Rick Tofte doesn’t try to hire workers for his Williston, N.D., construction business anymore. They’re difficult to find, and even harder to keep—starting wages at oilfield service firms in the area far exceed what he can pay for the services of carpenters, roofers and electricians. The 30-year-old firm has a full slate of building projects, including upscale housing and facilities for expanding oilfield companies. Yet Tofte Brothers Construction employs only six people; as the oil boom has taken hold in the region, Tofte and his brother Terry have increasingly relied on subcontractors to do most of their work.

“We have changed our structure in how we operate,” Rick Tofte said. “We used to do it all ourselves; now we sub[contract] out 75 percent of it, just because we can’t find the employees.”

Such adaptations by employers to a tight labor market go with the territory in western North Dakota and northeastern Montana, where rapid oil and natural gas development has transformed the economic landscape. Extraordinary demands are being made on the labor supply in the oil patch.

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By PHIL DAVIES  
Senior Writer

PHOTOGRAPHS BY KEVIN CEDERSTROM
THE QUICK TAKE

Rapid oil and gas development in the "oil patch" of western North Dakota and northeastern Montana has created huge demand for workers—not just in the oilfields, but also in a range of non-oil industries. But so far, the supply of labor—from within and outside the region—has responded slowly to demand. In recent years, job openings have soared and unemployment has dropped to very low levels—below 3 percent in a number of counties.

The Bakken oil play is driving job seekers from other Ninth District states and the rest of the country, but they’re not coming in sufficient numbers to keep up with continued job growth. There are several obstacles to the flow of labor into the oil patch, among them low unemployment in eastern North Dakota, the area’s frigid winters and—most importantly—a scarcity of housing.

The region faces an awkward period of adjustment, but labor conditions are likely to loosen within a few years as rising wages and improved living conditions for migrants increase the workforce.

From Minot, N.D., west to Sidney, Mont., and down to Dickinson, N.D., few workers are available to fill thousands of job openings in a range of industries, from oil and construction to health care and food service. Last December, the unemployment rate in the Williston area was 1 percent, and job openings outnumbered the jobless 10 to one. “If you’re not working right now, you don’t want to be working,” said Shawn Wenko, assistant director of economic development for the city of Williston.

In the oil patch, labor supply constantly plays catch-up with demand—setting it apart from most areas of the Ninth District and the nation, where unemployment rates remain high in the wake of the Great Recession. Oil country is a place where finding a job typically takes less than a day, unskilled laborers can make over $60,000 per year and restaurants offer sign-on bonuses and prize drawings to attract workers.

As local pools of available labor have drained, job seekers have pursued into the oil patch from other parts of the district, from distant states and even from other countries. But still there aren’t enough outsiders arriving to satisfy rising demand for labor in a white-hot regional economy driven by ongoing oil and gas exploration, drilling and production.

Markets are rising to the workforce challenges of the oil boom. For example, employers have raised wages to lure workers in a variety of industries, not just oil and gas. But when jobs are plentiful and wages high, yet employers still go begging for workers—especially in this national economy—it’s clear there are barriers to the free flow of labor into the oil patch. One obstacle is external to the region—low unemployment in eastern North Dakota that discourages migration from that area.

Communities and employers also face a variety of internal and place-specific factors that prevent or limit more labor recruitment, including a scarcity of housing and other critical infrastructure and services, and increasing crime. Hit by a massive economic stimulus that stripped average growth in North Dakota of 1,000 new jobs in eastern North Dakota that discourages migration from that area.

Chart 1: Surging employment in the Bakken

- Index (2004 = 100)

- Core oil counties
- North Dakota
- United States

* Dunn, McKenzie, Mountrail, Stark, Williams, N.D.; Richland, Mont.

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Businesses and local governments can’t do much about the weather. But they’re striving to make the oil patch a more hospitable place to live and work; for instance, the pace of housing construction has picked up over the past two years, despite lingering fears of a 1980s-style oil bust. These and other community-building efforts are critical to helping the oil patch continue its remarkable run of economic growth.

