

The New York Times

## Millions of Jobs of a Different Collar



Brian Harkin for The New York Times

**NEW LABOR** Jim Albert, a technician for General Electric, climbing to the top of a wind turbine in Sweetwater, Tex., where the turbines stand as tall as 20-story buildings.

By STEVEN GREENHOUSE

Published: March 26, 2008

EVERYONE knows what blue-collar and white-collar jobs are, but now a job of another hue — green — has entered the lexicon.



Michael Nagle for The New York Times

**RAISING THE ROOF** James Wells of Sustainable South Bronx, a nonprofit group that plants vegetation in the area, working on a Bronx rooftop garden.

Presidential candidates talk about the promise of “green collar” jobs — an economy with millions of workers installing solar panels, weatherizing homes, brewing biofuels, building hybrid cars and erecting giant wind turbines.

Labor unions view these new jobs as replacements for positions lost to overseas manufacturing and outsourcing. Urban groups view training in green jobs as a route out of poverty. And environmentalists say they are crucial to combating climate change.

No doubt that the number of green-collar jobs is growing, as homeowners, business and industry shift toward conservation and renewable energy. And the numbers are expected to increase greatly in the next few decades, because state governments have mandated that even more energy come from alternative sources.

But some skeptics argue that the phrase “green jobs” is little more than a trendy term for politicians and others to bandy about. Some say they are not sure that these jobs will have the staying power to help solve the problems of the nation’s job market, and others note that green jobs often pay less than the old manufacturing jobs they are replacing.

Indeed, such is the novelty of the green-job concept that no one is certain how many such jobs there are, and even advocates don’t always agree on what makes a job green.

“A green-collar job is in essence a blue-collar job that has been upgraded to address the environmental challenges of our country,” said Lucy Blake, chief executive of the Apollo Alliance, a coalition of environmental groups, labor unions and politicians seeking to transform the economy into one based on renewable energy.

Carl Pope, executive director of the Sierra Club, said: “A green job has to do something useful for people, and it has to be helpful to, or at least not damaging to, the environment.”

It can be difficult to parse the difference between green- and blue-collar jobs. Dave Foster, executive director of the Blue Green Alliance, a partnership between the United Steelworkers and the Sierra Club, pointed to workers who mine iron ore in Minnesota and ship it to steel mills in Indiana. “Ten years ago, that steel was used for making low-efficiency automobiles, so those jobs were part of the dirty economy,” he said. “But now that steel is being used to build wind turbines. So now you can call them green jobs.”

But to Andrew W. Hannah, chief executive of Plextronics, a start-up in Pittsburgh, green-collar jobs often have little relation to their blue-collar counterparts. His company produces high-tech polymer inks that are used to make electronic circuitry for solar panels. Of the company’s 51 employees, 20 have Ph.D.’s in fields like physics, chemistry and material science.

It is hard to gauge the number of green-collar jobs nationwide. Welders at a wind-turbine factory are viewed as having green jobs, but what about the factory’s accountant or its janitors?

Workers with Sustainable South Bronx, a nonprofit group that plants vegetation to keep the area cooler and reduce air-conditioning demands, would seem to fit the bill. But so would the employees of Tesla Motors, south of San Francisco, who are producing an all-electric Roadster that sells for \$98,000.

In the most-often-cited estimate, a report commissioned by the American Solar Energy Society said that the nation had 8.5 million jobs in renewable energy or energy efficient industries. And Jerome Ringo, president of the Apollo Alliance, predicted that the nation could generate three million to five million more green jobs over the next 10 years.

Green jobs are especially good “because they cannot be easily outsourced, say, to Asia,” said Van Jones, president of Green for All, an organization based in Oakland, Calif., whose goal is promoting renewable energy and lifting workers out of poverty. “If we are going to weatherize buildings, they have to be weatherized here,” he said. “If you put up solar panels, you can’t ship a building to Asia and have them put the solar panels on and ship it back. These jobs have to be done in the United States.”

Many advocates of green employment say the jobs should be good for the workers as well as the environment. Two weeks ago in Pittsburgh, more than 800 people attended a national green-jobs conference, where much of the talk was about ensuring that green jobs provided living wages. Many speakers anticipated that the jobs would do so, because they often required special skills, like the technical ability to maintain a giant wind turbine (and the physical ability to climb a 20-story ladder to work on it).

“These jobs will be better for the workers’ future, for their job security,” said Ms. Blake of the Apollo Alliance. “These green technologies are making products that the world wants, like energy-efficient buildings and light fixtures.”

