

YOUTH MOVEMENT

Blacksburg, Va., and Morgantown, W.Va., are counting on their local universities to create good-paying jobs that will keep kids from leaving town after graduation.

But is that realistic? BY DOUG CAMPBELL

You could do worse, much worse, than Blacksburg in the spring. This time of year the rolling landscape in southwest Virginia is popping with purple and green, the mountain air crisp. The campus of Virginia Polytechnic Institute and State University, more famously known as Virginia Tech, bustles with backpack-bearing students and brisk-walking faculty. Throughout town the streets appear to be recently paved and they are clean.

What a great place to live. If only there were more good jobs.

That's where Joe Meredith comes in. He is president of the Virginia Tech Corporate Research Center, which 10 years ago was hardly worth mentioning but today is home to 1,830 high-tech, mostly private-sector workers. The CRC was established in 1985 as a for-profit subsidiary of the Virginia Tech Foundation; its mission is to at once advance technology-transfer operations at Virginia Tech as well as to spur the economy of southwest Virginia. Today it makes its own money and does not draw on university funds.

On a recent afternoon, Meredith was chatting with a visitor over grilled chicken sandwiches at the research center's on-site café when a park tenant wanders over. Meredith looks up and says, "I got a resume this morning from a guy whose wife has been accepted to the vet school. He's a marketing guy." The tenant is chemistry professor and entrepreneur Ketan Trivedi. His face brightens with this news: "We need him," Trivedi says emphatically. "Send him to us please. Right away." Meredith nods and smiles.

Welcome to 21st century economic development, college-town style. Meredith is a significant piece of Virginia Tech's growing impact on greater Blacksburg. More to the point, he is part of a wider effort by community and university leaders to harness the considerable economic power of their local schools of higher education. Universities like Virginia Tech are being counted on to create more jobs in more places than ever before.

In places like Blacksburg and Morgantown, W.Va., there are jobs, sure. But most of the really good ones are already under the auspices of the universities that call those cities home, and there are only so many of them. This situation tends to be most pronounced in otherwise rural towns that are home to land-grant and state universities; you don't see nearly as much hand-wringing over retaining and recruiting young and educated professionals in places like



Springtime on campus at Virginia Tech

PHOTOGRAPHY: BOB VETTER/VIRGINIA TECH

Cambridge, Mass., Austin, Texas, and the San Francisco Bay area. What nonurban economic developers want is their regions' universities to create more private-sector, for-profit, off-campus jobs.

This is a relatively new concept: In the past, economic developers in rural areas were just thrilled to have all those college employees and students spend their paychecks and allowances with local merchants. Now the thinking has changed. Classrooms are great for educating young people. But only a critical mass of good jobs, it is believed, will keep university grads from fleeing the region after graduation. Equally, only large numbers of good jobs can attract accomplished out-of-towners.

Research parks have become the leading solution to this problem. Historically, research parks are also a relatively new concept. The majority of the 150 university research parks now operating in the nation were established after 1980. The long-term vision is that these endeavors will spawn scores of knowledge-based jobs that spread farther from campus — to neighboring communities whose economic profiles pale in comparison to generally prosperous college towns.

But it's not yet apparent that this vision is realistic. Yes, the research park at Virginia Tech is such a smash that it is drawing visitors from universities around the globe. Encouraged by places like Virginia Tech, Morgantown's West Virginia University recently broke ground on its first research park, anticipating that it will employ 2,500 workers by 2015. (That would be almost 5 percent of the Morgantown MSA's current workforce.)

At the same time, university officials and local economic developers acknowledge that spreading the wealth beyond a core area around their schools is a challenge. As much as the communities surrounding college towns would like to reap more benefits from the schools, the possibilities have limits. Besides the lure of good jobs elsewhere, rural college

towns are also battling the basic human desire to seek out new places to live and work.

"Clearly, these other communities would like to have more of Virginia Tech. They see it as an engine. But we struggle to see how to do that," says Ted Settle, director of the Office of Economic Development at Virginia Tech. "We haven't, I think, figured out how to help those communities."

New Twist on Town and Gown

The economic impact of universities is well known and documented. In a 2001 report, the National Association of State Universities and Land-Grant Colleges found that member institutions provide an average 6,562 jobs, not including part-time student employees. Additionally, for every university job, another 1.6 jobs are generated beyond campus, the survey said. Most of this impact is in the way universities have always helped their local economy — with students paying tuition and faculty and staff spending their money locally.

Virginia Tech was found to employ 8,038 people and generated an additional 6,806 positions in the surrounding area. Its presence was said to increase Montgomery County's gross regional product by \$521 million, or \$16,000 per household. A more recent but different study put economic impact by West Virginia University on the entire state of West Virginia at \$2 billion a year. West Virginia University directly provides almost one out of every three jobs in the entire Morgantown MSA.

