

University of Illinois at Urbana-Champaign

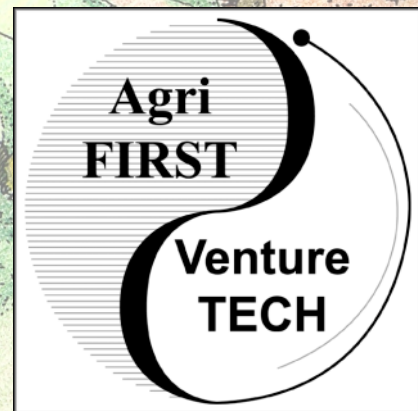
INFRASTRUCTURE FOR ECONOMIC DEVELOPMENT

A State of Illinois / University / Corporate Partnership

Leveraging University Successes in...

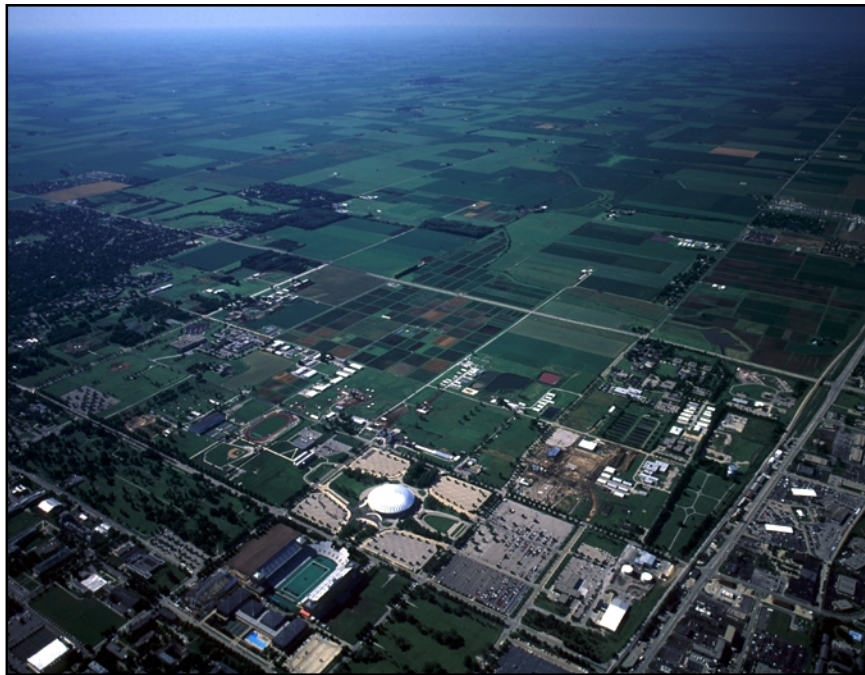
- *Biotechnology*
- *Information Technology*
- *Agriculture*
- *Technology Transfer*

... to strengthen the Illinois economy





South Research Park Building under construction ▲



Existing South Campus (aerial photo 2000) ▲

A Vision for Campus Development

The University of Illinois is poised to broaden and deepen its service to the State by expanding significantly the effort, energy and resources it devotes to economic development for the entire State.

The faculty, staff and students of the University have long been one of the State's major assets, through the conduct of world-class teaching, research, and public service programs. Already a vital economic development engine, the University has committed to adding a fourth dimension to those multiple traditional missions: expediting the transfer of U of I research results to the marketplace, creating new economic enterprises to benefit all who live and work in Illinois.

Technology is at the heart of today's – and tomorrow's – economy. The U of I has enormous strengths in agriculture, biotechnology, and information technology – areas in which Illinois has developed a competitive advantage among other states and areas in which that advantage can be strengthened with prudent additional investments.

The University will begin by investing its own resources to improve its service to the State. The availability of several hundred acres of land for new development at the southern part of the Urbana-Champaign campus coincides perfectly with new expectations that the University can and should increase its contributions to the State's economic base.