Not everyone, however, is enamored with green jobs. Take the Competitive Enterprise Institute, a Washington group that opposes state mandates requiring that a certain percentage of power come from renewable sources. Myron Ebell, the institute’s director of energy and global warming policy, argues that creating green jobs often does not create jobs on a net basis.

“If you create jobs in wind power or ethanol,” he said, “that will take away jobs in other industries,” like building and operating conventional gas turbine power plants.

Mr. Ebell suggested that green jobs might not prove to be so great. “There will undoubtedly be a lot of jobs created in industries that are considered green or fashionable,” he said. “Some will last a long time, and some will go like the dot-coms.”

Twenty-eight states have mandates generally requiring that 10 to 25 percent of their energy be obtained through renewable sources in a decade or two. In response, many companies have rushed to build wind- and solar-power systems, and some are researching how to transform prairie grass into biofuel.

Joy Clark-Holmes, director of public sector markets for Johnson Controls, which manages heating and cooling systems in buildings nationwide, sees strong job growth in the green economy. Her company's building efficiency business, she said, expects to hire 60,000 workers worldwide over the next decade.

"We see the market for greening our customers as growing," Ms. Clark-Holmes said. She talked of demand for technicians who install and maintain heating and cooling systems, managers who oversee those functions and engineers who develop and design such systems.

With scientists voicing increased concern about climate change, some highly talented people have left other fields to help build the green economy. For instance, Lois Quam, who helped create and run a \$30 billion division of UnitedHealth Group, a health insurer, has joined the renewable energy cause, becoming managing director for alternative investments at Piper Jaffray, an investment bank based in Minneapolis. She is setting up investment funds that focus on renewable energy and clean energy.

"The development of a green economy creates a broad new set of opportunities," Ms. Quam said. "When I first started looking at this area, many people commented on how this will be as big as the Internet. But this is so much bigger than the Internet. The only comparable example we can find is the Industrial Revolution. It will affect every business and every industry."

Mr. Jones, the head of Green for All, joined the green economy after graduating from Yale Law School. He became executive director of the Ella Baker Center for Human Rights in Oakland, using that position to start a program that trains low-income workers in how to weatherize homes and install solar panels.

Mr. Jones calls such jobs green pathways out of poverty. "The green economy needs Ph.D.'s and Ph.-do's," he said. "We need people who are highly educated at the theoretical level, and we need people who are highly educated at the level of skilled labor."

He sees green jobs as providing a career ladder. Some workers might start at \$10 an hour inspecting homes for energy-efficient light bulbs. Then they might become \$18-an-hour workers installing solar panels and eventually \$25-an-hour solar-team managers. Eventually they might become \$40-an-hour electricians or carpenters who do energy-minded renovations.

“Right now we don’t have the infrastructure to train a sufficient number of green-collar workers,” Mr. Jones said.

As the green economy grows, states are vying for green investments — and green jobs. Pennsylvania has been especially successful, attracting German and Taiwanese companies that are building solar equipment factories, as well as attracting Gamesa, a Spanish wind turbine company. Gamesa has two factories in the state, employing 1,300 workers. Facing pressure from the United Steelworkers, which views the greening of the economy as a way to increase union membership, Gamesa agreed not to fight an organizing drive, and now many workers are unionized.

Pennsylvania’s efforts have been helped by the presence of many skilled manufacturing workers in the state and its commitment to having 18.5 percent of its power come from renewable sources by 2020.

“We have gone after this sector first and foremost because the green of the sector is important, because it is the green that goes into the pocketbooks and wallets of workers,” said Kathleen McGinty, the state’s environmental secretary. “They are good-paying jobs, jobs that often require advanced skills.”

Jim Bauer, 55, is delighted to work for Gamesa. There he leads a team that assembles parts for wind turbines, earning slightly less than he did at [United States Steel](#), which laid him off from his crane operator’s job after 25 years. Now he earns \$17 an hour in his job, while many assembly workers earn \$13.50 an hour.

“It feels good working for a company that is bringing jobs into the country instead of taking jobs out of the country,” Mr. Bauer said.

He admits to feeling noble doing a green job. “We have to get away from fossil fuels and oil so we can tell the Saudis to take a hike,” he said.

## Mixed Economic Picture in Next Big State to Vote



Jessica Kourkounis for The New York Times

Alyda Morales helping students in a computer class at Esperanza, a nonprofit program that offers job training in Philadelphia.

By KATHARINE Q. SEELYE and JOHN M. BRODER

Published: March 8, 2008

PHILADELPHIA — A dismal jobs report on Friday thrust the nation's ailing economy to the forefront of the presidential campaign. But as the candidates shift their attention to Pennsylvania, which votes April 22, they are likely to find a more positive economic landscape than they might have expected from a Rust Belt state once heavily dependent on steel, coal and manufacturing jobs.

