REPORT OF THE ECONOMIC RECOVERY COMMISSION

STATE OF ILLINOIS
GOVERNOR PAT QUINN

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ECONOMIC RECOVERY COMMISSION
STATE OF ILLINOIS

PAT QUINN, GOVERNOR

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June 24, 2010

Dear Governor Quinn:

On behalf of the Economic Recovery Commission, it is a pleasure to present our report to you.

As we all know, Illinois is endowed with tremendous natural and human resources. We have world-class universities and research centers, dynamic financial institutions, consumer markets that are the envy of the world, first-tier cultural institutions, a highly capable and motivated work force, and a powerful culture of civic volunteerism. Yet many sectors of our state economy are in crisis.

It is imperative that we position Illinois for strong, swift, and permanent recovery from the current recession. In the global marketplace of the 21st century, we cannot expect to thrive by resting on past successes and waiting for the world to come to us. We must find new, effective ways to deploy our many valuable resources and re-establish Illinois as a global leader in commerce and job creation.

Under your Executive Order, this Economic Recovery Commission was created to address measures the State of Illinois could take to respond to the current economic downturn and promote long-term economic stability and expansion. As you directed, this Commission has conducted a wide-ranging study of best practices in other states and around the world that have fueled economic growth. We also have analyzed Illinois' tax and regulatory structure, with the aim of identifying new opportunities to foster job creation and improve the business climate.

Based on our months of conducting hearings and extensive research, as well as the Commissioners' experiences as respected leaders in a wide variety of industries and disciplines, one fundamental issue has become clear: Illinois has been addressing the challenges of the 21st century with techniques, plans and mindsets formed in the 1970s. We must make sure Illinois is at the forefront in venture capital, global marketing, and sustainability, leading the world in best practices for infrastructure planning, smart grid technologies, workforce education, and overall economic development. Illinois cannot afford to rely on decades-old strategies, concepts and business models as we confront the new global economic landscape of the 21st century.

Our universities and research centers are the envy of the world and have produced some of the most important technological inventions of our era, yet their commercialization too often has been reaped elsewhere. For example, a biochemistry professor at the University of Chicago discovered an effective new drug in the 1970s. Unable to raise venture capital in Illinois, he obtained funding from California sources and later moved his new company there. Today, that company, Amgen, is the world's largest independent biotech company, with some 17,000 employees – most of them in Southern California. Netscape and YouTube provide similar stories of brilliant scientists and entrepreneurs developing ideas in Illinois and building successful companies elsewhere. Illinois cannot afford the continuing loss of some of our best commercial minds and ideas.

The world has invested heavily in Illinois. We are the point of entry for global markets reaching the Midwest and are home to 78 foreign consulates, 44 foreign trade offices and 26 foreign chambers of commerce. Yet representatives of those offices raise constant concerns that until recently increasing our agricultural, service, and manufactured exports, and attracting more foreign investment, have not been given high priority. Because of our traditionally limited emphasis on expanding foreign trade, Illinois businesses miss important opportunities for investment and growth. Illinois cannot afford to fall behind in the global marketplace.

Illinois is the transportation crossroads of America, connecting rail, road, air and water transportation modalities. Yet our transportation infrastructure has been starved for investment for many years. Until recently, we have invested in transportation and intermodal systems based on a model of competition rather than cooperation. We must find new ways to connect our transportation systems and create synergies on a regional scale that will reflect the transportation needs of the 21st century marketplace. Illinois cannot afford to lose its position as the logistics center of our nation.

Overlaying all these issues is the challenge of the unprecedented political and fiscal problems you inherited last year. Personal integrity and leadership will help restore faith in our government as we address our fiscal crisis. However, no state can hope to attract business and create a vibrant, jobs-producing economy if its budget is dangerously out of balance. Tough-minded, honest budgeting and transparent long-term planning are needed to put our State finances on a solid foundation. All interested parties must be willing to sacrifice for the long term benefit of our state. Illinois cannot afford a continuing shortfall in the revenues necessary to meet our vital obligations.

Throughout this Commission's work, one consistent, positive theme arose: Illinois possesses extraordinary and still untapped resources. Too often, these resources are not deployed strategically, and many potential synergies have yet to be created. But as you will see in this report, we have identified many opportunities to revitalize and expand our economy using resources already at hand. Again and again, we have found opportunities for Illinois to re-establish its leadership as a vibrant economic force in the global economy – without spending more money. We have great financial, intellectual, and technological resources; we now must work together to combine those resources to build a bright and successful future for Illinois.

Our work with the forty highly motivated volunteers who made up this Commission gave us good cause for optimism about our state's future. These Commissioners represent large and small companies, labor, venture capital, financial services, government, community advocacy, education and technology. They gave generous amounts of time, thought and energy to this task. Their discussions, while usually lively, were always focused on what would be the best for Illinois. In particular, the six committee chairs virtually took on second careers to bring this report to fruition. As co-chairs of this Commission, we are honored to have served with this extraordinary group of Illinoisans.

The Commission also acknowledges the help provided by the Executive Service Corps and graduate students from Northwestern University's Master's in Public Policy & Administration program. In addition, a large cadre of experts inside and outside of government graciously shared their thoughts and expertise with us.

We were greatly assisted by the staffing provided to us by Greg Wass and Jennifer Weisensee of the Governor's Office. Their selfless work was an inspiration to all of us.

Finally, we would like to thank you. As Governor, you have given these Commission members a great opportunity to make thoughtful, innovative and practical recommendations to revive Illinois' economy. We believe these recommendations will help to lead to a robust economic recovery for Illinois, for ourselves and for our children and grandchildren.

Sincerely,

Alex Rorke
Co-Chair

John Spring
Co-Chair

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EXECUTIVE SUMMARY

When Indiana Governor Mitch Daniels wanted to promote his state's business climate and investment opportunities to potential investors, he needed to find a venue convenient for major financial institutions, well-served by transportation, and attractive to sophisticated business leaders.

So he came to Illinois.

Governor Daniels' recent official reception to promote new business initiatives in Indiana, held at the Art Institute of Chicago, does more than provide an anecdote to support Illinois boosterism. It also demonstrates the extraordinary assets that Illinois possesses – assets that competing states are savvy enough to exploit, if we do not.

For many decades, Illinois has been acknowledged as a global leader in innovation, commerce, education and technology. But over the past ten years, Illinois has lost more than 420,000 jobs. To a great extent, those job losses reflect a business culture based on 20th century strategies for business expansion – formerly effective strategies that do not reflect the needs of the entrepreneurial, technology-based companies that will drive the growth of the new economy. We cannot allow our past successes to stand in the way of our future prosperity.

Governor Quinn created the Economic Recovery Commission to address Illinois' current economic downturn and potential recovery. The Commission reviewed best practices that have promoted economic growth in other states and regions and identified new opportunities to foster job creation and improve the state's business climate. After months of study that included numerous public hearings and extensive research, the Economic Recovery Commission has developed an extensive list of recommendations to promote Illinois' economic recovery and secure future economic expansion. These wide-ranging recommendations are divided into six major headings: Innovation, Global Markets, Infrastructure, Sustainable Energy, Education and Government.

As the individual committees studied each of these segments, one overarching theme became apparent: Illinois possesses extraordinary economic resources that we have yet to put to full use. Many of these untapped resources have been developed by state government, but have not been effectively communicated to stakeholders. Repeatedly throughout these committee hearings, respected and well-informed business leaders and other stakeholders described needed programs and initiatives that would help to refuel Illinois' economy and position the state for future economic expansion. Yet upon further research, the Commission found that these programs already exist in Illinois – and in some cases, have even drawn national renown. But Illinois-based employers, workers and students were not aware that these potential resources are available to them.

Similarly, many resources outside state government have not been coordinated or deployed strategically. While officials of other states have led business and community coalitions to develop new strategies for investing in fledgling companies, promoting international trade, and providing cutting-edge workforce education programs, Illinois' leadership has too often lagged behind. As a result, many Illinois businesses have faltered for lack of investment and support.

This finding, while initially frustrating, actually offers great hope for Illinois' future growth. In many respects, we have all the pieces necessary to solve the puzzle of economic recovery; we have only to put

them into place to create synergies and develop partnerships that will position our state economy for swift, sustained expansion.

The following committee reports offer creative, thoughtful recommendations on a variety of subjects, reflecting the Commission members' widely varied backgrounds and experiences. Some of these recommendations are ambitious in scope. Others are tightly focused on specific concerns. But throughout these reports, one message remains consistent: We have within our grasp the necessary tools to rebuild Illinois' economy. With forceful leadership, strong public-private partnerships, effective communications programs, and a renewed willingness to innovate, Illinois can create new jobs, build new industries, and find new economic opportunity within our borders and around the globe.

Here follows the major recommendations from the six committees that made up this Commission:

Innovation

The Innovation committee found that there is insufficient public and private capital in Illinois that is made available to support new ventures and company formation. Illinois relies on a big-company strategy for growth instead of fostering an entrepreneurial culture, even though experience shows that new, innovative companies serve as the most efficient engines for economic growth. Illinois-based non-governmental organizations (NGOs) that promote entrepreneurial innovation, business expansion and global marketing often compete with each other instead of collaborating to support common goals. The State of Illinois and its NGO partners fail to celebrate entrepreneurial success, thereby missing an opportunity to brand and promote Illinois as a welcoming, supportive home for growth company formation and expansion.

To overcome these obstacles, the Innovation committee makes the following recommendations:

- Select and focus on target growth industries
- Increase access to capital, especially the supply of seed and early stage venture capital for young companies with high-growth potential
- Following the lead of California, Ohio and other states, deploy public pension fund investments to promote the Illinois economy
- Promote new public policies that recognize the relative growth potential of entrepreneurial companies
- Create public-private partnerships to develop a new culture of innovation

Global Markets

As the Global Markets committee considered the role of worldwide trade in fueling the recovery of the Illinois economy, it became clear that we can no longer assume that international marketing strategies developed in the 1970s will continue to bring the world to our door. The State of Illinois must find new, effective and efficient ways to market Illinois' assets around the world by leveraging our unique resources – without spending additional tax dollars.

To help the State of Illinois refocus its outreach to overseas trading partners to reflect the needs and opportunities of the new global marketplace, the Global Markets committee makes the following recommendations:

- Promote the Office of Trade and Investment (OTI) in the Illinois Department of Commerce and Economic Opportunity as the first point of contact, both for potential foreign investors and for Illinois companies seeking export assistance.

- Staff the OTI with business professionals with international trade experience.
- Leverage the OTI's effectiveness by working closely with the many multiplier organizations with strong Illinois connections that already attract foreign direct investment in Illinois and promote Illinois exports.
- Instead of targeting resources on a few small overseas trade offices that provide relatively limited access to potential trading partners in a few countries, move toward a model of contracting with selected multiplier organizations to reach business partners in a wider range of countries more flexibly and at a lower cost.
- The Governor should appoint a permanent Trade and Export Advisory Council to provide support and guidance to the OTI and emphasize the importance of global trade to Illinois.

Sustainable Energy

The Sustainable Energy committee strongly supports the principle that any discussion of economic development today must include a thoughtful review of energy, the environment and sustainability. As noted in a 2009 report by the Midwest Governors Association, the new green energy sector provides a real source of hope for rapid economic expansion. At a time when our region faces continuing job losses, new energy industries in the Midwest are emerging as focal points for job creation and retention. In fact, a number of recent studies suggest that new energy industries can create as many as 1.2 million jobs over the next decade.

To position the Illinois economy for rapid expansion by investing in energy sources and sustainable technologies that will yield environmental benefits, the Sustainable Energy committee makes the following recommendations:

- Create and expand public education and outreach programs to promote energy conservation by consumers and businesses.
- Work in partnership with the Illinois Finance Authority to expand affordable funding sources for energy-efficient projects and products.
- Create jobs and expand capacity for energy conservation projects of every size by continuing to invest in the Illinois Community College Sustainability Network.
- Reduce or eliminate financial disincentives that limit utilities' participation in energy conservation programs.
- Encourage expansion of the state's current transmission grid to relieve congestion, enhance reliability, provide power to underserved areas, and enable connection of renewable energy generators.
- Legislators and regulators should work collaboratively to encourage Illinois utilities to propose accelerated smart grid deployment plans.
- The Governor and legislators should show strong public support of the wind energy industry in Illinois, appearing at wind industry trade events and promoting Illinois wind energy developers and manufacturers out of state and overseas.
- Extend Public Act 095-0644 for at least 20 years to reduce wind industry uncertainty over property tax valuations.

- Pass a uniform statewide sales/use tax exemption for wind energy equipment purchases to put Illinois on an even footing with neighboring states.
- Pass legislation to expand the full credit per kilowatt for net metering from the current limit of 40 kilowatts to 2 megawatts.
- Continue to support development of the preliminary design report and preparation of a license application for submittal to the FERC to build new hydroelectric plants on the Mississippi River.
- In light of the Obama Administration's recent support of new nuclear plant construction, the Governor should form an expert panel to consider the implications of expansion of Illinois' nuclear capacity as part of its future energy portfolio and to assess the possibility of ending the construction moratorium and building next-generation nuclear power plants in Illinois.
- Use pricing and regulatory incentives to encourage existing power producers to invest in clean coal facilities, or create a pool of funds for clean coal projects, as part of any CCS compliance program.
- The General Assembly should use the Carbon Capture Legislative Review Commission to provide full hearings and build consensus on issues related to new carbon sequestration technologies.
- Create financial incentives for service stations to offer biofuels, and for consumers to purchase biofueled vehicles.

Infrastructure

The Infrastructure committee finds that, today and going forward, we must create a coordinated partnership between Illinois' state government and private industry that will maximize the value of our current infrastructure investments and look to the future with a systematic "triple bottom-line" approach that will yield financial benefits while promoting sustainability and providing positive social impact statewide.

To prioritize Illinois investment in public works, the Infrastructure committee makes the following recommendations:

- The State should seek out new partnerships with Illinois communities and private investors to invest in infrastructure projects that meet the needs of economically distressed areas while promoting sustainability and maximizing overall economic impact.
- Expand the State's capacity to support sustainable infrastructure development in Illinois by retaining the enhanced departmental capacity added during the American Recovery and Reinvestment Act.
- Create a Sustainable Cities Steering Group to assist local communities, smaller transit operators and metropolitan planning agencies in identifying new opportunities for transportation-oriented development and applying for federal grant programs to fund these projects.
- Actively promote mass transit development throughout Illinois, supporting legislation that will create new standards for strategic land-use planning and provide research and investment tools to attract new businesses and development to transportation centers.

- The Governor should promote State investment in transit-oriented development by issuing an Executive Order requiring all State agencies to assign a high priority to location-efficient sites in awarding grants and tax incentives.
- Promote public and private investment in new and expanded intermodal terminal projects.
- Support the expansion, acceleration and completion of the CREATE program.
- Support and promote regional and multistate planning for air, rail, road and water transportation projects to reduce traffic congestion and maximize economic benefits.
- Use State authority granted under ARRA for the Illinois Clean Water Revolving Fund to prioritize the allocation of low-interest loans for "green" water infrastructure projects.
- Draft a water use policy that includes expansion of studies of current water supplies and demands and promotes initiatives to improve water quality and reduce demand.
- Draft and implement a policy for statewide high capacity broadband networks.

Education

The Education committee found that Illinois' insufficient investment in education intensifies job loss in the state and serves as a serious barrier to future economic expansion. In hearings, industry experts and representatives of a number of companies throughout the state cited the overall quality of Illinois public schools as a serious competitive disadvantage. Some employers cited the difficulty in finding well-trained, competent talent as a major obstacle to expanding their operations in Illinois. Others said that their recruitment efforts were hampered because top-quality employees were unwilling to relocate to communities where the public school systems are struggling.

This committee has developed a two-pronged set of recommendations to help the State of Illinois develop a public educational system that will prepare today's students to be career-ready when they leave school, and that will help today's workers get the continuing education and retraining they need to stay competitive in a rapidly evolving workforce.

To help Illinois' public education system better serve students at every level from pre-kindergarten through college graduation, the Education committee makes the following recommendations:

- Encourage public-private partnerships that foster development of affordable, high-tech classroom programs and curricula in Science/Technology/ Engineering/Mathematics education.
- Expand school participation in local and statewide competitions that allow students to highlight their science and math knowledge.
- Work to replicate the Chicago Public Schools principal eligibility and selection process in other districts statewide.
- Expand the School Administration Manager Project, with the goal of placing SAMs in all high-need schools.
- Develop recommendations and standards for school-wide differentiated instruction programs and work with districts to fully implement and integrate these programs.
- Encourage community-school partnerships and create a clearinghouse to provide information on model partnership programs throughout the state.

- Increase school funding to the foundation level for every district, and link that increase in funding with stronger controls on district spending to make sure those increased dollars result in better educational opportunities for Illinois students.

To help Illinois' public education system provide necessary workforce training to adult workers and to stem the flow of both workers and businesses from our state, the Education committee makes the following recommendations:

- Increase alignment of college and university curricula with workforce needs.
- Create new programs to make technology education more affordable.
- Provide financial and other incentives to employers and workers to retain knowledge workers in Illinois.
- Establish a task force, including representatives of industry, state colleges and universities, community colleges and pre-K-12 public schools, to develop a plan to create five Illinois Centers of Excellence.

Government

The Government committee acknowledges the grave implications of the State's dire fiscal condition. The severe financial straits created in education and the private sector by the State's current fiscal distress demonstrate clearly, and urgently, that the State of Illinois is itself a major economic engine. If the State's failure to pay its bills on time continues, or if State spending is reduced to a fraction of current levels, the result will be tens of thousands of lost jobs in both the public and private sectors. The State's fiscal instability also acts as a strong disincentive to companies thinking about locating or expanding here.

To guide the State of Illinois to an immediate, comprehensive and politically courageous solution to its current fiscal crisis, the Government committee makes the following recommendations:

- Adopt additional reforms of Illinois' public pension systems, restructuring both funding and benefits of the public pension systems
- Adopt applicable practices of the Governmental Accounting Standards Board
- Aggressively review Illinois' Medicaid program spending
- Increase Illinois individual and corporate income tax rates
- Broaden Illinois sales tax to include additional services

INNOVATION

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Introduction

Over the past decade, Illinois has lost 427,600 jobs. To a great extent, those job losses reflect our state's outdated business culture, which is more focused on promoting the incremental growth of large companies than on realizing the potential of small businesses that are new and expanding – or that currently exist only in the minds of our most innovative entrepreneurs.

As the economy begins to turn around, it is critical for the State of Illinois to take a leadership role in promoting innovation in business. There is no question that we have the fundamental ingredients for extraordinary success in creating both new businesses and entirely new sectors: World-class research institutions, untapped private-sector resources and expertise, skilled workers, and, most important, top-flight entrepreneurial minds that can combine those elements into new and successful commercial ventures – based right here in Illinois. We lack only the coordinated, long-term public-private partnerships that will position Illinois' entrepreneurial community for rapid expansion – along with public policies that will make it attractive for those entrepreneurs to expand and build businesses in Illinois.

With this challenge in mind, the Innovation committee reviewed innovation-related practices in other states, both neighboring and distant, to compare these practices with those utilized in Illinois. These states include California, Indiana, Massachusetts, Michigan, Minnesota, Ohio, Pennsylvania, Texas and Wisconsin.

The committee then surveyed several Illinois-based organizations, including TechAmerica, NanoBusiness Alliance, the Illinois Venture Capital Association, the Chicago Entrepreneurial Center, Midwest Alternative Energy Forum, Illinois Biotechnology Industry Organization (IBIO), Illinois Science & Technology Coalition, several Illinois-based technology companies, as well as such public agencies as the Illinois Department of Commerce and Economic Opportunity (DCEO). Representatives of many of these organizations were invited to meetings of the committee to present their views.

Major committee findings include:

- There is insufficient public and private capital in Illinois available to support new ventures and company formation.
- Illinois relies on a big-company strategy for growth instead of fostering an entrepreneurial culture, even though experience shows that new, innovative companies serve as the most efficient engines for economic growth.
- Illinois-based non-governmental organizations (NGOs) that promote entrepreneurial innovation, business expansion and global marketing tend to compete with each other instead of collaborating to support common goals.
- The State of Illinois and its NGO partners fail to celebrate entrepreneurial success, thereby missing an opportunity to brand and promote Illinois as a welcoming, supportive home for growth company formation and expansion.

To overcome these obstacles, the committee makes the following recommendations:

- **Select and focus on target growth industries**
- **Increase access to capital, especially the supply of seed and early stage venture capital for young companies with high-growth potential**

- **Leverage public pension fund investments to promote the Illinois economy**
- **Promote new public policies that recognize the relative growth potential of entrepreneurial companies**
- **Create public-private partnerships to develop a new culture of innovation**

Background

For nearly two centuries, the economy of Illinois has been driven by innovation. Some Illinois innovators and their revolutionary products are known around the world – John Deere and the self-cleaning plow, Ignaz Schwinn and the balloon tire. Other Illinois industrial pioneers may be less well-known – Bill Greenwood of Mendota, who led the development of intermodal freight transport at Burlington Northern Railroad, or Josephine Cochrane of Shelbyville, who invented the automatic dishwasher and built a company that became Whirlpool Corp. – but their innovative visions continue to create jobs and shape our economy.

Today, the people of Illinois continue to develop extraordinary ideas that have the potential to reshape old industries and create new sectors that have yet to be imagined. But to make the leap from inspiration to industry, those innovators must have access to adequate capital investment. And unfortunately, Illinois has too often failed to make those critical early investments in innovation; as a result, Illinois-grown ideas have left our state to serve as the basis for successful ventures elsewhere. On the campus of the University of Illinois at Urbana-Champaign, a plaque marks the birthplace of Mosaic, the first widely used web browser – but the companies built directly upon that innovation were headquartered in Silicon Valley.

Illinois simply cannot afford to continue to export innovative ideas and entrepreneurial zeal. As we work to position Illinois for rapid recovery as the current recession lifts, we must address the chronic imbalance between the quantity and quality of ideas generated here and the levels of venture capital available to turn those ideas into economic engines that will benefit the state, and the people who live here, for years to come.

The importance of creating new sources of venture capital in Illinois cannot be overstated. Although venture capital-backed companies accounted for 11 percent of private-sector employment in 2008, they generated nearly $3 trillion that year – 21 percent of U.S. GDP.[1] Additionally, these companies have helped to create, not only new jobs, but entire new sectors, such as biotechnology, semiconductors, software and the Internet.

Today, many venture capitalists believe that green technology holds the same promise for job creation and economic growth – if the innovators working in green technology have the early financial support they need to translate their ideas into commercially viable products and services, and to build companies that will bring those products and services to market. These emerging technologies – which include alternative and renewable energy sources, electric cars, and power-grid management – drew $4.1 billion in venture capital in 2008. Today, as we look toward economic recovery, it is imperative that Illinois position itself to become a national leader in this and other sectors that show promise for rapid growth.

In past years, California has set an example of strong public-private partnerships that have fostered the growth of young companies. As the National Venture Capital Association noted in a 2009 report:

[1] National Venture Capital Association and IHS Global Insight, "Venture Impact: The Economic Importance of Venture Backed Companies to the U.S. Economy 5th edition," http://www.nvca.org/index.php?option=com_content&view=article&id=255&Itemid=103

> California perennially tops the list of venture impact regions – in part because of momentum it has built from decades of venture investing. The state's continued strength flows from a number of factors. First, its venture community invests in companies across multiple sectors (e.g. information technology, life sciences, clean technology). This increases the overall impact of those invested dollars on the state-wide economy while providing a measure of protection against sector-specific downturns. Second, California has developed more than one venture hub: the aforementioned Silicon Valley in the north, San Diego in the south, and a burgeoning new corridor in Orange County. Third – and no less important – local venture-backed companies and their investors have worked consistently with California policymakers to ensure that young innovative companies and the technologies they develop have the opportunity to grow and succeed within the state's larger business climate.[2]

California's entrepreneurial successes have been fueled in part by the investments of the California Public Employees' Retirement System (CalPERS), the state's public pension system and the nation's largest pension fund. A 2007 study found that CalPERS' total investment impact on the state's economy is considerable – slightly more than $15.1 billion in 2006 when the total multiplier effect of those investments is calculated. In 1990, the CalPERS Investment Committee established the Alternative Investment Management (AIM) program to specialize in private equity investments; today CalPERS is one of the world's largest private equity investors. In 1992, the CalPERS Board directed that 2 percent of the CalPERS' portfolio was to be invested in the State of California, across all investment categories, including public equity in firms headquartered in California, private equity, fixed-income products and real estate.

In 2001, CalPERS established the California Initiative to invest private equity in "traditionally underserved markets" in the state and in out-of-state companies that employ a large number of Californians. The California Initiative was initially launched with a capital commitment of $475 million to nine private equity funds and one fund-of-funds; by 2006, that allocation had leveraged an additional $725 million from other investors. The California economy gained about $8.55 for every dollar invested in pensions by employers and taxpayers. A second capital allocation of $500 million was made in 2006. As of June 30, 2009, the Initiative had invested in 341 companies; an analysis found that, from 2001 to 2009, those companies showed a net increase of 124,377 new jobs in California – even as overall state employment figures dropped by 4 percent. Although the CalPERS investments generated about $832 million in state and local revenue, the combined impact of both benefit payments and investments made in California on the state economy in 2006 was almost $27 billion.[3]

In recent years, some Midwestern states have begun to follow California's example by finding new ways to provide venture capital to innovators. One of the best-regarded examples is Ohio's Third Frontier, created in 2002 within the Ohio Department of Development. Third Frontier began with a ten-year initial life and a bipartisan commitment of $1.6 billion in State funds, approved by voter referendum. As of March 2010, Third Frontier has commercialized or created more than 630 companies and attracted more than $4.76 billion in private investment to Ohio. [4]

Third Frontier has targeted its investments in five key technology areas: Advanced and Alternative Energy; Biomedical; Advanced Materials; Instruments, Controls and Electronics; and Advanced Propulsion. To promote growth in those areas, the initiative has identified six key strategies:

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[2] Ibid

[3] California Public Employees' Retirement System "The Economic Impacts of CalPERS Investments on the California Economy" http://www.calpers.ca.gov/index.jsp?bc=/about/press/pr-2007/sept/boost-ca-economy.xml

[4] Ohio Third Frontier, "Ohio Third Frontier's Impact on the Ohio Economy," http://www.ohiothirdfrontier.com/MakingAnImpactReport.htm

- Increasing the quantity of high-quality research that has commercial relevance to Ohio companies
- Expanding access and availability of investment capital to create, grow, and attract technology-based enterprises
- Growing and nurturing an increasingly experienced pool of entrepreneurial management talent
- Addressing the technical needs of existing companies pursuing new products and production processes
- Contributing to the expansion of a technologically proficient workforce

Judged by a number of economic measures, Third Frontier is building the Ohio economy. Early stage and seed investments have increased from $32 million in 2003 to $298 million in 2008. Third Frontier-supported programs, such as the Wright Centers of Innovation, have assisted more than 350 start-ups. Licensing income at Ohio universities more than doubled from $16.1 million in 2002 to $39.6 million in 2007, and the number of university-based business start-ups has increased.[5]

Beyond those metrics, many believe that Third Frontier has had a strongly positive effect on the state's overall business climate, fueling "a fundamental change in the culture of the state to become more tech-based and entrepreneurial," according to Mark Collar, chairman of the Third Frontier Advisory Board.

To date, Illinois has been unable, or unwilling, to match other states' efforts in focusing our existing in-state resources on entrepreneurial efforts and developing new sources of venture capital to support the emerging industries that will fuel our future growth. However, the window has not yet closed; with thoughtful, growth-oriented public policies, combined with judicious public and private investment, Illinois can still match the competition and succeed in building an entrepreneurial, innovative business climate that will spur business expansion and create new, permanent jobs in our state for years to come.

Venture Capital

Venture capital is vital to economic development and job creation, yielding disproportionately high returns for every dollar invested. Studies indicate that, for every job directly created by venture capital investments, another 2.2 jobs are created indirectly through the multiplier effect. As those high-growth entrepreneurial companies expand, so do their payrolls; a 2004 study commissioned by the National Venture Capital Association estimated that 236,000 people were directly employed by Illinois companies that were originally venture-backed. The same study found that venture-financed companies headquartered in Illinois generated sales of $34 billion a year.[6]

Nationally, the study found that, for each $1,000 of assets, venture-backed companies report roughly twice the sales, pay almost three times the Federal taxes, generate nearly twice the exports, and invest almost three times as much in research and development as the average non-venture-financed company.[5] Yet Illinois has consistently lagged in its investment in venture capital. Since 2002, $969 million in venture capital has been invested in Illinois –1.5 percent of the national total— even though our Gross State Product equals 5 percent of national GDP.[6]

This dearth of venture capital is not limited to Illinois. A recent report by the Brookings Institution compared venture capital investment in the Midwestern states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin and found that venture capital investment in those states

[5] Ibid
[6] Illinois Venture Capital Association, "Venture Capital in Illinois," http://www.illinoisvc.org/pages/statistics__private_equity_monitor/62.php
[5] Ibid.
[6] Ibid

totaled about $375 million in the first two quarters of 2009 – compared with more than $4 billion in new investment in California and more than $1 billion in Massachusetts during the same timeframe.[7]
But as the Brookings report noted, the real issue is not the comparative success of the region in drawing venture capital. The real problem is that the amount of venture capital invested in the region is too small, compared both with the capital needs of start-up companies already established and the amount needed to convert homegrown ideas and technology into new, high-growth companies that will revitalize the economy.

Realistically, this relative shortage of venture capital will take years to reverse. For this reason, the state cannot afford a scattershot approach to venture capital investment. Although other states have recorded success in investing venture capital in a wide array of sectors, Illinois' comparatively scarce resources would be put to best use if they were focused on specific industries that seem highly likely to yield strong short-term results.

Therefore, the committee recommends:

- **Select four to six Target Growth Industries (TGIs) for Illinois, to prioritize and focus both public and private sector investments and promotional efforts.**

The TGIs should be selected based on the following criteria:

- They are emerging industries that leverage Illinois' existing assets.

  For example, preference should be given to emerging industries that share a technological focus with an Illinois research institution, or that would complement existing major corporate investment here. By building on Illinois' current strengths, these industries will have access to a local customer base, existing resources, and a high-quality talent pool with relevant training and expertise. The large existing companies will benefit as well, as the emerging industries will provide a key source of innovation and will fuel mergers, acquisitions, and licensing opportunities.

- They show promise of providing permanent economic benefits for the state economy.

  In assessing growth potential of various industries, the State should consider both the likelihood that the industry itself will expand and create new jobs, and also the possibility of spurring additional investment in related industries. For example, a successful biotech company may spark expansion of partner industries, such as shipping and packaging.

- They are less capital-intensive so that they can be scaled using the investment funds available.

  Given the relatively limited amount of venture capital available to Illinois start-ups, and given the likelihood that the funding stream will remain relatively limited over the short term, it makes sense to focus State efforts on industries that can be expanded from early stage to maturity with the funding available.

- They are not deeply established or anchored in other parts of the country, and have capacity to grow locally.

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[7] The Brookings Institute, "Turning up the Heat: How Venture Capital Can Help Fuel the Economic Transformation of the Great Lakes Region" http://www.brookings.edu/reports/2010/0129_venture_capital_samuel.aspx

By definition, in venture capital, the focus is always on the next new thing. For that reason, it makes no sense for Illinois to attempt to recreate the venture capital successes that other states have enjoyed by investing in industries that already have reached critical mass and are thriving elsewhere.

- They are well defined in terms of Standard Industrial Classification code, sector or other identifying means.

