



Friday, Mar. 19, 2010

## The Workforce: Where Will the New Jobs Come From?

By Barbara Kiviat

Later this year, a marketing manager will sit down for his first day of work at HomeAway, a company that helps people rent their vacation homes online. In the firm's sleek **Austin**, Texas, headquarters, a glass-wrapped building decorated with travel souvenirs, the marketer will flip on his computer and do his job — a job no one has done before. This, you see, will be a brand-new job, one of the most coveted commodities of economic recovery.

How this job will come to exist is at the heart of the most pressing problem in the economy today. Since the start of the recession in December 2007, the U.S. has shed 8.4 million more jobs than it has gained. The unemployment rate hovers near 10%, and broader measures of labor-market woes that include underutilized workers are as high as 16.8%. Go down the nation's list of economic problems — from mortgage defaults to state-budget shortfalls — and joblessness lurks in the background. ([See how some Americans are facing the prospect of long-term unemployment.](#))

Even as other economic signals have started to turn positive, the jobs situation has remained bleak. In February, the economy lost a net 36,000 jobs, which is leagues better than the 726,000 lost in February a year earlier but points in the wrong direction all the same. Were the economy to magically start generating jobs at a healthy clip — say, 200,000 a month — it would still take 3½ years to return to where we were, never mind the jobs we need for new entrants to the workforce.

This reality has triggered a nearly convulsive political response, given that elections are won and lost over the state of the economy and the mind-set of wage earners. That's why President Barack Obama, in his State of the Union address, called jobs his "No. 1 focus" and proposed repurposing bank-bailout money to lend more to small businesses, which would then, presumably, generate jobs. On March 17, Congress passed a job-creation bill that includes, among other things, an estimated \$13 billion worth of tax incentives to coax companies into adding to their payrolls. ([See 10 perfect jobs for the recession.](#))

The cold truth of the matter, though, is that there's not much Washington can do to gin up permanent jobs on such short notice. The federal government is a key player in engendering job growth in the long term — by establishing smart policy in areas such as trade, education, immigration, health care, energy, infrastructure and taxes — but over the course of months or even a few years, there's little it can effectively do besides hiring directly or stepping in as a buyer of goods and services.

The great American job-creation machine always has been and will continue to be private enterprise. The problem is that companies are beat-up from the longest economic contraction since the Great Depression. Plenty of economists think the worst is now behind us, but firms are still plagued by uncertainty about how fast the economy will recover. Nor can they plan responsibly without knowing the bottom-line costs of the massive new initiatives out of Washington on health care reform and carbon-emission regulation. Even companies that are financially fit often don't feel like taking the risk of ramping up operations and hiring more workers. There's been political pressure on banks to lend, but the problem for some bankers, like Frost Bank CEO Dick Evans, is that many businesses are debt-shy. "I'm aggressively trying to make loans, but right now they don't want to borrow," he says. "At this point," says Harvard Business School strategy expert Michael Porter, "the No. 1 thing that will create jobs is the perception and confidence that the economy will start growing again." ([Watch TIME's video "Austin Shows How to Make New Jobs."](#))

The good news is the perception as well as the reality is improving in some areas of the country. Just 12 out of 384 metropolitan areas ended 2009 with more jobs than they had at the beginning of the year, but more recently, the numbers have been looking better. Over the past six months (through January), 72 cities gained jobs, according to a Moody's Economy.com analysis of data from the U.S. Bureau of Labor Statistics. That may seem like a slow start, but it's a meaningful one to people being hired in places like Flagstaff, Ariz., Augusta, Ga., and Lansing, Mich.

**Austin** lands on that list too. The central Texas city of 760,000 has a few built-in advantages over other cities. The University of Texas and the state government — **Austin** is the capital — provide some economic stability. And as the Southwest's technology center, **Austin** is home to many high-growth (though high-risk) companies. It is also a music mecca and the gateway to Texas hill country, attributes that help it attract desirable workers. For all these reasons, it hasn't been battered quite as hard as other cities by the recession; the unemployment rate was nearly 3 points below the national average at the end of last year. Still, the metro area has seen big job losses from major employers, including the computer maker Dell and semiconductor manufacturers like Freescale and Advanced Micro Devices. It's not hard to find the desperate stories here that you find throughout the rest of the country: the woman laid off from book publishing two years ago who hasn't been able to find a permanent job since; the interior decorator who used to have a six-figure salary and now sells furniture for \$30,000 a year.