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Andrea Schwab for The New York Times

“All around here we’ve had businesses open up and close down,” said Tom Cacchione Jr. of the Sports Page bar in Erie.



Andrea Schwab for The New York Times

A closed Eckerd drugstore in Erie, Pa. Erie remains relatively hard-pressed, despite the state’s brighter economic outlook.

Polls show that economic issues helped Senator Hillary Rodham Clinton of New York secure her victory in Ohio over Senator Barack Obama of Illinois. And her campaign is clearly hoping to duplicate that success here by focusing on her plan for universal health care and her proposal for a 90-day freeze on home foreclosures.

In Ohio, 59 percent of voters surveyed said the economy was their top concern, and Mrs. Clinton was backed by a majority of those voters.

But Pennsylvania is in better economic shape than Ohio. Over the last two or three decades, much of this state has successfully made the transition to what officials call a knowledge-based economy. There are now more jobs here in education and health care than in industrial manufacturing. And analysts here said the candidates would have to tailor their economic messages to the state’s many distinct economies, which are in various stages of recovery.

While the state’s jobless rate has edged up over the last year, from 4.3 percent in January 2007 to 4.8 percent now, it has been below the national average for 13 months in a row. And while western Pennsylvania shares a border with eastern Ohio and shares some of that region’s economic woes, officials here say that Pennsylvania as a whole is more prosperous and diverse than its neighbor.

“We’ve recovered from the minor recession of 2000 and 2001 and have had steady job growth since early 2003,” said Dennis Yablonsky, secretary of the Pennsylvania Department of Community and Economic Development. “While most of our competitor states are facing large budget deficits, we’re looking at a \$400 million surplus this year.”

As of December 2007, Pennsylvania ranked 25th in unemployment, while Ohio’s unemployment rate of 6 percent pushed it down to 45th. And in terms of home foreclosures, Pennsylvania has done better than most states, ranking 37th in January.

But the national news this week — of the biggest job loss in five years and more home foreclosures than ever — spurred talk of a recession from which Pennsylvania would likely not be immune.

On the campaign trail on Friday, Senators Clinton and Obama seized on a federal report that the nation had lost 63,000 jobs in February. Both tried to link Senator John McCain of Arizona, the presumptive Republican nominee, to President Bush’s stewardship of an ailing economy, with Mrs. Clinton saying, “The economic policies of the Bush administration are failures.” Mr. Obama said that Americans “can’t afford John McCain’s promise of four more years of the very same failed Bush economic policies that have failed us for the last eight.”

But their messages will need refining as they try to appeal to Pennsylvania’s Democratic primary voters.

“The trick in crafting an economic message for Pennsylvania is that there are different concerns in different places,” said Donald F. Kettl, a professor of political science at the University of Pennsylvania. He noted that half the state’s delegates would come from Philadelphia’s vast media market, and the Philadelphia economy is diverse and relatively healthy, compared with much of the rest of the state.

“There’s a lot of concern that people have about the economy, but the nature of the constituency is so complex that it’s hard to craft a single message to appeal to them — except to blame George Bush for pushing the economy off the rails,” Mr. Kettl said. “He’s not popular anywhere, but is as unpopular in Pennsylvania as anywhere.”

Christopher Briem, a regional economist at the Center for Social and Urban Research at the University of Pittsburgh, said that in Pennsylvania, a presidential candidate needed to know about metropolitan, postindustrial and agricultural economies.

While southeastern Pennsylvania, with Philadelphia as its hub, continues to grow with pharmaceutical and banking jobs, western and northeastern Pennsylvania are still struggling with their postindustrial recovery.

“Pittsburgh continues its gradual maturation from heavy industry to a center for education, medical research, and culture,” Mr. Briem said, “but many small towns are floundering without their factories.”

Casino gambling has emerged as a new economic force in onetime factory towns like Pittsburgh, Erie and Bethlehem.

But Erie, for example, remains relatively hard-pressed.

“The economy here is absolutely horrible,” said Tom Cacchione Jr., 51, the owner of the Sports Page, a bar in Erie. “We’ve lost every manufacturing job that we ever had.”

Mr. Cacchione said he had just bought his bar in October and so far so good, for him. “But the surrounding businesses just don’t last,” he said. “All around here we’ve had businesses open up and close down. Even the drugstore closed, for crying out loud.”

