



RANKINGS REPORT 2011

The economic landscape may seem frozen with uncertainty, but just under the surface there are tectonic shifts as emerging growth sectors push upwards. It's time to find out which locations have planted their flag on today's summits and who is ready to climb tomorrow's heights.

In the motion picture industry, the buzzword over the past year has been "3-D." Great acting, well-written scripts, tight film editing and creative set design apparently are not good enough for today's plugged-in audience.

In fact, it's beginning to seem like the time-tested elements of great films no longer are required as long as the actors (real and computer-generated) literally jump off the screen and make you think they are about to step into your bucket of popcorn. Hollywood has added depth perception to movies while reducing the depth of the stories they tell. They call this progress.

Business Facilities also has a fixation with depth in our annual Rankings Report, but we strive to make sure our added dimension is not simply a special effect to jazz up the presentation. We hope the additional criteria we have introduced to our rankings decisions will give you a deeper understanding of why we have identified a location as a top-tier player and whether that location has established

the momentum which will enable it to hold or enhance its standing moving forward.

For several years now, we have refined the criteria we apply to our rankings to make sure the results are not two-dimensional snapshots. In many of our most-coveted flagship rankings categories, we've adjusted the process to give added weight to an evaluation of growth potential as well as specific datasets. For these categories, we scan as many relevant data sources as we can to narrow the field to the top contenders, then we apply our more subjective criteria to separate the leaders from the also-rans.

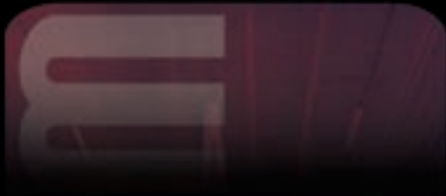
MULTI-DIMENSIONAL PROCESS

Our Economic Growth Potential ranking is a good example of how this "multi-dimensional" process works.

For this category, we start out by taking a close look at the hard facts of job-creation and project development in specific industry sectors in a location, along with supporting ele-

ments like incentives programs and the availability of a skilled workforce. Then we factor in the location's growth strategy, giving extra credit for the diversity of its initiatives and cooperation between business, government and higher education. We couple this with an assessment of the growth potential of the location's targeted industries, paying special attention to vertical integration and/or the creation of indirect as well as direct employment. Our final evaluation of Economic Growth Potential leaders certifies that we are convinced a location has a credible strategy for growth, has created the tools/programs needed to implement that strategy and has a proven track record of success with upward momentum.

Obviously, some rankings categories do not lend themselves to this type of subjective evaluation. A list of the top 10 states in installed wind energy capacity is always going to be based on adding up turbines and





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megawatts. For data-centric categories, we always are on the prowl for the most accurate data we can find.

This can be problematic in emerging growth sectors. When a new industry generates explosive interest, everyone wants to know as soon as possible who has taken a leadership position—but definitive metrics for measuring success may take time to mature. For example, reliable data sources that give us the big picture nationwide on the alternative energy sector now are available (for power generation and manufacturing), but metrics for other growth “hotties” like nanotechnology and digital

media still are in the formative stages.

That’s why we take great care in how we label our rankings categories. We try our best to differentiate for you our most solid top 10 lists from our work-in-progress leadership assessments of emerging hubs in new industries. We also want to emphasize that, in many of our categories, the distance between the top finisher and 10th place really is not that great. Any location that finishes in the top 10 (or top five for more restrictive categories) should consider the result a mark of success.

We will continue to refine our rankings each year to develop categories and criteria that not only measure a location’s success in the past year but also validate its momentum and growth potential. We want our rankings to take note of the movement that is taking place just under the surface of what appears to be an economic development landscape frozen by uncertainty.

That movement is real, and the jockeying for position is intense. If we do our job right, we will help you identify tomorrow’s leaders as well as today’s frontrunners. And so, without further ado, we present our 2011 Rankings Report. *Business Facilities* congratulates all of the locations that made the cut.

GROWTH MAGNET: VIRGINIA

As detailed above, we put a lot of work into our Economic Growth Potential ranking, so it is fitting that the top-ranked states in this coveted designation are working non-stop to plant the seeds for future job creation. It also should come as no surprise that the top five finishers in Economic Growth Potential also appear in our top 10

list for Best Business Climate. The two go hand in hand.