Yet **Austin** also offers a model of hope. The city's surfeit of computer-programming talent allowed a video-game outfit to hire 50 developers and designers in the past two months. A manufacturer is building a new plant north of town to take advantage of the growing commercial-lighting industry even as its construction-related business falls off. A pharmaceuticals start-up is looking for new lab workers. Some companies are expanding, and others — markers of the city's entrepreneurial spirit — are starting from scratch. **Austin** is emerging as one of the first pockets of the country where people are getting back to work, showing that even in this dreary economic environment, job creation can happen — and illustrating how it will eventually take root around the nation.

[See the future of work.](#)

[See pictures of the recession of 1958.](#)

### **One Created Job**

To start to understand the process, swing by HomeAway's downtown **Austin** headquarters. This is where,

sometime in the next nine months, a marketing manager will show up for his first day of work at one of the economy's newest jobs.

The story of how this job will come to exist starts five years ago, with one man's frustration at how hard it was to find and rent a beach house for his family vacation. Brian Sharples, who was between jobs at the time, didn't understand why he couldn't go to a single website — as he would go to Expedia for airline tickets — to find a comprehensive list of houses for rent. So, with a business partner, he started such a site. Five years later, the company has \$120 million a year in sales, employs 600 people in five countries and is ramping up its marketing push to grow even larger. That's why it needs a new marketing manager in [Austin](#). ([See "The Dropout Economy — 10 Ideas for the Next 10 Years."](#))

HomeAway is hiring for a very simple reason: people who own houses and want to rent them out are happy to pay \$300 a year to have the company spread the word — which it did in a Super Bowl commercial. "Jobs get created by providing a product or service that's better than what's out there," says Sharples. "There was an existing market for vacation rentals, and we've created efficiencies in that market. Now that it's cheaper and more efficient, more people are doing it, and the market is expanding."

In other words, to create jobs, start by creating something people are willing to pay for.

That's not as self-evident as it may sound. There is no shortage of theories about why companies aren't adding jobs faster. Banks won't lend to enable them to expand. Extra workers are too expensive because of taxes and health care costs. But the real clog in the nation's job-creating machinery is much more basic: a lack of demand for goods and services.

Just ask small businesses. American Express did that in a January survey, asking, What would most spur companies to go out and hire? An increase in customer demand, according to 42% of the respondents. Tax credits and better access to loans trailed, at 11% and 5%, respectively. ([See pictures of retailers that have gone out of business.](#))

To see that dynamic in action in [Austin](#), cut diagonally across the street from HomeAway and pop into the headquarters of Whole Foods. For a decade, the upscale grocery chain saw sales grow at about 20% annually. Last year, sales barely budged up 1% — and the 30 stores that executives planned to open around the country were trimmed to 15. Those 15 stores added nearly 4,000 jobs — just half as many as would have been gained had people kept buying organic peppers and salted caramels at the same pace. "There's too much thinking about how to create jobs," says James Manyika, a director of the economics-research outfit McKinsey Global Institute, "and not enough about how to create demand." ([Comment on this story.](#))

Why is that? Well, focusing on demand is a tricky thing to do. For decades, the economy's engine of demand has been American consumers — a population now over indebted, underemployed and endowed with a newfound sense of thrift. The explosion in credit-card and home-mortgage debt before the recession tells us the demand that was there was never sustainable. This is why the President now talks about doubling exports over the next five years and the importance of passing trade agreements with countries like South Korea, Panama and Colombia. If we can't sell to ourselves, there is at least partial salvation in selling to others.

It's also the reason the job-creation bill passed by Congress includes an accelerated tax break for companies buying equipment. Companies that sell equipment need people to build it, and companies that buy equipment need people to run and maintain it. Many firms outside of financial services have surprisingly solid balance sheets, Manyika points out, and might be wooed into investing sooner rather than later. That would drum up sales for the firms they'd be buying equipment from.

That prime-the-pump logic is also behind the use of the government to create demand — what we know as stimulus spending. Last year's \$787 billion American Recovery and Reinvestment Act has received its fair share of criticism for funds being dispersed too slowly and for not doing enough to stem unemployment. But in [Austin](#), Bruce Matous has a different point of view. "This saved my family business," says the president of Matous Construction.