He said signing the North American Free Trade Agreement was the worst thing President Bill Clinton had done, but Mr. Cacchione supports Mrs. Clinton anyway because he thinks she will do more for the economy.

Adam Welsh, 32, who works in management at United Parcel Service and also lives in Erie, agrees that the economy is terrible, but he has reached a different conclusion.

“Obama is against Nafta, and that’s good for him here in Erie,” Mr. Welsh said. “I’m supporting Obama because he is the furthest possible departure from George Bush. That’s what our country and the world needs right now. Bush has destroyed the economy and really hurt this country, and Obama is the anti-Bush. So I’m voting for him.”

Mark Nevins, a spokesman for the Clinton campaign in Pennsylvania, said that Mrs. Clinton would emphasize that Gov. Edward G. Rendell, who is supporting Mrs. Clinton, needed “a friend in the White House” to continue the economic progress he has already made. Mr. Nevins also said that her own plans and the success of her husband’s administration in creating jobs and expanding the economy would resonate in the state.

Sean Smith, a spokesman for the Obama campaign here, said that Mr. Obama would emphasize his plans to stop giving tax breaks to companies that create jobs overseas and would also highlight examples around the state of companies that have successfully made the transition from manufacturing to “knowledge.” He said Mr. Obama also planned round-table discussions. “He’ll be very specific here with his economic message,” Mr. Smith said.

Mr. Kettl said that the candidates might find they need to frame their economic messages in terms of security for the future rather than fixing current problems. “The grievances people have have much more to do with opportunity, questions of where the jobs are coming from, which are especially problems for lower- and middle-class workers,” he said. “This is an obvious Clinton base. The issue is less ‘Nafta is taking jobs away’ than ‘Where are jobs for your kids?’ ”

*Christopher Maag contributed reporting from Erie, Pa.*

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## Chicago Tribune

### Editorials

## A Pennsylvania primer

*March 17, 2008*

Let's give Democratic presidential hopefuls Barack Obama and Hillary Clinton the benefit of the doubt. Let's assume their blame-NAFTA chorus of doom before the Ohio primary was due to lack of information. We're here to arm them with some facts on manufacturing and trade, so they won't repeat their mistakes in the run-up to the April 22 primary in abutting Pennsylvania.

It's true the number of manufacturing jobs in the U.S. has declined, from a peak of 19.4 million in 1979 to about 14 million last year. The peak period for loss: About 2.8 million of those jobs vanished between 2000 and 2003. That period included a brief U.S. recession and a prolonged stretch of weak manufacturing demand both in the U.S. and in countries that buy our products, according to a 2004 Congressional Budget Office report. But since 2004, exports have recovered and losses of manufacturing jobs have slowed to about 100,000 a year, reports Dan Ikenson, associate director of the Cato Institute's Center for Trade Policy Studies.

And consider this striking anomaly from the Office of the U.S. Trade Representative: Even with those job losses, U.S. manufacturing output rose by 58 percent between 1993 -- the year the North American Free Trade Agreement was passed -- and 2006. That is greater than the 42 percent rise in manufacturing in the 13 years before NAFTA.

The ability to make more goods with fewer workers reflects ongoing productivity improvements that are shrinking manufacturing workforces all over the globe. (That includes China, which lost 15 million manufacturing jobs between 1995 and 2002.) But while it's compassionate to mourn the loss of U.S. factory jobs, that loss shouldn't dictate whether the U.S. signs free trade pacts.

Those pacts hugely benefit exporting states such as Ohio and...Pennsylvania. The Keystone State still makes things. But it now enjoys a thriving service sector too, especially in health care, finance and education. The decline in manufacturing jobs mirrors the national picture, with steep drops in the years 2000-2003 and far less severe losses since then.

Pennsylvania exported \$29 billion worth of goods to the world last year -- nearly double the value in 2002. A total of 94 percent of Pennsylvania's exports are manufactured goods, according to the U.S. Commerce Department, and manufacturing supported 661,283 jobs in the state last year.

Pennsylvania's exports have grown substantially to countries that have free-trade agreements with the U.S., according to the Commerce Department. Its top two foreign markets are NAFTA partners Canada and Mexico -- with those exports rising 136 percent since NAFTA took effect. The state's exports to Chile rose 164 percent and to Singapore 45 percent since trade pacts with those two were signed in 2004. Exports to Australia rose 44 percent since a 2005 pact, and to Bahrain 140 percent since a 2006 pact.

Those are the facts. Now it's up to Obama and Clinton to be honest about manufacturing and trade. The number of U.S. manufacturing jobs will continue to shrink. But blaming trade and trying to wall out the rest of the world won't stem that decline.