Virginia has parlayed its close proximity to Washington, DC—a natural magnet for government contractors—into a powerhouse push to make the Commonwealth a prime location for corporate headquarters.

In one of his first acts after he became the state’s chief executive last year, Gov. Bob McDonnell issued an executive order creating a state Economic Development and Jobs Creation Commission. McDonnell identified an improved business climate as a top priority for the new unit.

“We must be aggressive in putting

Economic Growth Potential

1. VIRGINIA

2. LOUISIANA

3. SOUTH CAROLINA

4. UTAH

5. GEORGIA

6. TEXAS

7. TENNESSEE

8. KENTUCKY

9. INDIANA

10. NEBRASKA

Best Business Climate

1. UTAH

2. TEXAS

3. VIRGINIA

4. FLORIDA

5. SOUTH CAROLINA

6. INDIANA

7. LOUISIANA

8. TENNESSEE

9. GEORGIA

10. SOUTH DAKOTA



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in place the policies that will improve our business climate and make Virginia a global job magnet,” he said. “This Commission will be identifying new ideas and initiatives to make the Commonwealth even more competitive in the global marketplace.”

The success of this business-friendly effort has propelled northern Virginia to the forefront of regions that confidently project high growth. One of the first to join a long line of major corporations parading into Virginia was defense giant Northrop Grumman, which announced last year that it would be relocating its corporate headquarters from the West Coast to

northern Virginia. The Breaking News section of the *Business Facilities* website (www.businessfacilities.com) has chronicled those who have followed. Earlier this month, Gov. McDonnell announced that ITT Defense & Information Solutions, an operating segment of ITT Corporation, will invest up to \$5 million to establish its new corporate headquarters in Fairfax County. Following completion of its spinoff from ITT Corporation, the Defense & Information Solutions business segment will be renamed and rebranded as ITT Exelis—a new, publicly traded stand-alone company.

The company’s products and serv-

ices will include premier technologies such as next-generation night vision, integrated electronic warfare, networked communications, force protection, radar, global intelligence, surveillance and reconnaissance systems, composite structures, space-based satellite imaging, weather and climate monitoring, and navigation and imaging systems, as well as maintenance, engineering and professional services.

Exelis will be based in the Tysons Corner area of Fairfax County. The project will create 100 new jobs over the next three to five years across all of its business operations in the Commonwealth. Virginia successfully competed against Maryland and Washington, D.C. for the project.

“The county’s proximity to our customers, its highly skilled workforce and business-friendly climate will allow us to continue to deliver essential products and services to our customers. I appreciate the hard work of the Fairfax County Economic Development Authority and other Virginia officials in helping us reach our decision,” said David F. Melcher, president of ITT Defense & Information Solutions, who will serve as chief executive officer of ITT Exelis.

The FCEDA worked with the Virginia Economic Development Partnership to secure the project for Virginia. Gov. McDonnell approved a \$100,000 grant from the Governor’s Opportunity Fund to assist Fairfax County with the deal. Through its Virginia Jobs Investment Program, the Virginia Department of Business Assistance will provide funding and services to support the company’s recruitment and training activities.

In April, Gov. McDonnell and the presidents of the University of Vir-

Installed Wind Power Capacity Leaders

1. TEXAS
2. IOWA
3. CALIFORNIA
4. MINNESOTA
5. WASHINGTON
6. ILLINOIS
7. OREGON
8. OKLAHOMA
9. NORTH DAKOTA
10. WYOMING

Installed Solar Power Capacity Leaders

1. CALIFORNIA
2. NEW JERSEY
3. COLORADO
4. ARIZONA
5. NEVADA
6. FLORIDA
7. NEW YORK
8. PENNSYLVANIA
9. NEW MEXICO
10. NORTH CAROLINA



STATE RANKINGS

ginia, Virginia Tech and Virginia State University joined with executives from some of the world's biggest names in manufacturing to officially break ground for the Commonwealth Center for Advanced Manufacturing (CCAM), a unique collaborative research facility in Prince George County, VA, that promises to accelerate the transfer of laboratory innovations to manufacturing production lines where they can improve efficiencies, products and profits.

"With a turn of the dirt today, Virginia is preparing a new foundation for manufacturing in the Commonwealth and in the nation," Gov.