  Obviously, there is little use in setting out a list of potential TGIs if there is no way to identify or track companies that fit within those categories. For that reason, the State's investment efforts should be limited to companies that fit within clearly defined, identifiable sectors.

Examples of potential TGIs for Illinois include:

- Information Technology
- Biotechnology
- Alternative Energy
- Medical Technology
- Advanced Materials/Nanotech
- Communications/Wireless

Once the TGIs are selected, it is critically important to expand, in a meaningful way, Illinois' supply of seed and early stage venture capital.

The recent recession has left emerging companies and industries parched for capital investment. In April 2009, a survey by the National Association of Seed and Ventures Fund, at the request of the Small Business Administration, found 70 percent of seed/early stage venture investment funds were having a difficult time raising capital.[8] In an April 2009 article in *Science Progress*, Richard A. Bendis, President and CEO of Innovation America, warned that the reduced amount of venture capital available is moving to companies that have moved through the early stages and are poised for expansion. So while innovative ideas continue to be developed in research institutions, they cannot draw the critical seed and angel investments that help to transform an idea into a commercial venture. Bendis wrote:

> Over the past decade, state governments have led the charge in their own jurisdictions to address this early-stage financing gap – or what has come to be known as `The Valley of Death' in the world of entrepreneurship. But now state budgets are also in crisis mode and have less money to invest in technology-based economic development initiatives. … The upshot: there is a desperate need among a lot of young entrepreneurial companies for not a lot of seed- and early-stage financing rounds – and that capital cannot be found.[9]

We must take action to meet the needs of young Illinois companies that require a relatively small injection of venture capital to begin their expansion into corporate maturity. As the Brookings Institution notes, a fund-of-funds approach can help to meet capital needs by supporting numerous venture capital firms while diversifying its own portfolio. A fund of funds also avoids the problem of creating a single gatekeeper for access to significant new early stage capital for entrepreneurial companies," the Brookings report points out. [10]

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[8] Richard Bendis & Ethan Byler (April 2009) "Creating a National Innovation Framework" http://www.usinnovation.org/files/bendis_innovation.pdf

[9] Ibid

[10] The Brookings Institute, "Turning up the Heat: How Venture Capital Can Help Fuel the Economic Transformation of the Great Lakes Region," http://www.brookings.edu/reports/2010/0129_venture_capital_samuel.aspx

Several states have implemented successful fund-of-funds. For example, the Ohio Capital Fund has invested $111 million in 21 funds, which have committed to investing at least half of those state dollars in promising Ohio companies. The Ohio Capital Fund dollars have been invested in 40 companies – which, in turn, have created nearly 1,600 jobs in Ohio, with a combined payroll of more than $100 million. The Ohio Capital Fund also has played a significant role in attracting other investment. Venture capital investing in Ohio has increased 13percent per year over the last five years – more than double the national rate of venture capital growth.[13]

Therefore, the committee recommends:

- **The State of Illinois should expand the venture capital pool by establishing a new venture capital fund-of-funds that will broadly invest in professionally managed seed and early stage funds with investment strategies focused on Illinois TGIs.**

For example, the Illinois General Assembly is currently considering HB 4819, which would establish a second Technology Development Account (TDA) fund of funds within the State Treasurer's investment portfolio.

The Treasurer's existing TDA, authorized by the General Assembly in 2002, has committed nearly all of its $75 million to 18 Illinois venture capital funds. To be eligible for consideration by the TDA, a venture capital firm must have at least one managing partner or a majority of its employees domiciled in Illinois. Additionally, the firms must commit to using their best efforts to seek investments in technology businesses wanting to locate, expand, or remain in Illinois.

To date, about $25 million of the TDA fund-of-funds has been invested in 34 Illinois companies with high growth potential. Since receiving those venture capital investments, those companies have drawn $433 million in additional investment, and they now employ more than 1,200 people in Illinois. HB 4819 would double the size of the program, adding a separately managed parallel fund that would invest in the same portfolio, and making up to 2 percent of the Treasurer's current $8.4 billion in investable assets available for TDAs.[11]

The State of Illinois could further expand the venture capital pool through passage of SB 1522**,** which would provide DCEO matching grants of up to $10 million to companies in TGIs that receive federal research grants and extend tax credits to state-registered, qualified institutional and individual "angels" who invest in early stage businesses in the TGIs. The committee recommends at least doubling State funding for these purposes.

Pension Fund Investments

The assets of the State of Illinois' public pension systems represent billions of dollars of investment – and investment choices. By setting aside a small percentage of total assets for investment in companies in-state with high growth potential, some public pension systems have wielded the power of their deep pockets to create new economic opportunities that benefit everyone in the state while yielding strong return on investment for their members.

As noted above, the California Public Employees' Retirement System (CalPERS) has demonstrated a strong record of success by targeting a portion of its investments to a fund-of-funds that invests in

[13] The Ohio Capital Fund, "Ohio Capital Fund Announces Assistance to Fortieth Company" http://www.theohiocapitalfund.com/pdf/031210_ocfannounces40company.pdf
[11] Illinois Venture Capital Association, "Hearing Data: February 2, 2010," p. 17, www.illinoisvc.org

underserved areas within the state. Similarly, the California State Teachers' Retirement System (CalSTRS) has committed a portion of its funds towards venture capital investments.[12]

Closer to home, Wisconsin's State Investment Fund, which includes retirement trust funds and functions as the State's cash management fund, has a strong focus on Wisconsin investments – investments that are made within the context of the State of Wisconsin Investment Board's fiduciary responsibilities. In fiscal year 2008, the Fund's new investments in Wisconsin companies totaled about $896 million. That includes $124.3 million in venture capital and loans to Wisconsin companies.[13] To increase the pool of venture capital available to emerging Wisconsin companies, the State of Wisconsin Investment Board allocated a total of $200 million over the last nine years to the Wisconsin Venture Capital Portfolio, which focuses investments on early stage companies in Wisconsin and the Midwest.

Far from reducing the returns on the Wisconsin fund's investments, the allocation of Wisconsin assets to venture capital in Wisconsin and the Midwest actually creates unique synergistic opportunities, the fund's managers believe:

> Since the Wisconsin Private Equity portfolio's inception, Staff's investment thesis has been that there are quality investment opportunities based on the gap between the high quantity and quality of research and development supported in the state and the low level of capital for these types of start-up investments. This inefficiency creates opportunities for investors knowledgeable about the local market.[14]

The Wisconsin fund's track record supports the value of that investment philosophy; the Pew Center on the States has named Wisconsin a "national leader in managing its long-term liabilities for both pensions and retiree health care and other benefits."[15]

This committee believes that Illinois' public pension funds could take advantage of similar investment opportunities while creating a new and powerful economic engine by directing a percentage of their funds to venture capital investments within Illinois.

To leverage the influence of State pension funds to speed Illinois' economic recovery, the committee recommends:

- **Establish guidelines to encourage Illinois pension funds to invest in Illinois-based firms.**

Other states have demonstrated, again and again, that a targeted in-state investment strategy can yield great benefits both for the investing fund and the state as a whole. Obviously, pension fund investments must be chosen primarily to increase return for members. But within that broad framework, pension fund investors should make every effort to invest in Illinois first.

As a first step, we must develop a clear definition of an "Illinois company." For example, the CalPERS California Initiative defines companies as "California companies" if any of the following are true: "Company headquarters are in California, 2) More employees reside in California than in any other state; and 3) More facility locations are in California than in any other state."[16] A similar definition would

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[12] California Public Employees' Retirement System, "Annual Investment Report Fiscal Year Ending June 30, 2008" http://www.calpers.ca.gov/invest/investmentreport-2008/default.htm
[13] State of Wisconsin Investment Board, "Invest in Wisconsin" http://www.swib.state.wi.us/InvestWisc.aspx
[14] State of Wisconsin Investment Board, "White Paper on the Wisconsin Venture Capital Landslide" http://www.swib.state.wi.us/VC%20_WhitePaper.pdf
[15] The Pew Center On The States, "The Trillion Dollar Gap" www.pewcenteronthestates.org/TrillionDollarGap
[16] CalPERS California Initiative, "Creating Opportunities in California's Underserved Markets," http://www.calpers.ca.gov/eip-docs/about/press/news/invest-corp/ca-initiative-09.pdf

simplify investment decision-making in Illinois.

To expand Illinois funds' access to pension system investments, we should require pension fund managers to provide access to any Illinois-based fund that wants to propose an offering. The pension fund managers will retain full discretion over where and how much to invest, but Illinois funds should be given a fair opportunity to make their case.

We also should expand opportunities for smaller Illinois venture capital funds by requiring pension funds to lift arbitrary restrictions on investments in smaller venture capital funds. The relatively small fund sizes of Illinois venture capital funds make them ideal vehicles for investing in small, emerging local companies. However, Illinois' public pension systems limit their investments in venture capital funds to a relatively small percentage of the target fund – usually 10 to 15 percent. In addition, the funds also set a minimum dollar amount for venture fund investments.

These arbitrary rules create twin obstacles to investment in Illinois-based venture capital funds; the pension systems' maximum allowed percentage of investment is generally too small to leverage any real economic benefit for the state as a whole – and the maximum percentage rule often combines with the minimum absolute dollar amount to rule out any participation in smaller funds. As a result, the pension systems are hindered from making significant investments in many Illinois venture capital funds that have a real potential for high returns. Other large institutional investors, including CalPERS, do not limit their fund-of-funds investments in this way.

From a risk management perspective, there is no rationale for forbidding a $25 million investment in a $50 million venture capital fund but permitting a $25 million investment in a $500 million megafund. The pension systems risk the same amount in both cases; the only difference is that, if the larger fund loses money, a larger number of other investors take a similar loss. Ultimately, risk is based on the performance of the target fund, regardless of the number of fellow investors. A bolder investment strategy – a willingness to invest a specific dollar amount based on thoughtful risk assessment rather than validation by other institutional investors – would make substantially more venture capital available to Illinois companies while expanding potential returns for the pension systems.

- **Coordinate the five Illinois pension systems' investments in venture capital under one or two professional managers. These managers should have a demonstrated track record of investing in early stage technology-focused venture firms and Illinois-based companies.**

To further these goals, the committee recommends establishment of the "Illinois Investment Managers Program" for the State public pension systems, as follows:

The Illinois Investment Managers Program is designed to promote venture capital investment in Illinois companies by the State's public pension systems. To that end, the pension systems shall invest a percentage of their total portfolios in direct venture capital funds or funds-of-funds focused primarily on investment in emerging Illinois companies. These investments by the pension systems will be coordinated under one or two professional managers with solid experience in investing in early stage technology-focused venture firms and Illinois-based companies.

Under the program, smaller Illinois venture capital funds will be encouraged to present their credentials directly to the retirement systems. To increase access to the pension systems' fund managers, the Program will create a web-based questionnaire for Illinois venture capital funds – leveling the playing field for the Illinois funds while providing simple, direct communication to the pension systems.

By expanding Illinois funds' access to pension system managers, the Illinois Investment Managers Program can expect to identify a number of Illinois venture capital firms with strong management teams and relevant investment experience that have the potential to enhance the pension funds' investment returns while focusing on Illinois-based investments. As these highly qualified Illinois venture capital firms are identified, the pension systems will make thoughtful, structured investments in their funds, with a target of at least $500 million of the systems' overall assets committed to the venture capital fund-of-funds by the end of 2012.

Given that the program will target smaller funds, it will not impose a maximum percentage ownership for its investment in a given fund; investments will be based on a dollar amount that reflects the risk-reward potential of the specific target fund.

All Illinois managers of direct venture capital funds and fund-of-funds will be encouraged to apply. Fund-of-funds managers must demonstrate that they are making best efforts to invest in direct funds with primary offices or headquarters in Illinois, and that those direct fund managers are making best efforts to invest in Illinois companies.

The program is intended to expand the pool of venture capital available to emerging Illinois companies. However, as with all other investments by the public pension systems, the managers' highest priority will be maximizing return.

The program's investments and rates of return will be published in an annual report available on the pension systems' websites. The report will indicate:

- Aggregate number of funds in the program.
- Total dollars committed to the funds in the program.
- Total dollars drawn by these funds under these commitments. (For example, the program may commit a total of $200 million to ten funds in the first year, but those funds will likely call that capital over a period of several years.)
- Aggregate number of Illinois-based companies receiving capital from the program.
- Aggregate equity dollars raised by all of the Illinois-based companies receiving capital from the program.

Creating a Culture of Innovation

The story of Amgen and Illinois is well-known: A biochemistry professor at University of Chicago discovered a powerful new drug, was unable to raise venture capital in Illinois and ultimately obtained funding from California sources. As a result, Amgen moved to southern California and today boasts revenues of more than $14 billion and employs more than 17,000 people around the world.

The Amgen story is disheartening on two counts: First, that Illinois' dearth of venture capital led to the export of a homegrown company that today is the largest independent biotech firm in the world. But second – and perhaps even more damaging – that the Amgen migration, and a few others like it, reflect the nation's perception of Illinois as a place where cutting-edge technology is born – only to grow up and move far away from home.

There is no question that Illinois, and the rest of the Midwest, have the intellectual muscle to create new, highly commercial technologies. Our research institutions are world-renowned: University of Illinois, Argonne National Laboratory, University of Chicago, Northwestern University, Fermilab – the list goes

on and on. Yet when the new technologies developed in those institutions are ready to be brought to market, few are surprised when those innovators choose to build their new companies elsewhere.
As noted above, one of the factors fueling our export of innovative young companies is a true dearth of venture capital compared with other states, such as California and Massachusetts. But almost equally important is our collective failure to develop a culture of innovation – an ecosystem of people, capital, and public and private organizations that build upon each other's successes to foster a nurturing environment for emerging industries.

Quite frankly, a major factor in creating a culture of innovation is simple public relations.

In Illinois, we hear a great deal about our failure to create a positive business climate, especially when compared with Indiana's track record of promoting commerce. For example, Indiana has launched some high-profile initiatives, such as the creation of the Indiana Economic Development Corporation (IEDC) – which landed three high-profile automotive investments over just ten months in 2006. That same year, the IEDC and Governor Mitch Daniels led 485 Indiana businesses to publicly commit to creating more than 60,000 new jobs and investing an additional $14.5 billion into the Indiana economy, bringing national attention to Indiana's newly revived business climate. Today, many cite Indiana as a positive role model for Illinois and its sagging economy.

However, a state-to-state comparison of employment statistics tells a very different story. According to figures from the U.S. Bureau of Labor Statistics, since January 2000 Illinois has lost 7 percent of its jobs; in the same time period, Indiana lost 8 percent of its total jobs base. Based on a wide range of metrics, *Forbes* magazine rates Illinois' business climate 24th in the nation, significantly ahead of Indiana in 30th place. Additionally, Forbes notes that Illinois has risen from 35th place in 2006, while Indiana has fallen five places, from 25th. And when it comes to "growth prospects," which reflects projected growth in jobs, income and Gross State Product, as well as business openings/closings and venture capital investments, *Forbes* rated Illinois 28th in the nation – and Indiana was 49th, just ahead of Michigan.

So in the face of those statistics, why does Indiana get such rave reviews for its business climate?

The answer would seem to be that Indiana has succeeded in creating a strong public image campaign promoting the State's ability to move swiftly and aggressively, and in a unified way, to promote business interests. The State of Indiana has succeeded in presenting its approach to economic development as focused and strategically organized, combining public and private resources to promote business expansion. Additionally, the Indiana Chamber of Commerce promotes its efforts to work tightly with a number of coalition partners to accomplish clearly defined legislative goals. As a result, Indiana is perceived as smoothly functioning, business-friendly and economically robust in a way that Illinois is not. Over time, that perception could become reality, if Indiana's campaign to woo new investors drains capital from Illinois.

So it is critically important, not only to build a stronger culture of innovation in Illinois, but to make sure that our great existing portfolio of innovation assets receives the attention it deserves. By building innovative new companies, and then by promoting those successes to a wider audience, we can create new generations of entrepreneurs who will make Illinois their home – permanently.

Recently, Chicago has seen some excellent examples of entrepreneurs who are working to create a critical mass of innovation. A new incubator/bootcamp, Excelerate Labs, is offering $20,000 in seed funds to startups chosen to participate in an intensive 13-week program. In addition to funding, Excelerate Labs also offers committed mentorship from highly successful, nationally known entrepreneurs. Earlier this spring, entrepreneurs Eric Lefkofsky and Brad Keywell -- who started Groupon, MediaBank, InnerWorkings and Echo Global Logistics – announced the formation of Lightbank, a Chicago-based

venture capital fund focused on early-stage technology companies. The fund will invest up to $10 million annually and will also provide hands-on assistance "to foster a vibrant, active community of Midwest technology entrepreneurs who are short on capital, but flush with innovative ideas."[17]

Non-profit organizations and associations can help to further efforts like these, especially if they combine their resources for maximum impact. As the Brookings Institution report notes, community and private foundations in the Great Lakes region have assembled endowments valued well into the billions of dollars. "This is a striking regional asset," the Brookings report notes. Although private foundations have historically focused their assets on improving education, social services, and cultural institutions, more and more foundations are experimenting with promoting economic development through new categories of grants and new collaborations among grant makers. The Brookings report continues:

> In 2005, for example, the Danforth and McDonnell Foundations in St. Louis were leaders in forming the Vectis Life Sciences Fund I, an $81 million venture capital fund of funds. In May 2008, the Foundations announced plans for the $175 million Vectis II fund, which would be one of the largest life-science venture funds in the Great Lakes region. Co-investors in Vectis I included the Washington University, the University of Missouri and union pension funds.
>
> Another example is provided by The Cleveland Foundation. Based on its own economic development experience going back to the early 1990's, the Foundation in 2003 led in forming the Fund for Our Economic Future to focus on the economic revitalization of northeastern Ohio. The Fund now has over 100 private and corporate foundation members that have committed to a six-year, $60 million effort to jointly determined objectives. Fund managers believe that this common effort is unique in the nation.[18]

These kinds of partnerships provide more than capital investment; they also contribute to a "vigorous support system for venture investment" that leads to sustainable, long-term economic expansion, according to Brookings. [19]

To build a stronger, more focused culture of innovation throughout Illinois, the committee recommends:

- **Establish the Illinois Innovation Council.**

The Illinois Innovation Council will provide statewide leadership across various sectors to strategically advance Illinois' innovation agenda. Its mission will be to establish and sustain a coordinated institutional framework that will maximize the state's assets and speed the transformation of the Target Growth Industries into self-sustaining engines of economic development. The bi-partisan Council's members, to be appointed by the Governor, will include representatives from both private and public sectors, including leaders of large and small high-tech corporations, venture capitalists, technology researchers, private foundations, non-profit incubators, business groups and trade organizations, DCEO staff, and State legislators.

The Council will:

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[17] Business Wire, "Chicago-based Fund, Lightbank, to Invest Up To $100 Million in Technology Start-Ups" http://www.marketwatch.com/story/chicago-based-fund-lightbank-to-invest-up-to-100-million-in-technology-start-ups-2010-03-15

[18] The Brookings Institute, "Turning up the Heat: How Venture Capital Can Help Fuel the Economic Transformation of the Great Lakes Region" (January 2010), p. 32, http://www.brookings.edu/reports/2010/0129_venture_capital_samuel.aspx

[19] Ibid

- Develop a strategic innovation and competitiveness agenda for Illinois and work to build consensus and support from all stakeholders, including research institutions, venture capitalists, private foundations, business groups, and state and local governments
- Foster collaboration between research institutions and the corporate sector that will lead to increased private investment in technology research, develop new sources of angel capital and yield successful commercialization of innovative products
- Encourage new approaches to foster growth and retention of technology-based start-up companies in Illinois
- Develop mentorship resources from private industry, business groups, non-profits and the Illinois Department of Commerce and Economic Opportunity to support entrepreneurs in target growth industries
- Promote new and existing incubators for early stage companies
- Develop a central, easily accessible clearinghouse of resources for Illinois entrepreneurs
- Review the performance of DCEO-funded entrepreneurial centers and mentorship programs to make sure State resources are being deployed to maximum use
- Promote Illinois as a global leader in innovation
- Champion the importance of promoting innovation and fostering emerging industries as engines for the Illinois economy, both today and in the future

The committee further recommends:

- **Establish a Council of NGO Advisors to develop and promote a common agenda for fostering innovation in Illinois.**

As a first step, the NGO Council should create a comprehensive list of all Illinois NGOs that currently are working to promote entrepreneurship, and compile an inventory of the NGO resources available to foster innovation statewide. Inventory all the NGOs supporting entrepreneurship in Illinois to determine how each NGO can contribute to the collective agenda.

The NGO Council should work to build strong new connections between well-established business groups, such as the Civic Committee of the Commercial Club of Chicago, and emerging entrepreneurial leaders. These relationships will provide deep and lasting benefits, not only to the individual entrepreneurs and organizations, but also the Illinois business climate as a whole, by helping to refocus the Illinois business community on the needs and potential economic contributions of emerging industries.

The NGO Council also will work toward development of a common agenda that will enable Illinois' diverse business groups, research institutions, non-profits and private foundations to work together to rebuild our state economy.

The chairperson of the NGO Council will serve on the Illinois Innovation Council.

Finally, the committee strongly recommends:

- **Develop a comprehensive, ongoing public relations program to publicize Illinois' innovative successes and improve Illinois' image as both birthplace and future home of cutting-edge technological innovation.**

Going forward, the State of Illinois and its partners in promoting innovation must work persistently to promote Illinois as a welcoming home to entrepreneurial businesses and emerging industries. This effort will require creation of an extensive public relations program that promotes a common agenda and celebrates innovative successes in every sector.

This public relations effort must be supported by every stakeholder, and the message must be consistent and unified. Every sector, every company, every business organization, every foundation – every group that is committed to building and retaining innovation in Illinois – must work in concert to promote a single ambitious goal: Illinois can be the best place for innovation in America.

If we all work together to make wise, strategic use of Illinois' many existing assets and cooperate in the creation of new funds, new partnerships, and new ideas, we can make that ambitious goal a reality and build a strong foundation for the Illinois economy of the 21st century.

GLOBAL MARKETS

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Introduction

By many measures, Illinois is an international success story. Since 2002, exports have represented the greatest growth segment in the Illinois economy, increasing from $25 billion to nearly $54 billion last year and making Illinois the sixth-leading exporter in the United States. Illinois produces nearly 7 percent of all U.S. agricultural exports and ranks second nationally in export of agricultural commodities, with nearly $4 billion worth of goods shipped to other countries each year. More than 1.4 million overseas visitors traveled to Illinois in 2008, spending more than $2.4 billion dollars here and making Illinois the sixth most popular U.S. state for international travelers.[20] Illinois also is home to more than 1,500 foreign firms, employing close to 280,000 Illinois residents.[21]

Our assets are world-class. Illinois boasts exceptional rail, highway, air and water transportation systems that make us the distribution center of North America. We are home to some of the nation's most renowned universities and research centers, and dozens more are only a few hours' drive away. As a Great Lakes state, we offer extraordinary freshwater resources. Our cultural institutions are legendary.

Illinois' international credentials are reflected by the large numbers of globally focused businesses, agencies and organizations that maintain a presence here:

- 78 consulates
- 44 foreign trade commissions
- 26 foreign chambers of commerce
- 6 U.S. Department of Commerce foreign trade offices
- More than 1,500 Illinois-based subsidiaries of foreign companies

Those statistics are impressive by any standard. Yet as we work to position Illinois for economic recovery, we must recognize that we must continue to battle for every euro, yuan or rupee that comes to Illinois, and that we must realize that our competition for those investments is not Indiana and Wisconsin, or even California and Massachusetts, but the entire world.

Although a recent study commissioned by the Chicago Council on Global Affairs focused solely on metropolitan Chicago, its admonishment is applicable to the entire state of Illinois:

> This is no moment for self-congratulation or complacency. Global stature means global competition. In the industrial age, Chicago was content to rule the inland empire of the Midwest. Today it plays at a global level for global stakes. If it continues to succeed, Chicago—both the city and its region—will enjoy not only an economic dynamism, but economic and social opportunity for all its citizens. If it fails, as many once-powerful industrial cities are failing, that dynamism will fade and that opportunity will disappear.[22]

The stakes are high: 539,300 Illinois jobs were supported by exports in 2008, and we must expand those numbers if we are to provide new, permanent jobs for the many Illinois workers who are unemployed today. We cannot afford to sit still, or to rely on 20th century strategies in hopes of commanding 21st century markets. We must use every resource at our disposal to strengthen our bonds with existing partners and target untapped opportunities worldwide. It is imperative, for the future of Illinois and

[20] Illinois Office of Tourism, "Fast Facts" http://www.enjoyillinois.com/illinoismediacenter/fastfacts.aspx
[21] Illinois Department of Commerce and Economic Opportunity, "Facts and Figures" www.commerce.state.il.us
[22] Chicago Council on Global Affairs, "The Global Edge: An Agenda for Chicago's Future," http://www.thechicagocouncil.org/UserFiles/File/Task%20Force%20Reports/Global%20Chicago_FINAL.pdf p. 7

everyone who lives here, that we find new ways to work together productively and successfully to bring Illinois to the world.

- To help the State of Illinois refocus its outreach to overseas trading partners to reflect the needs and opportunities of the new global marketplace, the committee makes the following recommendations:

- The Office of Trade and Investment (OTI) in the Illinois Department of Commerce and Economic Opportunity should be staffed by business professionals with international trade experience.

- Instead of targeting scarce State resources on a few small overseas trade offices that provide relatively limited access to potential trading partners in a few countries, the State of Illinois should move toward a model of contracting with selected multiplier organizations to reach business partners in a wider range of countries more flexibly and at a lower cost.

- The OTI should leverage its effectiveness by working closely with the many multiplier organizations with strong Illinois connections that already attract foreign direct investment in Illinois and promote Illinois exports.

- The Governor should appoint a permanent Trade and Export Advisory Council to provide support and guidance to the OTI.

- The OTI should be promoted as the first point of contact, both for potential foreign investors and for Illinois companies seeking export assistance.

Background

In announcing the creation of the President's Export Council, a private-sector advisory committee on international trade, President Barack Obama said: "Ninety-five percent of the world's customers and the world's fastest-growing markets are outside our borders. We need to compete for those customers. Other nations are. In a time when millions of Americans are out of work, boosting our exports is a short-term imperative." To that end, President Obama has set a goal of doubling U.S. exports in the next five years – an increase that would support two million additional jobs in the United States.[23]

As the committee considers the role of global markets in fueling the recovery of the Illinois economy, it seems clear that we can no longer assume that international marketing strategies developed in the 1970s will continue to bring the world to our door. The State of Illinois must find new, effective and efficient ways to market Illinois' assets around the world by leveraging our unique resources – without spending additional tax dollars.

In some ways, our future success is hampered by the global access already achieved by Illinois companies. As a MacArthur Foundation report observed, the "galloping globalization" of Illinois companies "has had an odd effect.

> It has made their offices here less global or, rather, it has cut back the number of people in Chicago who deal with global affairs. Once, multinational corporations had big international departments that ran their foreign operations. Now, global corporations don't even have

[23] Office of the US Trade Representative, "The President's 2010 Trade Policy Agenda," http://www.ustr.gov/webfm_send/1673

> "international departments." Instead, all the world's their stage, all their operations are international, and all their overseas operations are run from overseas.[24]

Fifty years ago, it would have been possible to compile a list of all the executives of Illinois companies who had authority over international business decision-making – and it probably would have been possible to gather them together in one room. Today, with global commerce so much an integral part of even small- and medium-sized companies, it becomes increasingly challenging for the State of Illinois to assess the widely varied international needs of our business community – much less to deploy the State resources to fulfill those needs.

The number of Illinois' potential trading partners also has increased phenomenally. In the last century, the majority of America's overseas commerce focused on Western Europe and Japan. Today, China, India, and the former Communist-bloc countries have created enormous new markets for U.S. goods and services, and new markets are emerging around the world. The White House Office of the U.S. Trade Representative reports that exports of U.S. goods to developing countries grew by 141 percent between 1994 and 2009, significantly higher than the 70 percent growth in exports to industrial countries.[25]

With the Internet making global communication almost instantaneous, production has become an intricate global process. For example, microchip maker AMD locates its research and development in California, produces in Texas, Germany and Japan, does final processing and testing in Thailand, Singapore, Malaysia, and China, and then sells to markets around the globe.[26] From Decatur, Archer Daniels Midland operates the world's premier crop origination and transportation network, connecting crops and markets in more than 60 countries.

The expansion of global commerce also has created extraordinary new markets for U.S.-based investment and financial and professional services of every kind. Of the $304 billion increase in U.S. services exports between 1994 and 2009, 55 percent were "education services, financial services, insurance, telecommunications, business, professional and technical services; and other unaffiliated services," the Office of the U.S. Trade Representative reports. [27]

The expansion of global trade creates great opportunities, both for individual businesses and for the state economy as a whole. Federal Reserve Chairman Ben Bernanke notes:

> Firms that emphasize exports are among America's most dynamic and productive companies. Relative to firms that produce strictly for the domestic market, exporters tend to be more technologically sophisticated and to create better jobs. Among U.S. manufacturers, for example, exporters pay higher wages and add jobs more rapidly than non-exporters. … U.S. firms with a global reach tend to be better diversified and are better able to respond to new market opportunities wherever they may arise. [28]

For these reasons, the committee believes it is imperative to include a strong focus on expanding global markets in any plans to speed Illinois' economic recovery.

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[24] The John D. and Catherine T. MacArthur Foundation, "Global Chicago" http://www.globalchicago.org/publications/MacArthur.pdfp. 1
[25] Office of the US Trade Representative, "The World Trade Organization" http://www.ustr.gov/webfm_send/1674, p. 6
[26] Chairman Ben Bernanke, "Global Economic Integration: What's New and What's Not?" At the Federal Reserve Bank of Kansas City's Thirtieth Annual Economic Symposium, Jackson Hole, WY. 9/25/06. http://www.federalreserve.gov/newsevents/speech/bernanke20060825a.htm#f3
[27] Office of the US Trade Representative, "The World Trade Organization" http://www.ustr.gov/webfm_send/1674, p. 7
[28] Chairman Ben S. Bernanke, "Embracing the Challenge of Free Trade: Competing and Prospering in a Global Economy "At the Montana Economic Development Summit 2007 Butte, Montana. 5/01/07. http://www.federalreserve.gov/newsevents/speech/Bernanke20070501a.htm

Illinois Office of Trade and Investment

To assist Illinois businesses in expanding overseas and drawing foreign investment, the State of Illinois Department of Commerce and Economic Opportunity has established the Office of Trade and Investment (OTI). Headquartered in Chicago, the OTI maintains a network of small trade and investment offices around the world. These OTI centers have been set up to help Illinois companies identify new markets and locate distribution channels for their products and services abroad, and to lead trade missions to provide Illinois companies with opportunities to speak directly with foreign buyers, agents, distributors and/or joint-venture partners. The OTI also promotes Foreign Direct Investment (FDI) by holding seminars and reverse trade missions. Currently, the OTI maintains ten small offices abroad, each staffed by one or two people, at a total cost of $4 million a year.

Each OTI office serves as the regional headquarters for a vast and varied geographic area. The Brussels office represents Illinois business to 29 countries, from Scandinavia to Italy, with an annual budget of $499,000. The Johannesburg office is charged with outreach to 55 countries, with a budget of $152,000. The Warsaw office serves as the portal to Illinois for 28 countries, including Russia, Finland, and all of the emerging markets in the former Eastern Bloc countries, with a budget of $178,000. The Mexico City office is responsible for representing Illinois business to all of the nations in Central and South America, with an annual budget of $388,000.