Despite that job loss, U.S. manufacturing output will rise because of our factories' and our workers' growing productivity. That's a net positive. So is opening foreign markets. That's what NAFTA did. That's what the Central American Free Trade Agreement and other bilateral pacts have done. That's what deals pending in Congress with Colombia, Panama and South Korea would do.

The candidates could help by telling us what they would do to make sure U.S. workers remain the most productive in the world.

Senators, tell us how you'll transform an education system that fails an unforgivably high number of our citizens. Explain how you'll see to it that American workers won't get left behind in the competition for jobs yet to be imagined. Tell us how you'll fix health insurance so that the loss of a job doesn't mean the loss of care. Arm us to grow and prosper -- and trade -- in the 21st Century.

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## The Washington Post

### 'Roboburgh' Rising

Lessons in Pennsylvania's Economic Steel

*By David Ignatius*

Thursday, March 27, 2008; Page A17

ALLENTOWN, Pa. -- The next round in the Democratic Party's presidential slugfest will be fought April 22 in Pennsylvania's "rust belt," in places like this old manufacturing city on the Lehigh River. And given the mounting economic worries here and across the country, Barack Obama and Hillary Clinton will be talking about the future more as a threat than as an opportunity.

But such radical pessimism about the U.S. economy is a mistake, at least over the long run -- and there's no state in the country that proves the optimists' case about America better than Pennsylvania.

Obama and Clinton have been taking turns trashing the North American Free Trade Agreement, a symbol of the forces of globalization that have transformed Pennsylvania's economy. They would be wiser if they embraced the economic policies of another politician named Clinton, who spoke in his 1996 reelection campaign about "building a bridge to the 21st century."

I got my start as a journalist in the Keystone state back in 1976, covering the steel industry for the Wall Street Journal. That was a period when this state's manufacturing industries were beginning what proved to be a convulsive shakeout. The United Steelworkers union and the big steel companies joined forces in a no-strike pact known as the Experimental Negotiating Agreement, which tried to protect the industry's high wages and benefits by blocking foreign competition.

This campaign for protectionism failed, and employment in the American steel industry fell from 521,000 in 1974 to 151,000 in 2000. The global shakeout was even more severe, with bigger percentage drops in steel employment in Germany, France and Britain. It was a savage process in which more than 30 U.S. steel companies went bankrupt and a great industrial union was decimated. Working in Pittsburgh in the late-1970s, I heard people talk as if any hope of future prosperity would disappear once the mills and blast furnaces closed.

But if ever there were a case that documents what the economist Joseph Schumpeter described as "creative destruction," it's what happened in Pennsylvania. Steel and other manufacturing industries were indeed shattered by competition from the globalized economy that was just emerging. But new industries that nobody could then have imagined took their place, and they provided new jobs, year after year.

Employment in Pennsylvania reached an all-time high in January and then fell slightly in February. People here fear that a steep recession may be coming. But as of February, unemployment in the state was just 4.9 percent. Since January 2003, Pennsylvania has added 178,000 new jobs, according to the state government.

Where are all these new jobs coming from? The answer is that as the old rust-belt manufacturing industries sank, Pennsylvania became a platform for innovators in technology, finance and the health industry. What saved the state, above all, was its concentration of great universities, which provided the human capital for growth.

Pittsburgh is probably the best example of this transformation. The lamentations of 1976 were real, and the old version of the Steel City is gone forever. What emerged was a new economy built around the knowledge base of Carnegie Mellon University and the University of Pittsburgh. Carnegie Mellon was the nation's leader in robotics, giving rise to companies with names such as Applied Perception Inc. and to the National Center for Defense Robotics. By 1999, an article in the Wall Street Journal said the city should be renamed "Roboburgh," and the Journal called rust-belt Pittsburgh one of the country's 10 hotbeds of technology.

A glimpse of Pennsylvania's future comes from statistics gathered by the state's Department of Labor and Industry. It forecasts that by 2014, jobs in Pennsylvania will increase overall by 6.8 percent. But manufacturing jobs will decline by 19.5 percent, including a further 22 percent drop in the iron and steel sector, a 25 percent decline in motor-vehicle parts and a 21 percent fall in industrial machinery.

The new jobs will come in areas such as professional and technical services (up 17 percent by 2014), computer systems design (up 30 percent), wireless telephone (up 30 percent) and data processing (up 32 percent). This transformation is evident in Pennsylvania data recording gains in wages and salaries from 2003 to 2005. Another study shows that pay rose 20 percent for information technology managers, 35 percent for biotech engineers, 24 percent for computer researchers.