McDonnell said. "Global dynamics will always influence where products are made, and CCAM's collaborative, creative approach to advanced manufacturing techniques gives the Commonwealth a leadership role in determining how the world's most advanced products are made."

In the CCAM, manufacturers will collaborate with accomplished faculty and students from Virginia's top research and teaching institutions to perform advanced manufacturing research in two priority areas: surface engineering and manufacturing systems.

When complete next year, the facility will house computational and

large-scale production labs, as well as open production space for heavy equipment and surface coating processes, including a thermal spraying machine, a directed vapor deposition machine, integrated data acquisition systems and a thermal conductivity measurements system. The CCAM project was *Business Facilities'* 2008 Economic Deal of the Year Gold Award winner.

"CCAM is a game changer for manufacturing operations in this country and around the world," said David Lohr, the newly appointed president and executive director of CCAM. "Its collaborative model joins academic research with manufacturing's drive for competitive advantage and it promises new, valuable innovations faster than ever before."

Among the founding companies that have signed up to anchor the CCAM facility research operations are: Canon Virginia Inc., Newport News, VA; Chromalloy, Orangeburg, N.Y.; Newport News Shipbuilding, a division of Huntington Ingalls Industries, which designs, builds and maintains nuclear and non-nuclear ships for the U.S. Navy and Coast Guard; and Rolls-Royce, headquartered in London, a world-leading provider of jet power systems and services for use on land, at sea and in the air.

LOUISIANA: SURGING UPWARD

We continue to be impressed with the diversity and coordination of economic development efforts across the state of Louisiana. The Bayou State's success is reflected in its stellar results in our 2011 State Rankings. For the second year in a row, Louisiana has topped the chart in our Workforce Training Leaders category on the strength of its widely praised FastStart

Alternative Energy Industry Leaders

1. OREGON

2. IOWA

3. ARIZONA

4. MICHIGAN

5. CALIFORNIA

6. TEXAS

7. NEW MEXICO

8. OHIO

9. KANSAS

10. COLORADO

Biotechnology Strength

1. CALIFORNIA

2. TEXAS

3. MARYLAND

4. MASSACHUSETTS

5. NORTH CAROLINA

6. PENNSYLVANIA

7. KANSAS

8. OHIO

9. INDIANA

10. NEW JERSEY



STATE RANKINGS

program. But even this worthy achievement was overshadowed by Louisiana's astounding breakthrough into the top tier of our top 10 listing for Economic Growth Potential. The state surged all the way to second place in the Growth Potential tally, while notching a very respectable seventh place in Best Business Climate. This was complemented by a traditional top 10 finish in our Cost of Labor ranking.

Louisiana FastStart's innovative, customized programs are available to companies that meet eligibility requirements and are aligned with Louisiana's diverse economic development targets, which include digital

media, headquarters and business operations, service industries, advanced and traditional manufacturing, warehousing and distribution, and research and development.

To qualify for FastStart, a company must first commit to creating a net of at least 15 new, permanent manufacturing jobs, or a net of at least 50 new, permanent service-related jobs. Each request is evaluated prior to project commencement to ensure all eligibility requirements are met.

Louisiana Economic Development's forward-thinking strategy is making bold forays into emerging growth sectors like digital media

while maintaining the vitality of traditional mainstays like oil, gas and steel production [the \$3.4-billion Nucor steel plant project was our 2010 Economic Development Deal of the Year Bronze Award winner].

Three years ago, *Business Facilities* broke the news that Shreveport, LA had emerged as a major player in the motion picture industry (we called it "Hollywood on the Bayou"). Now, we are pleased to report that Shreveport and several other locations in the state, including New Orleans, collectively have staked a claim as a national center for the burgeoning growth engine of digital media.