Increasingly, the quest for economic development officials in college towns is to unlock even more value from their resident universities. They want to keep those engineering degrees from leaving. And they also want to recruit human capital from other places.

So how well is greater Blacksburg doing in holding onto and growing its youthful and educated population? "Not very," says David Rundgren, executive director of the New River Valley Planning District Commission,

which encompasses five counties including the one that is home to Virginia Tech. "There's a tremendous amount of talent out of these [thousands of] students from which to develop corporations ... The goal of education is to train you so that you can work for somebody. The problem [in the New River Valley] is that we don't have anybody to work for."

Rundgren is exaggerating for effect. The employment situation in Blacksburg is relatively healthy, not dissimilar to any number of college towns — where thousands of people work for the university as well-paid administrators or faculty and where thousands of students come from out of town, spend their money and tuition and indirectly fund service-sector jobs. The number of jobs the university proper creates is a simple function of enrollment and research funding. The problem, or at least the perception of the problem, is that the farther you get away from Virginia Tech, even well within commuting distance, the farther employment rates fall and the number of "good" job opportunities diminish. (To be sure, the New River Valley's economic profile isn't miserable, but Rundgren sees plenty of room for improvement.) Policymakers are



The cities of Blacksburg, Va., and Morgantown, W. Va., are economically vibrant, thanks in large part to the presence of Virginia Tech and West Virginia University, respectively. But in these otherwise rural, somewhat isolated communities, the economic benefits of playing home to a university are limited. Neighboring towns, even those well within commuting distance, pale in economic performance by comparison.

vexed as they watch what they term “brain drain”: The university isn’t producing a critical mass of students who stay in the region after graduation. Nor is it creating enough jobs to lure droves of out-of-towners.

Blacksburg is economically healthy, thanks mostly to the presence of Virginia Tech. The New River Valley, which encompasses Blacksburg, isn’t faring as well, however, with unemployment at 4 percent, above the state average. Personal income growth in the metropolitan area that encircles Blacksburg lags the U.S. average. A 2004 report by the New River Valley Planning District Commission described the “distressed economy of our region.” With an eye toward recently shuttered manufacturing plants throughout the area, planners said that old-economy industries “can no longer provide the number of jobs and spin-off companies it did so well in the past. We must build on our local talents and strengths.”

A recent study by Virginia Tech’s Center for Regional Studies found a dearth of knowledge-based jobs in the region and mean earnings that were “extremely low” compared with six similar areas around the country (The six compared areas were Colorado Springs, Colo.; Fort Collins, Colo.; Athens, Ga.; Asheville, N.C.; Knoxville, Tenn.; and Lexington, Ky., all university towns in otherwise rural regions.)

A recent survey asked students in the New River Valley whether they were thinking about staying in the area after graduation. The report is not yet released, but Rundgren says the overwhelming majority of responses were negative. But when asked whether they would stay if there was a good job waiting for them, 98 percent switched their answer to the affirmative. Rundgren certainly doesn’t expect that many young people to ever decide to stay in the area, but he takes the results to mean that the New River Valley would do a much better job of keeping its kids if it had more good jobs. Rundgren is

working on several programs to create these jobs, but the biggest promise in the New River Valley remains Virginia Tech and the Corporate Research Center. “When we say Virginia Tech, that’s huge,” Rundgren says. “It makes a tremendous difference in all kinds of activity.”

Turnaround

It can be slow-going starting a research park. The early years of the CRC were not promising. Five years after opening in 1988, thanks to a \$4 million contribution from the Virginia Tech Foundation with 10 tenants and a single building, there were just 20 tenants, half of which were university offices. Joe Meredith arrived in 1993 and developed a value proposition that focused on helping young firms grow — instead of serving as a mere property manager — and that made the difference. Today there are 125 tenants representing businesses that usually align with Virginia Tech’s core competencies in engineering and physical sciences. Most of the employees are not university employees, meaning these are new jobs that arguably wouldn’t have existed without CRC. Tenants get proximity to Virginia Tech and its research capabilities and easy access to a crop of young, affordable employees.

Almost counterintuitively, the CRC until just this spring wasn’t anything like a business incubator, in the sense that it didn’t seek out start-up companies with no funding and no revenues. Only in April did a true incubator, called VT Knowledge Works, open in a new building (the 18th at the park) and start helping 13 incoming startups grow their operations and align them with investors and advisers. Meanwhile, Meredith is plenty busy. He keeps clipboards on his desk with all his active prospects. There were 20 of them in April, all real firms with revenue and a strong interest in locating in Blacksburg.

Several communities have approached Meredith with a proposition: Build a CRC in my town.