As recession hits the U.S. economy this spring, it will test the country's confidence in the future. But as Obama and Clinton make their swings through Pennsylvania, they should remember that this state is truly a laboratory for change.

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## The Patriot-News

Escaping the crunch

### **At least for now, Pennsylvania hasn't been hit like other states in balancing tight budgets**

Tuesday, March 18, 2008

It may not last, so enjoy it while you can. Pennsylvania is alone among Northeastern states in not facing a serious budget crisis.

The Rendell administration has projected a \$400 million budget surplus when the fiscal year ends on June 30. Meanwhile, states from Maine to California are making cuts in education and Medicaid, and, in some instances, raising taxes to close budget gaps.

It's almost as if Pennsylvania is operating in a parallel universe. All of its neighbors except West Virginia are struggling to fill budget shortfalls. Part of the answer is that Pennsylvania hasn't suffered as much from the meltdown in the housing market. Another is that the commonwealth has a much more diverse economy than it did a quarter century ago, when it suffered mightily through the steep recession of the early 1980s that saw the dismantling of the state's once-substantial steel industry.

And still another partial explanation for the comparatively excellent budgetary standing is that the state doesn't overly rely on any particular segment of the economy for tax revenues.

The Rendell administration would also argue that it has been a good manager of state government, pointing to the \$1.2 billion in annually recurring savings it says it has achieved by eliminating waste and improving government operations. And the majority Republicans in the state Senate could well claim they have helped to keep spending in check by refusing to go along with many of the Gov. Ed Rendell's more ambitious -- and costly -- proposals.

Pennsylvania, however well situated it may be, cannot completely escape the larger economic forces at work, particularly if the current slowdown and possible recession stretches out for more than a few months, which appears increasingly likely. It also has to deal with major cuts in federal funding, steep increases in energy costs and increasing demand for public services.

For the moment, in any case, Pennsylvania -- long considered an economic laggard -- is the envy of many of the states with which it is frequently unfavorably compared. Just maybe this state has more on the ball than its many detractors would have us believe.

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## **Our views: A transition to new jobs**

*Advocate Opinion page staff*

Apr 7, 2008

In the political world, all eyes for the moment are on Pennsylvania, where Democratic presidential candidates Barack Obama and Hillary Clinton are in an April primary duel. But one of Louisiana's leading politicians, Gov. Bobby Jindal, might want to look at Pennsylvania for more than the returns.

Jindal is governor of a state that is seeking to move from its traditional base of oil and petrochemical manufacturing to another type of economy that will be more competitive in a knowledge-driven marketplace.

Pennsylvania has faced many of the challenges that Louisiana will face in the coming years. And in some ways, although not all, Pennsylvania is a success story.

The industries in Rust Belt states were poached by low-wage states of the South with anti-union politics. The job losses led to population growth stalling or declining. Pennsylvania had to change, and the state's officials say it has.

"Most people have an older impression of Pennsylvania — that it's an industrial state, a coal and steel state like Ohio. That's a way-too-dated view of the state," Dennis Yablonsky, Pennsylvania's secretary of economic and community development, told *The Boston Globe*. "Our economy has been in transition from an industrial state to a knowledge-driven one for 20 years."

What helped to save the state? In large part, a concentration of great universities — state and private — invested in academic leadership in computer technology.

Louisiana can learn from a state that put serious money into higher education as a path to long-term economic growth.

Pennsylvania is now growing again, with the Department of Labor and Industry forecasting annual job growth of almost 7 percent by 2014.

But those jobs are not distributed evenly: Manufacturing jobs will decline by 19.5 percent in that period.

New jobs will be in professional and technical services, computer systems, wireless telephone providers and data processing.

That is a huge transition.

Pennsylvania's lessons for Louisiana?

The states are different in part because the "old economy" of petrochemical manufacturing here is hardly on its deathbed the way mining and steel processing are. Many good jobs will remain in the refineries and chemical plants for the foreseeable future in Louisiana.

At the same time, a different economy is not only coming, it's already arrived in high-growth states across the nation. Louisiana has been late to the party in terms of building assets that will make it more competitive.

A community college system is new, although growing, and LSU has a shot at national status with the university's Flagship Agenda that should be funded by the state during the next few years. LSU's Pennington Biomedical Research Center can be expanded, even beyond the \$50 million proposed by Jindal this year.

The latter sum is much less than many states are putting into biomedical research centers, but it's part of what the state must do.

Richard Florida, a longtime resident of Pittsburgh, is the economic development guru now at the Rotman business school in Toronto. His studies of how metropolitan areas advance, with an openness to new ideas and a tolerance of diversity, also are lessons for the path forward for Louisiana.