Employment Leaders

1. NORTH DAKOTA
2. NEBRASKA
3. SOUTH DAKOTA
4. NEW HAMPSHIRE
5. VERMONT
6. IOWA
7. WYOMING
8. HAWAII
9. VIRGINIA
10. OKLAHOMA

Workforce Training Leaders

1. LOUISIANA
2. GEORGIA
3. NORTH CAROLINA
4. NEW MEXICO
5. NEBRASKA
6. FLORIDA
7. ALABAMA
8. SOUTH CAROLINA
9. NEVADA
10. MAINE

Best Business Tax Climate

1. SOUTH DAKOTA
2. ALASKA
3. WYOMING
4. NEVADA
5. FLORIDA
6. MONTANA
7. NEW HAMPSHIRE
8. DELAWARE
9. UTAH
10. INDIANA



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Moonbot, a digital media studio that appropriately is housed in a building known as BioSpace 1 in Shreveport, has been hailed for its first “Interactive Storybook” for children, *The Fantastic Flying Books of Mr. Morris Lessmore*, which began as a Louisiana FastStart training program. Within weeks after Moonbot released an iPad App of the children’s tale, Mr. Lessmore and his flying friends soared to the top tier of Apple’s most popular apps for iPad. Using rich computer-generated animation, innovative interactivity, original composed music and unique games sprinkled throughout the book,

Moonbot’s reinvention of digital storytelling lets kids (and many of their parents) “repair” books, tumble through a storm, learn the piano and even get “lost in a book,” flying through a magical world of words. The Lessmore title also has won a Best In Show award at SIGGRAPH.

Louisiana also has made great strides in the telecom sector. Industry giant CenturyLink recently agreed to keep its headquarters in Louisiana for the next decade, adding 800 new jobs in the state by 2016.

Gov. Bobby Jindal and CenturyLink CEO and President Glen Post announced the agreement two years

after striking a deal to add a 350-job expansion for the Monroe, LA. telecom. Together, the deals will create 1,150 jobs in northeast Louisiana over the next five years. CenturyLink provides broadband, voice and wireless service to a national customer base and now employs 1,970 in Louisiana.

The commitment came as the Fortune 500 company was busy carving out a space of the national telecom market with the help of a string of high-value acquisitions.

The telecom merged with Embarq of Kansas in 2009 and completed the \$12.2 billion purchase of

Quality of Life

1. UTAH
2. MINNESOTA
3. NEBRASKA
4. OKLAHOMA
5. OREGON
6. SOUTH DAKOTA
7. KANSAS
8. WASHINGTON
9. MISSOURI
10. COLORADO

Lowest Cost of Labor

1. MISSISSIPPI
2. SOUTH DAKOTA
3. WEST VIRGINIA
4. ARKANSAS
5. MONTANA
6. OKLAHOMA
7. NORTH DAKOTA
8. SOUTH CAROLINA
9. KENTUCKY
10. LOUISIANA

Highest Average Wages

1. MASSACHUSETTS
2. CONNECTICUT
3. NEW YORK
4. MARYLAND
5. NEW JERSEY
6. CALIFORNIA
7. ALASKA
8. WASHINGTON
9. VIRGINIA
10. DELAWARE



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Qwest Communications International of Denver this year. In April it also announced a move to acquire Savvis Inc., a St. Louis cloud computing service provider, for \$2.5 billion. Analysts expected the acquisitions to drive a wedge between CenturyLink and its Louisiana base, but state leaders produced a slew of incentives to avoid that outcome, including:

- Two performance-based grants, including \$14.9 million to pay for 50 percent of building or leasing additional headquarters space in Monroe and \$3.3 million to reimburse relocation costs
- \$1.2 million over four years to expand CenturyLink's telecommunications partnership with Louisiana Tech
- Up to 150,000 square feet of dis-

counted space in the state-owned Accent Building in Monroe through 2015, to be used as swing space for CenturyLink staff during construction of expanded headquarters facilities

- Employee training under the Louisiana FastStart program.

UTAH REACHES NEW HEIGHTS

In last year's Rankings Report, Utah notched perhaps the best across-the-board showing of any state, making our top 10 in six different categories, including a first-place finish in Quality of Life, third place in Best Business Climate and seventh in Economic Growth Potential. We thought it would be hard to top that performance, but this year Utah has

emerged as our number one pick for Best Business Climate and has repeated as the top-ranked state for Quality of Life.

Utah's economic development strategy is built around seven industrial clusters, including software and IT development; life sciences; energy and natural resources; financial services; defense and homeland security; aerospace and aviation; and outdoor products/recreation. In each of these sectors, Gov. Gary Herbert is working to establish what he calls "competitive accelerators of empowerment and collaboration."

While Utah has proven to be fertile ground for entrepreneurs, the state also has had remarkable success

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in attracting big-ticket projects from major corporate players, especially in its burgeoning data center, software and IT cluster, which now includes Adobe, eBay, Twitter, Oracle, Microsoft and Goldman Sachs.