An employment gusher

The full impact of oil and gas development on the regional economy becomes evident in springtime, when the easing of road restrictions gives full rein to trucks headed out to drilling and well sites in the oilfields. The already high level of activity in communities such as Williston, Dickinson and Sidney rises to a fever pitch; restaurants are packed, long lines form at the post office, traffic jams main thoroughfares.

Total employment has exploded in the region since the early 2000s (see Chart 1), thanks to new horizontal drilling techniques that allow energy companies to tap the Bakken Formation, a deep layer of oil-bearing shale underlying 200,000 square miles of the northern Great Plains.

Employment in Williams County (home to Williston, a bustling oilfield hub) and Mountrail County more than doubled between 2004 and 2011, according to figures from the U.S. Bureau of Labor Statistics (BLS). Employment growth in six Bakken counties with either major oil production or oilfield service centers far outstripped average growth in North Dakota—a state which led the country in job gains.

Not surprisingly, many new jobs in this core Bakken zone and other nearby counties are in oil and gas (oil wells produce natural gas as a byproduct). From 2003 to 2010—the latest year for which BLS data are available—the industry added at least 5,500 net new jobs in eastern North Dakota and western Montana. Most of the new positions were at North Dakota oilfield service firms that provide petroleum and drilling companies with everything from truck hauling to crane services to delivery and well components (see Chart 2).

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The oil patch

Sidney
The center of oil activity and home construction in Montana’s portion of the Bakken

Williston
The hub of the region’s petroleum industry, home to 200-odd oilfield service firms

Watford City
Community has annexed land and extended sewer lines to accommodate a burgeoning population

Dickinson
A farming, manufacturing and university community developing into an oilfield service center

Minot
A gateway to the oil patch for oil companies, construction firms and other businesses doing business in the oilfields

Bismarck
State capital becoming a bedroom community for oil and construction industry managers and their families

Location of the oil patch within the Ninth District
With the exception of a short slowdown during the recession (see the September 2009 fedgazette), oilfield activity and employment have grown at breakneck pace, especially in North Dakota. In February, over 180 drilling rigs were operating in the state—triple the number active three years before, according to Baker Hughes, an oilfield technology firm that compiles drilling statistics.

Oil and gas development has also created jobs in other industries that feed on energy spending rippling through the regional economy (see Chart 3 on page 2). Builders in core Bakken counties have thrived on expansion projects—new offices, workshops and temporary housing for workers—for oilfield companies such as Baker Hughes, Halliburton and Brigham Exploration. In the second quarter of 2011, Williams County construction jobs more than doubled year over year.

Transportation employment has increased too, Together, Williams County and Stark County (home to Dickinson) gained over 700 trucking jobs from 2010 to 2011, an increase of 58 percent.

And as truck traffic has risen, so have crashes, increasing demand for ambulance crews, emergency room doctors and other health care workers. Oilfield trauma—falls, burns, explosions, crushed limbs—have added to the workload and strained capacity at hospitals in the region. Last fall, Mercy Medical Center in Williston broke ground on a 40,000-square-foot addition to accommodate expanded outpatient services, including new surgery suites.

Everywhere in the oil patch, new enterprises have opened to cash in on the boom—machine shops, restaurants, extended-stay motels, appliance stores. In the Williston area alone, almost 500 net new businesses have formed since 2004, according to BLS figures. All need labor, a commodity that has become more precious than oil itself.

Jobs chasing people
Rising demand for labor has severely stretched, in a region that before the oil boom was an economic backwater compared with fast-growing western Montana and North Dakota’s Red River Valley. Ranching and dry-land farming were the mainstays in what is now the oil patch, supporting a relatively small, dispersed workforce; in 2005, about 100,000 people lived in 11 North Dakota counties west of Minot and four border counties in Montana.

In a mere half-dozen years, oil has turbocharged that regional economy, driving down unemployment rates to the lowest levels in a generation. In December 2011, a swath of counties in Western North Dakota and two in northeastern Montana had unemployment rates at or below 3 percent (see map on page 5). By comparison, North Dakota’s average unemployment rate was 3.2 percent that month, and the equivalent figure in Montana was 6.7 percent. Rates were relatively higher in Montana’s portion of the Bakken—though still low in most counties compared with the state and U.S. average—because of lower and declining oil production.