Opportunities exist to expand the role that education, research and development in agriculture at UIUC can play in strengthening the Illinois economy. Many new ventures in biotechnology are directly related to agriculture, in both plant and animal technology. Playing a prominent role in

Illinois' agriculture-related economic development is among the most fundamental elements of the University's historic mission as a land-grant institution, and the time is right to reinvigorate that component of the University's multiple missions.

The Board of Trustees has endorsed a new focus on economic development and has acted decisively to put new administrative structures and processes in place to streamline and accelerate the transfer of research-based technology from the laboratory to the marketplace. The University has identified one essential resource – land – for expanding both its agricultural and broader technology transfer activities. Whatever agriculture-related results emerge from U of I laboratories, new test plots will be needed to demonstrate the potential commercial applications of those results. Additional resources are required – new land must be acquired, new facilities constructed. The University will seek new resources for those purposes from the State, but will also secure significant non-state resources to leverage the investment of new State support in this exciting endeavor to strengthen its contributions to the Illinois economy.

At the same time, the State expects the University to make research and development results in all areas more effectively and efficiently available to commercial development. New initiatives are needed to improve operational processes and enhance physical facilities that foster the transition of research from the laboratory to the commercial marketplace. The opportunity to take land currently assigned for agriculture and shift its use to the needs of technology transfer is extremely timely and fortuitous. But realizing that opportunity depends directly on the University's ability to secure new land and facilities for agricultural research and development.

Background

Beginning with its meeting of March 3, 1999, at which the Board of Trustees reviewed options for a master plan for the south portion of the Urbana-Champaign campus along with development of two science and engineering commercialization centers, the Board has engaged in a continuing discussion of the development of the UIUC campus. Two objectives have emerged as the primary focal points:

ACES Relocation

- Accommodating both current and long-term needs for research land replacement and growth of the College of ACES, including land that would house new facilities to replace out-moded existing research and support facilities for the College, that would enable the College to expand its service to the agricultural, agri-business, and economic development interests of the State of Illinois, and that would permit future use of land currently assigned to agriculture uses for other high priority purposes.

Research Park

- Accommodating a newly created research park and providing for the long-term growth of the park and related economic development initiatives. Establishment of a research park increasingly is seen as a critical component of the University's broadened economic development and faculty recruitment/retention efforts. The park will have physical presence in both the north and south portions of the UIUC campus, with the south component presenting the greatest opportunity for growth.