To expand their outreach efforts, the staff of these small, free-standing Illinois OTI offices participate in joint programs with other U.S. state and regional organizations, such as the Germany-based Council of American States in Europe, which represent 19 states, including Illinois. Their efforts are focused primarily on joint trade shows held under the auspices of local chambers of commerce in countries throughout their region, as well as promoting Sister Cities relationships between communities in Illinois and their counterparts throughout the world.

When Illinois international trade efforts are compared with those of other states, we seem woefully behind. For example, Virginia offers the Virginia Economic Development Partnership (VEDP), created 15 years ago by the General Assembly. "Our mission is to increase the number of Virginia companies selling overseas and their volume of international business, year after year," according to the VEDP website, ExportVirginia.org. "We assist both new and experienced exporters enter new international markets. We identify potential new markets, develop market entry strategies and locate possible distributors and representatives for products or services—all at little to no cost."[29]

It is worth reviewing the VEDP website, which bills itself as "Exporting 101." The site is visually sophisticated, simple to navigate, and crammed with well-organized, accessible information. The website alone serves as a valuable tool for any Virginia business seeking to begin or expand an export program.

Additionally, the VEDP offers a wide array of clearly presented, easily accessible programs to support Virginia business interests oversees. One example is the Accessing International Markets (AIM) Program, which accepts 20 Virginia companies each year into a yearlong export program. "AIM provides an export strategy along with the resources required to enter an export market successfully," according to the VEDP 2009 annual report. "AIM provides $5,000 toward export-related expenses, a custom market access plan, training, market visits to meet potential customers and distributors, and the help of expert consultants. To date, AIM graduates report on average a 92 percent increase in target market sales."[30]

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[29] Virginia Economic Development Partnership, "Who We Are," http://www.exportvirginia.org/

[30] Virginia Economic Development Partnership, "Your Products Should See The World. Here's Your Travel Guide," http://www.exportvirginia.org/assets/pdf/2009_International_Trade_Highlights_reduced.pdf

The VEDP is equally adept in promoting Virginia to international partners. In marketing its site selection services, the VEDP states:

> Your partnership with Virginia begins with the assignment of a Business Development Manager or International Investment Manager. The Partnership divides its business development efforts into two markets—domestic and international. Our Managers will guide you through the site selection process. He or she is your liaison with Virginia and one of our experts in location selection for your industry. As such, you can be assured that the most informed and experienced member of our team is on your team.
>
> VEDP's managers provide a variety of services to help you with the selection process. After an initial conversation to better understand your needs, they will prepare a summary of the most current market, economic, and demographic information. They will also supply individually tailored research of suitable land and buildings, labor availability, and other issues. They can then coordinate site visits to help you decide which of these locations is best suited to your business needs. Your manager will also work with local utility companies and other business development partners to ensure your requirements will be met there too. If necessary, they will coordinate with other government agencies, helping you with such matters as meeting environmental regulations or designing workforce training programs. Plus, the Partnership employs experts in Business Development Finance, Technical Services and Research to help your project team further streamline the selection process.[31]

In 2008, the VEDP won the nation's most prestigious export award, the President's E Star Award for Export Service. The award noted that, from 2005 through 2007, VEDP's International Trade Division assisted more than 100 Virginia companies through its export development programs. As a result, the companies in these programs notched phenomenal growth, in many cases doubling or tripling their export sales. In 2007, VEDP helped to increase Virginia's export sales by nearly 20 percent statewide.[32] These accomplishments carry a price tag, of course: In FY 2009, the VEDP's general fund appropriation was about $16 million with 100 staff.[33]

Closer to home, the State of Wisconsin has created the Division of Global Ventures to strategically target international companies for investment in the state. The Global Ventures strategy focuses on targeting companies that are leaders in emerging industry sectors, such as nanotechnology, water technology, wind turbine components, and precision manufacturing, and then marketing the state's resources to those companies.

In its efforts to attract FDI, the State of Wisconsin has focused much of its international marketing efforts on the state's wealth of fresh water. Wisconsin Governor Jim Doyle has become a high-profile trade ambassador for his state, visiting potential markets around the world to tout Wisconsin's advantages – especially its water resources and related technological expertise. Currently, Wisconsin is home to five of the 11 largest water technology companies in the world, and the State is investing in expanded water research facilities.

In a four-city trade mission to China in 2009, Doyle noted that much of China's water is unusable. "They have a huge need to clean water and use water efficiently and return water safely back into their

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[31] http://www.yesvirginia.org/about_us/partnership.aspx

[32] Office of the Governor (May 20, 2008) "Governor Kaine Hails Virginia Economic Development Partnership for National Export Award" Press Release. http://www.exportvirginia.org/assets/pdf/press_releases/2008%20E%20Star%20Award.pdf

[33] Virginia Economic Development Partnership, "Agency Strategic Plan" http://www.vaperforms.virginia.gov/agencylevel/stratplan/spReport.cfm?AgencyCode=310

waterways," he told a news reporter in a telephone call from Shanghai.[34] Governor Doyle also stressed Wisconsin's water resources in an address to 2009 International Water Technologies, Renewable Energy and Environmental Control Exhibition in Tel Aviv, part of a week-long trade mission "In Wisconsin, we are working hard to blaze the future in freshwater business and research," Doyle said in announcing the trip. "I look forward to working with Wisconsin businesses and new partners to lead the world in water technology and grow this important part of our economy."[35] In March 2010, Governor Doyle continued his global outreach by welcoming officials from China's Anhui Province. The province plans to invest billions of dollars in its water infrastructure through 2020, and officials came to Wisconsin to discuss opportunities for Wisconsin companies to participate in those projects.[36]

The State of Wisconsin's export efforts are supported by the Milwaukee 7, a regional economic development effort launched in 2005 to promote seven counties in southeastern Wisconsin. The Milwaukee 7 website – which promotes the region in four foreign languages, including Chinese – claims that the group's efforts have created or retained more than 5,300 jobs in the region.

In 2007, the group created the Milwaukee Water Council to promote the region's water resources and water technology expertise, both in academia and business. Since the Council was established, ten major water companies have moved large portions of their operations to Milwaukee. In June 2010, the Milwaukee Water Council will lead a business mission to participate in Singapore International Water Week, the world's largest conference and trade show focuses on water technology.

These examples give some idea of the increasing competition that Illinois faces, both in promoting our exports and in drawing foreign investment. As we work to position our state for rapid economic recovery, we cannot continue to rely on an outdated marketing model to bring Illinois to the world.

In preparing our report, this committee heard testimony from several foreign chambers of commerce who commented on other states' marketing efforts. One theme was constant: for many years, the State of Illinois has lagged other states in professional leadership of the OTI. The head of the OTI is in a critical position to promote or hinder Illinois' international trade efforts, so that person must be a professional, with international business experience. The OTI also requires professional staff who are knowledgeable about Illinois' resources and competitive advantages, as well as the many local and State incentives available to prospective investors.

OTI staff also must develop and maintain strong relationships with the many groups and organizations – both foreign and domestic – that work to promote global trade and economic development. These relationships are necessary if the OTI is to serve as a useful resource to the many foreign trade offices and foreign chambers of commerce in Illinois and to succeed in its mission of raising foreign awareness of Illinois' untapped potential as a world-class trading partner.

The committee understands how difficult it is for any organization, public or private, to avoid creating information silos. However, it is frustrating to review the many resources available in Illinois that have yet to combine to create critical mass in our global marketing efforts. For example, Illinois currently is home to five designated International Trade Centers, in Chicago, Glen Ellyn, Peoria, Moline, and Carbondale. The Chicago International Trade Center is part of NORBIC, an economic development organization for the Chicago region; the other four centers are associated with universities. Each center receives about $80,000 through DCEO; they report to the OTI.

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[34] John Schmid, Milwaukee Journal Sentinel (Wisconsin). September 22, 2009 "Doyle promotes water industry" http://www.allbusiness.com/government/government-bodies-offices-heads-state/13009302-1.html

[35] The Racine News Team, The Racine News (Wisconsin). November 16, 2009 "Governor Doyle Leads Trade Mission to Israel" http://racinenews.org/2009/11/16/governor-doyle-leads-trade-mission-to-israel/

[36] Office of the Governor (March 3, 2010) "Governor Doyle Welcomes Chinese Delegation to Wisconsin for Meeting on Water Technology" Press Release. http://commerce.wi.gov/NEWS/releases/2010/038.html

These International Trade Centers often serve as the first stop for Illinois companies considering export. The centers provide professional counsel to Illinois companies on all aspects of exporting, including distributor searches, duty drawbacks, export compliance, document preparation, logistics, payment mechanisms and marketing strategies. Unlike the U.S. Department of Commerce offices, the International Trade Centers offer these services free of charge. Yet the committee found that the OTI does not actively promote awareness of the high-quality services provided by the International Trade Centers.

Similarly, the Illinois Sister Cities program has established connections between Illinois communities and more than 100 cities in 40 countries worldwide. As the committee heard in testimony from Rockford officials, these connections can yield real economic benefits. Rockford has succeeded in leveraging its ten-year Sister City relationship with Changzhou into stronger connections with business interests throughout China. Rockford Mayor Larry Morrissey has made three trips to China to meet with business representatives and local government officials.[37] Those trips played a role in Wanxiang America's decision to site its new solar panel assembly plant in Rockford. To support those trade relationships, the Rockford Area Economic Development Council has created the China-Rockford Investment Consultancy desk, staffed by an administrator who is fluent in Mandarin.[38] With support and promotion by OTI, other Illinois communities with Sister City relationships could benefit from the Rockford model.

If Illinois is to succeed in the global economy, we must make sure that the State of Illinois receives the maximum value from its investment of taxpayer dollars in the promotion of international trade. Therefore, the committee makes the following recommendations:

- **The promotion and expansion of international trade must be a top priority for all State of Illinois economic development officials, including the Governor.**

  The Governor must demonstrate the State of Illinois' commitment to expanding international business relationships by personally leading Illinois trade delegations abroad and by making himself accessible to visiting international officials and investors.

- **The Illinois Office of Trade and Investment must reposition itself as a professional, proactive marketing organization**.

  The Illinois Office of Trade and Investment must refocus its mission on four main activities:

  - Marketing Illinois' competitive advantages around the world;
  - Providing first-point-of contact assistance to foreign investors seeking Illinois data, site locations, incentives and business contacts;
  - Marketing State export assistance services to Illinois companies;
  - Coordinating State and municipal efforts to attract and retain international business investment

- **OTI should be managed by business professionals with international trade experience.**

  As the head of the State of Illinois' global marketing efforts, the OTI Director should have strong organizational, networking, and team-building skills. The Director should be knowledgeable about the interaction of state and local governments, and also should be knowledgeable about, and sensitive to, the wide variety of foreign business cultures. Additionally, as the State's chief global marketing officer, the Director should be highly skilled at all forms of communication, including electronic communication and social marketing.

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[37]Thomas V. Bona, BusinessRockford.com, (Oct 09, 2009) "Mayor's Souvenirs From China: Relocation Leads" http://www.rrstar.com/archive/x1128404042/Mayor-s-souvenirs-from-China-Relocation-leads

[38]The Rockford Area Economic Development Council, "The China-Rockford, Illinois Investment Consultancy For Global Growth- Summer 2009,"p. 4, http://www.rockfordil.com/public/resources/resource_173/Summer_09.pdf

Similarly, OTI staff should be trained economic development professionals with international experience. They should be knowledgeable about federal, state, county and local incentives for foreign investment. They also should be well-informed about the international resources and marketing efforts of other states. They should be fluent in at least one foreign language, and should have strong electronic communications skills to facilitate access to trading partners around the world.

- **The OTI Director and top staffers should promote the Office and its services through strong relationships with other organizations, both domestic and abroad, that promote international commerce.**

  The Director and staff should work to build a strong public communications program that includes speaking engagements at trade conferences and networking events, consistent outreach to chambers of commerce and economic development organizations, and a comprehensive media strategy focused on both business and general audiences.

  As part of its outreach program, the OTI should make full use of electronic communication. For example, the OTI should develop and maintain a database of all foreign media representatives in the United States, and should include a targeted, consistent focus on overseas media as part of its overall communications strategy. Similarly, the OTI should establish e-mail and online communications with all of the chambers of commerce, trade associations, economic development commissions, colleges and universities and professional associations in Illinois, to facilitate information sharing. A monthly electronic newsletter would be one means of alerting organizations statewide to new opportunities and programs, while also creating a showcase for success stories.

- **The OTI should maintain comprehensive electronic databases of international businesses and partner organizations, and should make those databases available on-line.**

  An online list of foreign companies already established in Illinois, organized by country and sector, would encourage foreign investment in Illinois, as these companies would be the natural first points of contact for potential investors from those countries or sectors.

  A comprehensive database of Illinois businesses working abroad would make it simple for OTI to facilitate connections between potential business partners. This database also would enable enhanced communication between OTI and Illinois companies overseas, making it easier for OTI to maintain a schedule of international events and to send OTI representatives to important events.

  A database of local and regional organizations and agencies that focus on economic development would help OTI to foster cooperation between groups and communities and avert duplication of effort.

- **OTI should make information about its services available online in the languages of investing nations.**

  A huge disconnect is created when an organization dedicated to fostering international trade presents information only in the language of its home country. When an organization such as the Milwaukee 7 offers information about Wisconsin's resources in four international languages (including Mandarin) on the front page of its website, it underscores its credibility and value as a source of effective, targeted assistance to foreign partners.

- **The OTI should maximize the value of the five International Trade Centers in Illinois by promoting them aggressively and directing additional resources to them, if possible.**

  The committee heard universal praise for the services of the five Illinois International Trade Services, and considers that they give the best return on investment of any State-funded agency providing export assistance to small Illinois companies.

- **The OTI should work with Illinois communities to promote Sister Cities relationships that focus on economic development and expanded international trade.**

- **The OTI should partner with other economic development agencies and councils throughout Illinois to develop shared marketing themes for attracting investment and tourism.**

- **The OTI should take a leadership role in educating local and regional groups within Illinois about the overall benefit of expanded international trade.**

  When a foreign company invests in one community, the positive effects are felt for miles around. For example, a new foreign-owned factory in Belvidere creates opportunities for Chicago-based shipping services. The new jobs created by that factory bring in wages that are then spent in Rockford-area stores. And the increased tax revenues created by that factory help everyone in the Illinois. For that reason, it makes sense for economic development groups statewide to cooperate in promoting Illinois to the world.

Partner/Multiplier Organizations

As global opportunities have expanded exponentially, so have the numbers of groups and organizations focused on some aspect of international trade. Here in Illinois, there are hundreds of organizations whose missions include, at least in part, the promotion of Illinois to potential trading partners, investors and tourists. In addition, there are literally thousands of Illinois groups with a focus beyond our national borders, from college and university departments and interest groups, to ethnic organizations, to student exchange programs, to film festivals, to Facebook pages – the list is almost endless.

But as the MacArthur report notes, "these assets remain fragmented, seldom cooperating, islands rather than an archipelago. So the total impact remains less than the sum of its parts." [39]

In some ways, this fragmentation is completely understandable. Most organizations focus, quite properly, on their own individual missions; the larger needs of their state, or their country, are beyond their scope. Yet these groups do present an enormous opportunity to expand the presence and economic interests of Illinois in other countries, especially if the State takes an effective leadership role in coordinating and supporting their activities.

In researching this report, this committee spoke to representatives of a number of organizations with an interest in global commerce. All of them stressed their willingness to work with the State of Illinois to learn more about international opportunities and to promote Illinois to potential partners around the globe.

Some of these organizations represent businesses in other countries. But groups whose main focus is increasing Illinois' imports from their home countries present real opportunities for our state economy. When these organizations find Illinois distributors for their foreign-made products, they create Illinois jobs. Over time, those overseas producers visit Illinois to conduct further business – introducing them to

[39] The John D. and Catherine T. MacArthur Foundation, "Global Chicago," p.4, http://www.globalchicago.org/publications/MacArthur.pdf

the many assets Illinois offers foreign investors and making Illinois a likely site for a manufacturing facility when that company expands to U.S. production.

For example, the Italian-American Chamber of Commerce Midwest (IACC Midwest) is part of an international network, connecting Italian chambers of commerce worldwide with some 200 local chambers in Italian cities, along with thousands of Italian manufacturing and trade associations and other economic entities. Through networking events, special trade-focused events (such as "Pane e Pasta: The Essentials of Italian Tradition," to promote Italian-American food products to operators in the restaurant, grocery, and food and wine distributing industries), and multiple trade missions to and from Italy each year, the IACC Midwest creates and supports strong commercial relationships between Italy and Illinois. The group's largest event promotion is the Italian Expo, an annual three-day event held in Chicago that draws more than 26,000 attendees to fashion shows, cooking demonstrations, food and wine tastings and more than 150 exhibits of Italian products.

In addition to promoting Italian goods to Illinois distributors and consumers, the IACC Midwest also sends regular email bulletins promoting the advantages of Illinois to its extensive network of Italian business organizations. Every other month, the IACC Midwest's Executive Director travels to Italy, knocking on doors and meeting face to face with prospective trade partners, promoting Illinois as a site for new investment and seeking distributors in Italy for goods and services produced by its U.S. members.

Other groups offer similar opportunities: For example, the German American Chamber of Commerce of the Midwest (GACCoM), with 120 offices in 80 countries, offers a team of consultants to assist German and US companies in their efforts to expand internationally. The French American Chamber of Commerce has developed a complete set of turn-key services to create an incubator for French companies to launch in Illinois. The Australian New Zealand American Chamber of Commerce Midwest promotes trade through such events as *Escape the Winter: Experience Australia*, a January 2010 event which showcased Wine Australia, Coopers Beer and dozens of uniquely Australian foods for sampling, along with aboriginal art, jewelry, and live music.

Overseas, U.S. business interests are promoted on a wider scale by the American Chambers of Commerce Abroad, which maintains affiliates in 100 countries worldwide.

In addition to these private business associations, the Midwest also is home to a large number of consular offices and other government-funded trade offices and organizations, such as the Japan External Trade Organization (JETRO).

The many international conferences and trade shows held at McCormick Place and other venues in the Chicago area and throughout represent another extraordinary and, in this committee's view, largely untapped resource for OTI. Every foreign company exhibiting in Illinois should be viewed as a potential investor or distributor of Illinois exports. In addition to the Metropolitan Pier and Exposition Authority (better known as McPier) and the Chicago Convention and Tourism Bureau, there are about 50 other convention bureaus around Illinois. These groups have access to companies, business groups, and potential investors worldwide, and should be considered partners in the State of Illinois' international outreach.

As we prepared this report, this committee heard from representatives of a number of foreign chambers of commerce who maintain offices in Chicago. These representatives maintain strong, widespread relationships with local businesses and organizations in their home countries, and make frequent trips overseas to promote Midwestern business opportunities. They often are knowledgeable about which foreign companies are considering expansion into the United States, and their business contacts and language skills make them valuable resources for prospective investors.

Many of these representatives talked about their organizations' evolving role in maximizing trade relationships in mature markets, such as Western Europe. In years past, a state trade office in a foreign capital could reasonably serve as a first point of contact for businesses throughout a region. For example, a German company preparing to embark on its first international expansion might seek out the Illinois trade office in Belgium as an early resource.

Today, however, most businesses in Western Europe, Japan, and other mature markets have a variety of existing connections to U.S. business – often through national chambers of commerce and trade associations located here. As a result, they find less and less value in accessing potentially Illinois partnerships through an intermediary office located in another nation. For that reason, many state and regional trade offices and business organizations now focus their limited resources on promoting exports in newly developing markets, such as India and China, where the private sector has not yet established strong business networks.

This committee heard testimony from representatives of a number of international organizations who stressed their eagerness to work with OTI to expand Illinois' trade relationships overseas. With thoughtful planning and strategic partnerships, these groups could act as "multipliers" for OTI, building on existing networks to expand OTI's influence far beyond the range of its limited budget and small staff.

To build on established networks and to maximize return on the State's investment in international marketing efforts, this committee makes the following recommendations:

- **The OTI must identify and work closely with the "multiplier" organizations located in or connected to Illinois that work to attract foreign direct investment in Illinois or promote Illinois exports.**

  As a first step, the OTI should develop and maintain a comprehensive database of multiplier organizations based in Illinois, as well as those agencies in other locations that have strong connections to Illinois groups.

  The OTI should create a formal program of networking meetings for multiplier agencies, creating opportunities for them to meet each other and to build relationships with Illinois business and government leaders.

  The OTI should create electronic newsletters and send regular updates about Illinois trade opportunities to partner organizations, which can then send that information around the world.

- **The OTI should end its practice of maintaining State offices in mature markets and contract with selected multiplier organization to promote Illinois exports and FDI.**

  By closing these small, minimally staffed foreign offices and using multiplier organizations to promote Illinois in mature markets, the State will save money while gaining better penetration and coverage of target markets. For example, the State currently budgets $500,000 a year for the Brussels office. The OTI could gain a dramatic increase in geographic reach and could build on already strong existing networks by closing that office and using a portion of that appropriation to contract with selected multiplier agencies to promote Illinois trade in Western Europe. The remainder could be used to bolster OTI staff within Illinois and to increase funding for the International Trade Centers.

  The OTI should commit professional full-time staff to manage and oversee these contracts, monitor activities and review outcomes. These contracts would be renewed on an annual basis.

The OTI should continue to maintain offices in developing markets where international business networks are not yet in place.

- **The OTI should improve its relationships with foreign trade offices based in Illinois.**

  These trade offices, such as JETRO, are tightly focused on promoting the interests of businesses in their home countries. However, it is important for the OTI to understand the opportunities for mutual benefit that these offices present. When foreign trade offices find Illinois distributors for their exports, Illinois businesses benefit from increased sales opportunities. The resulting business relationships also create opportunities on both sides for expanded trade.

  As part of the OTI's outreach to foreign trade offices, they should make sure that these offices are supplied with up-to-date, culturally relevant packets of information about the advantages of investing in Illinois. This information should include clear, accessible instruction on identifying Illinois products for distribution in their home countries. Whenever possible, these packets should include information in the appropriate foreign language.

  The OTI should make sure that foreign trade commission personnel are consulted and involved whenever Illinois hosts a visiting trade delegation.

- **The OTI should work closely with McCormick Place and other Illinois convention venues to promote Illinois business at all trade shows.**

  All foreign companies exhibiting in Illinois are potential trade partners. Their participation in Illinois trade shows creates exceptional opportunities to promote Illinois business.

  The OTI should with Illinois convention bureaus and trade show organizers to develop information packets about the advantages of Illinois and to deliver those packets to all foreign exhibitors. As noted above, these packets should include clear, detailed information on finding Illinois products suitable for import to their home countries.

  Foreign trade commissions and foreign chambers of commerce in Chicago should receive guest passes to all McCormick Place trade shows. More than any packet or presentation, visits to these shows will demonstrate the enormous range of U.S. products and services, and will motivate foreign trade representatives to promote the shows in their home countries.

  The OTI should send representatives to country receptions held at McCormick Place or other trade show venues. These receptions are a great opportunity to forge personal connections with foreign trade representatives.

Expanded International Trade Leadership

Illinois is home to an extraordinary wealth of organizations with the capacity to expand our international presence and promote international trade. The Federal Reserve Bank of Chicago holds major seminars on international economic issues, often in cooperation with the World Bank, the International Monetary Fund, the Brookings Institution and other organizations. The Executives' Club sponsors overseas trade and investment missions and has produced major programs on international business. The Japan Society sponsors business lunches. Northwestern University and the University of Chicago hold regular public (if ill-attended) seminars on foreign affairs. The New York Council on Foreign Relations and the Asia Society hold seminars in Chicago. Yet most of these worthy efforts take place independently, with little or no attempt to join forces for maximum impact.[40]

[40] The John D. and Catherine T. MacArthur Foundation, "Global Chicago" http://www.globalchicago.org/publications/MacArthur.pdf p. 11

In an age of globalization, it makes no sense to focus resources on programs that respect parochial boundaries or organizational rivalries. Groups, communities – even states – must begin looking at international trade from a joint perspective that acknowledges that the benefits of foreign investment transcend city limits or state lines.

The author of a Chicago Council on Global Affairs report, *Past Silos and Smokestacks: Transforming the Rural Economy in the Midwest*, sets out the problem plainly:

> The rural Midwest could have an economic future as bright as its vibrant past. But it is basing its twenty-first-century future on a twentieth-century playbook. This is not a recipe for success. Towns and counties compete with neighboring towns and counties for jobs and investments. Industrial recruitment—"smokestack chasing"—is the norm.…
>
> The path to stronger economies in the rural Midwest is plain. Partnering regionally to compete globally is what's needed. This pathway will lead to scores of multicounty, self-defined regions across the Midwest. Only by combining their forces to create new businesses and good jobs at home will the towns and counties of the rural Midwest compete and thrive in a global economy where this sort of collaboration is fast becoming the norm.[41]

By taking a leadership role in promoting cooperation over competition, the OTI could help to position, not only Illinois, but the entire Midwest, for growth and prosperity fueled by international trade.

To make Illinois a regional leader in promoting international trade, the committee recommends:

- **The OTI should leverage resources, enhance common goals and create synergies by building partnerships with other Midwestern states and presenting a strong joint presence at international exhibitions, industry gatherings and trade forums held around the world.**

  It will be difficult for individual states to overcome longstanding regional rivalries and political differences to present a united front to the world. However, failure to work together will fuel a race to the bottom, with states and local communities bidding against each in competitions that provide great benefits to foreign investors to the ultimate detriment of our own residents. The local and state governments of the Midwest must come to an understanding that foreign investment in one community or state ultimately benefits the region as a whole, and government leaders must join forces to compete successfully against other regional business coalitions around the world.

- **The Governor should appoint a permanent Trade and Export Advisory Council to provide ongoing support and guidance to the OTI**.

  In naming the members of this Council, the Governor should seek input from executives and foreign offices of Illinois' multi-national corporations, both large and small, to make sure the Council provides guidance that reflects the needs of emerging industries as well as established companies. The Council members should include business professionals with strong international experience as well as representatives of Illinois universities and not-for-profit groups with an international focus. To maximize the Council's influence, its membership should include the chair of the Foreign Trade Commissioners Association of Chicago, which is made up of senior foreign trade representatives based in Chicago, and the chairman of the MPEA Board of Directors.

[41] http://www.thechicagocouncil.org/UserFiles/File/Task%20Force%20Reports/Heartland%20Paper%20-%20Rural%20Development%2010.pdf, p. 3

As the authors of an independent report to the Chicago Council on Global Affairs state:

> Globalization presents new and unprecedented opportunities and challenges to nations, peoples—and to cities. In the past, cities competed within national borders. Today, cities compete in a global marketplace that spans oceans and continents. [42]

The State of Illinois has the resources necessary to thrive in that global marketplace. The committee believes that, by following these recommendations, the State of Illinois can wield those resources efficiently and effectively and position our state for decades of international success.

[42] Chicago Council on Global Affairs, "The Global Edge: An Agenda for Chicago's Future," p. 3, http://www.thechicagocouncil.org/UserFiles/File/Task%20Force%20Reports/Global%20Chicago_FINAL.pdf

SUSTAINABLE ENERGY

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Introduction

Any discussion of economic development today must include a thoughtful review of energy, the environment and sustainability. For too long, environmental concerns have been viewed in opposition to job creation. Today, however, it is clear that sustainable energy and technology present opportunities to create new, permanent jobs while yielding environmental benefits today and in the future.

A 2009 report by the Midwest Governors Association identifies the new green energy sector as a real source of hope for rapid economic expansion:

> At a time when the Midwest continues to experience job losses and a challenging economic outlook, new energy industries in the Midwest are emerging as focal points for job creation and retention. Although the Midwest has lost more than 1.2 million manufacturing jobs since 2000, a number of recent studies suggest that new energy industries can create as many as 1.2 million jobs over the next decade, with as much as a third of those in high-wage, high-skill manufacturing and construction jobs.[43]

To help to position Illinois for swift recovery from the current recession and help us become a leading force in the new green energy economy, this committee has worked to recommend policies that will promote economic growth, decrease unemployment, attract new business enterprises, strengthen and retain existing business enterprises and ensure long-term economic stability while protecting the integrity of the environment.

Energy efficiency programs, when properly designed and implemented, can create a large number of jobs statewide while reducing energy costs for homeowners and businesses and diminishing future need for new fossil fuel generation. In the near term, energy efficiency programs and projects are a strong source of jobs for skilled laborers, engineers, designers, scientists, contractors and manufacturers, given the amount of work necessary to upgrade, renovate and retrofit existing public and private structures. Energy efficiency measures can also create new, permanent jobs swiftly without substantial front-end investment.

However, there have been substantial market impediments to widespread private investment in energy efficiency projects. On the supply side, contractors report a variety of challenges, including difficulties with identifying clients, obtaining financing, and recruiting a trained workforce. On the demand side, foreclosure and bankruptcy rates are extremely high, sharply reducing the numbers of homeowners and businesses that are financially able to invest in energy efficiency products. Although the number of utility customers who need assistance continues to climb, there is limited consumer awareness regarding the existence and cost-benefits of energy retrofits. Residents and small businesses often lack information about their own energy usage and the options available to increase energy efficiency, and those that are aware often lack access to capital to pay for those projects. Many larger commercial and industrial businesses do not prioritize energy efficiency projects, perhaps because they are unaware of the scope of potential savings or because the return on investment is lower than that of competing projects.

Given Illinois' role as a leading exporter of electricity to other states, the capacity of the electrical transmission grid also must be considered in any discussion of energy generation and conservation.[44] Both nationwide and in Illinois, our aging and increasingly constrained transmission grid creates increasing concerns about both energy loss and capacity limitation. It is estimated that at least 10 percent of generated electricity is lost in its transport to end users.[45] These losses are increasing as the system

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[43] Midwestern Governor's Association, "Platform for Creating and Retaining Midwestern Jobs in the New Energy Economy 2009," p. 4, http://www.midwesterngovernors.org/Publications/JobsPlatform.pdf

[44] U.S. Energy Information Administration "Illinois Quick Facts" http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=IL

[45] U.S. Department of Energy "Overview of the Electric Grid" http://sites.energetics.com/gridworks/grid.html

becomes more and more overloaded; the amount of energy lost over power lines doubled between 1980 and 2006, resulting in roughly $12 billion in additional costs to consumers.[46]

The transfer capability of the Illinois transmission system has not been upgraded in more than 30 years. Upgrading the current transmission system and improving connections to other states could increase accessibility to market opportunities for renewable energy producers.

As noted in a report by the Illinois Smart Grid Initiative:

> … the electric power system is out of date. The electric grid infrastructure in place today was designed largely before the advent of the microprocessor and the digital revolution. In addition, the whole electric infrastructure system, from generation to transmission to distribution to end uses by consumers, was developed at a time when efficiency was not a priority. Today, local and global environmental concerns imply that electricity, and the resources used to produce electricity, must be used in a more efficient manner over time.[47]

However, no one suggests that conservation alone can serve to meet Illinois' environmental and energy needs, today or in the future. In addition to finding more efficient ways to use current energy resources, we also must develop new, renewable sources of energy to meet our personal and industrial needs while reducing carbon emissions. In August 2007, the State of Illinois adopted a statewide renewable energy standard requiring Illinois utilities to procure at least 25 percent of their power from renewable sources by 2025. To the extent available, 75 percent of the electricity used to meet the renewable standard must come from wind; other eligible sources include solar, biomass, and existing hydroelectric power. [48]

With these issues in mind, the Sustainable Energy committee reviewed energy-related initiatives in other states along with Illinois-specific proposals. As part of our research, the committee met with experts from the public and private sectors who provided great insight into issues related to energy, the environment, and sustainability here in Illinois.