Data on job openings paint an even starker portrait of demand chasing supply in the oil patch. Job openings have climbed in the region as more jobs go unfilled for longer periods. According to Job Service North Dakota, job openings in most oil counties increased at least 80 percent in December 2011 compared with the year before; in Williams County, vacant positions more than doubled year over year.

A large share of openings are for oilfield jobs—petroleum engineers, roustabouts, crane operators, heavy-truck drivers. In January, there were over 1,100 oilfield positions open within a 50-mile radius of Williston. But there were also hundreds of other job openings in a range of occupations, including construction, office administration and sales.

Job Service data show that last December, job openings outnumbered unemployed people in many oil counties—an indication that labor pools were nearing rock bottom. In Williams County, there were 10 openings for every unemployed person, and five openings per jobless worker in Stark County.

Oil and gas development is also putting pressure on labor supplies in Minot and Bismarck, N.D., cities on the periphery of the oil patch. Petroleum isn’t the only factor driving demand for workers in these relatively large communities, which have diverse economies based on agriculture, health care, retail trade and other industries. Bismarck is the state capital, with thousands of government jobs. But Minot and the Bismarck-Mandan metro area are becoming centers for oil companies, engineering, land leasing agencies and other firms doing business in the oilfields to the west.

Last December, the Bismarck-Mandan unemployment rate stood at 3.2 percent, a year-over-year drop of almost 1 percentage point. In the Minot area, average weekly wages rose 12 percent in the second quarter of 2011 compared with the same period the previous year. And in both cities, percentage increases in job openings over that period mirrored those seen in oil-producing counties.

High wages and big-screen TVs
With labor supplies stretched tight as a drum, recruiting and holding onto workers is a daily battle for many firms, from the oilfields to Main Street. “The labor shortage situation is so serious that there are incredible accommodations being made by employers; everything from hours of the work shift to the wage rate,” said David Flynn, director of the Bureau of Business & Economic Research at the University of North Dakota (UND). “Raising wages is the most obvious tactic to lure scarce workers, and indeed average private wages have risen dramatically in the oil patch. Since 2004, wage increases in core Bakken counties have dwarfed increases in the state and nation (see Chart 4).

Some of the increase in oil counties is due to a rising proportion of well-paid workers in oil-related industries. (The average annual wage for North Dakota oilfield service workers was over $76,000 in 2010.) But most of the rise in average wages stems from increases across the spectrum of industries. For example, in McKenzie County, N.D., average wages for motel and food service workers increased 66 percent from 2010 to 2011. In the Sidney area, the locus of oil activity in the western part of the Bakken, average construction wages rose 10 percent from 2009 to 2010.

Business at Johnson Hardware & Furniture in Sidney was booming in January on the strength of increased sales of household goods to new residents and farmers flush with oil royalty income. “Things are fantatic,” said owner Phil Johnson. “We’ve posted 18 consecutive record months [in sales]; we’ve just put to bed the biggest month ever in the history of our store.” But costs have increased as well; to compete with rising wages in the area, Johnson has increased average pay at the store 40 percent to 50 percent over the past two years, to about $12 per hour.

In Watford City, the seat of McKenzie County, auto dealership S&S Motors has doubled its wage rates over the past five years. Owner Brent Sanford—who also is city mayor—said via email that the firm has also sweetened health benefits, paying 100 percent of employees’ medical, dental and vision coverage.

Employers have tried other ways of attracting and retaining workers, including offering flexible or part-time hours, paying sign-on bonuses and enlisting current employees in recruitment efforts. Last winter, a Williston restaurant ran a promotion in which workers who referred new hires were entered in a prize drawing for a large-screen television.

But no matter how diligently they pursue workers and strive to keep them
Low unemployment in the oil patch

December 2011 unemployment rates

The oil patch is a black hole for labor, sucking in workers from near and far. The Bakken’s gravitational pull is strongest in adjacent areas such as western Montana, Wyoming, eastern North Dakota and Minnesota, but its influence extends across the continent and overseas.