Matous is referring to a \$28 million contract to upgrade the Hornsby Bend Biosolids Management Plant, a city-owned facility that recycles sewage sludge and yard clippings into lawn fertilizer. The city desperately needed to upgrade its 1980s-built anaerobic digesters (you can see the foam insulation chipping off) and now has the money to do so, thanks to a 30-year interest-free loan from the federal stimulus package. To get the project funded, the city applied to the Texas Water Development Board, which had been handed stimulus money by the Environmental Protection Agency.

[See "Job Stimulus: Census Bureau to Hire 1.2 Million."](#)

[See a stimulus report card.](#)

Driving around Hornsby Bend, Matous points to a group of half a dozen workmen and says, "We would have laid off all those guys." The construction industry has been brutalized in [Austin](#), as it has been nationally, and by the end of last year, Matous was looking at just a few more months of work in the pipeline. Then he won the Hornsby Bend contract. Now the company is fielding job applications from people 200 miles away and is creating business for other firms, from the equipment maker Caterpillar to R&R Industries, a California outfit that makes yellow safety vests and just sold a couple hundred of them to Matous.

Injecting money into the system — whether through consumer spending, business investment or stimulus funds — is a short-term fix designed to get the gears moving again. That re-establishment of momentum is an important part of economic recovery. But getting things moving isn't the same as keeping them moving. In the long term, there is only one way to create enough jobs for the economy: innovation. ([See "Why the Economic Recovery May Be Disappointing."](#))

### **Start-up Nation**

Twenty miles south of [Austin](#), in a nondescript industrial park, sits a bland, corrugated-metal building with a roll-up door. Inside the building sits the future of the U.S. economy.

Or at least part of the future. Five and a half years ago, the lights went on at Xtreme Power with half a dozen employees and a vision to make wind power an easier sell. One of the big stumbling blocks in persuading utilities to buy wind is its unpredictability. The wind blows, and then it stops, while utilities' customers demand a constant flow of power. Xtreme's solution: a shipping-container-size power-

management system that takes in energy from wind farms, stores it and then smoothly releases an uninterrupted supply of it out the other end.

That innovation carries real economic value. Wind-farm operators want to sell more power, and they'll pay for something that helps them do that. As a result, jobs are created. Xtreme, which employed 57 people at the beginning of 2009, installed its first major system in Hawaii over the summer and now has \$100 million worth of orders in the pipeline. The firm currently employs 105 people and is again looking to grow. Its plan is to buy a factory in Wixom, Mich., that Ford shut down in 2007. ([See the best photos of 2008: "The American Economy: Down and Out."](#))

It's the dream scenario of the green-technology revolution: a plant that used to make Lincoln Continentals starts churning out the mechanical apparatus of wind-power storage. Michigan autoworkers, knocked off their feet by a collapsing industry, put their skills to use in the quintessential "industry of tomorrow." Once those high-value manufacturing jobs are in place and a group of workers has money to spend, other jobs follow — at doughnut shops, hair salons, real estate brokerages and law firms.

Green jobs are hardly the economic cure-all they are often made out to be. They currently account for only about 0.5% of the U.S. workforce, and plenty of the industry's job growth is likely to happen overseas. China is already the world's largest manufacturer of solar panels. But the model provided by green-energy players is the right one: create new products and new markets, and watch new jobs flow. Without the personal computer, we wouldn't have Google and its 20,000 employees. Without everyday low-cost pricing, we wouldn't have Walmart and its 2.1 million.

**Austin** provides a useful lesson in how to stay on top of the innovation game. Start with an educated population (43% of **Austin** residents have a bachelor's degree or higher), mix in a robust venture-capital scene (one of the best outside Silicon Valley), add a supportive community of peers (groups like Bootstrap **Austin** band together hundreds of entrepreneurs) and wrap all that up with a state government unafraid to throw money at companies that need a little help getting off the ground.

Over at the University of Texas, the nonprofit **Austin** Technology Incubator houses fledgling firms, plying them with business-plan advice, contact with financiers and lots of coffee over which to share ideas and solve problems. The incubator's 20-year record: more than 200 companies and thousands of jobs created. "Companies don't start unless they're resourced," says Rob Neville, who launched one company with the help of the incubator and is now scaling up another, Savara Pharmaceuticals, in anticipation of support from the Texas Emerging Technology Fund.