To position the Illinois economy for rapid expansion by investing in energy sources and sustainable technologies that will yield environmental benefits, the committee makes the following recommendations:

- **The State of Illinois should create and expand public education and outreach programs to promote energy conservation by consumers and businesses.**
- **The State of Illinois should work in partnership with the Illinois Finance Authority to expand affordable funding sources for energy-efficient projects and products.**
- **The State of Illinois should create jobs and expand capacity for energy conservation projects of every size by continuing to invest in the Illinois Community College Sustainability Network.**
- **Financial disincentives that limit utilities' participation in energy conservation programs should be reduced or eliminated.**
- **The State of Illinois should encourage expansion of the state's current transmission grid to relieve congestion, enhance reliability, provide power to underserved areas, and enable**

[46] Report of the Illinois Smart Grid Initiative "Empowering Consumers Through a Modern Electric Grid," p. 10, http://www.cnt.org/repository/ISGI.FinalReport.pdf
[47] Ibid
[48] Illinois General Assembly "Illinois Compiled Statutes" [(20 ILCS 3855/) Illinois Power Agency Act http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=2934&ChapAct=20%26nbsp%3BILCS%26nbsp%3B3855%2F&ChapterID=5&ChapterName=EXECUTIVE+BRANCH&ActName=Illinois+Power+Agency+Act.

connection of renewable energy generators.

- **Legislators and regulators should work collaboratively to encourage Illinois utilities to propose accelerated smart grid deployment plans.**
- **The Governor and legislators should show strong public support of the wind energy industry in Illinois, appearing at wind industry trade events and promoting Illinois wind energy developers and manufacturers out of state and overseas.**
- **The General Assembly should extend Public Act 095-0644 for at least 20 years to reduce wind industry uncertainty over property tax valuations.**
- **The General Assembly should pass a uniform statewide sales/use tax exemption for wind energy equipment purchases to put Illinois on an even footing with neighboring states.**
- **The General Assembly should pass legislation to expand the full credit per kilowatt for net metering from the current limit of 40 kilowatts to 2 megawatts.**
- **The State of Illinois should continue to support development of the preliminary design report and preparation of a license application for submittal to the FERC to build new hydroelectric plants on the Mississippi River.**
- **The Governor should form a panel of credentialed experts to consider the expansion of Illinois' nuclear capacity as part of its energy portfolio and to assess the possibility of ending the construction moratorium and building next-generation nuclear power plants in Illinois.**
- **The State of Illinois should use pricing and regulatory incentives to encourage existing power producers to invest in clean coal facilities, or create a pool of funds for clean coal projects, as part of any CCS compliance program.**
- **The General Assembly should use the Carbon Capture Legislative Review Commission to provide full hearings and build consensus on issues related to new carbon sequestration technologies.**
- **The General Assembly should create financial incentives for service stations to offer biofuels, and for consumers to purchase biofueled vehicles.**

Energy Conservation

Reducing energy consumption and increasing energy efficiency must be cornerstones of any sustainable energy initiative. A report by the American Council for an Energy-Efficient Economy states the case succinctly:

> Energy efficiency and renewable energy are the "twin pillars" of sustainable energy policy. Both resources must be developed aggressively if we are to stabilize and reduce carbon dioxide emissions in our lifetimes. Efficiency is essential to slowing the energy demand growth so that rising clean energy supplies can make deep cuts in fossil fuel use. If energy use grows too fast, renewable energy development will chase a receding target. Likewise, unless clean energy supplies come online rapidly, slowing demand growth will only begin to reduce total emissions;

> reducing the carbon content of energy sources is also needed. Any serious vision of a sustainable energy economy thus requires major commitments to both efficiency and renewables.[49]

Advocates for sustainability are sometimes perplexed by the slow adoption of energy conservation measures by both individuals and businesses. Relatively modest investments in efficient energy technologies can yield swift, significant cost savings, and many efficient technologies, such as compact fluorescent light bulbs, are readily available and relatively affordable.

Consumer reluctance to adopt energy-saving tactics may reflect a lack of information, as in the case of "voltage vampires", such as many televisions, VCRs, coffeemakers and toasters that continue to consume power even when they're not in use. Consumers may not be aware of the high energy consumption of the vast – and still increasing – numbers of home electronics, such as big-screen televisions, video games, and high-powered laptop computers, which threaten to offset other energy conservation efforts. The U.S. Environmental Protection Agency estimate that these energy wasters consume about 5 percent of the average household's energy bill. [50]

There also may be reluctance to switch from trusted (if low-efficiency) brands and products to new ones, especially if the more efficient products carry a higher price tag. Or consumers may not have the upfront dollars required for a major energy retrofit, such as replacing an inefficient furnace or insulating an attic.

State government can play an important role in promoting energy conservation, both by providing reliable information about energy-saving products and practices and by creating incentives for consumers and businesses to make real, conscious reductions in their energy uses.

A number of states and municipalities have created new tax credits, loans, rebates, and direct grant programs to promote energy efficiency and to encourage consumers to invest in high-efficiency products. In addition to saving energy, these programs promote job creation by encouraging sales of durable goods, such as home appliances, and investment in home improvement projects.

One approach is provision of a tax credit for purchase of energy-efficient appliances and vehicles. Oregon, Maryland, and Minnesota have enacted tax credits for highly energy-efficient appliances, based on the U.S. Department of Energy/Environmental Protection Agency's ENERGY STAR® qualifications). The appliances covered by the programs include highly efficient clothes washers, air conditioners, heat pumps, water heaters, and vehicles. In Maryland and Minnesota, sales tax is waived when buyers purchase one of the qualifying appliances. Stores typically put signs touting the tax credit on display models of qualifying appliances, letting consumers know both that the appliance meets State standards and that they will save money if they buy. The point-of-purchase credit is instant, available, and equal for every customer, and requires less administration on the State's part. In Oregon, which has no sales tax, purchasers receive an income tax credit, which is more cumbersome to administer.[51]

These tax credit programs have substantially promoted sales of high-efficiency products. In Oregon, for example, the Residential Energy Tax Credit program, which included credits for purchase of alternate fuels (such as natural gas) and hybrid vehicles, led to 41,220 purchases in 2007. An independent report found that those purchases yielded $2.55 million in energy savings in their first year, and reduced net

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[49] Bill Prindle and Maggie Eldridge, American Council for an Energy-Efficient Economy "The Twin Pillars of Sustainable Energy: Synergies between Energy Efficiency and Renewable Energy Technology and Policy" http://www.aceee.org/pubs/e074.htm

[50] Renee Sande, Down to Earth NW, "Thwart Energy Vampires in Your Home" http://www.downtoearthnw.com/stories/2010/feb/28/thwart-energy-vampires-in-your-home/

[51] American Council for an Energy-Efficient Economy, "Opportunities for State Action: Sales Tax Waiver" http://www.aceee.org/energy/salesfs.pdf

annual carbon dioxide emission by 1,290 tons. The RETC program cost the State $12.5 million in tax credits that year.[52]

The State of Illinois recently promoted sales of ENERGY STAR® appliances through a rebate program funded primarily by the federal American Recovery and Reinvestment Act. The program, which provided a 15 percent rebate for qualifying high-efficiency appliance purchases, was a tremendous success; within 11 hours, the $6.2 million in federal rebate funds had been exhausted, requiring an additional infusion of State funding from the Energy Efficiency Trust Fund.[53]

States and municipalities also have had success in promoting energy retrofits of homes and businesses. Oregon's Business Energy Tax Credit provides a 35 percent income tax credit carried over five to eight years. The Oregon program includes purchases of energy-efficient equipment, such as lighting and heating systems, as well as construction or retrofits of LEED-certifiable buildings.[54]

In January 2010, Massachusetts announced $1.6 billion in new energy efficiency incentives for utilities, with the goal of reducing electricity use by 2.4 percent and natural gas by 1.15 percent each year over the next three years. These incentives will encourage utility customers to adopt energy efficiency measures, such as insulating their homes and replacing conventional light bulbs. The program also includes a major increase in State spending on consumer outreach. This initiative was a product of the 2008 Green Communities Act, which required Massachusetts to establish specific efficiency targets and a plan to achieve them.[55]

California, ranked at the top of the American Council for an Energy Efficient Economy's rankings of the most energy-efficient states, is now requiring energy efficiency in new construction. On January 14, 2010, the California Building Standards Commission approved the nation's most environmentally stringent building code for new commercial buildings, hospitals, schools, shopping malls, and homes. The new code, named CAL Green, will go into effect in January 2011, and will require builders to install a number of environmentally-friendly features in new buildings to conserve water and electricity, and also requires them to divert half of construction waste to recycling. The California Air Resources Board estimates the new code will reduce greenhouse gas emissions by three million metric tons in 2020.[56]

Here in Illinois, the 2007 Illinois Power Agency Act includes an energy efficiency portfolio standard that requires annual energy savings starting at 0.2 percent in 2008 and increasing to 2 percent savings in 2015 and each year beyond. To reach this goal, the Illinois Commerce Commission authorized a dedicated charge on electric bills to create a fund to subsidize energy efficiency programs. Under legislation passed in 2009, gas utilities will begin a similar fund in 2012. By statute these programs are subject to a spending cap. Although the energy efficiency programs are operating below the spending caps at present, those caps could be reached within a few years.

Ameren and ComEd, Illinois' two major electric utilities, are primarily using these energy efficiency funds to provide rebates to customers after energy efficiency projects and purchases are completed. This requires residential and commercial customers to provide capital upfront to invest in these projects and

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[52] EcoNorthwest, "Economic Impacts of Oregon Energy Tax Credit Programs in 2007 and 2008" http://www.oregon.gov/ENERGY/CONS/docs/BETC_RETC_Impacts-020209_FINAL.pdf

[53] Illinois Department of Commerce and Economic Opportunity, (April 16, 2010) Press Release "Energy Star Rebates" http://www.commerce.state.il.us/dceo/Bureaus/Energy_Recycling/Energy+Star+Rebates/appliance-rebate.htm

[54] Ibid.

[55] Pew Center on Global Climate Change, "Massachusetts Establishes Ambitious Energy Efficiency Standards" http://www.pewclimate.org/node/7365

[56] Pew Center on Global Climate Change, "California Approves Statewide Stringent Building Code for New Buildings" http://www.pewclimate.org/states/news/ca-building-code-01-15-10

receive the rebates. Cook County's Energy Savers Program for multi-family buildings is an example of a program that removes this obstacle by providing low-interest loans to help building owners pay for new heating and cooling equipment, new windows and insulation, and other energy conserving improvements.[57] Additional robust and accessible financing mechanisms are needed in Illinois to promote energy efficiency projects for each market segment—residential, small commercial, institutional, and public sector.

To provide new sources of low-cost loans for energy improvements, Illinois recently passed PACE bond enabling legislation, which went into effect on Jan. 1, 2010. PACE bonds can be used to provide financing for residential and commercial property owners who want to invest in energy-efficiency projects or renewable energy generation. Under the new law, municipalities across Illinois are authorized to create their own financing districts, which can then issue bonds to provide financing for these projects. Those bond proceeds are then used to make loans to property owners that can be repaid through an increased property tax assessment over a period of years.[58] These bonds make it possible for communities to promote energy savings, create new, local jobs and support property investment. Yet this committee finds that the new PACE program has not been aggressively marketed to Illinois municipalities.

Another serious disincentive to energy efficiency in Illinois has been created by current utility ratemaking policies, which reward utilities with higher profits if they sell more electricity than expected, and punishes them with lower profits if electricity use decreases. This means the utilities' business model is directly at odds with the goals of the energy efficiency programs the utilities are implementing.

The American Council for an Energy-Efficient Economy notes that many states are currently working to remove this disincentive by finding alternative ways to guarantee utilities' rates of return. The two main mechanisms being used are performance incentives and decoupling of a utility's profits from its sales. Decoupling has been in place in California for many years, and other states are pursuing similar initiatives.[59]

The Delaware Public Advocate recently provided a clear explanation of the issue. Under decoupling:

> A utility company's profits would be disassociated from its sales. They would be guaranteed a minimum amount of "return", or profit, from the sale of their commodity (electricity or gas). The company would not be penalized for selling less of their product. There are different types of Revenue Decoupling mechanisms, each particular to the jurisdictions' public policy initiatives.
>
> **What are some of the benefits of Revenue Decoupling?**
>
> The main benefits would be that the utility company would not be hurt financially when a customer reduced their energy consumption through conservation measures. This would protect the utility companies' stockholders from financial loss. Another benefit is that the utility company would be "on the same page" as everyone else when it came to promoting energy efficiency programs. The utility companies, being large energy industry entities, could be leaders in the field of energy conservation. Many people feel this is a prudent course of action for public policy goals.[60]

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[57] PR Newswire, "Cook County Energy Savers Program a Top U.S. Retrofit Performer" http://www.prnewswire.com/news-releases/cook-county-energy-savers-program-a-top-us-retrofit-performer-83924127.html

[58] PACE Financing, "Illinois PACE Financing: How does Illinois financing work?" http://pacefinancing.org/state-financing/illinois/

[59] American Council for an Energy-Efficient Economy, "The 2008 Energy Efficiency Scorecard," p. 16, http://www.aceee.org/pubs/E086.pdf

[60] State of Delaware, "Frequently Asked Questions on Current Issues - Revenue Decoupling" http://publicadvocate.delaware.gov/HTML/rd.shtml#whatare

Beyond these financial disincentives both to consumers and utilities, this committee found that Illinois lags other states in our consumer education and outreach programs. As noted above, many consumers are unaware of the simple steps they can take to reduce energy consumption. And even those consumers who are energy-savvy may not know how to access current programs to provide incentives and rebates for energy-saving purchases and projects.

Although Illinois has adopted updated energy-efficiency building codes for new residential and commercial construction, these codes are useful only if contractors understand how to implement them and local building inspectors strictly enforce their provisions. Currently, there are not enough green energy-trained licensed contractors and workers to meet demand. It is telling that, on the ComEd website promoting a program to increase air conditioner efficiency, one of the Frequently Asked Questions is, "There are no contractors listed in my ZIP code. What should I do?"[61]

Some of these obstacles to energy efficiency projects are being addressed by the Building Industry Training and Education (BITE) Program, administered by the Illinois Department of Commerce and Economic Opportunity. The program provides funds to organizations to educate and train building-industry professionals on energy efficient practices, products, and equipment. Grantees organize and coordinate workshops and training statewide to educate the building industry on state-of-the-art energy efficiency practices for building construction, rehabilitation, operation and maintenance. The program is funded through the Energy Efficiency Trust Fund and the administration of a portion of the Illinois Energy Efficiency Portfolio (EEP). [62]

The Illinois Community College Sustainability Network (ICCSN), a consortium of all 48 Illinois community colleges, also is working to provide training on green building techniques and technologies. In January 2010, Governor Quinn announced a $1.7 million State grant to the ICCSN to establish Green Jobs Centers at three Illinois campuses. The centers will focus on energy efficiency and conservation for homes and small businesses, training workers in weatherization, energy audits and other energy conservation projects.[63]

A further disincentive for Illinois consumers and businesses is created by our lack of coordinated energy conservation programs that offer "one-stop shopping." It is time-consuming and frustrating for consumers to access one program for information on reducing natural gas consumption, another for advice on energy-efficient electric appliances, and a third for help on finding low-cost financing to fund conservation products and purchases. In addition to being confusing to consumers, this lack of coordination also costs money: It is often cheaper and more efficient to install energy-efficient products in coordination with each other instead of hiring separate contractors through separate programs. Efforts to coordinate existing energy efficiency programs could dramatically improve consumer acceptance and usage of these programs.

To promote the development of a robust energy efficiency industry in Illinois, to catalyze effective investments in energy-efficient building and technology, to build a trained workforce for efficiency projects, and to support comprehensive energy efficiency programs throughout the state, the committee makes the following recommendations:

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[61] ComEd, "Home Savings," http://www.comed.com/sites/HomeSavings/Pages/acefficiency_faqs.aspx

[62] Illinois Department of Commerce and Economic Opportunity, "Energy Efficiency" http://www.ildceo.net/dceo/Bureaus/Energy_Recycling/Energy/Energy+Efficiency/

[63] Chicago Press Release Services, (January 15, 2010) "Gov. Quinn Announces $1.7 Million Grant for Illinois Community College Sustainability Network; Grant Will Expand Green Job Training, Educational Opportunities," http://chicagopressrelease.com/press-releases/gov-quinn-announces-1-7-million-grant-for-illinois-community-college-sustainability-network-grant-will-expand-green-job-training-educational-opportunities

- **The State of Illinois should create and expand public education and outreach programs to promote energy conservation by consumers and businesses.**

  The State should target consumers with clear, easy-to-implement advice on small behavior changes that yield significant energy savings, such as unplugging energy "vampires" when they are not in use.

  Separate outreach programs should focus on businesses, encouraging them to promote energy-saving products. For example, appliance retailers should be encouraged to stock only the efficient ENERGY STAR® versions of each product. There should be a statewide effort to educate contractors and local building inspectors on the requirements of the State's new energy-efficient building code.

- **The State of Illinois should work in partnership with the Illinois Finance Authority to expand affordable funding sources for energy-efficient projects and products.**

  The Illinois Finance Authority should take leadership in identifying and seeding new financing mechanisms for each segment of the construction market. These new financing mechanisms should be designed to complement current programs and overcome existing financial disincentives for energy projects, and should promote wider participation by consumers and suppliers.

  DCEO and the Governor's Office should create a joint task to promote the PACE bond program to local Illinois municipalities and assist them in developing PACE districts. The Illinois Finance Authority should work with local governments to develop PACE bond programs.

- **The State of Illinois should create jobs and expand capacity for energy conservation projects of every size by continuing to invest in the Illinois Community College Sustainability Network.**

  The ICCSN has set a goal of establishing new Green Jobs Centers in all 47 Illinois community colleges. To help reach that goal, the committee recommends appropriations of $2 million to $4 million annually through Fiscal Year 2012. These appropriations could be funded through the American Recovery and Reinvestment Act or other federal programs. This relatively modest investment will be instrumental in spurring the growth of a trained, certified and highly employable "green" workforce. Without this investment, energy efficiency and renewable energy projects will encounter implementation backlogs, and companies may be forced to import trained workers from other states -- significantly diminishing the positive economic impact of these projects.

- **Financial disincentives that limit utilities' participation in energy conservation programs should be reduced or eliminated.**

  The current utility rate formula rewards utilities for increased sales volume and creates financial penalties for reduced demand by consumers. The Illinois General Assembly should pass legislation to "decouple" utility revenues from sales volume and align utility companies' financial incentives with their customers' interests in saving energy and lowering their bills. As noted above, this approach has been used successfully in many other states.

  The legislatively mandated spending caps on energy efficiency programs should be removed. Illinois utilities should be allowed to capture all the cost-effective energy savings available.

  In a related issue, Illinois' gas and electric utilities should be instructed to coordinate their existing energy efficiency programs to ease consumer access.

Transmission and 'Smart Grid'

The obsolescence of the national power grid poses a major obstacle to the development of the new green power economy. As a report sponsored by the U.S. Department of Energy comments:

> To give you an idea of the current state of grid modernization, consider this: If Alexander Graham Bell were confronted with today's telephony – cell phones, texting, etc. – he would most likely be amazed. Thomas Edison, meanwhile, would feel quite at home in the largely non-digital, electromechanical landscape that is today's grid.[64]

The limits of the U.S. power grid were dramatically highlighted in 2003, when the obsolete grid was overburdened by a "perfect storm" of near-peak demand and errors by computers and operators. The result was the worst blackout in North American history, a cascade of power outages that left more than 50 million people in the dark in eight states and two Canadian provinces.[65]

In looking at renewable energy sources, the second "pillar" of sustainable energy policy, this committee found that our nation's aging and increasingly constrained transmission grid is a major limiting factor. Although we may have the capacity in Illinois to generate thousands more megawatts using renewable and low-emission sources, an inefficient transmission grid negates a significant portion of that increased capacity. As noted in the introduction to this report, an estimated 10 percent of generated power is lost in transmission to end users. It is short-sighted to focus on expanding generation without ensuring that consumers reap the full benefits of that expansion through efficient transmission. As the Department of Energy report notes, "If the grid were just 5 percent more efficient, the energy savings would equate to permanently eliminating the fuel and greenhouse gas emissions from 53 million cars."[66]

Transmission grid issues are a major factor in Illinois. For example, wind energy offers great potential as a clean, renewable source of energy. However, most wind farms are sited in rural areas, at a distance from the metropolitan areas in need of power. And, of course, there is no correlation between periods of peak consumer usage and windy weather conditions that generate the most electricity. So there is a need to transport electricity more efficiently, both to Illinois users and to other markets.

Beyond increased capacity, a new focus on sustainable generation also will require a wide array of additional technological upgrades in the electric system – known collectively as the smart grid. These smart grid technologies, which range from control systems on the grid itself to smart meters and automation devices in homes and businesses, add both information and automation to the electric system. This technology brings two-way communication to the grid system, giving customers real-time, precise information about energy costs that helps them to control their usage while providing utilities with better monitoring capabilities system-wide.

Smart grid systems also create new economic incentives for small-scale renewable power projects. For example, net metering would allow rural homeowners and businesses to sell excess power created by smaller wind turbines back to the grid – reducing their electric bills and creating a distributed power network in rural settings, which increases system reliability.

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[64] US Department of Energy, "What the Smart Grid Means to Americans," p. 3, http://www.oe.energy.gov/DocumentsandMedia/ConsumerAdvocates.pdf

[65] Special Task Force on the Condition and Future of the Illinois Energy Infrastructure, "Blackout Solutions," p. 1, http://www.standingupforillinois.org/blackout/downloads/report.pdf

[66] US Department of Energy, "What the Smart Grid Means to Americans," p. 7, http://www.oe.energy.gov/DocumentsandMedia/ConsumerAdvocates.pdf

A properly deployed smart grid promotes energy efficiency by reducing energy loss in the distribution system, improving reliability, and enabling customers to better manage their energy use. Additionally, the smart grid has the potential to create thousands of new jobs nationwide, as skilled workers are needed to install and manage these 21st century technologies. In April 2010, the U.S. Department of Energy announced nearly $100 million for 54 smart grid workforce training programs nationwide to train the next generation of workers in the utility and electrical manufacturing industries. These projects will leverage more than $95 million in funding from community colleges, universities, utilities and manufacturers, and are expected to train tens of thousands of workers to help modernize the nation's electrical grid and implement smart grid technologies in communities across the country. As part of those grants, Illinois will receive more than $7.5 million, split between a Smart Grid Education and Workforce Training Center at the Illinois Institute of Technology and a new online curriculum for current and future electric power industry workers.[67]

Currently, ComEd is conducting a pilot program that provides new smart meters for about 5 percent of their customers, and a workshop process ordered by the Illinois Commerce Commission is under way to examine issues related to the smart grid.

However, other states have progressed beyond Illinois in smart grid deployment. In 2009, for example, California passed the nation's first statewide smart grid bill, requiring the state's Public Utilities Commission (PUC) to develop a comprehensive plan for the installation of smart meters, data networks and other smart grid infrastructure by July 1, 2010. It also requires utilities with more than 100,000 customers to submit their own detailed timelines by July 1, 2011. Beginning on January 1, 2011 the PUC will also be required to submit annual progress reports on improvements to the grid. California already is a national leader in smart grid deployment; Pacific Gas & Electric alone has installed 3.7 million smart meters throughout its coverage area in Northern California.

To promote the creation of a 21st century grid in Illinois, the committee makes the following recommendations:

- **The State of Illinois should encourage expansion of the state's current transmission grid to relieve congestion, enhance reliability, provide power to underserved areas, and enable connection of renewable energy generators.**

  EHV (extra high voltage) lines should be used to connect current substations and expand into currently underserved areas. These lines could provide healthy redundancy, reducing the risk of large-scale service interruption, and could also provide more options for new energy generation to reach competitive markets.

  The committee is aware that this recommendation raises some significant concerns about cost and land acquisition policies; certainly, Illinois ratepayers should not be asked to carry the financial burden of new transmission systems that would be used primarily to convey electricity generated in other states to customers living in other states. However, these issues can – and must – be resolved, so Illinois and its residents can make effective, efficient use of current and future energy generation.

  The cost of building new EHV transmission systems will be substantial. State officials, working in conjunction with the Illinois congressional delegation, must aggressively advocate for federal funds to upgrade Illinois' transmission grid.

[67] US Department of Energy, "Workforce Training for the Electric Power Sector" http://www.energy.gov/news/documents/04-08-2010_SG_Workforce_Selections.pdf

- **Legislators and regulators should work collaboratively to encourage Illinois utilities to propose accelerated smart grid deployment plans.**

  As a first step, the General Assembly and the Illinois Commerce Commission should request proposals for more pilot-scale projects to prove new technologies and demonstrate smart grid benefits. The projects should include demonstrations of interoperability, cybersecurity, and customer privacy protections.

Sustainable Energy Generation

Illinois is poised for significant expansion of its sustainable energy generation capacity. This expansion offers the promise of statewide job creation, both in construction and operation of these new generation systems. However, these opportunities create a number of policy challenges, both in identifying funding to build these new systems and, just as critically, in prioritizing investment in the various forms of sustainable generation available.

One major source of funding for renewable energy programs is the Illinois Finance Authority (IFA), which currently offers a variety of bond programs to help finance economic growth in Illinois. As a self-funded agency, the IFA receives no general revenue funds from the State of Illinois, and the State bears no direct or indirect liability for the debt the IFA issues or incurs except for specific, statutorily authorized programs. The IFA's operating income is exclusively derived from application and closing fees, interest income, and investment income.[68] The IFA has created a number of bond programs to finance renewable energy projects, including the Clean Coal Bond Program, Illinois Power Agency Bonds and Industrial Revenue Bonds.

In reviewing the renewable sources of energy generation currently available in Illinois, this committee does not intend to make specific recommendations on their proportional representation in Illinois' near- or long-term energy portfolio. Rather, we offer a discussion of some of the benefits and challenges of each source to highlight its potential as a source of jobs and economic growth in Illinois.

Wind Energy

The wind energy industry offers enormous potential for economic growth in Illinois, through both equipment manufacturing and generation. At present, Illinois generates approximately 2,000 megawatts of wind power, and thousands of additional megawatts are in various stages of development. Under Illinois' Renewable Portfolio Standard, a minimum of 75 percent of an electric utility's renewable energy must come from wind power. This is an aggressive but achievable goal – if Illinois is able to resolve a number of issues.

Historically, the greatest hindrance to Illinois' wind power industry has been the lack of a focused business development program, combined with weak support from the General Assembly and the Governor's office. The current administration has made important strides in reversing this trend, but more needs to be done for sustained success.

Illinois' property tax system also creates roadblocks to expansion of the wind energy industry. Under current law, Illinois property tax assessments, rates and levies vary widely from town to town and county to county. At present, property taxes on land and infrastructure owned by wind generation companies are determined under Public Act 095-0644, which applies a standard statewide valuation method to wind energy devices. This statute is set to expire in 2011, creating significant uncertainty about future tax bills

[68] Illinois Finance Authority, "About IFA" http://www.il-fa.com/about/

for wind energy projects. Illinois already imposes one of the nation's highest property tax rates on wind farms; the possibility that this rate may change, or may be subject to the decisions of local authorities, creates great uncertainty for wind farm owners, and puts Illinois at a severe disadvantage compared to neighboring states.

Illinois also is one of the few states that charges sales/use tax on wind energy equipment. Forty other states, including all adjacent states, exempt wind energy from sales/use tax. Imposing Illinois sales tax on wind energy equipment essentially means that materials for Illinois wind energy projects are 6.25 percent more expensive than they are in neighboring states. Local governments have partially mitigated this problem by expanding Enterprise Zones to wrap in neighboring wind farms. This issue also is addressed in part through PA 96-0038, passed in June 2009, which allows wind farm developers to apply as High Impact Businesses to create their own Enterprise Zones. However, a more uniform solution is needed.

Solar

Although Illinois' climate would seem to be far more conducive to wind than solar, the Illinois Solar Energy Association states that Chicago has nearly as much usable sunlight as Atlanta or Los Angeles. Chicago also is the only American city with manufacturing and assembly facilities for both solar photovoltaic and solar thermal panel equipment.[69] Additionally, peak generation times for solar power closely match periods of peak consumer demand, making solar energy an important asset in reducing system overloads. In Illinois, smart grid technology and expanded net metering could make solar energy an important localized power source for residential and commercial applications in a distributed power network.

However, residential and commercial solar projects are expensive, even with incentives, and payback periods are long. If consumers could sell their excess solar-generated power back to the grid, the economics of solar power investments would be greatly enhanced. But the current treatment of net metering in Illinois has significant limitations beyond 40 kilowatts. This limitation particularly impacts potential commercial investors, who could host local solar projects on their property. For example, "big box" retailers with 100,000-plus square foot facilities could install solar panels on their roofs, to provide power to their own business and to sell power back to the grid. This distributed use of solar power also could provide power to high-use commercial electricity consumers during peak hours, lessening the strain on the overall system.

Hydropower

In 1983, the U.S. Army Corps of Engineers Rock Island District prepared a *Reconnaissance Report for Hydropower* in the dams along the Mississippi River from Saverton, Missouri's Lock and Dam #22, up to Lock and Dam #12 near the Illinois-Wisconsin border. The study determined that Lock and Dams 13, 15, 16, 18, 20, 21 and 22 have favorable capabilities to produce hydropower and would contribute to the National Economic Development Objective – essentially meaning that dams at these locations would meet the national criteria for a positive cost/benefit. The Corps completed a preliminary evaluation of biological impacts and no significant adverse impacts were identified.

In 2006, the City of Quincy was granted preliminary permits by the Federal Energy Regulatory Commission for hydropower projects at Mississippi Lock and Dam Nos. 20, 21 and 22. The preliminary permits give the City of Quincy priority of application for a license for the project under Part I of the

[69] Illinois Solar Energy Association, "Renewable Energy Basics" http://www.illinoissolar.org/resources/Documents/ISEA_RE_Basics.pdf

Federal Power Act while obtaining the data and performing the acts required to determine the feasibility of the project and to support an application for a license.

A pre-feasibility study has been completed to make an assessment of the technical and economic viability of constructing hydroelectric generating facilities at Mississippi Lock and Dam Nos. 20, 21 and 22. The study, completed by Mead & Hunt, addressed the feasibility of developing generating capability under five development alternatives.

Nuclear Energy

Illinois is a leading producer and consumer of nuclear power; currently, just over half of the electricity used in Illinois is generated by nuclear energy. Clearly, nuclear power is important to Illinois' energy infrastructure today, and some propose that nuclear power should play a greater role in Illinois' energy generation portfolio in the future. Proponents of expanding nuclear power in Illinois cite the nuclear industry's strong safety record worldwide, point to the increased safety and affordability of the Generation III plants currently on-line overseas, and believe that an expansion of nuclear power in Illinois could create and support thousands of high-paying permanent jobs in a variety of high-tech industries.

Despite those benefits, there is currently a legislative prohibition on construction of new nuclear power plants in Illinois, reflecting concerns about the safety of the plants and their waste products, the high costs of new nuclear construction and differing perspectives on the need for new capacity in Illinois. However, the Obama Administration's recent support of new nuclear power plant construction has renewed interest in the issue nationwide. Many rigorous studies have reexamined the issue,[70] including key research from Illinois' own institutions. The technological advances that have been made in nuclear power generation over the past three decades in Generation III and Generation IV power plants, and the wealth of nuclear expertise available in Illinois, make this an appropriate time to review the long-term need for new central power plant construction and the potential impact of expanded nuclear power generation in Illinois.