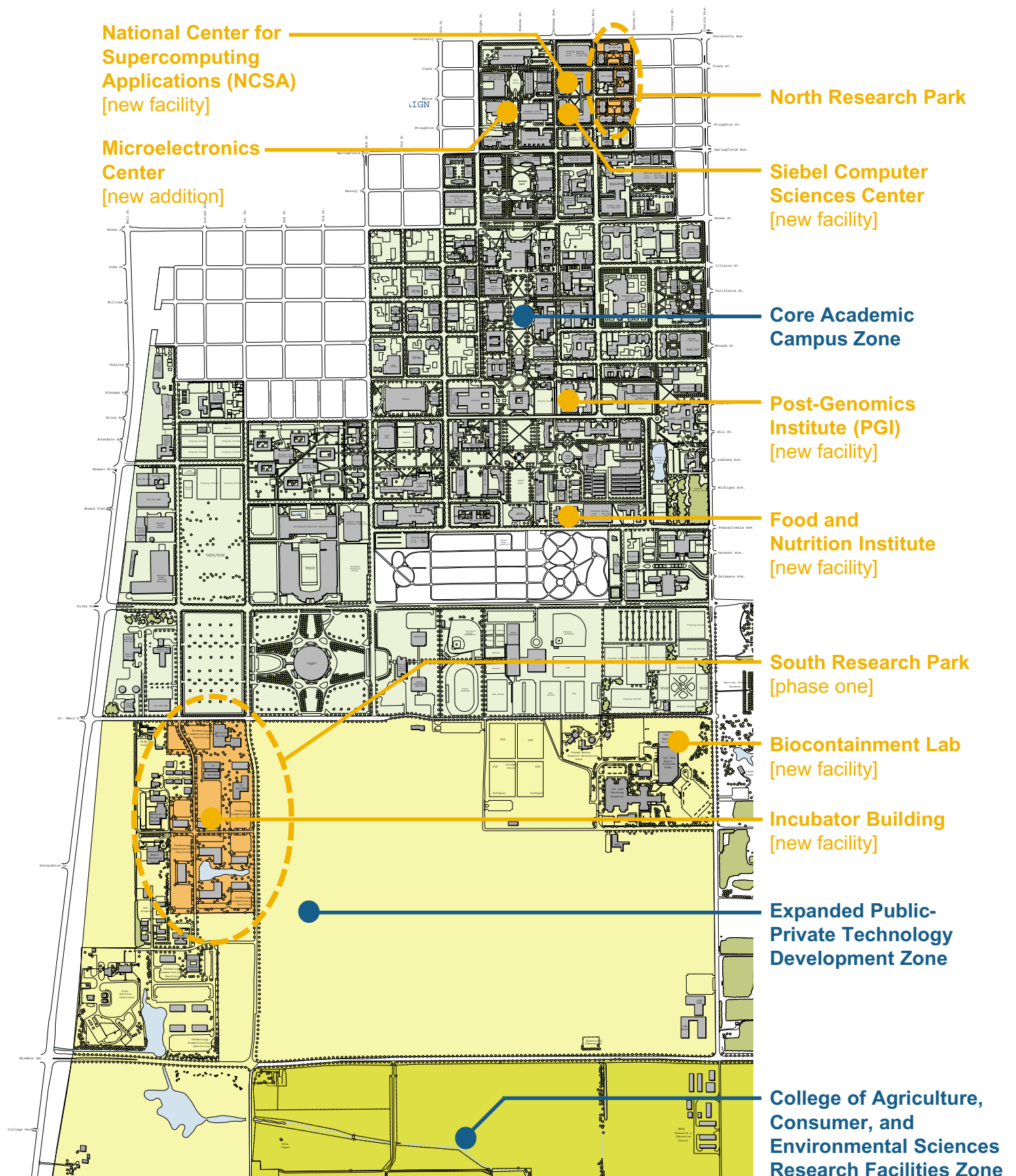
The Board adopted budget proposals meeting these objectives in March and October 2000. Governor George Ryan described new State initiatives in this area as he unveiled Illinois VentureTECH during his FY01 budget address, and reaffirmed his endorsement for continued U of I support through VentureTECH in his recently-released budget plan for FY02. The General Assembly approved the first phase of VentureTECH, including planning funds for four University of Illinois facilities, in May 2000. The General Assembly will address FY02

funding for VentureTECH initiatives during the forthcoming spring 2001 legislative session.

The Trustees subsequently created a board to oversee development of a research park that would have a major presence in the UIUC south campus area, and employed a private developer to begin construction of facilities in the park. The Board also created and filled a new executive position of Vice President for Economic Development and Corporate Relations, brought the management of all technology transfer activity under the new vice president, and established IllinoisVENTURES, a mechanism for securing and investing resources in start-up companies with the potential for making contributions to the Illinois economy.

One component of the Governor's initial VentureTECH program for the University of Illinois at Urbana includes \$30 million for a new facility to house the National Center for Supercomputing Applications, which will be sited in the north campus area. At almost the same time that VentureTECH opportunities at UIUC were being unveiled by the Governor, the University received a substantial private gift – \$32 million – from Thomas M. Siebel to be matched by additional state resource to construct a new computer science education and research center. Fortunately, the new NCSA and Siebel Center facilities can be constructed in close proximity to one another, forming a wonderful new critical mass of computer science education, research, applications, and technology transfer activities on the north campus that can help attract additional new corporate interest to the north research park area.