The common threads that link all of these major projects are long-term commitments by the companies to the creation of high-wage jobs, generous financial incentives provided by the state, and, in some cases, the foundation created by a homegrown business. Two of the biggest success stories that have deployed these elements involve software giant Adobe Systems Inc. and IM Flash Technologies, jointly owned by computer chipmakers Intel Corp. and Micron Technologies Inc.

Adobe is creating up to 1,000 high-tech jobs at its new \$100-million technology campus in Utah. The new Adobe campus, to be completed in 2012, will accommodate future growth for the company and its Omniture Business Unit operations, currently based in Orem. The multi-phase project provides space for additional facilities expansion.

Adobe acquired Omniture, a homegrown Utah company, for \$1.8 billion in October 2009. The Omniture unit currently employs 620 people in Utah and 1,100 worldwide.

The Governor's Office of Economic Development (GOED) Board approved a generous post-performance, refundable economic develop-

ment tax incentive for the campus project. New state tax revenue is expected to exceed \$134 million over a 20-year period as a result of Adobe's projected expansion, job creation and capital investment in Utah. The maximum value of the tax credit incentive is \$40.2 million, or 30 percent of new state revenue for 20 years.

Gov. Herbert emphasizes the incentive for Adobe is structured so that it costs nothing to taxpayers.

"Post-performance incentives are a good model, a fair model," he told *Business Facilities* in an interview. "At no time are the taxpayers at risk. We are creating 1,000 new jobs that may pay up to 175 percent of the average county wage and we will get well over



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\$100 million in new tax revenue.”

Also receiving a healthy dose of tax incentives has been IM Flash, which recently announced it will add 200 high-wage jobs and invest \$1.5 billion into its flash memory chip plant in Lehi, UT. At the same news conference in Lehi, Massachusetts-based EMC Corp. said it will be hiring about 500 tech-savvy employees for a customer-service operation in Utah to service clients worldwide of its computing hardware and software used to create and manage large banks of cloud computers.

“Already around IM Flash, other companies that support this kind of technology are here, making it easier for the next company to move in,”

said Rich Brown, dean of the College of Engineering at the University of Utah. “And the state’s high-tech economy is just growing.”

The Governor’s Office of Economic Development extended tax credits to the two companies, with \$45.9 million going to IM Flash and \$3.5 million to EMC. The credits represent one-third of new state tax revenue that will result from the investments. EMC, which is expected to invest more than \$7 million in new workspace at an undetermined location, in 2007 bought Utah-founded Mozy Inc., based in Pleasant Grove. GOED officials expect the new operation will generate \$14 million in tax revenue.

In June, GOED also approved a \$33.7 million tax incentive to ITT Corp., which plans to add up to 2,700 employees at a new composites manufacturing and engineering plant in the Salt Lake City area.

Utah has about 66,000 high-tech jobs, a number that besides computer-related businesses includes medical device manufacturers, telecommunications companies, medical researchers, Internet broadcasters, aerospace companies and those dedicated to engineering testing and scientific research.

CA, TX, MD TOP BIO PLAYERS

Our Biotechnology Strength ranking remains our most labor-intensive

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category. Each year, we drill into government statistics and the latest State Bioscience Initiatives Report, prepared by the Biotechnology Industry Organization (BIO) and Battelle. We then apply 24 key criteria to develop our ranking, including the amount of state R&D funding and venture capital investments; the level of concentrated occupational employment in biotech; tax exemptions specifically targeted to biotech; the number of biotech facilities; biotech patents generated; university grant funding; and bioscience higher education degrees, among other factors. A point scale is applied, giving credit to states that actually invested in biotech facilities and/or had the highest concentration of

employment in more than one biotech subsector. As we have done with our other flagship rankings categories, we weighed the data against the growth potential of each state's initiatives.

In this year's biotech ranking, California, the "birthplace of biotech," and Texas have maintained their one-two punch at the top of our annual Biotechnology Strength list. However, we frankly must affix a very large asterisk to the Golden State's perennial roost atop the bio leaderboard. California's unsurpassed university system, the traditional source of the research brainpower behind the state's biotech industry, has absorbed a series of budget-cutting body blows from the state govern-

ment in Sacramento as it grapples with massive deficits.

