

University of Delaware builds its future

Research park at old Chrysler site could power state's, university's growth

By RACHEL KIPP • The News Journal • February 21, 2010

The ghosts of Dec. 19, 2008, linger inside Newark's old Chrysler plant, where everything is just as it was the day the last car rolled off the assembly line and 1,100 newly unemployed workers walked out the doors into an uncertain future.

Empty water bottles, soft-drink cans and ketchup packets are strewn across tables in employee lunch areas. Christmas cards are still pinned to bulletin boards. Union fliers about coping with unemployment lie on the floor.

Soon, any evidence of the almost-60-year-old landmark will disappear. In its place will be a sprawling, 272-acre hub for high-tech research, business and academics.

The project would be the largest-ever expansion of the Newark campus, fitting into a grand vision for the university to become a national leader in science and technology development and a major job-creating engine in the state.

"If you look at the site 10 to 20 years from now, I think what you'll see is that the university used this opportunity to emerge even stronger as a major force of economic and social development in the state," said university President Patrick Harker, who believes the site represents "the next 100 years of growth for the university."

"The first thing people talk about when they go on the site is, 'Wow, this is really big,' and then they start talking about all the things we can do and start thinking about how we can really make an impact in a big way," Harker said. "I've heard conversations evolve from 'President Harker, we can't do that' to 'Why can't we do that?'"

The site is to include a business incubator -- space for startups and for companies that want to capitalize on research relationships with the university faculty. At the center of the plans are partnerships with regional health care leaders and the U.S. Army, which is dramatically expanding employment and research at nearby Aberdeen Proving Ground in Maryland because of the Base Realignment and Closure Program.

The demolition and salvage phase is expected to take up to two years. The initial push begins this week, with a Thursday auction of machinery and equipment from the plant. Environmental cleanup will proceed in stages, as different sections are targeted for development.

"It's a very large site ... on the part away from South College Avenue, we would be open to leasing to companies that want to do other things, [such as] light manufacturing," Harker said.

"We envision collaborating with a lot of different kinds of companies. The site will have more of a mixed-use feel with housing, retail, academic space and transit."

Harker would not say how much cleanup, redevelopment and construction would cost.

Kevin Byrne is chief operating officer of the University Financing Foundation, an Atlanta nonprofit that helps institutions with development efforts. He estimated that one 100,000-square-foot, top-flight bioscience research facility could run up to \$50 million.

Key to success

There are roughly 200 research parks in the U.S., many of them built from the shells of shuttered industrial facilities like the Chrysler plant. Often, the key to success for the parks is finding the right balance of tenants.

"There's a tipping point along the continuum where a research park works. It works with both university investment and private-sector investment," Byrne said. "A university research park doesn't work if it's 100 percent university basic research and a university research park doesn't work if it's purely driven by the private sector. ... The key is the university has to recognize immediately what its role is and how much participation it's going to have in the research park. Once they have that determined, the next steps are easy to lay out."

The housing and academic component on the site will come from the clinical campus of the Delaware Health Sciences Alliance, a partnership between the university, Christiana Care, Nemours and Thomas Jefferson University in Philadelphia. Medical, nursing, physical therapy and pharmacy students will live on campus and take classes there while serving in clinical rotations in the state's hospitals and doctors' offices.

UD and Army officials recently signed a cooperative research-and-development agreement to share laboratories, personnel, facilities and equipment.

Researchers from UD's Center for Composite Materials have been working with the Army since 1986 on developing lightweight materials for military vehicles. The university is hoping to expand that partnership by establishing additional Army research centers at the former Chrysler site.

University leaders have not been shy about their ultimate goal -- to win a contract to establish a national Army research center on campus.

"We are going from [Aberdeen Proving Ground] as a relatively low-tech base with a training and a testing center work force to a much more high-tech work force that does basic research, applied research, training and testing," said Michael Lombardi, director of outreach for the Research, Development and Engineering Command at Aberdeen.

The agreement is not exclusive and has caused several Maryland universities to show interest in partnering with Aberdeen, Lombardi said. He believes there is enough need at Aberdeen to keep

multiple universities busy, but acknowledged that how schools proceed will determine who gets more business.