The Governor's VentureTECH support for the University of Illinois also includes funds to plan and construct an \$18 million addition to the current Microelectronics Center, also located in the north campus area, and \$75 million to plan and construct a Post-Genomics Institute (PGI) that will merge UI strengths in the life sciences, medicine, biotechnology and information technology. The PGI facility will be constructed in the central part of campus to facilitate as much as possible multi-disciplinary interaction among these areas.



▲ *Diagram of Development Initiatives*

ACES Relocation Plan

College of Agriculture, Consumer, and Environmental Sciences (ACES)



Existing Beef Cattle Barn ▲



Existing Swine Facility ▲



Existing Feed Mill ▲

DRIVERS:

- The 1980s construction of Windsor Road (arterial) bisecting the South Farms and ACES related operations.
- Need to replace obsolete facilities north of Windsor Road, such as the 1918 cattle barn and feed mill.
- The decision of ACES to acquire contiguous land south of Curtis Road to meet their program needs.
- The fundamental need to improve and expand the College of ACES research facilities and resources if the College is to remain relevant and competitive in a rapidly evolving, global context.

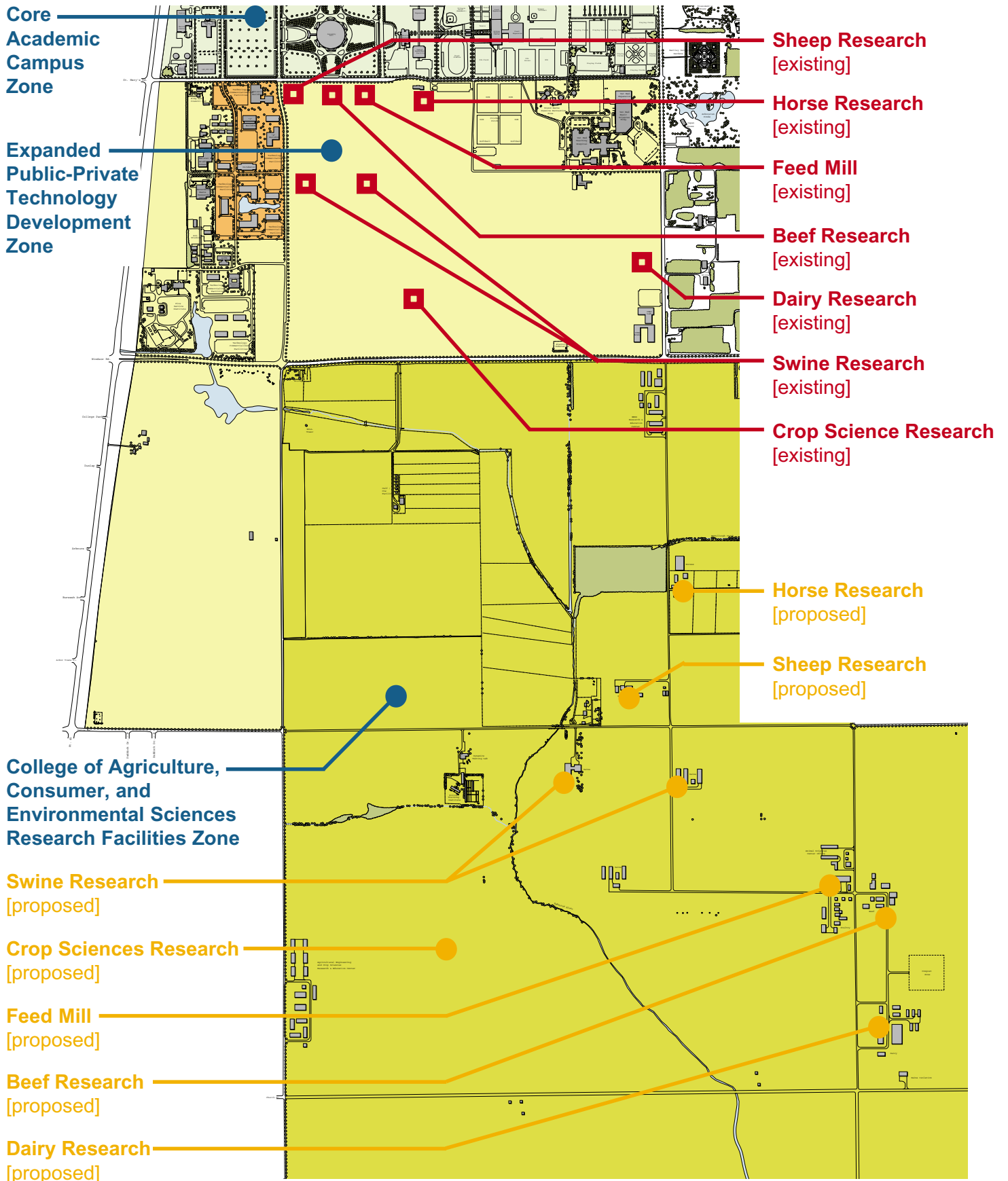


Diagram of ACES Relocations ▲



▲ Expanded Public-Private Technology Development Zone (view looking northwest)



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Research Park Plan for Growth