Clean Coal

Illinois' considerable clean coal assets include a ready, affordable fuel supply, enormous geological storage capacity, a central location for pipeline transport of carbon dioxide, first-in-the-nation demonstration projects such as FutureGen and Taylorville Energy Center, and a sequestration testing consortium led by the U.S. Department of Energy, Archer Daniels Midland and the Illinois Geological Survey.

To date, Illinois is the only state in the nation to have enacted a Clean Coal Portfolio Standard (CCPS). The law facilitates development and construction of "clean coal" plants that use Illinois coal in conjunction with capture and storage of carbon dioxide and requires Illinois electric utilities and other electric retail suppliers to buy at least 5 percent of their power from clean-coal facilities by 2015. The CCPS also establishes a pricing support framework for converting Illinois-mined coal to electric power and, potentially, pipeline-quality synthesis natural gas (SNG).

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[70] "The Future of Nuclear Power: An Interdisciplinary MIT Study" (2003 with 2009 update). MIT. http://web.mit.edu/nuclearpower/; "Nuclear Power Joint Fact-Finding" (June 07) The Keystone Center http://www.keystone.org/spp/energy/electricity/nuclear-power-dialogue; "The Economic Future of Nuclear Power" University of Chicago (2004) http://www.ne.doe.gov/np2010/reports/NuclIndustryStudy-Summary.pdf; Levelized Cost of Energy Analysis - v 3.0" Lazard, Ltd. (2009) http://blog.cleanenergy.org/files/2009/04/lazard2009_levelizedcostofenergy.pdfhttp://www.narucmeetings.org/Presentations/2008%20EMP%20Levelized%20Cost%20of%20Energy%20-%20Master%20June%202008%20(2).pdf

With the adoption of the CCPS, policy leaders of Illinois, on a bipartisan basis, acknowledged that Illinois coal will continue to play a major role both as an energy source and as an economic engine. The CCPS also recognized that breakthrough advances in clean-energy technology are usually expensive and will come about only through investment in new facilities that receive favorable rate treatment to offset risks and recover costs.

However, national energy policies have created serious uncertainties for the clean coal industry. Federal regulatory policy on carbon management continues to zigzag, and it is unclear whether carbon emission standards will be developed under the auspices of the U.S. Environmental Protection Agency or through a new policy initiative along the lines of a carbon tax or cap-and-trade system. To some degree, this uncertainty neutralizes the huge assets Illinois could wield under a reasonable build-out of a North American CCS network. Absent clear federal direction on carbon management, including incentive rewards for early compliance with carbon capture and sequestration, Illinois' residential and small commercial retail ratepayers could be forced to shoulder much of the construction cost of new clean coal facilities.

BIOFUELS

Biofuels are categorically defined as the wide range of fuels produced or derived from biomass. Biofuels production has increased in recent years due to the rising cost of petroleum and other unsustainable forms of energy. Commodities such as maize, sugar cane or vegetable oil are the most common forms of biofuels. However, since many of these products are historically used as food or feed, a debate has ensued over whether farmland formerly used to grow food crops should now be converted to biomass production for fuel use. Given that converting the entire United States grain harvest to biofuels would meet only 16 percent of America's current auto fuel needs, some experts have raised concerns that placing energy markets in competition with food markets for scarce arable land will inevitably result in higher food prices.[71]

Illinois currently has a variety of programs in place to encourage use of biofueled vehicles. These programs include the Illinois Green Fleet program, biofuel rebates, hybrid and bio-fuel vehicle purchase rebates, and engine conversion rebates. While all of these programs have strong merits, a relatively small number of Illinois gas stations offer E-85 and biodiesel fuel, dampening consumer demand for biofueled vehicles.

Although maize and soy have been the primary source of commercial biofuels in Illinois up to the present, lumber waste, grass, and even some municipal waste can be used to produce ethanol. All of these potential fuel sources are plentiful in Illinois, and do not raise concerns about competition with food crops.

Abengoa Energy, a Spanish company, is partnering with the Midwest-Kansas Electric Company to open the first commercial-scale cellulosic ethanol plant in Kansas -- the first in the Midwest. Constructing the facility will cost about $400 million; the U.S. Department of Energy has provided a $75 million dollar grant for the project.

Other companies also have smaller plants that are already operational. There are 26 plants planned or under construction, including small plants and test facilities. These new technologies all use non-foodstuffs as production material. Given that the federal government has committed about $3.5 billion for

[71] Lester R. Brown, "Biofuels Blunder: Massive Diversion of U.S. Grain to Fuel Cars is Raising World Food Prices, Risking Political Instability," *Testimony before U.S. Senate Committee on Environment and Public Works*

research and production of cellulosic ethanol plants, commercial interest in second-generation biofuel production plants is likely to expand rapidly.

Other states currently provide grants to incentivize companies to open second-generation biofuel plants. Iowa recently provided a $20 million grant to the Poet Corporation to build a cellulosic plant in Emmetsburg, Iowa. The U.S. Department of Agriculture also provides loans to finance commercial-scale development of non-corn-based ethanol plants.

To support Illinois energy production from renewable and sustainable sources, the committee makes the following recommendations:

To promote expansion of wind energy production:

- **The Governor and legislators should show strong public support of the wind energy industry in Illinois, appearing at wind industry trade events and promoting Illinois wind energy developers and manufacturers out of state and overseas.**

  Executive orders and regulations should be used to encourage wind energy development and to provide consistent taxation and regulatory treatment of wind farms statewide.

- **The General Assembly should extend Public Act 095-0644 for at least 20 years to reduce industry uncertainty over property tax valuations.**
- **The General Assembly should pass a uniform statewide sales/use tax exemption for wind energy equipment purchases to put Illinois on an even footing with tax policies in neighboring states.**

  The resulting loss in revenue caused by this exemption would be exceeded by income and sales tax revenues generated by the jobs created by new wind energy projects.

To promote solar energy production:

- **The General Assembly should pass legislation to expand the full credit per kilowatt for net metering from the current limit of 40 kilowatts to 2 megawatts.**

  This expansion will provide strong incentives for local commercial solar projects and other small renewable generation projects. As noted above, this expansion would require smart grid improvements and would probably require three to five years to implement.

To promote future expansion of hydropower in Illinois:

- **The State of Illinois should continue to support development of the preliminary design report and preparation of a license application for submittal to FERC to build new hydroelectric plants on the Mississippi River.**

To plan the future of nuclear generation in Illinois:

The Governor should form a panel of credentialed experts to consider the expansion of Illinois' nuclear capacity as part of its energy portfolio and to assess the possibility of ending the construction moratorium and building next-generation nuclear power plants in Illinois.

The task force should include representatives of public and private research institutions with expertise in Generation III and Generation IV reactors. Given recent changes in federal policy and the potential for new economic opportunities, this review should be conducted in the near term.

The committee discussed the subject of nuclear energy in depth. Those discussions included the question of whether the expansion of nuclear power in Illinois would contribute to the state's rapid economic recovery in the wake of the recession. A majority of the committee members felt this topic was too large and important to ignore, and strongly recommend a serious reappraisal of new nuclear power plant construction in Illinois. A dissenting opinion on this recommendation is attached.

An appendix summarizing the research supporting the recommendation is available at *economy.illinois.gov*.

To make Illinois a leader in clean coal technology and power generation:

- **The State of Illinois should use pricing and regulatory incentives to encourage existing power producers to invest in clean coal facilities, or create a pool of funds for clean coal projects, as part of any CCS compliance program.**
- **The General Assembly should use the Carbon Capture Legislative Review Commission to provide full hearings and build consensus on the following issues:**

  Expansion of the State's role to moderate or eliminate liability risks to early participants in deep geological storage of CO_2.

  Review of existing eminent domain statutes to ensure that they provide a means to balance the rights of individual property owners with the goal of attracting private-sector investment in CO_2 transport pipelines.

To foster the Illinois biofuels industry, create new jobs and expand the market for Illinois agricultural products:

- **The General Assembly should create financial incentives for service stations to offer biofuels, and for consumers to purchase biofueled vehicles**.

  The State should provide tax rebates/credits and low-cost loans to service stations to encourage expansion of fuel options.

  A pilot program should designate test communities for initiatives to increase the number of bio-diesel/E85 stations and promote biofueled fleets. Municipal governments in the test communities should be offered State-funded incentives to transition their public vehicle fleets to biofuels to the maximum extent possible, to support local alternative fuel providers. Within the test cities, DCEO and IEPA should identify and actively solicit large businesses to convert their fleets to bio-diesel and E85, under an expansion of the Illinois Green Fleets program.

Dissenting Opinion Submitted by Jacky Grimshaw, Vice President for Policy, Center for Neighborhood Technology

March 1, 2010

The recommendations to expand nuclear power in Illinois are misguided for at least three reasons. The first is environmental and public health risks associated with nuclear power, the second is the uncertain regulatory and legislative conditions for new power plants, and the third is the lack of need for additional baseload power in this market for the foreseeable future, and its negative impact on rates paid by Illinois residents and businesses.

The first and most important emphasis for Illinois should be to maximize energy efficiency and renewable energy--these will have the impact of reducing energy costs to consumers, and bringing jobs and economic development to Illinois over the short term.

Development of nuclear power is far more complex. It is a long term strategy and continues to be one of the most expensive sources of power. It is unclear that there is the need for additional nuclear power to provide electricity for Illinois that could not be accomplished through large scale application of efficiency and renewables which would reduce the need for more large generating plants.

While with the exception of the Three Mile Island accident civilian nuclear power in the United States has a very good safety record, that record shouldn't be taken as a green light for nuclear power. Accidents elsewhere such as Chernobyl, and the narrowly avoided disaster at the Davis-Besse plant in Ohio a few years ago where a reactor vessel shell was nearly corroded through, are all reminders that the pitfall of nuclear power is that when it does indeed fail, the consequences are enormous. While the recent fire at a gas fired power plant in Connecticut was tragic, a comparable scale failure at a nuclear power plant could endanger the lives of hundreds or even thousands of people.

Likewise the environmental impact of nuclear power is easily obscured. While it is touted as a low-carbon power source, controlling carbon emissions is not the only environmental issue we face. In 1996 and 2003, radioactive tritium leaked from Exelon's Braidwood nuclear power plant, after which Exelon paid $11 million to develop a new water source for the town of Godley. Last June, radioactive tritium was found to be leaking from the Dresden nuclear power plant in Grundy County. In just the past month, not one but two wells were found to be contaminated with radioactive tritium from the Vermont Yankee plant, leading the State Senate to vote against relicensing of that plant. Moreover, the mining and enrichment of uranium has serious environmental impacts, and the open issue of how to properly store nuclear waste for

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millennia is daunting. Even if Yucca Mountain or some alternative were actually implemented, the transportation of huge quantities of nuclear waste by rail opens up entirely new exposure risks.

No new nuclear power plant has been built in the United States in decades. A number of projects are currently moving through the regulatory approval process in other states, and Federal policy does appear to support the construction of new nuclear power plants. But no plant has actually started construction and it remains to be seen what it will actually take to successfully get state, federal and local approval for construction to actually begin. Meanwhile Illinois has a legislative prohibition on the construction of new plants. The possibility of a repeal of that provision has already proven to be incredibly contentious. Trying to actually get it passed could likely spawn huge rift with the environmental and natural resources protection communities and could derail other more positive initiatives.

But perhaps the best reason not to build new nuclear power plants in Illinois is that we really don't need them. Illinois is currently well served by power generation resources and the renewable portfolio standard is having the impact of having large amounts of new wind generation built. That wind power is baseload power and will compete in the marketplace with nuclear which is also baseload power. Add in the likely possible addition of one or two new coal plants (Future Gen and Tenaska), [Tenaska will begin construction this year, and is scheduled to be online in 2014] and Illinois is well served by power generation. While current nuclear plants are low cost producers it is because their capital costs have been paid for. Any new nuclear plant will provide much more expensive power that won't be able to compete in this marketplace. That leaves the only solution to have the Illinois Power Agency be required to purchase their output at whatever cost it takes to make them economically viable. With similar mandates already in place for renewable power, and likely for the output from the Tenaska plant, an additional mandate for the purchase of expensive new nuclear generation will have the impact of raising electricity rates in Illinois. Increased electric rates will put a burden on families and a strain on businesses, even to the point that they may move operations out of Illinois. This negative economic impact will surely outweigh any job creation from the building of new power plants. The combination of new renewable resource, the energy efficiency efforts already underway and proposed elsewhere, to say nothing of the ongoing push for more distributed generation is all more than adequate to serve Illinois' future energy needs. And they will get served at a lower cost and with more environmental benefits than by the construction of new nuclear power plants.

The focus of Illinois' economic recovery efforts in energy should be in those strategies that can bring significant benefits to consumers and the economy in the short term. For these reasons, the recommendations in this report to build new nuclear power plants in Illinois are not wise and we cannot support them.

INFRASTRUCTURE

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Introduction

As the heart of the nation and the crossroads of business, Illinois must maintain a strong, reliable infrastructure to ensure our economic survival and maintain our position as a premier logistical hub. By investing in our infrastructure, the State of Illinois can provide jobs today while creating a competitive advantage for the state's economic future.

Unfortunately, new construction and maintenance of the state's infrastructure has been deferred for years. In 2009, the American Society of Civil Engineers (ASCE) released the Report Card for America's Infrastructure. Based on an analysis of nine infrastructure elements throughout the state, Illinois received an overall grade of D+. As part of the report card, the ASCE estimated a statewide investment need of $2.2 trillion, 46 percent less than the five-year capital outlay currently planned.

After years of delaying necessary investments in Illinois' roads, bridges, transportation systems, water projects, schools, community colleges, public buildings, and other high-priority projects, the State of Illinois embarked last year upon *Illinois Jobs Now!*, the State's first comprehensive capital program in more than a decade. This program represents a combined investment of $31 billion, and will support or retain hundreds of thousands of jobs. But even this investment, massive as it is, should be viewed only as a first step toward a consistent, strategic, long-term approach to expanding and maintaining Illinois' infrastructure.

Today and going forward, we must create a coordinated partnership between Illinois' State government and private industry that will maximize the value of our current infrastructure investments and look to the future with a systematic "triple bottom line" approach that will yield financial benefits while promoting sustainability and providing positive social impact statewide.

This committee has investigated a wide range of infrastructure investment opportunities in Illinois. Recognizing the urgency of the economic crisis for the state, its communities, its business networks and its residents, our mission was to provide strategic guidance through application of the following principles, leaving no opportunity behind to improve both the short-term economic situation and the state's longer-term prospects for a sustainable recovery:

1) *Make the most of existing resources*. This includes both tangible assets, such as those associated with the new capital plan, commitments by the State and utilities to invest in systems preservation and enhancement ("fix it first") and real property; and intangible assets such as the State's regulatory authority, credit enhancement powers, information, procurement, technology development, knowledge creation and other resources.

2) *Alignment and joint investment.* While state and local government and the private sector can all contribute to economic recovery, the best results will be produced by coordinated and joint action. The state's economy is concentrated in traditional industries, but it is possible through state leadership to help redeploy the capacity of our workforce and supply chains to emerging economic markets. The state's communities and business networks are renewable resources and need to be treated as such.

3) *Readiness counts*. Studies prove that the rate of deployment of investments is as important as the relative labor-intensity of investments. Both the Illinois Department of Transportation and the state's transit agencies were high performers in the use of ARRA funds because of their readiness. This lesson needs to be applied to all infrastructure investment needs and opportunities.

4) *Look to the future through a systematic triple bottom line approach.* Much of the work that needs doing is in the places that most need jobs, and most emerging opportunities are in emerging markets for products and services that can be counted on to produce significant environmental benefits. Illinois claims many innovative and capable economic leaders, but studies by the Federal Reserve and recent competitive experience show that we need to improve our capacity to more systematically assemble leaders and resources.

After comprehensive research and review, we propose the following recommendations to prioritize Illinois investment in infrastructure:

- **The State should seek out new partnerships with Illinois communities and private investors to invest in infrastructure projects that meet the needs of economically distressed areas while promoting sustainability and maximizing overall economic impact.**
- **The State should expand its capacity to support sustainable infrastructure development in Illinois by retaining the enhanced departmental capacity added during the American Recovery and Reinvestment Act.**
- **The Governor should create a Sustainable Cities Steering Group to assist local communities, smaller transit operators and metropolitan planning agencies in identifying new opportunities for transportation-oriented development and applying for federal grant programs to fund these projects.**
- **The Governor should actively promote mass transit development throughout Illinois, supporting legislation that will create new standards for strategic land-use planning and provide research and investment tools to attract new businesses and development to transportation centers.**
- **The Governor should promote State investment in transit-oriented development by issuing an Executive Order requiring all State agencies to assign a high priority to location-efficient sites in awarding grants and tax incentives.**
- **The State of Illinois should promote public and private investment in new and expanded intermodal terminal projects.**
- **The State of Illinois should support the expansion, acceleration and completion of the CREATE program.**
- **The State of Illinois should support and promote regional and multistate planning for air, rail, road and water transportation projects to reduce traffic congestion and maximize economic benefits.**
- **The State of Illinois should use authority granted under ARRA for the Illinois Clean Water Revolving Fund to prioritize the allocation of low-interest loans for "green" water infrastructure projects.**
- **The State of Illinois should draft a water use policy that includes expansion of studies of current water supplies and demands and promotes initiatives to improve water quality and reduce demand.**
- **The State of Illinois should draft and implement a policy for statewide high capacity broadband networks.**

'Triple Bottom Line' Investment

The State of Illinois has embarked on the largest public works program in our history, *Illinois Jobs Now!*, which will invest $31 billion in combined local, State and federal funds in capital projects statewide. This program has the potential to create or support more than 400,000 jobs. This massive investment, deployed thoughtfully and strategically, could help to leverage private development, protect our environment, and create strong new economies in Illinois communities that have been overlooked for generations. To achieve that goal, all State investments must be reviewed on a "triple bottom line" standard, used by the United Nations and other groups to assess the impact of investments on "people, planet, and profits."[72]

Illinois cannot afford to promote economic development divorced from social responsibility and environmental values. By making creative, thoughtful infrastructure investments, we can spark development that will yield jobs in communities that most need them and help to promote sustainability at every level. To meet these goals, we cannot simply approach infrastructure improvements from a traditional standpoint, focused on cement, asphalt, and steel with a few green touches added on as a nod to environmental concerns. Instead, the State of Illinois must take a creative, cohesive approach to infrastructure that will yield strong return on investment by every standard of the triple bottom line.

Milwaukee offers an excellent example of an infrastructure improvement that is providing positive results on all three measures. In 2003, instead of investing $100 million in reconstructing its aging Park East Freeway, a mile-long elevated spur, Milwaukee decided to tear it down. To encourage redevelopment in the surrounding neighborhoods, the freeway was replaced by McKinley Avenue, a landscaped six-lane surface boulevard. The new avenue restored the city's grid and freed 64 acres of land for new development. The project also expanded opportunities for residential and retail development and job creation in three newly accessible city neighborhoods – the McKinley Avenue District and the Upper and Lower Water Street Districts.

So far, these new neighborhoods have drawn hundreds of millions of dollars in new development. In total, about 20 acres have been built out thus far, with another 5 acres currently under construction or in the planning stages. According to the Redevelopment Authority of the City of Milwaukee, the level of current investment is in line with the 15-20 year plan for full build-out. The Park East redevelopment project also has spurred development of the adjacent, abandoned Pabst Brewery site, which will include more than 1.3 million square feet of mixed-use residential, retail and office space over 20 acres.

Although the Park East development has few formal requirements for green building and sustainability, at least half of the newly developed buildings thus far have had some level of LEED certification. For example, Manpower Inc.'s new world headquarters, which opened in 2007, is LEED-certified Gold. Additionally, the Brewery project is registered as a LEED Neighborhood Development pilot project, and is committed to high levels of sustainability. Adding to its sustainability, the Park East area also would be served by Milwaukee's proposed streetcar system, linking to existing rail as well as a proposed Kenosha-Racine-Milwaukee commuter rail service.

Finally, the Park East development is providing and promoting economic diversity through affordable housing, encouraged through tax incentives. Of the five residential projects that have been completed in the new area, three include lower-income or affordable senior housing. The $16 million Blue Ribbon Lofts in the Brewery, which opened in January 2009, combined use of federal low-income housing tax credits, federal and state historic credits and low-interest rate financing from the Wisconsin Housing and Economic Development Authority. The 95-unit project – a redevelopment of the old brewery's former

[72] http://www.un.org/esa/sustdev/csd/csd15/lc/tblr_me.pdf

keg house –now provides mixed-income housing targeted to the "creative class" through such amenities as a music recording studio and individual spaces that can be used as studios and computer labs.

To promote State investment in infrastructure projects that yield positive results on the triple bottom line, the committee makes the following recommendations:

- **The State should seek out new partnerships with Illinois communities and private investors to invest in infrastructure projects that meet the needs of economically distressed areas while promoting sustainability and maximizing overall economic impact.**

  As part of this effort, the State should seed creation of community development finance institutions to meet the equity needs of underserved areas, such as a Triple Bottom Line Investment Fund, to promote public-private investment in infrastructure projects.

  The State should develop and promote a storehouse of information on federal grants and other programs to support sustainable infrastructure development, and should help to provide research assistance necessary for local government to compete for those programs.

  The State can help build demand for emerging markets by adopting an affordability definition that includes housing and transportation costs — such as the federal Housing and Transportation Affordability Index recommended by SB 374 — when it allocates funds, distributes economic incentives and sites public facilities.

- **The State should expand its capacity to support sustainable development in Illinois by retaining the enhanced departmental capacity added during the term of the American Recovery and Reinvestment Act.**

  Investments from ARRA have served to significantly upgrade State systems that have been neglected for years. Going forward, current staffing levels will be needed to maintain and improve State systems for promotion, oversight and coordination of infrastructure projects.

Mass Transit

Every day, mass transit systems throughout Illinois offer millions of people reliable, affordable transportation to help them get where they need to go each day. These transit systems play a critical role in our state economy, bringing employees to and from their workplaces and dramatically reducing roadway congestion. Mass transit also can serve as a strong economic driver for new development, spurring new residential construction and fostering retail growth. With strategic public-private investment, transit-oriented development can create new jobs and enhance both transportation networks and quality of life for city residents.

Portland, Oregon, demonstrated the potential of transit-oriented development with its Brewery Blocks projects, tied to the new Portland Streetcar which opened in 2001 during a severe economic downturn. Since then, the new streetcar line has generated more than $1.4 billion along its 4.7-mile loop.[73] The streetcar line runs right through the middle of the Brewery Blocks project, which covers five city blocks. The mixed-used project, on the site of a former brewery, includes 1.7 million square feet of residential office and retail space and was redeveloped by a private developer at a cost of about $300 million. The City of Portland provided a $6 million loan for the construction of a three-level, 1,350-space underground parking facility and a $2 million grant for infrastructure improvements, which included streetlamps and benches. Four of the buildings in the Brewery Blocks are LEED-certified, underscoring the developer's

[73] http://www.iedconline.org/downloads/smart_growth.pdf, p. 8

intention to create a national demonstration project for sustainability. The economic benefits of the transit-oriented, pedestrian-friendly Brewery Blocks projected were proven in July 2007, when the developer sold three of the buildings, totaling 660,000 square feet, for $291.6 million, setting a Portland record for per-foot and per-unit prices.[74]

Here in Illinois, the town of Normal is currently working to make accessible transportation the centerpiece of its Uptown development. At present, Normal lacks a centralized transportation hub. Normal's Amtrak station is the second most-used in Illinois, with 176,384 riders using the station in 2008, but its passenger rail and bus facilities are outdated and there are few efficient connections between the town's transportation systems. To address these issues, the town has proposed the Normal Multimodal Transportation Center to integrate bus, rail, and car transportation and expand access to campus and airport shuttles and park-and-ride facilities. The proposed center also would ease access to the town's bicycle and pedestrian pathways.

The new transportation center, which also will house the Town of Normal's municipal offices and town council chambers, is planned as a LEED Silver-designated building. It will serve as an anchor for Normal's Uptown Business District, which has been chosen as a pilot region for the newly developed LEED Neighborhood Development standards.[75] In February 2010, the Normal Multimodal Transportation Center was awarded a $22 million federal grant through the Transportation Investments Generating Economic Recovery (TIGER) program.

Similarly, in Madison County, the Southwest Regional Intermodal Freight Transportation Hub has won $6 million in federal funds for a Tri-City Regional Port District project to construct a new harbor and connecting rail lines for a multimodal inland waterway transportation barge port and an associated rail and truck facility.

To promote transportation-focused development, thus encouraging sustainable communities, fostering green economic development and creating new jobs, the committee makes the following recommendations:

- **The Governor should create a Sustainable Cities Steering Group to assist local communities, smaller transit operators and metropolitan planning agencies in identifying new opportunities for transportation-oriented development and applying for federal grant programs to fund these projects.**

  A sustainable cities steering group would enable cities like Normal and Moline, which have been successful in securing funding for their transit and sustainable development initiatives, to share best practices with other communities as they develop plans for their region. The steering group also could identify successful projects out of state that can provide examples of innovative transportation-oriented development.

  In addition, the State of Illinois should expand its assistance to local communities as they prepare competitive applications for federal grant programs, including the TIGER program for innovative transportation investments, the Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) program for environmental protection through mass transit initiatives, and other grants for sustainable communities and livability initiatives through Housing and Urban Development, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency.

[74] http://www.sustainableindustries.com/greenbuilding/9481037.html
[75] http://www.normal.org/TransportationCenter/files/TigerApplication.pdf

- **The Governor should actively promote mass transit development throughout Illinois, supporting legislation that will create new standards for strategic land-use planning and provide research and investment tools to attract new businesses and development to transportation centers.**

  As a step toward better coordination of transportation systems and development, the State of Illinois should encourage increased research on transportation issues, including expanded collection of data on passenger logistics.

- **The Governor should promote State investment in transit-oriented development by issuing an Executive Order requiring all State agencies to assign a high priority to location-efficient sites in awarding grants and tax incentives**.

  For example, the Illinois Efficiency Incentive Act allows the Illinois Department of Commerce and Economic Opportunity (DCEO) to grant additional tax credits under the Economic Development for a Growing Economy (EDGE) program for projects sited near public transit or affordable workforce housing. Similar incentives could be included in other programs.

Intercity Transportation Networks

Thoughtful and strategic investments in Illinois' transportation infrastructure can serve as long-term economic engines for a community, for a region, and even for the state as a whole. But to maximize the value of our infrastructure investments, we must stop approaching these projects sector by sector and city by city. Instead, the State of Illinois should view our transportation system as a whole, with the understanding that rail, highway, water and air transportation systems all combine to move people and products and spur the Illinois economy.

An excellent example of successful investment in an integrated transportation system is the public-private investment in two intermodal facilities in Will County. These new facilities – an existing one in Elwood and a new one currently under construction nearby in Joliet – are creating thousands of new jobs and leveraging Illinois' central location as a transit hub to spur more cost-effective transportation of cargo.

The CenterPoint Intermodal Center in Joliet, a 3,900-acre state-of-the-art, integrated intermodal center, represents a $2 billion private investment. The center also will receive State investment under the Intermodal Facilities Promotion Act, signed last year. Designed to encourage business development along the freight rail systems of Illinois, the Act authorizes income taxes from jobs created at the facility to be placed in an Intermodal Facilities Promotion Fund. DCEO will administer the fund to reimburse CenterPoint for infrastructure improvements. DCEO will award an annual grant of up to $3 million in fiscal years 2010 to 2016.

These intermodal facilities connect the manufacturing, distribution and agricultural communities in the Midwest to the global marketplace and make Will County home to the largest "inland port" in North America. Further investments in intermodal facilities will extend our capacity to transfer goods from ports to trucks to trains, alleviate regional freight congestion and foster new economic development nearby, creating thousands of new jobs.

Similarly, the Chicago Region Environmental and Transportation Efficiency Program (CREATE) program is structured as a public-private partnership to increase the efficiency of the urban rail network. The $2.5 billion CREATE program represents the first time federal, state and local governments have partnered with the railroad industry to solve the problem of auto and rail congestion on such a large scale. It also represents a first-ever joint partnership among the six competing railroads that pass through

Chicago. CREATE will reduce train delays and congestion throughout the Chicago area by focusing rail traffic on five rail corridors. The project will include 25 new roadway overpasses or underpasses to replace grade crossings and six new rail overpasses or underpasses to separate passenger and freight train tracks, as well as extensive upgrades of viaducts, tracks, switches and signals throughout the system – creating thousands of Illinois jobs.

Other areas throughout Illinois further demonstrate the value of public-private investment in projects that link multiple transportation modalities. For example, the Ottawa Industrial Park, 84 miles from downtown Chicago, offers access to CSX Rail Transportation and ADM Terminal barge service, and Interstate-80. To draw new investment, the park offers a number of economic incentives. It is in a Tax Increment Financing (TIF) District and Enterprise Zone and offers property tax abatements and State tax incentives through the EDGE Tax Credit, as well as grants through the Employer Training Investment Program and low-interest loans through the Upper Illinois River Development Authority and the Illinois Finance Authority. In addition, the park offers sales tax exemptions on building materials used in the Enterprise Zone and receives a State utility tax exemption on natural gas, electricity, and charges related to communications.[76] These financial incentives, combined with access to multiple modes of transportation, make it possible for the park to compete successfully for private investment.

As the State of Illinois considers offering new incentives to future commercial and industrial projects, high priority should be given to those projects that maximize access to nearby transportation options.

High priority also should be given to projects that will ease congestion – on highways, on freight and passenger rail lines, and in public transit systems. In addition to the CREATE program, which will speed rail movement throughout the region and reduce delays for both trains and motorists, the Illinois Tollway is leading a pilot program for an interconnected system of High Occupancy Toll lanes, express bus stations and park-n-ride lots along I-294 that will create a new network for congestion-free travel. When fully operational, this project could reduce travel times by 40 percent and create hundreds of new jobs. The reduced congestion also will mean that trucks will move more quickly along I-94, creating significant savings for shippers. The Illinois Tollway has already applied for federal funding to speed construction of this new anti-congestion network.

This committee also believes that the State of Illinois should take a region-wide look at transportation problems and opportunities. A third major airport is planned to expand the Chicago hub, developing shipping opportunities, relieving congestion at O'Hare and Midway Airports, and creating new economic opportunities in both Illinois and Indiana. Governor Quinn is working with other state leaders in the Midwest Regional Rail Initiative to make high-speed rail a reality, a project that will create 24,000 rail-related jobs in Illinois, while expanding tourism and supporting the rail freight and passenger industries. The State of Illinois also is working with Indiana to create the Illiana Expressway, to connect Interstate 65 in Indiana with Interstate 55 in Illinois and reduce bottlenecks that hamper freight transportation in and out of Chicago. By continuing to extend our vision across our state borders, the committee believes we can make sure that these new transportation investments are efficient while delivering maximum economic benefits to nearby communities.

To maximize economic benefits from the State of Illinois' investment in its intermodal transportation infrastructure, the committee makes the following recommendations:

- **The State of Illinois should promote public and private investment in new and expanded intermodal terminal projects.**

  New tax incentives and other programs should be developed to spur industrial redevelopment of

[76] Ottawa Industrial Park Overview , http://www.ottawaindustrialpark.com/oipoverview.pdf

vacant land near rail yards.

A statewide Cargo Oriented Development Index could be created to support municipal projects, such as the Blue Island and Harvey redevelopments, focused on industrial and downtown areas near freight transportation terminals.[77]

- **The State of Illinois should support the expansion, acceleration and completion of the CREATE program.**
- **The State of Illinois should support and promote regional and multistate planning for air, rail, road and water transportation projects to reduce traffic congestion and maximize economic benefits.**

  As part of this effort, the State of Illinois should convene airport managers, both statewide and in neighboring states, to plan for more efficient connections to other modes of transportation network and promote improved regional service.