"This didn't happen overnight," Lombardi said. "We sat down with UD and talked about what they think are multiple levels of expertise, where they had professors and staff willing to engage with us. Some people don't want to do anything that would change the status quo, but UD really saw this as an opportunity. ... They were very, very responsive to us and that helped."

High-tech jobs

With at least a year until the first shovel breaks ground, it's hard to predict what the final layout of the research park will look like or how many jobs it will generate.

Most likely, there will be positions for faculty members, researchers, lab technicians, information technology and facilities maintenance.

"I find that at research parks, a lot of the leads on tenants are not coming from a typical commercial real estate operation, they come from faculty who might be working with a company or know of a company that might be interested," said Brian Darmody, associate vice president for research and economic development at the University of Maryland-College Park and president of the Association of University Research Parks.

The University of Arizona opened a technology park on the site of an old IBM facility in Tucson in 1994. The 1,345-acre, 2-million-square-foot park is much larger than the 272-acre Chrysler site. By 1998, the park had 17 tenants that employed 4,173 people, according to a study done by the school. The park currently has 40 tenants, including businesses, a high school, and a community college campus, and employs 6,938 people. Tenants at the park paid \$593.3 million in wages to their employees; the average annual salary is \$85,515.

About 70 companies, with an estimated 12,000 employees, have set up shop in the surrounding area since the park was established, said Bruce A. Wright, associate vice president for university research parks at the University of Arizona.

At 40 acres on Newark's edge, Delaware Technology Park is much smaller than the Chrysler site. Since 1998, about 16,000 jobs have been created directly or indirectly by investment at the facility, positions that run the gamut from research jobs to FedEx drivers who handle the increased volume of deliveries, said Mike Bowman, the park's chairman.

"People want to look at the Chrysler site through the old lens of corporate jobs and big manufacturing," Bowman said. "That's not what we're doing and not what we expect to find. We expect to find high-paying jobs, including direct jobs and service jobs."

Delaware Technology Park's tenants include the Delaware Biotechnology Institute, which houses 25 UD faculty members and research from five of the school's colleges. There is also the Fraunhofer USA Center for Molecular Biotechnology, a nonprofit research lab that recently

received a \$5.3 million government contract to create a vaccine to protect against anthrax and plague.

The Fraunhofer center started with two people working in a lab. Now, it employs more than 100 and occupies an entire building at the park.

"What will really attract companies to come to Chrysler is the intellectual environment the university will offer," said Vidadi M. Yusibov, executive director of the Fraunhofer center. "They are also looking for some kind of support system that allows startup companies to access infrastructure and to have a beneficial coexistence with the university and other companies."

Partners, donors needed

The university used more than \$24 million in working capital -- borrowing against the school's capital reserves -- to purchase the Chrysler property. Gov. Jack Markell's state budget for fiscal 2011 earmarks \$2 million toward building out the site.

Harker said the school needs partners and donors to complete the project, which will begin with redevelopment of the land across the street from the current campus area along South College Avenue.

In an era of declining state appropriations and slumping endowments, UD's emphasis on turning the Chrysler site into a hub for research with national and global implications appears to be a strategic move. Federal money is one of the few growing sources of funding and those are the kind of projects that agencies like the National Institutes of Health or the U.S. Department of Energy are looking for when handing out multimillion-dollar grants.

"The federal government is spending money. There are a lot of basic research dollars and advanced research dollars as part of the budget and the stimulus. There's also a lot of state money ... in the sense of stimulus money that came to the states for research," said Byrne, of the University Financing Foundation. "Right now, funding projects is very difficult, but projects are getting done and the way they're getting done is for smart people to figure out how to integrate all that together and come up with the right mechanics to finance the project in a nontraditional way.

"The challenge is ... how are they going to build this? This is going to be millions, multimillions, if not billions of dollars in an economy where there is not a lot of traction," Byrne said. "How are they going to get that done? It's a silly cliché, but when you run a marathon, you've got to start ... right now, it's going to be little, bitty baby steps until [the economy] straightens back up. Once everything straightens back up, UD can be a major factor in university research with this huge site that can accommodate a lot of different activity."

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