California has maintained its biotech lead this year largely on its status as home to more than a third of the nation's leading biotechnology firms. As the budget cuts begin to bite, our rankings oddsmakers are hedging their bets on whether the nation's most populous state will be able to defend its biotech crown next year.

The long-term biotech picture is decidedly brighter this year for Maryland, which surged to a third-place finish from last year's ninth-place ranking. Maryland is home to the highest concentration of federal biotech research facilities, anchored by the National Institutes of Health



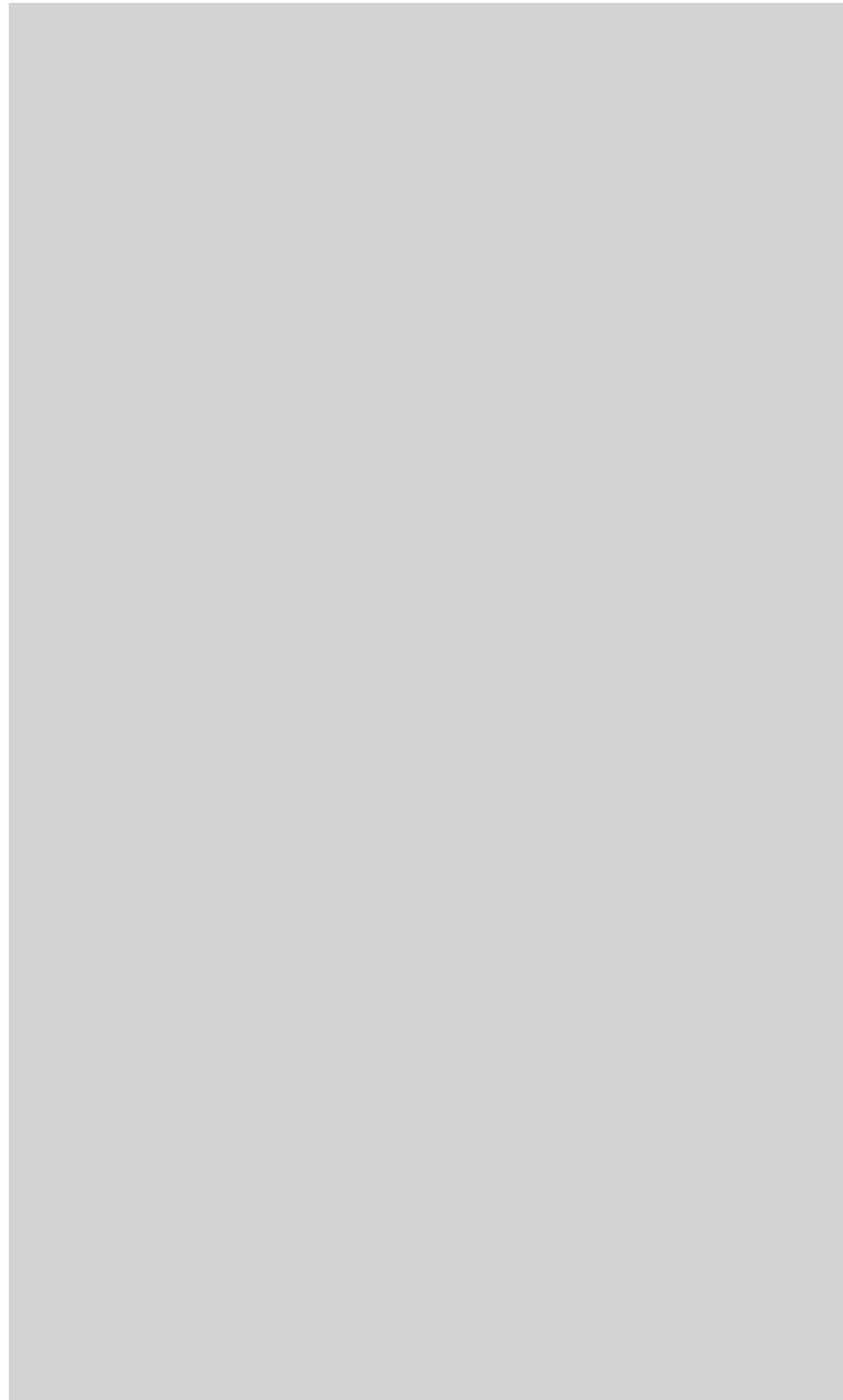
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(NIH). Taken together, Maryland's bioscience research complex is conservatively estimated to represent nearly \$8 billion in research and

development expenditures annually, third in total size only to California and New Jersey, which possess major industry R&D. The state also has a

leadership position in academic R&D per capita, led by Johns Hopkins University, the top recipient of NIH funding in the U.S.