  A regionalized approach to water transportation planning, drawing on input from local officials, private industry, and State agencies, would improve the connection of waterways to other segments of the transportation network and would help stakeholders identify and obtain funding for new projects that would attract new freight business to our water ports.

Water Projects

Illinois' water infrastructure is aging and out of date, raising serious environmental concerns and posing difficulties for development and industrial expansion. Decades of deferred maintenance have left many communities with inadequate drinking water and wastewater systems; the need for updates and replacements, especially downstate, far exceeds current financial resources.

Local governments and privately-owned community water suppliers are eligible for low-interest constructions loans through the Illinois Environmental Protection Agency (IEPA). These loan programs allow communities to upgrade and expand water and sewage treatment systems, providing engineering, construction, and operations jobs and supporting community development efforts. Further coordination among IEPA, DCEO and the Illinois Finance Authority (IFA) would make more resources available for improvements of water systems statewide.

These improvements in water systems must be made strategically. Although Illinois boasts extensive freshwater resources, conservation efforts still are needed to assure adequate water supplies in the future. Our water resources can provide a strong competitive economic advantage to other regions of the country, but only if the State of Illinois moves swiftly to assure adequate supplies of clean water. Due to projected growth of the population and economy, Illinois could require up to 50 percent more water by 2050. As we plan for economic development over the coming decades, we need to know how much water will be available, how much water we will need, what the options are for providing additional supplies and reducing demand, and what the economic impact of those options is likely to be.

The importance of natural resources planning to economic development is demonstrated by two recent water supply planning pilot programs initiated and supported by the Illinois Department of Natural Resources. A study by the Mahomet Aquifer Consortium projects that by 2050, groundwater withdrawals in a 15-county area of central Illinois will increase by more than 200 million gallons a day over current consumption (estimated at about 340 million gallons a day in 2005.) Removing that quantity of water

[77] Illinois Economic Recovery Commission, Infrastructure Committee Support Memo, Chair Scott Bernstein, November 23, 2009, http://www2.illinois.gov/economy/Documents/INF-minutes-112309.pdf

from the aquifer would create serious water quality issues for the area, particularly in Champaign County. Investment in water infrastructure, combined with conservation efforts and drought preparedness plans, could make it possible to meet the area's future water needs – but only with organization and strategic effort.

A similar study raised concerns about water supplies in northeastern Illinois. Although the water in Lake Michigan may seem to be limitless, Illinois' withdrawals are in fact limited by a U.S. Supreme Court decree. As a result, decreasing well yields, higher pumping costs and increases in water contaminants may hinder Illinois' economic development and growth.

These studies point out the need for the State of Illinois and local partners to take action to protect these water resources and begin similar studies in other areas of the state. More progress on this front began in 2010, when the Illinois Department of Natural Resources announced plans for a new study of water resources in the Kaskaskia Basin in southwestern Illinois. The Southwestern Illinois Resource Conservation & Development (SWIRCD) will receive $94,000 from DNR to conduct the Water Quantity Study, which will be reported in June 2012. The Kaskaskia project underscores the importance of adequate water supplies to the coal mining industry, energy development and job creation.

To ensure that Illinois' water infrastructure and natural resources remain environmentally healthy and adequate to support economic growth over the coming decades, the committee makes the following recommendations:

- **The State of Illinois should use authority granted under ARRA for the Illinois Clean Water Revolving Fund to prioritize the allocation of low-interest loans for "green" water infrastructure projects.**

  Under ARRA, a "green" project component of at least 20 percent is required for grants awarded to the states from the Clean Water and Drinking Water State Revolving Funds.[78] As of September 30, 2009, the State of Illinois had received $177,243,100 of ARRA funds for the financing of construction of wastewater treatment facilities and associated infrastructure, green infrastructure, nonpoint source projects, estuary projects, and program administration.[79]

- **The State of Illinois should draft a water use policy that includes expansion of studies of current water supplies and demands and promotes initiatives to improve water quality and reduce demand.**

  As part of the policy-making process, the State should fund basic data gathering by the Illinois Water Survey on water withdrawals.

  The State of Illinois should further work to manage stormwater runoff and reduce impact on wastewater systems by promoting development and using green infrastructure, including natural wetlands.

BROADBAND

In the new global economy, expansions of the broadband infrastructure are among the most important and most potentially valuable investments that we can make. In a 2009 study, President Obama's National Economic Council noted:

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[78] Illinois Environmental Protection Agency http://www.epa.state.il.us/water/

[79] American Recovery and Reinvestment Act, http://www.recovery.gov/Transparency/RecipientReportedData/pages/RecipientProjectSummary508.aspx?AwardIdSur=56645&AwardType=Grants

> Broadband touches nearly every aspect of the U.S. economy, providing Americans with unprecedented opportunities in employment, education, health care, entrepreneurship, and civic participation. For millions of Americans without adequate access to broadband, however, the possibility of falling behind in the knowledge-based economy is real. Recognizing this concern, the American Recovery and Reinvestment Act provided $7.2 billion to stimulate economic growth and create jobs by expanding the deployment and adoption of broadband services…. These critical broadband investments will create tens of thousands of jobs and stimulate the economy in the near term. By providing broadband-enabled opportunities to previously underserved communities, these investments will also lay the foundation for long-term regional economic development and foster a digitally literate workforce that can compete in the new knowledge-based economy.[80]

Expanding the broadband infrastructure is particularly important for rural areas that have been heavily dependent on one industry, making them economically vulnerable. In these areas, broadband can provide a link to jobs many miles away that are untethered to local economic conditions, creating a safety net for rural areas. In a recent jobs forum, for example, the CEO of Arise Virtual Solutions testified that 23 percent of the company's U.S. "home agents" live in towns of less than 15,000 residents.[81] In north central Ohio, the Consolidated Electric Cooperative (CEC) is constructing a 166-mile network that will provide major-city connectivity to rural users and will also connect all of the CEC's substations support its smart grid technology initiative, facilitating implementation of cutting-edge green technology and further supporting economic development in the region.[82] In addition to expanding opportunities for online employment and commerce and new green initiatives, these broadband investments are themselves economic engines, creating tens of thousands of jobs in construction and other sectors that can help to put struggling communities back to work quickly.

To date, Illinois has been a national leader in making broadband deployment a State priority, giving support to a wide range of initiatives, public, private, and non-profit. For example, the Vince Demuzio Rural Broadband Initiative pilot project is improving access to affordable high speed data transmission infrastructure, facilities, and services for Macoupin and Montgomery counties. Under *Illinois Jobs Now!*, the State has designated $50 million for exceptional broadband technology projects. The Governor also has called upon the Department of Transportation to install fiber optic duct in all new road construction projects. Our demonstrated commitment to connectivity was reflected in the $41.5 million in broadband grants Illinois won from the National Telecommunications and Information Administration. NTIA funding will help Illinois to create an unprecedented fiber-to-the-premises initiative when the University of Illinois, Champaign and Urbana build out their Urbana-Champaign Big Broadband (UC2B) network over the next three years.

To help Illinois reach the goal of accessible, affordable broadband connections in every community, this committee makes the following recommendations:

- **The State of Illinois should draft and implement a policy for statewide high capacity broadband networks.**

  As part of Illinois' promotion of broadband connectivity, the State should provide leadership to communities that are developing "last mile" solutions, including guaranteed digital connections.

[80] http://www.whitehouse.gov/sites/default/files/20091217-recovery-act-investments-broadband.pdf, p.1
[81] http://www.whitehouse.gov/sites/default/files/20091217-recovery-act-investments-broadband.pdf, p.13
[82] http://www.whitehouse.gov/sites/default/files/20091217-recovery-act-investments-broadband.pdf, p.11-12

In addition to including fiber technology expansion in every State-financed infrastructure project, the State of Illinois should work with private developers to promote inclusion of fiber extension in all large-scale projects.

The State of Illinois' broadband policy should promote development of the smart grid, and all broadband deployment initiatives should reflect input from utilities and other smart grid stakeholders.

The State of Illinois should expand the Vince DeMuzio Rural Broadband Initiative to other rural counties.

EDUCATION

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Introduction

To develop and maintain a thriving, dynamic economy, it is critical that Illinois invest in its most important resource: human capital. The financial, social and economic returns from an investment in human capital are long-term and concrete. Again and again, research shows that education leads to higher wage jobs, improved quality of life, lower poverty rates, better health, longer life expectancy, lower infant mortality rates, lower teen pregnancy rates and reduced criminal activity. Conversely, the consequences of a poor education system have a devastating economic impact. A single statistic tells the story: In 2009, more than 46,000 students left Illinois high schools without graduating; the lost lifetime earnings for that group of dropouts total nearly $12 billion. [83]

This committee found that Illinois' history of insufficient investment in education intensifies job loss in the state and serves as a serious barrier to future economic expansion. In hearings, industry experts and representatives of a number of companies throughout the state cited the difficulty of finding well-trained, competent talent in many communities as a major obstacle to expanding their operations in Illinois. Corporate employers in the healthcare field reported on the current nursing shortage and the failure of our state educational institutions to produce an adequate number of nurse practitioners, certified medical assistants, health care IT professionals and other highly trained workers. Others said that their recruitment efforts were hampered because top-quality employees were unwilling to relocate to communities where the public school systems are struggling.

The problems facing our educational system are intensified by our continuing loss of jobs and talent to other states. An estimated 40 percent of information technology graduates from Illinois colleges and universities leave Illinois upon graduation to take jobs out of state. According to TechAmerica, the largest technology trade organization in the United States, Illinois lost 46,500 high-tech jobs between 2001 and 2006, and we rank 17th in research and development investment per capita.[84] The loss of these highly skilled professionals reverberates throughout the economy: In 2008, the average annual wage for high-tech jobs was $77,091, compared with $45,866 for the average private sector wage.[85]

In reviewing strategies to improve Illinois' education system and revive our state economy, this committee sought perspectives from business leaders in health care, technology, agriculture and food processing, as well as educational experts. We spoke to former and current CEOs and general managers of major corporations, as well as professional staff and factory workers.

Additionally, the committee was troubled by the lack of public awareness of Illinois' many educational initiatives designed to improve workforce training and support employers. Again and again in hearings before this committee, industry representatives cited the need for specific training programs and public-private educational partnerships designed to promote technological advances. Yet upon further research, this committee repeatedly found that those specific initiatives mentioned were already in place, and are even acknowledged nationwide for their excellence. But too many employers, workers and other stakeholders within our borders are unaware that these programs exist. Without adequate outreach, these programs are severely limited in their effectiveness.

We cannot afford to let our public school systems become entrenched in a downward spiral that simultaneously reflects and fuels Illinois economic decline. We must make sure that today's students have the educational resources to develop the skills they will need in their future careers, and that current

[83] Alliance for Excellent Education, "Illinois High Schools" http://www.all4ed.org/files/Illinois.pdf
[84] TechAmerica, "Cyberstates 2008," p. 61, http://www.aeanet.org/publications/idjj_cyberstates2008_overview.asp
[85] Ibid

workers have access to training programs that will enable them to modify their skills to adapting to the evolving workplace. We also must make sure that our training programs are well-publicized and easily accessible to workers and employers throughout Illinois.

Although all the recommendations put forth by this committee may not result in immediate economic returns and job creation, Illinois cannot expect to thrive economically without making necessary investments in the education of the current and future workforce.

This committee has developed a two-pronged set of recommendations to help the State of Illinois develop a public educational system that will prepare today's students to be career-ready when they leave school, and that will help today's workers get the continuing education and retraining they need to stay competitive in a rapidly evolving workforce.

To help Illinois' public education system better serve students at every level from pre-kindergarten through college graduation, this Committee makes the following recommendations:

- **Encourage public-private partnerships that foster development of affordable, high-tech classroom programs and curricula in Science/Technology/ Engineering/Mathematics education.**
- **Expand school participation in local and statewide competitions that allow students to highlight their science and math knowledge.**
- **Work to replicate the Chicago Public Schools' principal eligibility and selection process in other districts statewide.**
- **Expand the School Administration Manager Project, with the goal of placing SAMs in all high-need schools.**
- **Develop recommendations and standards for school-wide differentiated instruction programs and work with districts to fully implement and integrate these programs.**
- **Encourage community-school partnerships and create a clearinghouse to provide information on model partnership programs throughout the state.**
- **Increase school funding to the foundation level for every district, and link that additional funding with stronger controls on district spending to make sure those increased dollars result in better educational opportunities for Illinois students.**

To help Illinois' public education system provide necessary workforce training to adult workers and to stem the flow of both workers and businesses from our state, the Committee makes the following recommendations:

- **Increase alignment of college and university curricula with workforce needs.**
- **Create new programs to make technology education more affordable.**
- **Provide financial and other incentives to employers and workers to retain knowledge workers in Illinois.**
- **The State of Illinois should establish a task force, including representatives of industry, state colleges and universities, community colleges and pre K-12 public schools, to develop a plan to create five Illinois Centers of Excellence.**

STEM Education Initiatives

Although no one can fully predict the future educational demands of the workplace, it seems clear that STEM (Science/Technology/Engineering/Mathematics) education will continue to play a fundamental role in preparing students for their future careers. This is especially true for girls and minority students, who historically have been underrepresented in higher-level STEM education.

"Keeping Illinois Competitive," a 2006 Illinois Status Report on STEM education by Northern Illinois University's P-20 Task Force, found that Illinois trails others states in the percentage of students performing at grade level or better in basic STEM subject areas. According to the report, only about half of Illinois high school students have the requisite mathematics and science skills to succeed in college and in the workforce of the new economy.

The report identified many reasons for the underperformance of Illinois students:

- School curricula, assessments, and pedagogy are not consistently aligned with the needs of the 21st Century workforce
- Qualified math and science teachers are in short supply and lack access to necessary professional development
- Many mathematics and science teachers lack proper qualifications and/or access to ongoing professional development to improve their teaching.
- Instructional activities and materials that can improve STEM education have not been identified and disseminated statewide.
- Awareness programs aimed at recruiting high-potential students to post-secondary STEM education are inadequate – intensifying Illinois' shortage of both STEM teachers and knowledge workers.

In 2005, 225 Illinois school districts reported shortages of physics and chemistry teachers, the report noted. Without action, the problem of deficient STEM education in Illinois is likely to intensify in the future. Today, about 30 percent of Illinois' high school math and science teachers are over the age of 50, and there are not enough future STEM teachers currently in the pipeline to replace them.[86]

By shortchanging STEM education, the State of Illinois is limiting the future success of far too many students and jeopardizing the future expansion of our state economy. Without STEM-proficient workers, Illinois cannot expect to compete in the new knowledge-based economy.

In recommendations to President Obama, the National Science Board forcefully set out the issues facing STEM education in the United States:

> The National Science Board recommends a set of actions for the new Administration to implement starting in early 2009 to advance STEM (education for all American students, to nurture innovation, and to ensure the long-term economic prosperity of the Nation. The urgency of this task is underscored by the need to ensure that the United States continues to excel in science and technology in the 21st century. It must develop the ideas that could transform and strengthen the economy, ensure a skilled workforce for American industry, and guarantee that all

[86] Keeping Illinois Competitive, "Illinois STEM Education Report" http://www.keepingillinoiscompetitive.niu.edu/ilstem/pdfs/STEM_ed_align_7-2.pdf

American students are provided the educational resources and tools needed to participate fully in the science and technology based economy of the 21st century. [87]

The National Science Board's recommendations of essential components for effective STEM education are thoughtful and comprehensive, and worth citing at length:

> **A motivated public, students, and their parents**: The President and his Administration should emphasize to the general public, early and often, the importance of a solid education, especially in STEM, for all of our students.... • It is particularly important that parents understand this need. The President should issue a call to arms to all parents to use their influence at all levels—home, school and community—to bring about the changes we recommend. • Coalitions among parents, government, business and industry, private and corporate foundations, public figures, scientists and engineers, the media, and other stakeholders should be used to draw attention to the need and collectively develop locally relevant strategies to foster high quality STEM education for all students.
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> **High-quality teachers**: Dedicated, high-quality teachers are central to ensuring high quality STEM education for all students. We will continue to lose the best and brightest potential STEM teachers from our schools until we pay them at a level more closely aligned with salaries available to them in STEM areas. The labor market provides those with STEM training greater compensation in occupations other than teaching—a fact that is driving STEM teachers out of teaching. …
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> **World-class resources and assistance for teachers**: Even the best teachers need instructional materials, technology, and resource specialists to assist them. A teacher should not have to develop all of his or her own tools for teaching STEM. • Advanced technologies offer many tools that can augment the classroom experience. A Federal initiative should be mounted to examine the best ways to use technology in education. • A "Science Corps" should be established, of active and retired STEM professionals, to assist teachers in classrooms, schools, and at district levels. Summer and after-school programs that reinforce classroom learning might also utilize this supporting Science Corps. • A web-accessible resource of peer-evaluated STEM instructional materials and best practices should be developed that identifies those materials and best practices that have been proven to be valuable and effective. This resource could include those materials and best practices developed in other countries that have been shown to be effective. • A web resource that compiles research from the cognitive sciences and STEM education fields that is relevant to educational practice should be developed to inform educators and policy-makers. …
>
> **An early start in science**: The earlier children are exposed to STEM concepts, the more likely they are to be comfortable with them later in life. • STEM core concepts and ideas should be included in Head Start and other early education programs. • Improving the extent and quality of elementary school STEM education should become a priority. …
>
> **Communication, coordination, and collaboration:** Local excellence, national coherence, and global relevance in STEM education can only be achieved if all relevant stakeholders—including, most importantly, parents—are involved in achieving these goals. • Coalitions, like some of the state P-16 councils that have effectively addressed STEM education issues, should be encouraged and funded everywhere. Such coalitions should promote interactions among K-12 school systems; 2- and 4-year colleges and universities; informal science education organizations; and business

[87] Dr. Tom Kalil, National Science Board, "Actions to Improve Science, Technology, Engineering, and Mathematics (STEM) Education for all American Students," http://www.nsf.gov/nsb/publications/2009/01_10_stem_rec_obama.pdf

and industry to promote learning and the development of the STEM skills needed for the 21st century. …[88]

In reviewing STEM education in Illinois, the committee strongly supports a renewed focus on instruction in the sciences and mathematics. As part of that focus, the committee makes the following recommendations:

- **Encourage public-private partnerships that foster development of affordable, high- tech classroom programs and curricula.**

To excel at STEM subjects, students at every level need to be engaged and challenged. Today, a student with an iPod has personal access to more computing power than NASA had when we sent Apollo 11 to the moon. So we cannot expect to teach high-tech subjects successfully with out-of-date or non-interactive software programs. However, much of the educational software commercially available is financially out of reach for many school districts, and many schools still lack adequate computer access for their students.

To meet the technological education needs of students without imposing heavy costs on school districts, the State of Illinois should expand its programs to provide low-cost laptops and computer education to students and teachers. In addition to providing grant funding for these programs, the State of Illinois should work to forge partnerships between needy schools and corporate donors. Additionally, the State of Illinois should promote educational software programs that are now available at little or no cost to districts, and should expand workshop programs that will help STEM teachers expand and sharpen their skills.

Currently, Abbott Laboratories funds a teacher development day at the Illinois Math and Science Academy that offers workshop activities along with innovative approaches to math and science curricula.

Another IMSA project uses Web 2.0 technology to bring an environmental chemistry pilot program to students around Illinois. The program, funded by grants from the Abbott Fund and Tellabs Foundation, uses video conferencing, online forums, wikis, blogs, immersive online worlds and a searchable database of session recordings and published innovation projects. Students at three Illinois high schools will use portable technology units to access facilitated sessions hosted at IMSA. [89]

A teacher-focused model could be found in EnLiST, (Entrepreneurial Leadership in STEM Teaching and learning), a National Science Foundation-funded partnership between the University of Illinois at Urbana-Champaign, Urbana School District #116, Champaign Unit 4 School District, and Thornton High School District #205. The EnLiST partnership is focused on providing science teacher leaders with cutting-edge content knowledge, a strong pedagogical repertoire, and an entrepreneurial spirit and mindset. The three-year program for K-12 physics, chemistry and physical sciences teachers includes a series of summer institutes on the University of Illinois campus, face-to-face and online coursework throughout the academic year, and in-school follow-up and implementation activities.[90]

- **Expand school participation in local and statewide competitions that allow students to highlight their science and math knowledge.**

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[88] Ibid
[89] Illinois Math and Science Academy, "Donors Fuel Expansion and Innovation Throughout Illinois," https://www3.imsa.edu/news/features/donorexpansion
[90] EnLiST Illinois, "EnLiST: Entrepreneurial Leadership in STEM Teaching and Learning," https://www.enlist.illinois.edu/pdfs/EnLiST-Brochure.pdf

In addition to providing a challenging residential college prep program to academically talented Illinois students in grades 10-12, the Illinois Math and Science Academy (IMSA) also serves as a teaching and learning laboratory that helps to provide innovative instructional programs to thousands of teachers and students statewide. As part of that mission, IMSA offers CyberQuiz 4Kids, a monthly online contest co-sponsored by the Abbott Fund. Each month, the CyberQuiz 4 Kids introduces two challenging mathematics or science brain teasers or word problems, one for Illinois students in grades 6-7 and another for grades 8 and 9. Every student who submits a correct answer receives a certificate of achievement and invitation to a special recognition event as a winner – and is entered into a monthly random prize drawing for an iTouch. There are also annual grand prizes. The program has been wildly popular with Illinois students statewide.[91]

IMSA also sponsors a Junior High Math Competition for students around Illinois. Additionally, IMSA students participate in intramural math contests and interscholastic competitions, including the North Suburban Math League and the Illinois Council of Teachers of Mathematics State Math Contest. Additionally, all IMSA students enter the American Mathematics Competitions, the first round in a sequence of increasingly challenging math exams that ultimately lead to the International Mathematics Olympiad team. IMSA students also compete for the Chicago area team of the American Regions Mathematics League nationwide contest, and IMSA fields a team for the Mandelbrot Competition, a high level mathematics competition for high school students. Additionally, IMSA students compete in the American Computer Science League, which emphasizes both programming and computer science theory.

Competitions like these offer tremendous benefits to participants, providing exceptional motivation to master difficult subject matter in a limited timeframe, and offering the possibility of recognition at the regional, state, national and even international levels. The State of Illinois should strongly encourage schools to participate in these and other competitions, including science fairs and the Illinois Science Olympiad, and should work to help schools in needy areas partner with corporate sponsors to make these experiences accessible to all.

Leadership Accountability

STEM education, although critically important, is only one component of academic success. For too many Illinois children, the possibility of improved STEM education fails to address their more pressing need for schools that will help them to achieve basic literacy skills.

Illinois is blessed with many dedicated, talented educators who enable their students to learn and thrive. However, we must take steps to ensure that every public school teacher, and every public school administrator, is competent and fully committed to the education of the children we put in their care. To meet that goal, Illinois must institute new evaluation standards for educators.

At present, most educator evaluation focuses on classroom teachers. However, much of students' success or failure in the classroom reflects the leadership abilities of school principals, who have an enormous impact on teacher quality and morale and serve as major drivers of school improvement. One study estimated that a principal's leadership accounts for 20 percent of a school's impact on student achievement.[92] A principal's influence can expand and sustain quality instruction throughout an entire school, so that a student's progress is not dependent on the random chance of landing in a classroom with

[91] Illinois Math and Science Academy, "Abbott Fund CyberQuiz 4Kids," https://www3.imsa.edu/admissions/cyberquiz
[92] Leithwood, K., Louis, K.S., Anderson, S., & Wahlstrom, K. The Wallace Foundation "How leadership influences student learning," www.leadershiplinc.ilstu.edu/.../howleadershipinfluencesstudentlearning.pdf

a strong teacher. For these reasons, assessing the quality of a principal's leadership is an essential component of school reform efforts directed at improving student achievement.[93]

A number of studies have identified specific leadership skills that strongly predict improved student achievement. In a 2003 meta-analysis of 70 studies, which looked at 1.1 million students and 14,000 teachers at 2,900 over a total of 30 years, a team of Colorado researchers identified 21 key leadership responsibilities. They found that a principal who improved his/her ability in each of these key responsibilities could drive a ten-point overall average increase in the students' achievement results. Conversely, principals who lacked competence in such basic leadership responsibilities as establishing clear-cut goals, designing a coherent and appropriate curriculum and providing adequate teacher resources could have a disastrous impact on their students' achievement levels.[94]

The Chicago Public Schools (CPS) have demonstrated the importance of principal effectiveness to school turnarounds. In 1997, CPS began playing a greater role in Local School Councils' selection of school principals. Previously, under the 1988 Chicago School Reform Act, the individual Councils – made up of parents, teachers, community members and the school principal – had wide discretion in hiring new principals for their schools. In 1997, CPS created a new process which screened applicants and created an eligibility list from which LSCs could hire. As an outcome of the new policy, the three CPS- approved principal preparation programs began framing their training around the core Principal Competencies reviewed in the CPS screening process.[95] In 2008, CPS again revised the process to reflect a list of Critical Success Factors, five core competencies encompassing 24 basic skills.[96] As a result, the screening process has become more performance-based and transparent. The process also provides baseline data on the strengths of each incoming principal, data that is used to tailor coaching and professional development support and evaluations for that principal and provide continuing feedback to principal preparation programs.

Of course, selecting a qualified principal is only the beginning step toward school turnaround. Many principals in failing schools need structured help to become more effective in promoting educational quality. To that end, 56 Illinois schools currently participate in the National School Administration Manager (SAM) Project, a ten-state school improvement. The SAM project, funded by The Wallace Foundation, helps principals to focus on instructional leadership while delegating routine operations management tasks to an administrative manager. Initially, the Project found that school principals were spending less than one-third of their time on instruction-related issues. By identifying an administrative manager and helping principals to develop a thoughtful, efficient approach to delegating non-education related tasks, the SAM Project allowed principals to double the amount of time they spend on instructional improvement and refocus on education as their top priority. The SAM project also works to make the entire school community aware of the principal's crucial role in transforming a struggling school's approach to education. In the initial study in Louisville, KY, each of the pilot schools reported substantial gains in student achievements.

Principal-focused programs like these offer real hope of sustainable, school-wide improvement. However, the committee notes an axiom of private industry: "If you can't measure it, you can't manage it." Without reliable, consistent, targeted performance metrics in place, we cannot know whether our investments in principal improvement are yielding results. For that reason, Illinois' Race to the Top application included the goal of building "robust teacher and principal evaluation systems that focus on both effective practice

[93] Peterson & Finn, 1985; NCSL Task Force on School Leadership, 2002. "A License to Lead?" www.ppionline.org/documents/New_Leadership_0103.pdf
[94] "Balanced Leadership," http://www.mcrel.org/PDF/LeadershipOrganizationDevelopment/5031RR_BalancedLeadership.pdf
[95] Chicago Public Schools, "Developing Aspiring Principals: Policy, Experience, and Performance," http://www.cgcs.org/images/PastConference_pdfs/LA4.pdf
[96] Office of Principle Preparation and Development, "Chicago Public Schools Principal Competencies," http://www.oppdcps.com/downloads/Competencies.pdf

and student growth." Those evaluation systems will enable school districts to "use redesigned teacher and principal evaluation systems to inform the allocation of professional development resources and key decisions such as compensation, career advancement, certification, tenure conferral, and dismissals."[97]

There are a number of research-based evaluation tools that could be used to measure the effectiveness of Illinois principals. For example, The Vanderbilt Assessment of Leadership in Education (VAL-ED) is a paper and on-line review that allows the principal, the principal's supervisor, and all teachers in the school to assess the principal's leadership skills. At present, VAL-ED is the only principal evaluation tool aligned with the 2008 Interstate School Leaders Licensure Consortium's standards.

For a broader look at a school's culture, leadership and performance, the Consortium on Chicago School Research (CCSR) at the University of Chicago regularly surveys Chicago public school principals, teachers, and students. The survey asks participants to rate each school's learning climate, student-teacher relationships, leadership, instructional program, professional environment, and outreach to parents and community members. All Chicago Public Schools participate in the CCSR survey,

To improve principal selection and performance at Illinois public schools, the committee makes the following recommendations:

- **The State of Illinois should work to replicate the CPS principal eligibility and selection process in other districts statewide.**

  The concepts of the CPS program can, and should, be replicated in other districts throughout the state. Focusing on these Critical Success Factors for selection and assessment can help districts or Regional Offices of Education to identify principals with the skills, knowledge, and behaviors required to turn around low-performing schools. These concepts also provide districts with clear-cut principles to work with university partners in tailoring principal training programs to meet local needs. Going forward, selecting principals based on these factors will enable districts to collect baseline data on each principal that will link to new State-mandated performance-based evaluation requirements associated with student growth and school condition, and will guide districts in designing personalized coaching and professional development programs.

- **The State of Illinois should invest in expanding the School Administration Manager Project, with the goal of placing SAMs in all high-need schools.**

  The National Partnership Zone Initiative, part of Illinois' Race to the Top application, offers an opportunity to expand the SAMs concept. The Initiative is a three-year, $75-million public-private partnership with five other states to develop long-term reform strategies for their lowest-performing schools. The Partnership Zones will be established in several districts with clusters of low-performing schools. Schools chosen for the Partnership Zone will be given higher priority to receive funding through Illinois' share of federal school improvement grants, and may receive as much as $750,000 per school year for three years.[98]

- Each cluster of schools will be paired with a lead partner, an experienced turnaround leader that will directly support principals. Lead partners will have authority to select principals in their schools and will be required to place a staff member to work alongside the principal at each school in the cluster. The SAM project would fit smoothly into this model, offering additional means to assist the principal in improving time management and skills and focusing on instructional improvement.

[97] Illinois State Board of Education, "Race to the Top," http://www.isbe.state.il.us/racetothetop/PDF/application.pdf
[98] Illinois State Board of Education, (February 2, 2010) Press Release. "Illinois targets struggling schools with new 'Partnership Zones,'" http://www.isbe.state.il.us/news/2010/feb2.htm

- The SAM model does not necessarily require hiring a new employee. Some restructure the duties of an existing staff member, such as a school secretary, to include SAM responsibilities. Others begin the project with a designated SAM staff member and then transition the SAM responsibilities to existing staff. The reported success of these variations on the SAM approach underscore the real value of the project – retraining principals to make educational improvement their highest priority and major focus, even after the formal project ends.

Differentiated Instruction

Illinois has a large and diverse student population. The children in our schools come from families at every income level and represent many races and ethnicities. Many students are foreign-born, with parents who speak little or no English. Beyond these demographic differences, the children in our schools reflect extraordinary differences in learning styles and educational achievement.

Given these deep-seated differences, we cannot expect success from a one-size-fits-all approach to education. Teachers and school leaders must work to identify the individual learning needs of their students and then create plans to adjust curriculum and instruction to meet those needs. Instead of simply "teaching to the middle" – an approach that, by definition, ignores the very real educational needs of both high- and low-performing students – school leaders must recognize that all children deserve a chance to learn in a style and at a level that offers them a chance of success.

Differentiated instruction can transform the learning environment by creating flexibility in instruction and assessment within the curriculum framework. The differentiated instruction principle embraces the idea that education is ultimately an individual process, and that teachers can – and should – offer instruction in a variety of ways that recognize the diverse needs of the children in their classrooms.