South Research Park & Academic Development



Motorola Building (2001) ▲



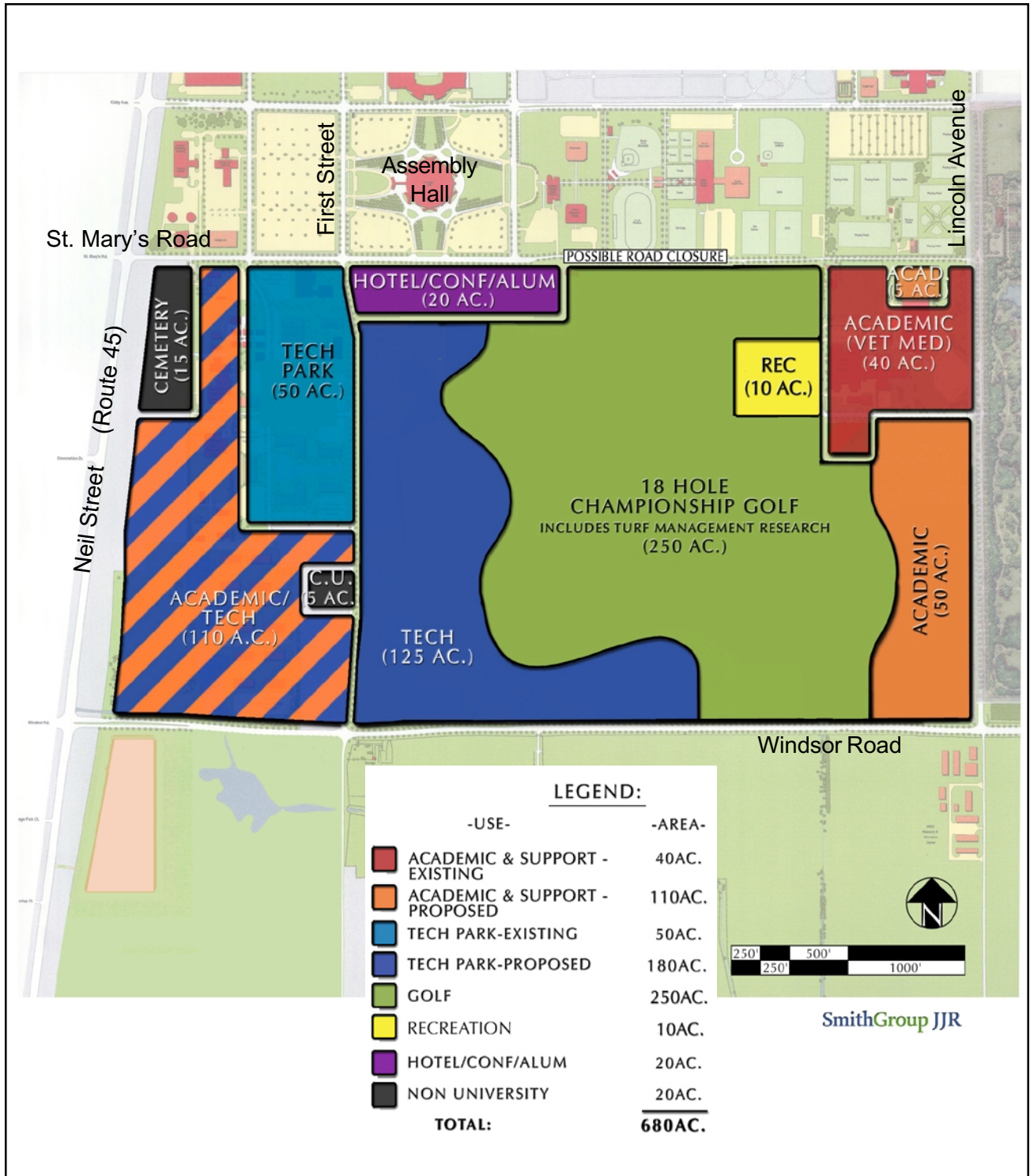
Research Park "Z" Building (2001) ▲



Proposed Incubator Building ▲

DRIVERS:

- Encourage research, development, and commercialization of the University's intellectual assets and foster economic growth.
- Attract high-tech companies that will contribute to the success of faculty recruitment and retention by creating opportunities for faculty to participate in the commercialization of their intellectual property.
- Stimulate the local economy by expanding the pool of employment opportunities for faculty spouses, students, alumni, and other members of the University/community.
- Reinforce and elevate the reputation of the University of Illinois and State of Illinois as leaders in advanced technology research and education.



▲ Proposed Land Use Diagram for Expanded Public-Private Technology Development Zone



Existing ACES lands ▲

Initiatives Serving the College of Agriculture, Consumer, and Environmental Sciences (ACES)

As described above, master planning and economic development discussions have made it clear that the College of ACES needs additional land and facilities to support programmatic growth and improvement. In addition, relocation of existing ACES activities can make substantial land available for development of a south campus research park. In October 2000 the Board of Trustees approved a special budget request initiative that included acquisition of approximately 2,500 acres of land and construction of thirteen new or replacement facilities for the College of ACES. The initiative seeks an investment of slightly more than \$190 million in new state funds in campus-based land or facilities at UIUC, combined with private and non-state university resources at a 2:1 ratio. The plan calls for an investment of \$128 million in new state funds beginning in FY 2002 combined with \$65.5 million of non-state

contributions for land acquisition, utilities improvements, demolition of existing facilities, road construction, *etc.*

In addition, the plan approved by the Board seeks new state funds of \$20 million, to be matched by \$20 million in federal funds and another \$4 million in non-state matching funds to construct a biocontainment research facility that would be located in the south campus area, and \$60 million plus a \$12 non-state matching contribution to plan and construct a food and nutrition institute facility. The research and academic programs supported in the food and nutrition institute will be closely linked with related efforts in the \$75 million Post-Genomics Institute. In total, new state investments of just over \$200 million would be combined with additional non-state resources of more than \$170 million.