Maryland Gov. Martin O'Malley is seeking to spur biotech development with his \$100-million Invest-Maryland program, which would provide tax credits to insurance companies so they could invest in technology companies, including biotech research facilities. The state also is well under way with its Bio 2020 plan to invest at least \$1.3 billion in biotech across the decade. The 15-year-old Maryland Venture Fund, which makes direct investments in



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Automotive Manufacturing Strength

1. TENNESSEE

2. SOUTH CAROLINA

3. GEORGIA

4. KENTUCKY

5. ALABAMA

6. MICHIGAN

7. OHIO

8. MISSISSIPPI

9. TEXAS

10. INDIANA

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technology and life sciences early-stage companies, has invested \$25 million and returned more than double that investment.

Under the Bio 2020 plan, the Maryland Biotechnology Center was established within the Maryland Department of Business and Economic Development to coordinate a host of state, university and private sector initiatives to support biotechnology innovation and entrepreneurship in Maryland. The Center works closely with university technology transfer offices and commercialization programs such as the Maryland Technology Development Corpora-

tion (TEDCO) and the University of Maryland's Maryland Industrial Partnerships (MIPS) program to foster and fund collaborative initiatives

between bioscience enterprises, universities, and federal labs. In certain qualifying cases, the Center can supplement funding of industry-univer-

Best Transportation Infrastructure

1. TEXAS

2. FLORIDA

3. ILLINOIS

4. CALIFORNIA

5. TENNESSEE

6. OHIO

7. GEORGIA

8. NEW YORK

9. UTAH

10. ALASKA

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sity and industry-federal labs research partnerships. The Center has created a BioEntrepreneur Resources Program which assists entrepreneurs in leveraging available public and private capital. The Center also works closely with the University of Maryland School of Law's Intellectual Property Legal Resource Center (MIPLRC). The MIPLRC provides free legal services on the subjects of business and intellectual property to start-up bioscience enterprises.

ND IS JOBS CENTRAL

As the U.S. struggles to stabilize its economic ship of state in the wake of the Great Recession, everyone is focused on jobs. Unfortunately, much of this focus has been fixated on the lack of jobs—the list of the states with the highest unemployment rates remains far too long. So we thought it would be useful to maintain a rankings category that rewards the locations that are bucking this trend. Our Employment Leaders ranking tells you where the jobs are, and the undisputed leader is North Dakota.

As we recently detailed in the *Business Facilities* Blog, North Dakota is surging forward with 7 percent annual growth and the lowest unemployment rate in the U.S. The reason ND is expected to hold its position at the top of the

national economic charts for some time to come can be summarized in two words: shale oil.

The Bakken Shale Formation stretches down from Canada into North Dakota and Montana. Centered on an area known as the Williston Basin, the formation has long been known to hold a rich deposit of oil. In fact, the U.S. Geological Survey determined about 15 years ago that Bakken Shale contains the largest continuous oil accumulation it has ever assessed.

But when the USGS made this assessment in 1995, it also gloomily predicted that only a small portion of black gold could actually be extracted from the oil-rich basin. In its 1995 survey, USGS declared that barely 151 million barrels of oil could be squeezed from the Bakken Formation, a drop in the bucket compared to past production in Texas or the 10 billion barrels that eventually will come out of the Alaskan oil fields.

This all changed in 2000, when the large oil companies perfected a technique called horizontal drilling and figured out how to pull oil out of shale. Drillers now can send a shaft vertically down to the shale layer (which is two miles below the surface) and then change direction and drill horizontally along the oil seam.

The successful execution of horizontal drilling in the Bakken Formation induced a quantum reassessment of the amount of recoverable oil there: the total is now believed to exceed 3.65 billion barrels.