Carol Ann Tomlinson, a nationally recognized leader in the field, offers a pithy definition of the concept:

> At its most basic level, differentiating instruction means "shaking up" what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn. … It means teachers proactively plan varied approaches to **what** students need to learn, **how** they will learn it, and/or how they will **show what they have learned** in order to increase the likelihood that each student will learn as much as he or she can, as efficiently as possible.[99]

Tomlinson stresses that differentiated learning is fundamentally different from the type of tracking that divides students according to perceived ability and then offers an inflexible curriculum based on that ability ranking. Instead, she states: "Effective differentiation requires use of flexible grouping patterns so that students consistently work in a variety of groups based on readiness, interest, learning preference, random assignment, teacher choice, and student choice."[100]

Certainly, many gifted teachers wield a variety of educational methods to engage the children in their classes, and offer a range of information to help children at every level learn and grow. However, a truly effective differentiated instruction program must function school wide, encouraging teachers to share effective strategies and techniques with each other and creating a student-focused environment that gives children confidence that their needs and strength will be acknowledged and addressed in every class at every level.

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[99] Carol Tomlinson, Ed.D., William Clay Parrish, Jr. Professor; University of Virginia Amherst College Community Presentation (March 31, 2010), http://www.caroltomlinson.com/Presentations/Amherst_College.pdf

[100] Carol Ann Tomlinson, Kay Brimijoin and Lane Narvaez, "Differentiated School," http://www.ascd.org/publications/books/105005/chapters/Setting_the_Stage_for_Change_Toward_Differentiation.aspx

To make Illinois public schools more responsive to the individual needs of our students, and to improve every child's chances of academic success, the committee makes the following recommendation:

- **The State of Illinois should develop recommendations and standards for school wide differentiated instruction programs and should work with districts to fully implement and integrate these programs.**

  There is a vast body of academic research and case studies work detailing the successful implementation of differentiated instruction programs, in individual classrooms and school wide. A large number of schools, including many in Illinois, have introduced various aspects of differentiated learning in their curricula. To extend the principles of differentiated education to schools statewide, especially low-performing schools, the State of Illinois should develop a set of standards to guide principals and school administrators.

  The State also should develop assessment programs to make sure that schools remain fully engaged in developing and refining these initiatives. The task of reforming our approach to education and creating new teaching methods that acknowledge the extraordinary diversity of our students will not be achieved overnight; the State must provide consistent, long term support to help Illinois schools succeed in this fundamental reform.

Parental and Community Involvement

One of the greatest predictors of a school's success is its level of parental and community involvement. Although high levels of parental involvement are more often reported in schools in wealthier districts, many schools in lower-income neighborhoods have developed strong parent and community supports. One example is found in the book *How to Walk to School*, which tells how a committed principal and committed neighborhood parents transformed Nettelhorst Elementary School in Chicago from an underutilized, struggling neighborhood school into a successful, vibrant, and challenging learning environment. The Nettelhorst story showcases the powerful effect of engaging parents, local businesses, and elected leaders in an effort to improve a school, and provides a blueprint for inspiring parents, teachers, administrators and community members to reenergize their own neighborhood school.

Another example of a successful program linking schools and community members is Chicago Lawyers in the Classroom, coordinated by the Constitutional Rights Foundation Chicago. The Foundation trains attorneys to teach the basic principles of the U.S. Constitution and our legal system, provides learning materials, and then matches the trained attorneys with elementary schools. Training sessions are held at Chicago law schools, and attorneys are asked to visit their partner schools at least three times each year. In addition to teaching students about legal issues, the attorneys help students develop their critical thinking skills and offer a variety of positive adult role models to young students. Currently, more than 200 attorneys are working with students in 40 Chicago public schools through this program.

A number of corporations also have created model programs for promoting involvement with local schools. These programs benefit students and teachers, and also create new lines of communication that can help to align curricula at local schools with the needs of the corporate workforce.

For example, Decatur-based ADM has a number of outreach programs to local schools. In addition to offering several college scholarships, ADM has created the Link program, giving high school counselors and teachers an opportunity to shadow employees in a wide variety of technical and professional positions for two weeks. The program was designed to give educators a clearer picture of the gaps between the high school curriculum and workplace needs. "We hope to build a pipeline to attract talented students in our area," Kathie Whitley, vice president of ADM Human Resources, said in a news release about the program. The program, which offers teachers stipends for their shadow time, has been very successful. A

number of other companies and coalitions are considering similar programs based on ADM's Link model, and the number of educators applying to join the ADM program has exploded.[101] ADM also offers a High School Work Program that pays students while they work in various divisions throughout ADM.

Walgreens' One-on-One mentoring program partners with the Midtown Educational Foundation in Chicago, a supplementary educational program for inner-city youth. The program assigns a Walgreens volunteer tutor to a student, building a long term educational relationship. Tutors in the program help students develop skills in seven different areas, including reading, writing and mathematics; creative thinking and conceptualization; conflict resolution and teamwork; public speaking; cultural awareness; visual and performing arts; and sports.[102]

To expand parental and community involvement in Illinois public schools, the committee makes the following recommendation:

- **The Illinois State Board of Education should strongly encourage community-school partnerships, and should create a clearinghouse to provide information on model programs throughout the state.**

  Educators are well aware that strong parent and community involvement provides extraordinary benefits for schools, offering access to valuable professional and financial resources. However, these resources generally are most readily available to schools in higher-income communities, where well-educated parents are comfortable in classroom settings and often have many personal links to potential corporate partners.

  By providing information about successful programs already in place and by developing training programs to prepare volunteers for classroom contact, the State of Illinois can reduce obstacles to parent and community involvement in needy schools.

  The State also could help to reduce inequities in community partnership by creating a website to match potential volunteers with specific school needs. Not all school volunteers need to be physically present in the building to contribute; for example, a website designer in suburban Chicago could help to create a new homework support site for a school in East St. Louis. A "matchmaking" website also could help corporate partners identify employees whose skills match a school's needs.

School Funding

Illinois schools are more reliant on local property taxes than any other state in the nation, creating severe inequities for students and property owners alike.[103] Under the current system, students in low-income communities attend poorly funded schools that lack basic educational resources, and property owners in low-income communities must pay far higher tax rates than their counterparts in wealthier neighborhoods. Because property taxes are based on home values rather than owners' ability to pay, longtime residents in high-tax communities can be painfully squeezed by skyrocketing tax bills. This shortsighted and unfair tax policy has a devastating impact on many Illinois communities, creating disparities that threaten our children's futures and our state economy. The fundamental structure of Illinois school financing must be changed.

The Educational Funding Advisory Board (EFAB) was created in 1997 to ensure that the State provides a base level of per-student funding – known as the foundation level – to all districts. However, the State has

[101] Interview with Kathie Whitley, VP. of Human Resources, Archer Daniels Midland Company. (February 9, 2010)
[102] James Frederick (May 17, 1999), "Walgreens' charity efforts reach inner-city kids 'one-on-one' " http://findarticles.com/p/articles/mi_m3374/is_8_21/ai_54787310/
[103] Center for Tax and Budget Accountability, "Funding a Quality Education Requires Fiscal Reform," http://www.ctbaonline.org/Education.htm

failed to meet that base level of funding every year since FY2003. The recommended funding level has not been adjusted since FY2006, when it was set at $6,405. The State's fiscal year 2011 budget sets the foundation level at $5,669. This financing shortfall leaves poorer districts unable to meet their responsibilities to the students they educate.

This committee does not believe that simply sending more money to school districts will automatically lead to improved education quality. There is no straight-line link between the average amount a district spends per pupil and the average student achievement of that district. In 2004, for example, Tazewell Central District 51 in Peoria was one of the lowest-spending districts in the state, yet the district out-performed the state's highest-spending district, Rondout District 72 in Lake Forest. However, research shows that wealthier districts are far more likely to graduate students who are academically prepared for college and the workforce.

As President Obama said in his 2010 State of the Union Address: "One of the best anti-poverty programs is a world-class education. In this country, the success of our children cannot depend more on where they live than their potential."

To provide Illinois students with equitable opportunities to learn that reflect their individual academic potential instead of their zip codes, this committee makes the following recommendation:

- **The State of Illinois should increase school funding to foundational level for every district, and should link that increase in funding with stronger controls on district spending to make sure those increased dollars result in better educational opportunities for students.**

  Increased State funding must be tied to thoughtful statewide school reforms. For example, Illinois currently supports 870 separate school districts. Of those, nearly 200 are single-school districts. In addition, many communities have separate elementary districts feeding to a high school district. Illinois school districts serve an average of 2,407 students, compared with an average of, for example, 11,000 students per district in North Carolina. As the Taxpayer Action Board report notes, district consolidation could reduce school bureaucracies and administrative costs, and could also improve curriculum alignment between elementary, middle and high schools.

  Past efforts to provide short-term incentives for district consolidation have yielded only limited results. However, linking permanent funding increases to demonstrated efficiencies could provide the necessary impetus to action. Legislation to reform school funding should be tied to creation of a District Consolidation Commission, as recommended in the Taxpayer Action Board report, which would create reorganization guidelines, select candidate districts and establish a process for implementation.[104]

  The *Burnham 2.0 Plan for Education*, released in 2009 by a diverse group of education advocates, public officials and civic and labor leaders, suggested a State funding distribution formula focused on student outcomes. Their model would not punish low-achieving districts by withholding funds, but it would target non-discretionary funds to those districts to ensure that spending focuses on tested educational strategies designed to help students. The Burnham 2.0 plan acknowledges that this is only one possible model for linking increased resources to school improvement. "But to carry on the conversations about funding and outcomes as if they were two separate conversations makes no sense," the report states. "If we keep doing that, the resources expended seem unlikely to lead to the outcomes we want."[105]

[104]State of Illinois, Report of the Taxpayer Action Board, June 2009, p. 71-73 http://www.illinois.gov/PressReleases/Documents/TAB%20Report%20FINAL.pdf
[105] Advance Illinois, "Burnham 2.0 Plan for Education," http://www.advanceillinois.org/filebin/pdfs/Burnham_Plan.pdf

Workforce Education

To promote economic success, Illinois must be more effective in training students for a smooth transition from school to the workforce. To achieve this goal, educators must work more closely with employers in curriculum development, job training, internships, and student placement. This process must not end with graduation; it also is critically important to provide accessible, affordable resources to help retrain displaced workers. The economic benefits of these retraining programs are immediate and significant; a University of Chicago analysis found that one year of community college schooling raises the earnings of male displaced workers by 7 percent and by even more for females. The research also showed that older displaced workers – those over 35 – benefit as much from retraining as younger workers.[106]

The University of Chicago further found that workers receive significantly greater economic benefits from science and technology-related class work, including health-related courses and college-level science and math classes. This research underscores the critical role that community colleges play in updating Illinois workers' skills to meet evolving workforce needs.

Illinois offers a number of programs designed to help displaced and low-income workers develop new skills that match workforce needs. For example, the Shifting Gears initiative, a collaborative project of the Illinois Community College Board, the Department of Commerce and Economic Opportunity and the Chicago-based Joyce Foundation, combines basic education with occupational skills training. The program combines specific workforce training programs with basic skills and English-language services, and helps to connect newly trained workers with employers. The program focuses on training workers for jobs in manufacturing, health care, and transportation/distribution/logistics, and includes outreach to partner employers to make sure training programs continue to meet workforce needs.[107]

Given their potential outreach to an untapped workforce and their ability to initiate partnerships with local businesses, community colleges are well positioned to take a leadership role in strategic workforce development efforts. Elgin, Oakton and Harper community colleges have provided an exceptional example of regional outreach in their relationship with the Workforce Board of Northern Cook County and WorkNet Centers in Arlington Heights and Evanston. In this partnership, the Workforce Board sets policies for local workforce development programs and creates links between local employers and training programs; WorkNet provides workers with one-stop, online and in-person access to training programs and other State-provided services, and the community colleges develop and deliver training programs to meet current and anticipate future workforce needs.

Opportunities also exist to tighten links between curriculum and industry needs at the university level. The Illinois Institute of Technology offers strong models of workforce-aligned education in its power engineering programs, which offer academic degrees and certificate programs focused on leading-edge issues in electric power, such as Smart Grid technology. To strengthen connections between faculty, students, and industry leaders, IIT's Electric Power and Power Electronics Center partners with other institutions, government agencies, and industry to sponsor research projects, short courses, conferences, and seminars.

The value of increased access to workforce-aligned education, both to individual workers and to the state economy a whole, is unquestioned. But given the current economic climate, the State of Illinois must acknowledge the financial needs of both current students and displaced workers. Although technology

[106] Jacobson, LaLonde and Sullivan (October 2005), "Do Displaced Workers Benefit From Community College Courses? Findings From Administrative Data and Directions for Future Research," p. 2, http://harrisschool.uchicago.edu/faculty/articles/LaLonde_displacedwkrs.pdf
[107] The Joyce Foundation, "Shifting Gears," http://www.shifting-gears.org/illinois/61-state-progress-illinois-.html

education and retraining programs have been shown to provide real future economic benefits to workers, tuition costs put education programs out of reach for millions of Illinoisans.

To meet the needs of Illinois employers and provide workers with accessible, affordable education programs that will increase their incomes and expand their career options, the committee makes the following recommendation:

- **The State of Illinois should work to increase alignment of college and university curricula with workforce needs.**

  The models of successful educational partnerships with employers and industry noted above can and should be expanded and reproduced statewide, with a focus on community colleges as the most accessible and affordable training providers.

- **The State of Illinois should create new incentive programs to make technology education more affordable.**

  For many students, the burden of paying off student loans greatly limits their flexibility in accepting employment. An Illinois-bred and/or –educated student may want to live here after graduation, but the monthly burden of loan repayment can force that student to accept a slightly higher-paying position in another state. The State of Illinois could work with employers to create incentive programs to attract students through student loan repayment programs. The company could shoulder part or all of a student's loan payments in return for a State tax credit offsetting some of the employer's cost. The student's debt burden would be relieved, the employer would gain access to a well-trained employee, and the State would receive increased income and sales tax revenues.

Additionally, Illinois must address the problem of retaining knowledge workers. In a global economy, we must find new ways to compete for the talented workers who will create the cutting edge technologies and build the new knowledge-based industries of the future. As part of that effort, the State of Illinois must create new, targeted incentives for both employers and workers to reduce the migration of talent away from Illinois.

To ensure that Illinois can retain the highly skilled workforce we will need to take leadership of the knowledge-based economy, the committee makes the following recommendation:

- **The State of Illinois should provide targeted financial and other incentives to employers and workers to retain knowledge workers in Illinois.**

  The State could strengthen bonds between Illinois employers and educational institutions and promote employment by providing tax credits to Illinois businesses that hire Illinois-trained knowledge and technology workers.

  The State also could expand the pool of highly trained workers by assisting foreign-born, Illinois-trained residents in obtaining H1B visas. These visas are granted to foreign nationals only when there is no American citizen with the highly specialized skills required by a specific job. Although many foreign nationals seek these visas, they ultimately are granted to provide necessary skills to domestic companies, not to expand immigration. These visas can provide a critically important source of skilled labor to smaller technology companies that cannot recruit electrical engineers and IT professionals to fill current openings, even despite the current recession. The State could help those Illinois companies meet their workforce needs by assisting qualified degree holders throughout the visa process. This assistance may prove extremely valuable to our state economy in future years: From 1995 to 2005, one-fourth of America's

engineering and technology start-up companies were founded by foreign-born entrepreneurs.[108] By providing guidance through the visa process, Illinois may become the home of the next Andy Grove, the Hungarian immigrant founder of Intel – a California-based company which just reported $10.3 billion in revenues for the first quarter of 2010.

Finally, the committee urges the State of Illinois to combine its educational resources with its power to act as a convener to create new, industry-focused focused Centers of Excellence, teaming colleges and universities, local businesses and public schools to attract top-quality employers and talent. Minnesota created a Centers of Excellence program in 2005, establishing centers on health care, manufacturing and engineering, and information security at four state universities and 18 community and technical colleges throughout the state. Each center offers state-of-the-art programs, practical research and connections with K-12 schools and business and industry. Minnesota's Centers of Excellence include:

- HealthForce Minnesota, a collaborative partnership of education, industry and community that focuses on transforming health care education and delivery across the state of Minnesota.

- Advance IT Minnesota, a partnership focused on information and communication technology designed to develop a more robust IT community in Minnesota.

- 360° Manufacturing and Applied Engineering Center of Excellence, which serves manufacturing and engineering industry needs by cultivating a talented workforce through flexible education and career opportunities, primarily dealing with applied engineering, engineering technology and precision manufacturing, including automation and robotics, machining and welding.

Minnesota Center for Engineering and Manufacturing Excellence, which provides research experts, work force education, student interns, teaching institutes and long-range recruitment strategies for engaging students – especially women and underserved minorities-- in science, technology, engineering and math.[109]

By creating similar Centers of Excellence in Illinois, we could attract new businesses and provide current employers with the technical assistance and skilled personnel they need to expand. For example, the University of Illinois Medical Center could create a Center of Excellence bringing together the state's existing health care industry resources, which include Baxter Healthcare Corporation, Abbott Labs, Takeda Pharmaceuticals, Walgreens, and Advocate Health Care, to name only a few. University of Illinois at Urbana Champaign could leverage its national reputation as a leader in computer security systems to create a Center of Excellence to promote and attract defense and security-related industry. Other opportunities might include Centers of Excellence for Lean Manufacturing or Smart Grid.

To promote Illinois' existing resources in education and industry, and to create new opportunities for workers and employers to thrive in Illinois, the committee makes the following recommendation:

- **The State of Illinois should establish a task force, including representatives of industry, state colleges and universities, community colleges and pre-K-12 public schools, to develop a plan to create five Illinois Centers of Excellence.**

  Each center would be created with the goal of winning national recognition for excellence in research, education, workforce training and linkages to community resources, including local

[108] Vivek Wadhwa, The Economist (December 17, 2009), "Going to America: A Ponzi scheme that Works" http://www.economist.com/
[109] Minnesota State Colleges and Universities "Centers of Excellence" http://www.mnscu.edu/business/centers_of_excellence/index.html

business and public schools. These centers would develop innovative curricula and offer opportunities for internships and hands-on training as well as classroom education.

The Centers of Excellence Task Force would develop a competitive process to create the centers. Proposals could be judged on their potential to create synergies between existing resources and their likelihood of drawing increased investment by specific industries to Illinois. The Task Force would be expected to complete its work and identify the five Centers no later than January, 2012.

The State of Illinois should create appropriations in its FY2013 and 2014 budgets to seed creation of the five Centers, which will be required to generate further funding.

GOVERNMENT

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Introduction

Over the past decade, the State of Illinois has seen a dramatic increase in its budget deficit. At the same time – and in many ways, as a result – the state has seen dismal performance in job creation and revenue production, as compared to both national and regional averages. Today, as State government faces an estimated deficit of approximately $13 billion in the coming fiscal year, there is near-universal agreement that the current fiscal situation is not sustainable. However, the potential opportunities to reverse the current fiscal decline face serious political obstacles.

The committee's recommendations, which have been formulated from a bipartisan perspective, acknowledge the grave implications of the State's dire fiscal condition.[110] Today, the State of Illinois' unpaid bills total an estimated $6 billion, and the payment cycle has lengthened to six months or more for schools and universities and many State contractors and providers of vital services. As a result, small businesses and social service agencies that rely on State payments to meet payroll and pay their own bills are facing horrible cash flow problems; some have been forced to close their doors, resulting in a cascade of lost jobs statewide. The severe financial straits created in education and the private sector by the State's current fiscal disaster demonstrate clearly, and urgently, that the State of Illinois is itself a major economic engine. If the State's failure to pay its bills continues, or if State spending is reduced to a fraction of current levels, the result will be tens of thousands of lost jobs in both the public and private sectors.

The current fiscal crisis threatens to overwhelm any State effort to promote economic recovery. As W. James Farrell, chairman of the Commercial Club of Chicago, noted in a letter to members on Dec. 15, 2009: "The State is delaying payments to health care providers and other vendors, slow-paying its school districts and universities, and borrowing hundreds of millions to fund [current] operations. Taxpayers …will take their businesses, their investments and their jobs to another state (rather than risk the consequences of such fiscal instability)."[111]

A number of factors have led the State of Illinois to the brink of financial catastrophe. These issues must be addressed by an immediate, comprehensive and politically courageous solution, or we risk irremediable damage to State government and to our entire state economy.

A comprehensive solution must include four basic elements:

- Reduced State spending, including comprehensive Medicaid reform
- Additional public pension system reform
- Revised accounting standards
- Increased revenues

These solutions will not be easy to implement. But this committee believes that, by proactively and responsibly addressing these issues, our State government can lay the groundwork for new economic vitality for our state and bring new prosperity to the people who live here.

Background

[110] ICPAS did not take part in the committee recommendations.
[111] W. James Farrell, Civic Committee of The Commercial Club: Invitation to members of The Commercial Club (December 15, 2009)

Illinois has the fifth-largest population (12,831,970) and the fifth-largest economy (Gross State Product—GSP—of approximately $633 billion) of any state in the nation. [112]
Despite the size of the state economy, however, the Pew Center on the States' *Beyond California: States in Fiscal Peril* report (2009) ranked Illinois among the ten most financially troubled states. The report identified six measurable factors that contributed to the State of California's financial disaster: Revenue change, foreclosure rate, unemployment rate, money management practices, and the need for a legislative supermajority to make budget decisions. Other states were then rated according to these factors, using data available as of July 31, 2009.

The findings of the Pew Center report were sobering. "Illinois' budget situation has gone from shaky to unsustainable,"[113] the report stated flatly. The authors noted that Illinois, like states across the nation, had suffered severe revenue downturns and high rates of unemployment and foreclosure. "But what puts Illinois squarely in the company of California," the report said, "is its lack of fiscal discipline to balance its state budget."[114]

In addition to the fiscal crisis facing its state government, Illinois also is grappling with an economy that has lagged in growth for 30 years. The Illinois Policy Institute notes that Illinois ranks 44th in its rate of GSP growth, and a 2007 report by the General Assembly's Commission on Government Forecasting and Accountability noted that the growth of Illinois' economy has lagged the country as a whole in each of the last three decades. [115]

The relatively slow growth of the state economy, combined with the State's outdated and inadequate tax policies, have made it impossible for the State to meet all of its financial obligations over the past decade. The State's chronic budget shortfalls have drawn the attention of the major bond rating agencies, Standard & Poor's (S&P), Moody's, and Fitch. Factors involved in rating general obligation bonds include the State's economic forecast, debt structure, financial conditions, demographic factors, and management factors of the governing administration.

Over the past two years, poor economic forecasts and rising levels of debt have resulted in dramatic downgrades in the State of Illinois' General Obligation bond ratings. The chief reason given for the rating drop has been the rapidly expanding deficit in the State budget. The rating downgrades have a serious negative effect on the State's overall financial health, as each downgrade results in an increase in the interest rate the State must pay on its bond issues. Over time, these ratings downgrades can force the State to pay tens of millions of dollars in increased interest payments to its bondholders.

There is little debate that the State of Illinois faces an immediate fiscal emergency. The Pew Center found that, in a state whose constitution requires that proposed expenditures shall not exceed estimated funds available for the fiscal year, Illinois has run budget deficits every year since 2001. The Pew report noted that, in past years, Illinois has relied on short-term borrowing to pay its bills and avoid the immediate consequences of its deficit spending. But when the recent recession struck, State revenues dropped precipitously and demand for State services increased. As a result, the amount of unpaid bills quadrupled during the fiscal year ending June 2009. "Illinois officials ended the legislative session in July 2009 without a plan to pay them off," the Pew report noted.

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[112] Bureau of Economic Analysis, News Release, June 5, 2008, www.bea.gov
[113] The Pew Center on the States, *Beyond California: States in Fiscal Peril*, http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=55888
[114] Ibid
[115] Commission on Government Forecasting and Accountability, "A Comparative Study of Illinois' Economy" http://www.ilga.gov/commission/cgfa2006/Upload/0907ComparativeStudyofILEconomy.pdf

The State's inability to pay for its operating expenses from current revenues has a clear and devastating impact on schools, contractors and providers. The decade-long reliance on borrowing to meet current needs also has forced the State to pay millions of extra dollars in interest, draining State revenues that might otherwise have been used to maintain schools and other public buildings or to invest in long-overlooked infrastructure improvements.

Recommendations

Illinois' business community does not exist in a regulatory or financial vacuum. Every company that is based in Illinois, and every company that does business here, is in some way affected by Illinois' tax policies, our statutes, and the fiscal health of our government.

Too often, in exploring the connections between Illinois government and Illinois' overall economic health, commentators and stakeholders resort to "cherry-picking," carefully selecting a few statistics or indicators out of context to make a case for or against a specific policy or reform. However, to make strategic, thoughtful recommendations on policies and procedures that will help Illinois to recover from the current economic recession and position our state for swift and durable economic growth in the future, it is necessary to consider the total economic impact and influence of Illinois government.

For that reason, Governor Quinn's charge to the Economic Recovery Commission specifically requested a full analysis of "Illinois' existing tax and regulatory structure, with the aim of identifying opportunities to enhance the economic climate for business and job creation." In response, the Government committee has reviewed the past and current fiscal conditions of State government and has developed recommendations to address the current governmental fiscal crisis while positioning the state economy for healthy future growth.

Part of the solution to the State's fiscal straits lies in spending reductions. Last summer, after a two-month review of State spending, the Governor's Taxpayer Action Board identified more than 100 potential opportunities savings. The report's conclusion acknowledged that many of those potential savings would be "challenging to implement." Nevertheless, State government already has adopted a number of the Taxpayer Action Board's recommendations, and others await implementation. But targeted reductions and increased efficiencies cannot come close to closing the State's $13 billion budget deficit for the coming year – a deficit which represents roughly half of the projected General Revenue Fund receipts in FY2011.

Even as revenues have fallen in response to the global economic downturn, Illinois' Medicaid program has seen a significant increase in enrollment. Currently, the Illinois Medicaid program covers roughly one out of every five residents. According to the Center for Medicare and Medicaid Services, Medicaid accounted for approximately 15.9 percent of all healthcare expenditures in Illinois during 2008. Yet concerns about reimbursement rates and payment cycles have led an increasing number of providers to shut their doors to Medicaid recipients.

In addition to the widening gap between State revenues and State expenditures, the State of Illinois also faces a stunning unfunded liability in its public pension systems. A number of factors have led to the gaping hole in the State of Illinois' public pension funds, including weak investment returns, skipped and partial payments by the State, ill-considered early retirement initiatives, and insufficient contributions on the part of public employees. These factors have combined to create a combined total unfunded liability for Illinois' public pension systems estimated at $75 billion to $95 billion.

The liability in the pension systems poses a lethal threat to the State of Illinois' future fiscal viability. Even after the recently passed pension reforms, the State's required contribution to the public pension systems will top $4 billion in fiscal year 2014, and the required contribution and debt service on pension bonds will combine to reach $10 billion in 2032. Clearly, it has become mathematically impossible for the State to meet its obligation to provide necessary services and also make its required pension payments.

The importance of the public pension systems to the Illinois economy cannot be overstated. The pension systems provide retirement income to 400,000 current retirees and their spouses and represent a major portion of future retirement assets for 300,000 active teachers and State employees. Additionally, the investment portfolios of the public pension systems represent an extraordinary opportunity to drive investment in new and emerging Illinois businesses. It is clear that further overhaul of our pension systems is urgently needed to protect current and future pensioners while also creating expanded sources of investment capital.

As we consider the narrow range of options still available to rescue the State of Illinois from its current financial disaster, it is important to address one of the root causes that has often gone overlooked – the State accounting systems that have enabled previous administrations to paper over the ongoing structural deficit. Although the State constitution states that appropriations for a fiscal year shall not exceed the estimated funds available in that year, that definition of a balanced budget has allowed the State of Illinois to use borrowed funds and postponed payments to avoid meeting its financial responsibilities – and has further allowed both the General Assembly and the Governor's Office to present artificially balanced budgets to Illinois taxpayers. To avoid future budgets that rely on the accounting equivalents of smoke and mirrors to present a rosy picture, the State of Illinois should revise its accounting standards to meet national standards for transparency, accuracy and comprehensiveness.

Finally, and most significantly, the State of Illinois has failed for many years to address the inadequacies and inequities of its revenue streams. Illinois' flat income tax rates of 3 percent on individuals and 7.3 percent on corporations (including replacement tax) rank among the lowest in the nation. When the per capita burden of both state and local taxes (including property taxes) is computed, Illinois ranked 30th among the states in 2007, according to the Federation of Tax Administrators. Yet despite our relatively low tax rates and moderate tax burden compared with other states, Illinois has one of the most unfair tax codes in the country, according to the Institute on Taxation and Economic Policy**,** a non-partisan research group; the flat income tax rate means that lower-income taxpayers pay a substantially greater percentage of their income than more affluent earners. Additionally, the State sales tax is imposed on goods, and has not been expanded to reflect the growing service economy. So Illinois' tax revenue problem is three-fold: Revenues at current rates are not adequate to meet the State's real budgetary needs, State taxes are unfairly and regressively imposed, and State tax policy has not evolved to reflect the changes in Illinois economy.

Summary of recommendations:

- **Aggressively review Illinois' Medicaid program spending.**
- **Adopt additional reforms of Illinois' public pension systems, restructuring both funding and benefits of the public pension systems.**
- **Adopt applicable practices of the Governmental Accounting Standards Board.**
- **Increase Illinois individual and corporate income tax rates.**
- **Broaden Illinois sales tax to include additional services.**

Medicaid

Medicaid is an entitlement program, which means that enrollment may not be denied to anyone who is legally eligible for the program. Medicaid is a state-run program jointly funded by state and federal government. In Illinois, the majority of State Medicaid spending (59.7%) is funded through the General Revenue Fund; significant expenditures also are made from the Cook County Provider Trust Fund (12.6%), the Hospital Provider Fund (10.4%), and the Long Term Care Provider Fund (5.7%). Smaller shares are provided by the Drug Rebate Fund (4.6%) and the Tobacco Settlement Recovery Fund (3.2%).[5]

During the recent downturn in the economy, Medicaid enrollment has increased significantly as State tax revenues have dropped. According to an April 2008 study by the Kaiser Family Foundation, a single percentage point increase in the national unemployment rate adds 600,000 children and 400,000 adults to Medicaid and the State Children's Health Insurance Program (SCHIP), increases Medicaid and SCHIP spending nationally by $3.4 billion, and translates into a 3 to 4 percent drop in State general fund revenues. As a result of these combined pressures, a number of Medicaid systems in other states have acted to contain costs by reducing program benefits and/or limiting eligibility, denying basic medical coverage to large numbers of Americans living in poverty.[6]

The State of Illinois' current fiscal crisis makes the threat of reduced Medicaid eligibility very real. Medicaid spending is the State's second-largest budget item, behind education. According to the Kaiser Family Foundation, in FY 2007 the total Medicaid spending in Illinois was $12.7 billion. In January 2010, 2.54 million Illinoisans were enrolled in the program.[7]

However, it is important to remember that the Medicaid program also contributes significantly to the Illinois economy statewide. As the Center for Tax and Budget Accountability (CTBA) noted in its recent report, *Medicaid Plays a Critical Role in Illinois' Economy:* "As Medicaid dollars funnel through the local economy, they support not only private health care providers and local businesses, but also wages, employment, business income, consumer spending, state tax revenue and overall economic output."[8]

The Medicaid program also leverages billions of dollars in federal matching funds. As the CTBA report notes: "Federal matching funds are dollars injected into the local economy that would not come into the state but for state Medicaid spending." Under the current ARRA-enhanced federal match, every dollar of Illinois' eligible Medicaid spending leverages 62 cents of federal match. (Prior to the ARRA program, Illinois' federal Medicaid match was 50 percent.) This means that a $1 million cut in State Medicaid spending might cost $620,000 in federal match, for a net savings of only $380,000. So any proposals to reduce Medicaid expenditures must be carefully considered in terms of their real-dollar impact on the State's budget.