Initiatives Related to Research Park Development

In partnership with a private developer the University has nearly completed construction of the first of two phases totaling approximately fifty acres of research park space south and west of the corner of First Street and St. Mary's Road on the south UIUC campus. Facilities already constructed, or for which planning funds have been received, include:

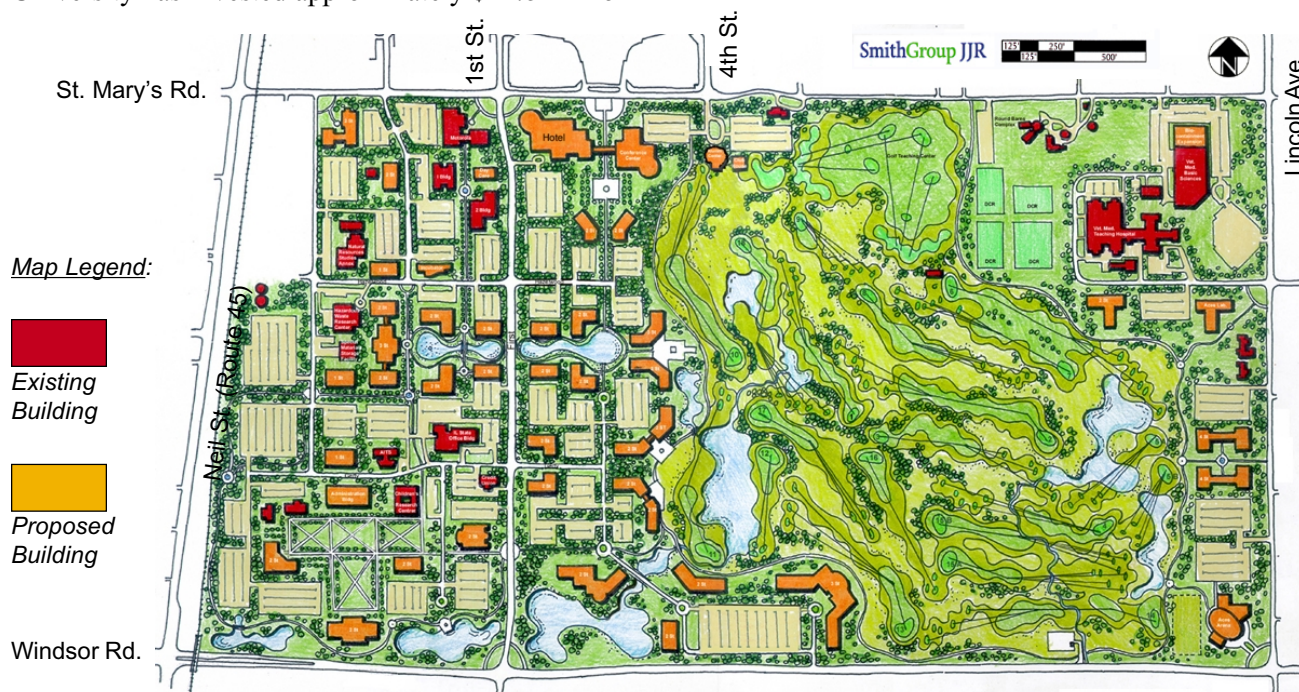
- A 75,500 gross square foot research and development facility for Motorola, Inc.
- A 63,600 gross square foot research and development facility (the "Z" building)
- A 64,600 gross square foot research and development facility (the "I" building)
- A 41,800 gross square foot research incubator facility

The first facility was constructed by Motorola, Inc. for expanded research and development activities. The next two facilities were constructed by the private developer on University land, and are being leased to corporate or other entities for research and development operations. Planning for the research incubator has been funded by the State through the Governor's VentureTECH program. In addition, the University has invested approximately \$11.8 million

in infrastructure implementation (utilities services, program relocation, telecommunication, roads, *etc.*) for the first phase of the research park development.

In addition to this initial phase of research park development, discussions are under way for further development of additional land in ways that could expand the research park or other economic development initiatives or could serve other university needs. For example:

- The research park developer is prepared to construct a hotel/conference center, which represents the private investment of approximately \$15 to \$20 million.
- A private donor has expressed interest in construction of a golf course in proximity to the hotel/conference center, representing another private investment of approximately \$12 million.
- The University Alumni Association has expressed interest in constructing a new office facility in proximity to the hotel/conference center, representing an investment of approximately \$10 million.