There are now more than 4,000 active oil wells in North Dakota, with most of the activity centered in Dunn, Montrail and Mercer counties. The black gold rush has turned landowners into instant millionaires and spawned a job surge and a housing shortage in the three counties as oil rig workers have surged into North Dakota from across the nation.

The last time we checked, there weren't significant oil deposits in Nebraska, but there are plenty of jobs—enough to merit second place in our Employment Leaders category. The Cornhusker State currently is posting the second-lowest unemployment rate in the U.S. at about 4.2 percent.

“My focus has been on creating higher paying jobs in the state,” Gov. Dave Heineman told *Business Facilities* in a recent interview. “I don't want to lose a single engineer or architect or scientist. We are going to do a much better job of connecting higher education to the businesses in the state.”

Gov. Heineman has made job creation for Nebraska graduates a hallmark of his new Talent and

Innovation Initiative, which he recently presented to the state legislature.

“The Talent and Innovation Initiative is about enhancing the level of business specialization and attracting new, advanced companies to Nebraska,” Heineman says. “We want to help the private sector grow. This is about job opportunities. The idea for this initiative came from the Department of Economic Development, Nebraska business leaders and a series of recommendations in [a Battelle Labs] study.”

TX IS A WIND POWER

As we indicated in our Rankings Report intro, it is now possible to get a much better fix on which locations are leading the way in installed capacity for wind and solar power, thanks to data gathered by the American Wind Energy Association and the U.S. Department of Energy, among other sources.

It should come as no surprise that the Lone Star State is our Installed Wind Power Capacity king, with plenty of wide open spaces sitting in the center of the nation's wind corridor. But up north Minnesota is making a spirited charge up the list with an impressive fourth-place finish.

California rules the roost in Installed Solar Power Capacity. Hardly a week goes by without another



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announcement from the Golden State of a vast new solar farm project. Most of these mega-projects have been situated in the Mojave Desert not far from Los Angeles.

Even Google wants a piece of the burgeoning solar power pie out West. Google announced in April it is investing \$168 million in what it says will be the world's tallest solar power tower. The Internet search giant is funding BrightSource Energy's solar farm in the Mojave Desert, which employs an Ivanpah Solar Electric Generating System to produce solar energy by utilizing fields of heliostats to concentrate the sun's rays. The concentrated rays are directed towards the top of a tower where a receiver converts the rays into steam

that powers a traditional turbine and generator to make electricity.

The Ivanpah Power Tower will reach approximately 450 feet tall and will use 173,000 heliostats, each with two mirrors. By the time the plant is up and running in 2013, it will be producing 392 MW of solar energy.

While most people would expect California to be synonymous with solar power, our second-place ranking for Installed Solar Power Capacity may raise a few eyebrows among those who haven't been closely tracking the race to the top in solar energy generation. Thanks to a forward-thinking state program that started incentivizing solar panel installations years ago, the Garden State has

earned its top tier status in this category. New Jersey's installations don't rival the scale of the mega-farms in the western deserts, but with nine million residents in one of our most densely populated states, smaller installations add up to a large bundle of megawatts.

The top finisher in our flagship Alternative Energy Industry Leaders category is a state that is delivering a one-two punch in solar and wind, Oregon has a burgeoning solar power panel industry and is moving forward with one of the most ambitious wind-energy projects in the world.

In Hillsboro, OR Solar World has

Best Education Climate

1. MARYLAND

2. MASSACHUSETTS

3. FLORIDA

4. NEW YORK

5. GEORGIA

6. OHIO

7. HAWAII

8. TEXAS

9. UTAH

10. NEW JERSEY

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the largest solar cell manufacturing facility in North America. Solaicx, a silicon manufacturer for solar energy applications, is located in Portland, and Salem is home to Sanyo Solar.

The Shepherd's Flat wind farm project in Oregon may end up being the world's largest (if Pentagon concerns about radar deflection are overcome). The project will stretch across 30 square miles in Morrow and Gilliam counties in north-central Oregon and generate enough electricity to power 235,000 U.S. homes.

Google, Inc. and two Japanese firms have joined GE Energy Financial Services and Caithness Energy as own-

ers of the project. Google announced it is putting \$100 million into the project, and two Japanese companies, ITOCHU's Tyr Energy and Sumitomo

Corp., together will kick in another \$400 million, bringing a bonanza of wind power to the Pacific North. **BF**

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