In a new economy, in other words, it's what you know rather than who your mama was.

Pennsylvania, like Louisiana, is a state with a high percentage of native-born residents. In both states, the connections of home and family are stronger than in many others, but economic vitality is about bringing new and diverse populations in, as well as better-educating one's own.

Jindal, as the son of immigrants, is perhaps uniquely positioned to talk about Louisiana as a place to move, as well as a place natives can return.

The lessons of Pennsylvania should not be lost in the chatter about the presidential primary. The economic implications of a knowledge-driven world are huge, and relevant to Louisiana.

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## Different city, similar story

### **Pittsburgh rebirth proof that Michigan's industry may not define it forever**

BY KATHERINE YUNG • FREE PRESS BUSINESS WRITER • APRIL 14, 2008

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*Part of an occasional series.*

PITTSBURGH -- Few cities in America understand Detroit's [economic](#) pain better than the former steel town of Pittsburgh. But empathy isn't all it has to offer.

Pittsburgh knows what it takes to survive a massive loss of manufacturing jobs. Two decades after most of its steel mills shut down, the city has transformed itself into a diversified, service-oriented economy, albeit with a smaller population.

Its efforts to remake itself provide plenty of lessons for southeast Michigan and other areas grappling with these issues.

"The Pittsburgh economy is a healthy place," said Frank Giarratani, an economics professor at the University of Pittsburgh. "If Detroit can somehow find itself in the same place, it will be OK."

The two metropolitan areas share striking similarities.

Both long relied heavily on one industry for economic growth and ignored warnings to diversify. Both are home to strong research universities and foundations and a multitude of research and development centers. And both see their populations getting smaller and grayer.

But Pittsburgh was forced to cope with a severe economic crisis much earlier than Detroit. The outcome provides a glimpse of what may be in store for Michigan.

Today, along 2 miles of the Monongahela River, just east of downtown, former steelworkers dine and shop at the \$300-million Waterfront retail, residential and office development, where U.S. Steel's flagship Homestead Works mill once stood.

Across the river to the west sit the offices and laboratories of the Pittsburgh Life Sciences Greenhouse. It's playing a key role in the growth of [start-up companies](#) in fields such as medical devices, therapeutics and biotechnology tools.

And in what might be the biggest sign of change, the University of Pittsburgh Medical Center, the city's largest employer, is preparing to move its headquarters to the prominent U.S. Steel Tower this spring.

Thanks to expansions in health care and higher education, Pittsburgh now boasts more jobs than before the steel industry collapsed in the mid-1980s, said Chris Briem, a regional economist at the University of Pittsburgh's Center for Social & Urban Research.

"We have diversified," he said. "We feel your pain. We've been there."

Last year, venture capital investment in the Pittsburgh region was almost double the amount in Michigan, according to the PwC/NVCA MoneyTree Report. The city's technology association, the Pittsburgh Technology Council, has 1,400 members compared with 887 for Troy-based Automation Alley.

## Troubles along the way

To be sure, not everything has turned out rosy.

When thousands of laid off steelworkers fled the area in search of jobs, they took their children with them. The city's population, now just more than 310,000 compared with more than 420,000 in 1980, never has recovered from the blow, and job growth has slowed in recent years.

Pittsburgh's finances also took a hit. After years of chronic budget deficits, the city has been under state oversight since the middle of 2004.

And many of the former mill workers who stayed in the area, such as Jay Weinberg, are earning less money than they would have made had the mills never gone under.

To survive, thousands of them opened their own businesses. Others juggled multiple low-paying jobs. Many of their wives went to work for the first time.

Weinberg, whose father and uncles worked in the mills, is one of the luckier ones. The ex-Homestead worker and former United Steelworkers officer serves as vice president of Maglev Inc., which is trying to bring magnetically levitated high-speed trains to the Pittsburgh area.

"I almost feel guilty for having survived so well," said the 59-year-old Pittsburgh native, who grimly recalls the suicides and mental breakdowns that followed the mill layoffs.

But the steel industry hasn't completely disappeared from Pittsburgh.

U.S. Steel still calls the city home and operates a research and development center and three manufacturing facilities in the area. The region also contains a number of thriving specialty steelmakers and steel service firms.

But the industry's share of the metropolitan area's total employment has sunk to just 1.3% from 14.5% in 1970. And Pittsburgh's steelmaking capacity now accounts for less than 4% of the country's total capacity compared with nearly 12% in 1980, Giarratani said.