The committee makes the following recommendations:

- **Pursue cost-saving to offset expected increases in Medicaid program spending.**
- **Join other states in strongly advocating for continuance of the current enhanced Federal match of state Medicaid spending, which is scheduled to end in December, 2010.**

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[5] Illinois State Comptroller, "State Medicaid Programs Face Funding Challenges," http://www.ioc.state.il.us/FiscalFocus/article.cfm?ID=296
[6] Kaiser Family Foundation, "Medicaid and the Uninsured," (Publication #7580-06) http://www.kff.org/about/kcmu.cfm
[7] Ibid
[8] Center for Tax and Budget Accountability, "Medicaid Plays a Critical Role in Illinois' Economy" http://www.ctbaonline.org/New_Folder/Health%20Care/Medicaid%20Economic%20Impact%20Analysis_Final.pdf

Pensions

The single greatest factor in the State of Illinois' widening budget gap is the ever-increasing cost of funding public pensions, which includes both the required annual payment and debt service on Pension Obligation Bonds issued in 2003 and 2009. Without restructuring both the pension systems and the current pension-related debt, the State's obligation to fund its public pension systems will increasingly overwhelm the State budget, resulting in further downgrades of the State's bond ratings.

The public pension crisis facing the State of Illinois dates back more than 30 years. The problem reflects years of systematic State underfunding of its employer contributions to the pension funds, combined with catastrophic declines in asset values caused by the recession, ill-considered legislative changes in both benefits and funding mechanisms, and flawed actuarial projections. Over the past 15 years, these factors have combined to push the unfunded liabilities of the pension systems from approximately $20 billion to an estimated approximately $75 billion to $95 billion in the coming fiscal year.

To address the rapid expansion of the public pension systems' unfunded liabilities, Governor Pat Quinn has proposed a series of pension fund reforms, including revising benefits for new hires, raising the retirement age, increasing employee contributions, and reforming benefit formulas. A number of these reforms were recently passed by the General Assembly, and are expected to yield substantial future savings for the State. However, the savings these reforms will yield are relatively small in the next few years. Other potential reforms, such as revising the pension formula for current employees going forward, could provide more substantial near-term savings. However, some have raised legal concerns that these changes might violate a provision of the State constitution prohibiting any changes that will result in employees' retirement benefits being "diminished or impaired."

The committee endorses the recently passed reforms of the public pension systems as a fundamental move toward a permanent solution of the State of Illinois' chronic fiscal difficulties. However, the committee recommends further reforms of the public pension systems that will help to reduce the unfunded liability and limit further expansions of unaffordable pension benefits.

The committee makes the following recommendations**:**

- **Maintain existing benefit levels already earned by current employees.**
- **Evaluate the legality of reducing future benefit accrual of current employees to the level provided to newly hired public employees.**
- **Increase employee contributions to the pension system for all employees to reflect the actual annual increase in liability.**
- **Impose a statutory moratorium on any increases or enhancements to employee benefits until funding levels of all systems reach 90 percent of actuarially determined liability.**
- **Increase retirement age to 72.**
- **Subject pension systems' investment portfolio to annual audit by a professional, independent board.**
- **Place a moratorium on issuance of any future Pension Obligation bonds until the reforms listed above have been enacted into law.**
- **Create an independent Pension Review Commission, advised by independent accounting and actuarial professionals, to propose additional legislative changes to eliminate abuses and substandard practices and to study the possibility of creating a defined-contribution retirement system for future service of all employees.**

Accounting Standards

Although the annual Illinois State Budget document is hundreds of pages long, the information it presents is limited in scope. The budget provides details of proposed expenditures for the coming fiscal year, and clearly offers line-item comparisons with recent years' expenditures. A wealth of further detailed information on the State's previous revenue performance, spending, and asset management is available in the Comprehensive Annual Financial Report. So retrospectively, at least, details of the State's budgeting and financial performance are accessible and transparent.

Where the State's budget presentation is sorely lacking is in its presentation of long-term financial consequences of the decisions made, or delayed, within that fiscal year. For example, as the Civic Federation notes, "Between FY2010 and FY2033, the State of Illinois will pay a total of $22.7 billion in debt service for the total outstanding POB (Pension Obligation Bond) principal of $13.4 billion on all POBs combined. It will also pay $14.8 billion in total debt service for $9.4 billion in G.O. bonds for capital purposes."[9] Yet the budget presentation focuses only on each individual year's debt service, not the total cost of financing the State's increasing debt load.

Similarly, the State's accounting systems detail accrued liabilities for non-pension benefits paid to retirees and their dependents, but future liabilities for these benefits are not detailed in annual budget documents.

No private company, and no household, could expect to make sound financial decisions based solely on a single-year budget plan. The State's overwhelming unfunded public pension liability is but the most dramatic example of the long-term consequences of our short-sighted budgeting process.

It is impossible to bring Illinois back to financial stability without budget documents that provide all necessary information about the short- and long-term financial impact of today's fiscal decisions. Additional State financial documents, including reliable forward-looking statements, must be made available to both lawmakers and the general public.

The committee makes the following recommendations:

- **By executive order, adopt all accounting practices currently recommended by the Governmental Accounting Standards Board (GASB).**
- **In consultation with GASB experts, develop accounting practices that provide transparent and comprehensive pension fund information until GASB releases its new standard for public pension accounting and financial reporting.**

Income and Sales Taxes

Illinois is one of 41 states that impose a personal income tax – but is one of only seven states that impose a flat rate, rather than a progressive income tax. Our flat rate of 3 percent – required under the Illinois constitution – is the lowest flat rate, and the lowest overall effective rate, of any state that imposes a personal income tax.

Illinois also imposes income tax on corporate earnings, both on corporations based in Illinois and income derived in Illinois by corporations based in other states. In addition to the flat 4.8 percent tax rate – again, prescribed by the Illinois constitution – corporations also must pay a Personal Property Replacement Tax

[9] The Civic Federation, "Illinois Fiscal Rehabilitation Plan", p. 51, http://civicfed.org/sites/default/files/IllinoisFiscalRehabilitationPlan.pdf

(PPRT) of 2.5 percent. (Partnerships, trusts, and S corporations pay PPRT of 1.5 percent on income.) All proceeds from the PPRT are distributed to municipal governments according to a statutory formula.

Our flat income tax rate, combined with our limited personal exemptions and the meager value of our Earned Income Tax Credit, have made Illinois' tax system one of the most regressive in the country. According to the non-partisan Institute on Taxation and Economic Policy, Illinois taxpayers who make less than $18,000 per year pay 13 percent of their total income in State taxes, while the wealthiest 1 percent pay only 5 percent of their incomes in State taxes.[10]

The Illinois State tax code also is unusual in that retirement income is not subject to income tax. Of the 43 states that impose an income tax, 39 tax public or private retirement income, beginning at various income thresholds.[11]

In 2009, Illinois' individual income tax collections averaged $656 per capita. When total tax collections were looked at as a percentage of income, Illinois ranked 37th. Per capita, our total State tax revenues, including income and sales taxes, rank 27th nationally.[12]

Illinois' sales tax, which is imposed almost exclusively on consumer goods, also fails to reflect the evolution of the state economy. When the sales tax was created, goods represented the vast majority of consumer purchases. However, the State of Illinois has not revised the sales tax structure to reflect today's more service-based economy – in contrast to other states, including neighboring Wisconsin and Iowa.

When adjusted for inflation, both Illinois sales tax and income tax revenues have shown a significant decline since FY2001; sales tax revenues have decreased by 13.0 percent and personal and corporate income tax revenues have declined by 14.1 percent. Because of these declines, local municipalities have been forced to shoulder an increasing share of funding for schools and other basic services, prompting dramatic increases in property taxation in many communities. Those increases in property taxes can create severe financial pressures for property owners whose incomes have not kept pace with the rising value of their homes or places of business.

Illinois' over-reliance on property taxes also fuels extreme inequity in the public education system, providing more than adequate revenues for schools in property-rich communities while starving education in impoverished areas.

Increasing the personal and corporate income tax rate by 2 percentage points would yield an estimated $6 billion in additional State revenue annually. Additionally, making retirement income subject to Illinois income tax would yield an estimated $1.6 billion in revenue each year.[13]

To avoid making the State income tax even more regressive, personal exemptions should be increased and the Earned Income Tax Credit expanded to provide relief for lower-income taxpayers. The Legislature also should pursue a constitutional amendment to allow a progressive tax rate structure, eliminating the State income tax for families making less than $50,000 a year and imposing a graded offset for those making $50,000 to $100,000 a year. Similarly, small businesses that earn less than $500,000 annually should be exempt from the corporate income tax.

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[10] Institute on Taxation and Economic Policy, "Who Pays?" http://www.itepnet.org/whopays/
[11] Ronald Snell and Bert Wainasan, "State Personal Income Taxes on Pensions and Retirement Income: Tax Year 2007" National Conference of State Legislatures (July 2007), data.opi.mt.gov/legbills/2009/Minutes/Senate/Exhibits/tas73a04.pdf
[12] Federation of Tax Administrators, "2009 State Tax Revenue," http://www.taxadmin.org/fta/rate/09taxbur.html
[13] Illinois Comptroller's Office, "FY2007 Tax Expenditure Report," www.ioc.state.il.us/library/cr.cfm

To further increase State revenues, the Illinois income tax code should decouple from Federal tax deductions such as the "domestic production deduction," which will cost the State of Illinois an estimated $103 million in lost revenue in FY 2011.[14]

Illinois also should move quickly to reform and expand the State sales tax base. At present, Illinois' base rate of 6.25 percent puts us in the top ten states with the highest sales tax rates in the nation. (California leads the nation with a base rate of 8.25 percent, followed by Indiana, Mississippi, New Jersey, Rhode Island, and Tennessee with rates of 7 percent.)

Despite our relatively high tax rate, revenues from the Illinois sales tax have grown more slowly over the past two years than sales tax revenues in most other states.[15] This reflects our narrow sales tax base, which excludes almost all services. As the Commission on Government Forecasting & Accountability (COGFA) notes in its report, *Service Taxes: A 2009 Update*, the Illinois sales tax focus on consumer goods fails to reflect the massive growth in the service economy, both nationally and specifically in Illinois. The COGFA report found that, in 2007, Illinois' service-related industries comprised 43.9 percent of the Gross State Product–the highest of the Great Lakes states.[16] This reflects the growth of the state's financial, technical, and information service industries. By limiting the State sales tax base almost exclusively to consumer goods, the State of Illinois overlooks a large and growing source of revenue that many other states have tapped effectively.

Illinois' current sales tax structure also places an unfair burden on lower-income taxpayers. As the Institute on Taxation and Economic policy has noted:

> Sales taxes generally create two types of unfairness in the tax code–and taxing services can help eliminate each of them. First, sales taxes are regressive, requiring lower-income taxpayers to pay more of their income in sales tax than wealthier taxpayers. Second, sales taxes generally include a wide variety of special exemptions, which often discriminate between similar taxpayers in ways that are not defensible from a tax fairness standpoint. Exemptions for services are a good example of this sort of unfairness: Exempting services discriminates against individuals who consume more goods than services.[17]

The current Illinois sales tax structure exacerbates this problem: Of the 17 services currently taxed, 12 are basic utilities, such as phone, gas, and electric service, increasing the burden of the already regressive sales tax on lower-income consumers.

The result of Illinois' consumer goods-based sales tax is an inadequate revenue stream that unfairly burdens lower-income consumers.

Expanding the Illinois sales tax base to include personal services would result in a less regressive system, given that wealthier taxpayers consume a disproportionately higher amount of many taxable services. Additionally, broadening the sales tax to include services would dramatically widen the tax base and generate substantial new revenues. The 2009 COGFA report estimated that, at current rates and exempting business-to-business transactions, widening the sales tax base to include services would yield $3.64 billion of potential revenue to the State. Expanding the sales tax base to services also would yield

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[14] Center on Budget and Policy Priorities, Nicholas Johnson and Ashali Singham, (January 14, 2010) "States Can Opt Out of the Costly and Ineffective 'Domestic Production Deduction' Corporate Tax Break," http://www.cbpp.org/cms/index.cfm?fa=view&id=553
[15] Institute on Taxation and Economic Policy, "Balancing Act: Tax Reform Options for Illinois," http://www.ctj.org/itep/ilfinal.pdf
[16] Commission on Government Forecasting and Accountability, "Service Taxes: A 2009 Update" http://www.ilga.gov/commission/cgfa2006/Upload/2009-JULY%20SERVICE%20TAXES%20Update%
[17] Institute on Taxation and Economic Policy, "Should Sales Taxes Apply to Services?" http://www.itepnet.org/pb3serv.pdf

an additional $910 million to local governments from the basic 1.25 percent municipal sales tax. (This does not include local sales taxes, such as those imposed by the City of Chicago and Cook County.)

Even with the expansion of the base, the sales tax remains regressive. For that reason, expansion of the Illinois sales tax should be accompanied by tax relief for lower-income residents. As noted above, the most efficient and targeted means of providing tax relief to low-income Illinoisans would be a substantial expansion of the State of Illinois' Earned Income Tax Credit; as the EITC is refundable, a number of Illinois taxpayers would actually receive tax refunds greater than the amount of State income tax withheld from their paychecks.

After these changes in the State tax code are adopted, the State of Illinois will continue to offer a number of tax benefits for in-state businesses. For example, under the Illinois tax code:

- Corporations with more than 80 percent of their payroll and property outside the U.S. are not included in combined returns. Corporations with unique apportionment formulas are not included in combined returns.
- Businesses are offered a number of targeted tax credits designed to drive new investment and create jobs, such as the Illinois EDGE program, which provides a credit equal to 3 percent of the wages paid to newly hired employees for new or expanding businesses.
- Dividends and interest paid by corporations operating in Illinois Enterprise Zones are tax-deductible.

Business-related sales tax exemptions include:

- Manufacturing machinery, as well as replacement parts and computers, used to control manufacturing machinery are exempt. Purchases of manufacturing machinery receive a credit equal to 50 percent of what the taxes would have been if the manufacturing machinery were taxable making it possible for the manufacturers to use this credit to offset any other sales tax liability they incur.
- Purchase of farm machinery is exempt
- Pollution control facilities; any system device, or appliance sold to prevent or reduce air and water pollution or pre-treat a potential pollutant are exempt.

All new revenues generated by these tax increases should be directed toward paying down the unfunded pension liability or funding pre-K thru 12 education. These additional funds should not be used to create or expand any programs, with the exception of programs directly tied to improving student achievement.

The committee makes the following recommendations**:**

- **An increase in the State personal income tax rate.**
- **An increase the corporate income tax rate.**
- **Inclusion of retirement income in the State personal income tax base.**
- **Improvement of Illinois' collection of sales tax on on-line and other remote sales (see appendix available online at *economy.illinois.gov*).**
- **Expansion of the State sales tax to include services (see appendix available online for a complete list of services recommended for inclusion).**
- **Direct all increased revenues to paying down the unfunded liability in the State's public pension systems or funding pre-K thru 12 education programs.**

Additional Recommendations

Each year, the federal government provides billions of dollars in matching funds to the State of Illinois for its entitlement programs. However, there may be additional grants and other funds available, from both federal sources and private foundations. To ensure that Illinois taxpayers receive the maximum benefit from the tax dollars we send to Washington, and to maximize Illinois' ability to attract private funds for pilot programs and other initiatives, this committee recommends a review of the State's grant management processes.

In the most successful university fundraising systems, a central authority oversees grant writers and acts as a clearinghouse for development officers working within individual colleges, departments and university associations. The State should review the level of coordination currently existing between all of its various departmental grants management programs and assess the information flow from the State of Illinois' office in Washington, D.C. If the review shows that expansion and improvement of grants management would be cost-effective, the State should use the university development model to revamp its grants management program systemwide.

In addition to acknowledging the excellent work done by the Taxpayer Action Board (see appendix available online at *economy.illinois.gov*), this committee urges the Governor to build on the board model by soliciting, selecting and appointing a group of professionals with diverse skill sets to act as a permanent Advisory Council to identify potential revenue enhancements and cost-saving opportunities, and to suggest ways to implement those recommendations. By working in partnership with thoughtful, experienced, public-spirited volunteers, the State can move swiftly to put Illinois back on its fiscal feet.

The committee makes the following recommendations:

- **Coordinate all State efforts to seek out and obtain federal private grants**
- **Solicit pro bono assistance to establish independent, ongoing reviews of revenue-enhancing and cost-saving opportunities, including those noted within the Taxpayer Action Board Report, for presentation to the Governor, General Assembly and the public.**

Conclusion

The Government committee is fully aware that its recommendations touch upon some of the most difficult and hotly debated issues facing the State of Illinois and its elected leaders. However, these recommendations, quite simply, are necessary if we are ever to return Illinois to fiscal sanity.

In developing these recommendations, the committee members endeavored to set aside individual interests in hopes of forging agreements that will benefit the people of Illinois as a whole. We believe these recommendations reflect our attempt to make sure that no single interest group is targeted with an unfair share of the sacrifices – or the benefits – of these changes.

In reviewing these recommendations, this committee urges the Governor and the General Assembly to consider them as a whole. To pick and choose among these recommendations based on political expediency or partisanship would be a cynical, even hypocritical, exercise, and one that would leave Illinois on the highway to financial ruin.

To succeed, all of us must compromise, even at the expense of some of our most cherished public positions. We cannot continue nibbling around the edges of substantive change. The State of Illinois must enact substantial pension and accounting reforms. We must review and reform state spending, beginning with the Medicaid program. We must increase revenues by reforming and expanding our state income and sales taxes.

All of us are involved in this; all of us are stakeholders. It is this committee's firmest belief that the blueprint for any progress lies within these recommendations. To do any less would be to betray the most vulnerable people of Illinois: the sick, the poor, and the children who are relying on us to fight for their future, and the future of our state.

Dissenting Opinion Submitted by Jerry Roper, President & CEO, Chicagoland Chamber of Commerce

CHICAGOLAND
CHAMBER OF COMMERCE

The State of Illinois is in a dire economic predicament. Under Illinois law, the State must maintain a balanced budget. However, for FY 2010 the State of Illinois expects to be $12 to $14 billion in the red. In order to help meet Illinois' statutory obligations, the Illinois Commission on Economic Recovery has provided several recommendations intended to bring the State of Illinois to a base level of economic solvency.

It has been a privilege to participate on the Government Subcommittee and I commend Governor Quinn and the efforts of the Commissioners, consultants and researchers who worked diligently to develop recommendations for economic recovery. I respectfully submit the following dissent to certain recommendations contained in the report.

SUPPORT OF PENSION REFORM

Responding to the State of Illinois' budget shortfall, the Illinois Economic Recovery Commission has proposed several recommendations for bringing the State of Illinois to a base level of economic solvency. To start, it is my position that the Commission's recommendations regarding pension reforms are well crafted and well suited for legislative consideration and implementation. The Commission's recommendation for creating a two-tiered pension system by freezing existing benefits for current employees and exploring a new defined contribution program for both new and existing employees for all future service would be a more private sector-like system and have significant financial benefit in helping reduce the State deficit. Increasing existing employee contributions, will, over time, also help to bring the State into a more viable financial situation.

Other Commission pension proposals such as increasing the retirement age to 72 from 65, will also serve to better align State revenues with outlays in its yearly budget proposals. Additionally, keeping the pension budget in check by instituting an external evaluation board to review accounting practices introduces accountability into the budget and better insures that shortfalls in funding Illinois pensions will not lead to further reductions in Illinois bond ratings by credit reporting agencies.

Dissent

Integral to the Commission's proposal are personal and corporate income tax increases. The Commission is recommending that the State increase the personal income tax rate by 2 percent to an effective rate of 5 percent and that the State increase the corporate tax rate by 3.2 percent to an effective rate of 8 percent. Additionally, the Commission has proposed an increase in the sales tax base, particularly through the taxation of consumer services.

The Report cites Illinois' personal income tax rate of 3 percent as lower than most states. However, what it fails to recognize is that Illinois is one of the few states that does not allow individuals to itemize their deductions similar to federal income tax practices. The result is to drive up the effective tax rate as compared to other states. Similarly, while the Report cites Illinois' relatively light corporate tax burden

when compared to the current corporate income tax burdens in other states, it should be noted that several other states are indeed currently proposing corporate tax decreases.

The recommended tax increases are specious and should be met with caution by the Governor and General Assembly. While tax increases can be expected to grow Illinois revenues in the short term, State income tax increases, particularly on businesses, will result in making the state of Illinois a less business-friendly environment, force existing businesses to leave Illinois, and deter new businesses from locating here. At a time when unemployment exceeds 11 percent, we simply cannot afford to increase the tax burden on Illinois struggling businesses and entrepreneurs. Alternatively, the State should be reducing the tax burden and providing financial incentives for the next wave of innovative businesses in high growth business sectors such as clean tech and Internet-based companies.

The Report includes a recommendation to expand the sales tax base and cites it as the most regressive of taxes. While this may be true for essential items, it is not necessarily true for discretionary spending. For example, restoring the sales tax on food would be one of the most regressive tax recommendations one could fathom. While the nature of our economy has certainly shifted to a service economy, we must be very cautious when considering a sales tax expansion. Taxing the Internet and other highly competitive service and information businesses will only harm our ability to attract the high paying jobs of the future.

If the trend in other states is to reduce the tax burden on business and Illinois chooses to increase the business tax burden, then Illinois could stand not only to lose business, but it could also stand to lose valuable private sector jobs. This is something that the State of Illinois cannot afford. The shrinking of the State tax base, the loss of jobs and accordingly the decrease in the potential for government revenue will all hurt the cause of economic prosperity in the state of Illinois.

For the aforementioned reasons, I respectfully disagree with the Commission's recommendations regarding the expansion of the tax base to include private services in the state. Additionally, and for similar reasons, I dissent from recommendations advocating for corporate and personal income tax rate increases. With respect to the Commission's recommendations regarding pension reform, I strongly agree that the proposals will help to put the State of Illinois back on solid financial footing.

Dissenting Opinion Submitted by John Coli, President & International VP, Teamsters Joint Council 25

TEAMSTERS JOINT COUNCIL 25

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March 19, 2010

Declaring that Illinois' public employee pension systems need reform is an understatement. We are in a state of crisis. A solution must be reached before our resources are overwhelmed.

Yet the recent recommendations of the government committee are shortsighted and uninformed.

The idea to change benefits for existing employees must be dismissed outright. Not only would it be unconstitutional to change existing employee benefits, but it completely ignores the collective bargaining process, in which public employee unions and the state come to the table and negotiate benefits for employees in the spirit of compromise.

To truly enact meaningful reform, we must address the real problem—funding.

State employees did not cause this crisis. As an employer, the State of Illinois has chosen to underfund—or simply skip—required annual pension payments for decades. Yet state employees continue to make their full contributions each and every year as required by the Pension Code. In a private sector multi-employer fund, skipping payments would have been illegal and subjected the employer to penalties and fines.

The retirement benefits and employee contributions for Illinois public school teachers, university employees and state employees are, as a whole, comparable to similar plans sponsored by other states. By comparison, the normal cost to the state is affordable.

Furthermore, comparing the state's pension systems to the private sector does not take into consideration the reality that Illinois does not pay its employer portion of the Social Security tax for virtually more than 75 percent of its workers. Private sector employers do. The current pension systems saves the State of Illinois 6.5 percent in payroll costs.

State pension benefits are actually more affordable than average costs in the private sector in large part because Illinois teachers, university employees and state employees contribute significantly more to their retirement plans than is typical in the private sector.

Before legislators irresponsibly change the benefits of new and current workers, Teamsters Joint Council 25 strongly suggests the Illinois General Assembly enacts a dedicated revenue stream to fully fund state employee pensions.

Fraternally,

John T. Coli

John T. Coli
President

Dissenting Opinion Submitted by Joseph Persky, Professor of Economics, University of Illinois at Chicago

I fully support all efforts to address excesses and abuses in the State pension plans. However, the major changes put forward in the report are not about such problems. In particular, I take strong exception to the committee's suggestion that the State system should attempt to mimic current trends in private pension plans. Private plans have moved to defined contributions rather than defined benefit. This national trend in the private sector is unfortunate and short sighted. For the State of Illinois to move in the same direction promises little if any immediate gain and threatens to undermine the quality of the State's labor force in the long run.

Should the State attempt a move to defined contributions, the result will very likely be an increase, rather than reduction in short run costs. For the same effective benefit level defined contributions are more expensive for employers, not less expensive. The committee has reviewed no actuarial estimates of potential savings. To achieve even modest savings, benefit levels would have to be cut drastically. But current Illinois pension benefits and costs are not out of line with those in other nearby states. It is wishful and highly uneconomic thinking that the State will be able to attract the same quality labor force at significantly lower levels of remuneration.

The State pays no social security for the large majority of Illinois pension plan participants. Without acknowledging this, pension comparisons to the private sector are highly misleading. Private sector employers do pay into social security for their employees. Social security is essentially a defined benefit plan. Illinois contributions to its defined benefit plans are only slightly more than social security payments alone would be.

In times like the current recession it becomes clear that most elderly individuals are poorly placed to take on the risks of volatile financial markets. Employers, and especially large employers, are much better situated to carry and manage these risks. This point is independent of whether the private or public sector is being considered. It is also independent of the level of benefits or generosity of terms incorporated in a pension scheme. For most retirees defined benefit makes better sense.

We all know that there is a problem with pensions in the State. But that problem is the result of irresponsibility on the part of a series of State legislatures and governors. States that have acted responsibly in funding their pensions are not experiencing pension crises today.

The State's recent hasty move to a two-tier pension plan strikes me as poorly conceived. Whatever the legalities, the proposed exploration of "reducing future benefit accrual of current employees to the level provided to newly hired public employees" endorses nothing less than an egregious breach of faith. If we want to improve the quality of State services and publicly supported education, we need to attract the best of the state's labor force to the public sector. Reducing a major benefit may be possible in the midst of a serious recession and a budget crisis. But these pension changes will yield little if any immediate fiscal relief, while they undermine the State's long-run ability to recruit, retain, and motivate its employees. This hardly seems a progressive path into recovery and the 21st century.

SUPPLEMENTAL RECOMMENDATIONS

Small Business Assistance (Commissioner Hedy Ratner)

No discussion of entrepreneurialism and job creation would be complete without consideration of the needs of Illinois' small businesses, especially those owned and operated by women and minorities. Small businesses are important drivers of economic stability and growth, and public policies that support small business help to accelerate job creation and swift economic recovery.

To expand and thrive, Illinois' small business owners must find new, effective ways to manage their tax burdens and increasing health care costs. They also require improved access to debt and equity capital, technical assistance and resources to build capacity, and new markets – including public contracts at every level. By offering new forms of targeted assistance to women- and minority-owned businesses, the State of Illinois can expand opportunities for all.

To make new sources of capital available to small businesses in Illinois:

- **The State of Illinois should offer guarantees and establish collateral pools to enhance the federal Small Business Administration's Community Express loans and other 7(a) loan programs, especially microloans for new and emerging businesses.**
- **The State of Illinois should re-affirm, adequately fund and aggressively market the Illinois Capital Access Program (CAP), a form of loan portfolio insurance which provides additional reserve coverage to the lender on loan defaults.**

  By participating in CAP, lenders can access a proven financing mechanism to meet the needs of financial institutions and Illinois small businesses that do not qualify under conventional lending policies.

  Under CAP, the borrower makes a non-refundable contribution of 3 to 7 percent of the total loan amount to a reserve fund. DCEO then provides a matching contribution to a reserve fund, with a higher match provided to minority/woman/disabled owned businesses and businesses located in a federally designated Empowerment Zone or Enterprise Community.
- **The State of Illinois should expand and increase its current microlending programs and offer increased microloan technical assistance.**
- **As noted above, State tax credits should be provided for "angel" investments in early stage firms, with special provisions to encourage investment in small minority- and women-owned businesses.**
- **The Illinois Finance Authority should be encouraged to invest in appropriate high-growth potential women- and minority-owned firms.**
- **The State of Illinois should establish a New Entrepreneurs tax credit to encourage private investment in women- and minority-owned small and micro businesses and accelerate small business growth.**

Another challenging issue for small business owners is the lack of affordable and accessible health insurance plans. Rising premiums combined with a small pool of employees make it increasingly difficult for small businesses to provide competitive health insurance plans to their workers.

To lower costs and promote multi-year predictability for small business owners and to promote creation of new jobs with health benefits:

- **The State of Illinois should create a Small Business Healthcare Tax Credit to help defray part of the cost of providing quality health coverage to employees.**

  Additionally, self-employed entrepreneurs should be allowed to list health insurance premiums as a business deduction on their State income tax returns.

- **To supplement federal health care reform, the State of Illinois should create pools of small employers, allowing them to access health insurance plans at a competitive price.**

Finally, the State of Illinois should recognize the high growth potential of small minority- and women-owned businesses by expanding opportunities for those businesses to serve as State vendors and contractors. By making a stronger commitment to supplier diversity, at every level, the State of Illinois can help to support emerging businesses and create new jobs.

To expand opportunities for minority and women business enterprises to compete successfully for State and other contracts:

- **Acknowledging that the majority of women- and minority-owned businesses are service providers, the State of Illinois should work toward increasing its diversity goals in professional services and supplies and services contracts, and including these contracts in the Minority/Women/ Disadvantaged Business Enterprise (M/W/DBE) goals for all State agencies, as well as state colleges and universities.**

- **The State of Illinois should expand the Procurement Technical Assistance Program to include not only federal contracting assistance but also help in securing State, municipal and private-sector contracts.**

- **The State of Illinois' Department of Central Management Services (CMS) should conduct a comprehensive review of legislation and administrative rules to establish anti-bundling safeguards.**

  These safeguards prohibit State agencies from consolidating two or more procurement requirements into a single large contract – too big for most small businesses to make a successful bid. New anti-bundling provisions would require contracts to be structured to promote competition and foster the participation of small businesses as prime contractors.

- **The General Assembly should expand and broaden the State's small business initiative and goal based program to reflect SBA 23 percent small business goals.**

Food Desert Initiatives (Commissioner Ronald Powell)

The State of Illinois cannot expect to achieve economic health if our residents do not have access to the basic necessities for physical health. As noted above, access to clean, healthy drinking water is a critical factor in promoting swift economic recovery. Similarly, access to healthy, affordable food must be considered in any economic recovery plan. Unfortunately, many people in Illinois live in "food deserts" – large geographic areas with no nearby grocery stores, where fast food and other low-nutrition, high-fat items are the most readily available food options. As a result, residents face significantly increased risk of chronic illness and premature death. The costs of these food deserts are great – to residents, to the health care system, and to the state as a whole. For these reasons, the State of Illinois should encourage and support "food desert" initiatives, which will create new jobs in low-income urban and rural communities while promoting public health.

The State of Illinois' commitment to addressing the crisis of food deserts should include:

- **Encouraging partnerships with federal and local government and the private sector to promote new businesses that will provide fresh foods to underserved communities, especially communities of color, while creating new jobs.**

  For example, President Obama has included a $400 million Health Food Financing Initiative in his proposed budget. Within the first year of funding, the federal initiative will leverage enough investments to begin expanding healthy foods options into as many as one-fifth of the nation's food deserts, simultaneously creating thousands of jobs in urban and rural communities nationwide. These types of public-private partnerships present a unique opportunity to bring healthy foods to long-overlooked communities while creating good jobs for the people who live in them.

- **Expanding the availability of capital funding sources, including grants, loans, lines of credit and loan guarantees, to grocery stores and other retailers of healthy food that meet State guidelines for creation of living-wage jobs with benefits.**

- **Establishing and enforcing performance targets for private businesses that receive State tax credits or support from other State programs for building new food stores or renovating existing stores in communities designated as food deserts.**

  Those targets should include accountability for job quality standards, either through collective bargaining agreements or through living wages that reflect regional standards.

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