Meredith isn’t so sure that’s feasible. “Part of it is location specific, meaning we’re adjacent to Virginia Tech,” he says. “It’s a chicken-and-egg problem. What comes first, the entrepreneurs and the technologies or the [research park] services. If you had services, would it attract entrepreneurs and technologies? I don’t know.”

Morgantown Takes Notice

By no means is Virginia Tech’s research park an economic panacea. But its success is the sort that has emboldened other universities to start their own research parks. One of the most recent to get going is West Virginia University.

Like Blacksburg, Morgantown looks like an oasis of economic vibrancy when viewed on paper. There is also a growing biometrics corridor down Interstate 79 toward Clarksburg, where the FBI’s fingerprint center has helped spawn a cluster of like-minded firms. As the state’s leading university, however, the responsibility for driving the new economy is keener here than at Virginia Tech. West Virginia ranks 48th out of the 51 states and the District of Columbia in net migration of the “young, single, and college educated.”

Between 1995 and 2000, according to the U.S. Census, West Virginia lost 4,691 of this group (aged 25 to 39, with at least a bachelor’s degree), a rate topped only by the Dakotas and Iowa. By contrast, Virginia landed relatively high on the list, gaining 6,475 of that cohort during the same period. But data from the Census Bureau suggest that the lion’s share of those young and educated folks migrated to Washington, D.C.’s Northern Virginia suburbs — not to the southwestern part of the state.

Russ Lorince, director of economic development at West Virginia University, says the under-construction research park will be the highest-profile component of the school’s effort to reverse the trend of poor economic showings. He says it’s a natural move for the university, since more compa-

nies are giving up costly R&D and looking to schools to pick up the slack. "It's a tragedy to see people from your region grow up and graduate from the local university and then go to Seattle and Austin and San Diego, some to return and many not to return," Lorince says. "So our desire is to create opportunities for our young people and at the same time we create this stream of talent of young employees for potential employers."

The West Virginia research park is expected to open around winter 2006 at an initial investment of \$19 million, paid for from grants and state and federal agencies. Lorince expects most tenants will have ties to the university and its research strengths — biometrics and forensics, advanced materials and information technology.

Tom Witt, director of the Bureau of Business and Economic Research at WVU, says that land-grant universities are taking the next logical step from their origins. Where their outreach once concentrated on aid and advice to farmers and establishing branch campuses and classrooms, now the mission is job creation. "There's an increasing sense of entrepreneurial activity focused on economic development," Witt says. "With the adverse demographics that we face in this part of southern Appalachia, the development of these types of institutions is one way of readdressing the loss of young people." They seek, Witt says, "a reverse brain drain."

A Realistic Vision?

Expecting research parks to fix many economic woes might still strike some as naïve. But there are ardent believers. Here's what William Drohan, executive director of the Association of University Research

Parks, tells to skeptics: A West Coast university 50 years ago fretted over losing a stream of talented graduates each year to jobs in New York and Chicago. So the school, Stanford University, opened its own research park. Drohan says that Silicon Valley would not exist today were it not for Stanford University Research Park, whose famed original tenants included Hewlett-Packard. And closer to home there is Research Triangle Park, which Drohan says "to call a pipedream was an understatement."

Now, a fair amount of luck is involved with those success stories, Drohan allows, but that doesn't mean some similar sort of brushfire of innovation can spread across West Virginia or southwest Virginia. "When you start this momentum and create these new jobs that feed off each other, it can be just like what happened in Silicon Valley."

The United States may never birth another Silicon Valley, but Lee Cobb would settle for just a sliver of that kind of success. Cobb is executive director of Region 2000 Economic Development Council, which covers greater Lynchburg in south-central Virginia. For the past year, Cobb has been in talks with Virginia Tech officials about setting up a tech-transfer office in Lynchburg, which is about 90 miles from Blacksburg, home to several liberal arts colleges and saddled with a reputation of being a poor choice of location for young folks just starting out.

Cobb's group aims to get approval this summer and funding from the state soon after. Without a solid link to a research university, Lynchburg is at a disadvantage in the 21st century economy, Cobb says. He grants that it's only human nature to want to explore other lands, but he thinks



A recent West Virginia University graduate celebrates a successful college career. Here she poses with the Mountaineer statue, one of the official emblems of the university.

Virginia Tech is Lynchburg's greatest hope for appealing to a wider swath of workers. "To me, it's just reality that kids grow up somewhere, they want to go somewhere different. That's a challenge for us and it's an opportunity for us since we have probably close to 10,000 students in our region," Cobb says. "We've got to make those kids understand what the opportunities are here. And that's one of the things that this alignment with the university in the city would help with." **RF**

PHOTOGRAPHY: DAN FRENDO/WVU PHOTOGRAPHIC SERVICES

READINGS

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Visit www.richmondfed.org for links to relevant sites and supplemental information.