Extensive construction in the region—new commercial facilities, housing, roads, utilities—has created opportunities for businesses based elsewhere to provide skilled labor. A number of contractors and engineering firms in Fargo and Grand Forks, N.D., regularly dispatch work crews west, putting them up in motels, apartments or other temporary housing. They come home on weekends, completing a 600-mile roundtrip commute.

“It’s attractive to do business out there, because labor is so scarce,” said Barry Wilfahrt, president of the Grand Forks-East Grand Forks chamber of commerce. “[Oil patch firms] are paying a very significant premium to get people to come out.” Other contractors commute from Bismarck and Billings, Mont., and housing developers based in western Montana maintain work crews in the oil patch for part of the year.

This transient labor is difficult to track; most itinerant contractors draw their paychecks from firms based outside the oil patch. What can be quantified is migration to oil country—people from other places coming to take jobs and settle in.

Between 2004 and 2010, after minimal growth earlier in the decade, the combined population of six counties in the heart of the oil patch increased markedly (see Chart 5). Census data show that the population of Williams County increased at more than three times the state average from 2005 to 2010, for a gain of about 2,700 people.

The region’s torrid economy has surely accelerated population growth over the past two years, which has yet to show up in the census. Williston officials in January estimated the city’s population at about 20,000, based on building permits and surveys. They put population growth at about 20,000, based on building permits and surveys. They put.

The lure of oil

Continued on page 6
small—tax data documenting house-
hold moves from newcomers who filed
returns from their previous home-
towns—but the data (see Chart 6 on
page 5) show a net inflow of taxpayers
into core Bakken counties since 2008,
reversing an opposite trend before the
oil boom.

Talk to oil patch employers, and the wide sweep of the region’s labor net
becomes clear. Every business contacted for this article employed people from
outside the area, some of whom had
traveled hundreds of miles to find work.
In January, Johnson Hardware had six
workers on its payroll who had recently
moved to Sidney; including three men
from Montana’s Flathead Valley, where
home building has been slow. “We’ve
seen a large influx of fellow Montanans
moving from the mountains to the
plains because of the opportunity that
exists out here,” Johnson said.

At Mitchell’s Oil Field Service, a
Sidney-based construction and trucking
company with facilities in Watford City
and other communities in the region,
applicants from western Montana and
other states such as Minnesota, Idaho
and Arizona far outnumber those from
area residents. “Pretty much all the local
people have been snatched up by some-
body, either by our company or other
companies around here,” said Human
Resources Director Andrea Davidson.

A half-open gate

Despite the inflow of workers, there’s
no sign of loosening labor conditions in
the oil patch.

Throughout 2011, unemployment
rates across the Bakken remained very
low and ratios of job openings to unem-
ploved kept rising, with increasing num-
bers of jobs available to those who some-
how had managed to avoid employment.

Clearly, not enough people are mov-
ing to the oil patch to keep up with the
pace of job creation in the region. Or
perhaps it isn’t attracting enough of the
right types of workers—those with the
aptitudes and skills sought by employers.

Ziesch sees a structural “imbalance”
in the region’s workforce: a dearth of
teenagers, mothers of young children and
other part-time workers to fill posi-
tions in offices, retail stores, restaurants
and motels. A large proportion of work-
ers who come to the area to work in the
oilfields are men who are either single
or choose to live apart from their fami-
lies for weeks or months at a time.

Many newcomers are people down
on their luck without the necessary
skills to work in the oil industry, con-
struction and other fields, said Wenko
of Williston economic development.
“It’s unfortunate we have people show-
ing up off the bus, off the train,” he
said. “We’re looking for skilled labor up
here; we’re not looking for lost souls.”

There are a number of obstacles to
increased migration to the region, some
more easily surmounted than others.

One is strong economic growth and
low unemployment in other parts of
North Dakota. The Red River Valley, the
most populous part of the state, is the
closest large source of potential workers
for the oil patch. Many residents of
Fargo, Grand Forks and other commu-
nities along the Minnesota border are
familiar with the oil patch and may have
relatives or friends living there. But the
job market in eastern North Dakota
gives them little incentive to pull up
stakes. Last December, the Fargo area
had over 6,000 open positions, twice the
number available a year earlier. Most
counties in the eastern half of the state
had unemployment rates below 4 per-
cent—enviably low compared with the
nation as a whole.