These new companies are key to job growth. People talk about small businesses being such great generators of jobs, but a more precise assessment is that young businesses are. John Haltiwanger, an economist at the University of Maryland, has been studying government data for 25 years and has determined that about a third of all new jobs created come from start-ups. Furthermore, young companies add jobs faster. From 1980 to 2005, the typical 15-year-old firm added jobs at a rate of 1% a year, the typical three-year-old firm at a rate of 5%. "These are the rocket ships of the economy," says Haltiwanger.

[See "A Brief History of Unemployment."](#)

[See how Americans spend now.](#)

Of course, young firms are also more likely to flame out and vaporize their jobs — but job destruction is, perhaps surprisingly, par for the course no matter what the size of a company. Even in the recession, about 4 million people a month have been landing jobs. We just don't feel the impact of that because more people have been losing them, leaving us with fewer employed people overall. That constant churn can be jarring for individual workers, but it represents one of the key strengths of the American economy: flexibility. That's certainly true for established companies too.

To see why that matters, stop by Ringdale, a company in the northern **Austin** suburb of Georgetown. One of Ringdale's main business lines used to be security systems, but as the construction of new buildings has remained depressed, so have sales of things like the ID-card readers that go inside them. Ringdale's response: throw more resources, including employees, at its burgeoning line of light-emitting-diode products, for which it holds a number of patent applications, thereby answering increased demand for low-energy commercial lighting. "We've redeployed," says CEO Klaus Bollmann, whose firm will open one plant expansion in a few months (accounting for an additional 10 to 15 jobs) and a second, larger one next year (120 more jobs). As the economy shifts, reinvent.

That good advice isn't just for companies.

### **Rewiring the Workforce**

In northwest **Austin**, in cubicles packed with toys and rock-band posters, people in T-shirts and jeans are hard at work creating a video game that someday will be played online by thousands of people at a time. It takes years to produce such a complex game, representing a major investment for California-based Electronic Arts. Why is this happening in **Austin**? Simple. "The talent pool is here," says local BioWare studio co-head Gordon Walton.

In the national job-creation discourse, jobs often start to sound like things that companies one day decide to hand out. In reality, job creation is also a function of the labor supply. It's not just about firms wanting to hire but also about having people they can usefully employ. There are only four or five cities in the U.S. where Electronic Arts would be likely to develop such a complicated product. **Austin** is one of them partly because it has a tech-savvy population and a history of fielding such work — and also because it's an easy place for people to train for the profession, with local colleges offering courses in game design and programming.

In a down economy, plenty of people assume responsibility for reinvention. Lindsey Spratt lost her job as an assistant audio engineer and is now studying to be a chef at the Texas Culinary Academy. Rob Carruthers was laid off from a job as a project manager at a software company and is putting his dual engineering-business background to use as a consultant to tech start-ups and schools. ([See "How to Know When the Economy Is Turning Up."](#))

**Austin** also illustrates a systematic approach to making sure people have the right skills to match what companies need. For the past two years, Workforce Solutions, a government-funded not-for-profit, has been partnering with businesses and local schools like **Austin** Community College to develop a series of training courses to help people upgrade their skills and earn certifications. The modules are built to be accessible to people well into their careers — recognizing that a 40-year-old isn't likely to have two or four years to return to school full time — and focus on **Austin**'s up-and-coming industries, like biotech,

renewable energy and video-game development. "When these jobs come, we'll have the people with the skills to move into them," says Workforce executive director Alan Miller.

Employers are stepping up too. A few blocks east of the state capitol stands a hospital, one of 10 in the metro area owned and run by the not-for-profit Seton Family of Hospitals. An adjacent building that used to be a children's hospital now houses a clinical-education center. Wards and operating rooms are filled with patients — sophisticated, computer-controlled dummies that nurses-to-be can use to receive valuable training. One dummy even gives birth.

Health care as an industry is booming in most places, and **Austin** is no exception. Over the past three years, Seton has built three medical centers and hired 2,300 people. But getting people into those jobs — nearly 30% of which are for nurses — is a multipronged process. A few years ago, there was a waiting list to enter nursing school in **Austin**. Seton had to hire nurses trained in the Philippines. Now, with the clinical-education center's extra capacity and new partnerships with nursing programs at local colleges, Seton can hire locally.