"Detroit in a lot of ways has a leg up on Pittsburgh," said James Epolito, a Pittsburgh native and the chief executive of the Michigan Economic Development Corp. "We are still going to be the auto capital of the world.

"We've got to turn our present attitudes around in Michigan. We will come back, but it's not going to be overnight, and there are no quick fixes," he added.

### **Lessons learned**

In Pittsburgh, economic and workforce development officials have gained some hard-won perspective on mistakes made and things done right in their struggle to find new sources of growth.

Some of the key lessons:

- More attention should have been paid to the importance of entrepreneurship. The Pittsburgh region lags in the rate of new businesses formed, according to Pittsburgh TODAY, an online report card about the region.

Business leaders tried to lure big companies to the area rather than creating an entrepreneurial culture, despite having universities and corporate research and development in the area, said Harold Miller, a local consultant and a former president of the Allegheny Conference on Community Development.

- Pittsburgh should have acted quicker to develop other industries that steelworkers could transition into rather than initially trying to bring the steel mills back, said Barry Maciak, director of the Center for Competitive Workforce Development at Duquesne University.

"We spent a lot of time trying to save what couldn't be saved," he said. "When it's over, sometimes it's over."

- It's worth [investing](#) in organizations that help start-up companies get off the ground.

Since 2002, the state-funded Pittsburgh Life Sciences Greenhouse has directly invested nearly \$10 million in more than 45 fledgling companies involved in medical devices, therapeutics and other life science specialties. More than a dozen start-up firms also are leasing lab space at the Greenhouse at discount rates.

In addition, six senior-level life sciences executives recruited by the organization are helping 220 local life sciences companies grow their businesses.

"These former CEOs have experience these companies can't get anywhere, and if they could get it, they couldn't afford it," said John Manzetti, the Greenhouse's chief executive and president.

Since late 1999, another local organization, Innovation Works, has directly invested \$37 million in 104 start-up companies in areas such as advanced materials, consumer products and electronics. A team of business advisers also works with these companies.

"You can never have too much of this really early-stage capital," said Michael Stubler, president of the Pittsburgh Venture Capital Association and managing director and cofounder of Draper Triangle Ventures.

- Vacant industrial sites and deteriorating neighborhoods can be transformed into assets.

When it became clear the steel mills weren't coming back, the city teamed up with the Allegheny Conference on Community Development, an economic development group, to buy properties, demolish the facilities and clean things up for development.

"Once you have the sites ready, you would be surprised at how much it makes a difference," said Mulugetta Birru, director of the Wayne County Economic Development Department and a former executive director of the Urban Redevelopment Authority in Pittsburgh.

Nowhere is the city's achievement more visible than at the Waterfront development located in the nearby suburb of Homestead, which is to Pittsburgh and the steel industry much like Highland Park is to Detroit and the auto industry. It reminds visitors that shuttered steel mills don't have to become permanent eyesores.

The 260-acre retail and dining destination opened in 2000 after several years of planning and development that included new roads and sewers and changing zoning rules involving three communities.

And revitalization efforts weren't limited to mill sites.

The Lawrenceville neighborhood has reinvented a lengthy portion of its once rundown main drag, Butler Street, into a thriving arts and design district with one-of-a-kind boutiques, art studios and restaurants.

To market the district, a community development group called Lawrenceville Corp. distributed more than 100,000 copies of a guidebook for shoppers. The zone now features more than 70 design-related businesses. Every April, it holds a 24-hour art show, called Art All Night, that attracts thousands.

- Don't underestimate the power of community spirit and pride.

More than anything else, Pittsburghers' devotion to their city seems to have kept it from becoming a wasteland. Those who didn't leave town when the mills closed have formed an emotional attachment to the area on par with the fierce loyalty exhibited by Pittsburgh Steelers fans across the nation.

"People love this city like no other city in the world," said Michael Madison, a University of Pittsburgh law professor who writes Pittsblog, a blog about the area.

Pittsburgh's devotees even include people such as Mike Stout, who says the city has gone downhill because of the loss of manufacturing jobs.

Like many others, Stout, 58, has learned that life doesn't stop because Big Steel leaves town. He now runs a small printing shop on Eighth Avenue in Homestead, near where the mill he once worked stood.

The former United Steelworkers grievance chairman also spends time on his singing career. He's part of a group that performs at union conventions around the world. He writes his own songs and has compiled them into CDs with titles such as "Break the Chains" and "Soldiers of Solidarity."

"Manufacturing work is what made this country what it is," he said during lunch at a seafood restaurant at the Waterfront.

Asked how it feels to be dining on the site of his former mill, he pauses and ruefully admits, "It's weird."

Then he continues eating.