In Grand Forks, most people are con-
tent to stay put for now, said Keith
Reinmeier, customer service area man-
ger for the Grand Forks Job Service
office. “They like the communities
where they live,” he said. “There are a
lot of opportunities in eastern North
Dakota, and people are aware of that.
There’s no gate swung open and people
heading west.”

Strains on the physical capacity of
the oil patch to absorb more people are
another impediment to migration. Pub-
lic and private resources necessary
to support a burgeoning workforce are
being stretched to their limits in cities at
the epicenter of the oil boom, such as
Williston and Watford City. “You’re get-
ting communities that are just com-
pletely overwhelmed with this influx of
people,” said Flynn of UND.

A housing shortage—a major reason
why more nuclear families aren’t mov-
ing to the region—has driven up rents
and forced many workers to sleep in
trailers, tents and vehicles (see “No
room at the inn,” page 7).

A related problem: maxed out
sewage systems in some communities.
In 2011, the flow of wastewater into the
city of Williston’s treatment plant
exceeded its design capacity; this year,
the city plans to spend $5 million to $6
million in state grants funded by impact
fees on oil companies to upgrade the
plants—a stopgap measure until a bigger
facility can be built.

Other strains on infrastructure and
public services make life stressful and
unpleasant, discouraging some people
from moving to the oil patch. Truck
traffic clogs highways and ravages coun-
try roads, lengthening commutes; small
police and sheriff’s departments strug-
gle to respond to increased crime.

Finally, there’s the weather, an
issue for migrants from warmer climes.
Flynn noted that North Dakota’s bracing win-
ters give pause to workers considering
moving anywhere in the state, not just
its western reaches. “The fact that it’s
North Dakota doesn’t help,” he said.
“There’s a perception of North Dakota
being cold, and it happens to be true.”

In time, they will come

This year is likely to set new records in
oil drilling and production in the oil
patch. Petroleum companies are explor-
ing promising new areas of the Bakken,
lke Montana’s Roosevelt County, and
refining their drilling techniques to tap
even deeper shale-oil deposits. Unless
global oil prices fall or regulators inter-
vene—drilling processes that inject water
and chemicals into the earth have drawn
federal scrutiny—economic growth tied
to oil and gas development will continue
to strain the region’s labor supply.

Any further tightening in the job
market could retard economic develop-
ment in the region if some employers
search in vain for workers, forcing them
to delay or cancel new initiatives and
facility expansions.

That possibility concerns Gaylon
Baker, executive vice president of Stark
Development Corp., the economic devel-
oment arm for Stark County. “Our work-
ers are hard to find, and our wage scales
are up there,” he said, making it hard for
the Dickinson area to attract manufactur-
er and other non-oil employers.

Williston is being eyed by restaurant
and retail chains for new locations,
Wenko said. But they’re worried about
ultra-low unemployment, and the
scarcity and expense of housing for
workers. “We understand that it’s going
to take significant investment for them
to come in here,” he said. “It comes
down to the workforce and housing.”

Not every business is a winner in an
oil boom; over the next few years, many
employers, especially non-oil firms, will
continue to struggle to hire and retain
workers, at least at wages they want to
pay. A surplus of job openings in the
region will keep unemployment rates in
the basement.

However, down the road, labor sup-
plies are likely to increase in the oil patch
as state and local governments invest
in sewers, highways and other infrastruc-
ture, and developers build more housing
for workers and their families.

Rising wages in a range of industries
should encourage more local residents
to enter the workforce and attract more
workers from outside the region willing
to brave frigid winters. “We’re catching
up with the rest of the world,” Baker
said. “We were a low-wage environment
prior to [the oil boom], and thank good-
ness we’re no longer famous for that.”

Instead, western North Dakota and
northeastern Montana are known for
having jobs—more jobs than anyone
could have imagined before oil lit a fire
under the region’s economy.