▲ Illustrative of Proposed Master Plan for Expanded Public-Private Technology Development Zone

Leveraging State Investments

One of the fundamental principles of the Governor's VentureTECH program is that State funds should be provided primarily to projects and programs that will in turn leverage the availability of private, corporate, federal or other non-state investments. As described more completely below, development of the south campus at UIUC will produce remarkable leveraging opportunities including:

- A nearly 1:1 match of state investments in new agriculture and technology transfer-related facilities, which combined reach nearly \$400 million.
- \$35 million annually in new research grants and contracts, once the agricultural facilities are in operation.
- Creation of 5,000 new jobs in high-technology related areas with the initial phase of the south campus research park.
- Opportunities to secure additional private funds for projects such as a new hotel/conference center proposed by the research park developer, a possible new championship golf course, and a possible new home for the U of I Alumni Association.

Beyond these direct leveraging opportunities, investments in the programs and projects described

on page 13 will provide a number of ancillary benefits. Improved technology transfer opportunities will help the University of Illinois continue to recruit and retain top-quality faculty, staff and students, including those with strong entrepreneurial interests. In turn, those successful recruitments will sustain the State's competitive advantage in agriculture, biotechnology and information technology areas, and will further strengthen the U of I's abilities to secure private, corporate and federal research and development funding. New opportunities for cooperative ventures with Illinois agribusiness sector will emerge, and the U of I's relationship with that sector of the Illinois economy will be strengthened.

Leveraging opportunities are also significant for the VentureTECH investments in the north and central parts of the UIUC campus. Once the Siebel, PGI and Microelectronics facilities are completed and fully operational, federal or corporate research and development grants and contracts are expected to expand by \$25 million per year. Significant private capital investment (\$32M) has also been secured for one new facility, and the prospects for comparable private investments for other technology-related facilities are very strong.



Rendering of Proposed Alumni Association Building ▲

Summary

Agriculture and Research Park Capital Projects Planned for the South Campus at UIUC

(Dollars in Millions)

	<i>Total Cost</i>	<i>State Resources</i>	<i>Matching Resources</i>	<i>Construction Timetable</i>
South Campus Development*	\$193.6	\$128.1	\$65.5	FY02 – FY04
Food and Nutrition Institute [#]	\$72.0	\$60.0	\$12.0	FY02 – FY03
Biocontainment Facility**	\$44.0	\$20.0	\$24.0	FY02 – FY04
Incubator Building	\$8.0	\$8.0	\$0	FY02 – FY03
Motorola Facility	\$9.4	\$0	\$9.4	Complete 12/01/00
R&D Bldg. “Z”	\$6.1	\$0	\$6.1	Complete 2/15/01
R&D Bldg. “I”	\$6.2	\$0	\$6.2	Complete 6/30/01
Park Infrastructure – University	\$11.8	\$0	\$11.8	Through 12/00
Park Infrastructure – Developer	\$1.0	\$0	\$1.0	Through 12/00
Hotel/Conference Center	~\$15.0***	\$0	\$15.0	Under review
Golf Course	~\$12.0***	\$0	\$12.0	Under review
Alumni Assoc. Building	~\$10.0***	\$0	\$10.0	Under review
Totals	\$389.1	\$216.1	\$173.0	

Future Year Build-Out Under Review

* Project includes Land Acquisition (\$17.4), Infrastructure (\$27.6) and construction of 13 new or replacement facilities (\$148.7).

** Preliminary cost estimate, subject to change depending upon program definition.

*** Very preliminary cost estimates. Hotel/Conference Center includes two linked facilities.

[#] Academic and research activities supported by the food and nutrition institute are very closely linked to those contained in the \$75 million Post-Genomics Institute, for which state-provided construction funds have been included in the Governor’s FY02 budget recommendations.



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