That sort of coordination among workers, educators and companies is vital, considering that it can be difficult if not impossible for individuals to know which job to train for next. Even the head of Workforce Solutions admits that focusing on biotech, green energy and video games is really just an educated guess based on **Austin**'s historical strengths and industries that seem poised to grow. One of the reassuring things about capitalism is that over time, workers and companies are pretty good at figuring out the most productive ways to get together. In the short term, though, that realignment can be a struggle.

[See what businesses have survived bankruptcy.](#)

[See "In a Tough Job Market, Teens Are Suffering Most."](#)

Even so, there is a clear trend emerging: tomorrow's jobs will require people to add more value than ever before. Consider Samsung's only semiconductor-fabrication plant outside South Korea, which sits in northeast **Austin**. Since the fall, the factory, which makes flash memory for devices like smart phones and iPods, has been undergoing a \$500 million upgrade. In advance of the plant's early-summer reopening, Samsung will hire about 200 engineers and technicians to run and service the new, more sophisticated equipment inside. But with the new factory and those new jobs, 500 other positions have been eliminated: robots, not people, will now transport silicon wafers.

That's actually not so awful, economically speaking. Innovation and increased efficiency are the lifeblood of any economy. But it does mean that as we tackle the topic of creating jobs, we must realize that the sustainable ones will be those that build from a human being's unique abilities, like problem solving and creativity. If we want to encourage high-quality-job creation, we need to find a way to enable economic evolution. We need to set the stage for companies to create tomorrow's goods and services, and we need to be prepared to support workers in their quest to adapt. ([See the best business deals of 2009.](#))

### **Washington Isn't the Answer**

In Washington, the bulk of the response to job loss has been to drum up short-term demand. Last year's stimulus package kept the economy from spiraling further downward. Current proposals to extend

unemployment benefits and send \$100 billion to struggling local governments would have a similar effect — allowing consumers and cities to keep on spending.

Tax cuts for businesses that hire — and then retain — workers will likely wind up doing more of the same. No businessman in his right mind is going to add the long-term liability of a worker simply for the short-term benefit of a tax break. On the other hand, such incentives may accelerate some hiring that would have eventually happened anyway, and that would put more money into consumers' pockets faster. Of course, extra spending and tax cuts contribute to the \$1.5 trillion federal deficit, and that drags on the economy. ([See "How High Could the U.S. Tax Rate Go?"](#))

Easing the flow of credit, especially to small businesses, has also been a major policy push — and a tricky one to size up. The efficient reallocation of capital is key to any economy but especially to one like the U.S.'s, which counts on dynamism as a competitive advantage. Lending to businesses is down; that much is true. But is that because banks are overly cautious and asset-impaired or because businesses are uncertain about the future — or just aren't creditworthy borrowers? A recent survey by the National Federation of Independent Business found that companies that couldn't borrow typically had declining sales or depressed real estate values. Simply opening the lending spigot doesn't seem to be the answer.

All these ideas are short-term. That's understandable. People who are out of work want immediate solutions. Politicians wouldn't be doing their jobs if they didn't try to give voters what they want.

The conundrum is that the most useful things government can do to encourage job growth aren't flashy initiatives with quickly visible results. "There's no magic wand we can wave over companies that will induce them to go out and hire people," says Matthew Slaughter, an economist at Dartmouth's Tuck School of Business. "We need to think long-term."

If Congress wants more and better jobs in the U.S., it should do things like create a permanent tax break for companies that invest in research and development, make it easier for foreigners who get science and engineering Ph.D.s at American universities to stick around after graduation, and spend serious time and money improving the nation's infrastructure, including the electric grid and broadband network. Such initiatives will not create many jobs that can be tallied on a spreadsheet. What they will do is more important: lay the groundwork for businesses to innovate and grow.

The same is true on the worker side of the equation. If the key characteristics of the American economy are flexibility and forward motion, then we would all be better off if people felt more support — both financial and social — to invest in their education, switch jobs and industries and venture out to start new firms.

Establishing job creation as a discrete goal is a misleading enterprise. Beyond cyclic swings in demand, what we're really talking about creating is not jobs but ideas and technologies and more efficient ways of producing and selling goods and services. If that sounds like a harder goal to set, let alone achieve, that's because it is.

Yet as [Austin](#) richly illustrates, in the wake of the worst economic downturn in generations, that sort of innovation is starting to happen. And from that, the jobs will follow.