The ion

The Research Park Option

The University of Georgia

The Research Park Option

- The Association of University Research Parks reports that research parks in the US and Canada comprise roughly 40,000 acres of land with developed space approaching 95 mm square feet, employing 230,000 people.
- The majority of these parks were created within the last 15 years, and therefore any assessment of the group's performance from a real estate perspective may be premature.
- Recent spate of research park projects and state initiatives are a response to trends that have emerged within higher education nationally and state economic development nationally. These include the following:

The Research Park Option

- **Key Drivers**
  - State budget crunch
  - Perceived value of university intellectual property
  - State responses to globalization
  - Successful parks in key states
  - Market demand – filling out the food chain

The Research Park Option

- **Designed to promote R&D activities**
  - Pure private
  - Pure public
  - Public-private

They promote knowledge industries, create collaboration with universities and provide a unique operating location for leading-edge companies. UARPs serve as locations where industry clusters can emerge leveraging university research, community development assets and private sector partners.

The Research Park Option

- **Requirements**
  - Leadership
  - Research Base
  - Building Blocks
  - Involvement of Private Sector (capital and tenant recruitment)
- **Efforts w/o these will be challenged**
  - Good ideas in bad locations
  - Lack of leadership
  - No real assets upon which to build program

The Research Park Option

OVERVIEW OF SELECTED
RESEARCH/TECHNOLOGY PARKS
JANUARY 30, 2006
* Denotes information updated

Office of the University Architects for Facilities Planning
University of Georgia, 382 East Broad Street, Athens, Georgia 30602
706/542-3605 Fax 706/542-7395

NAME/LOCATION	AFFILIATION/SPONSOR	CONTACT INFORMATION	MISSION/FOCUS	FOUNDED	SIZE	NUMBER OF COMPANIES	NUMBER OF EMPLOYEES	PARCEL SIZE	TOTAL GSF/ BUILDING SIZE	SPACE SIZE
1. Stanford Research Park* Menlo Park, CA	Stanford University	Jean Snider, *Director* Stanford Management Co 2770 Sand Hill Road, Menlo Park, CA 94025 650/926-4224 Fax 650/854-9628 snider@stanford.edu	Scientific, Technological & Research-oriented industries, including: electronic, optic, biotechnology, computer hardware & software	1954	700 acres	150	22,000	Minimum of 1 acre	10 million sf of developed buildings total	
2. University City Science Center* Philadelphia, PA	26 Educational & Medical Institutions from Pennsylvania and Delaware	Annette L. Winston, *Exec. Assistant to President & CEO* 3711 Market Street, 3rd Floor, Philadelphia, PA 19104 215/966-6252 Fax 215/382-0466 awinston@sciencecenter.org	Powering Commercialization TM	1955	17 acres	160	5,200		Total of 2 million sf	
3. University Research Park* Charlotte, NC	University of North Carolina Charlotte	M. Seddon Goode Jr., *President* University Research Park 1901 Tom Wadsworth Drive, Charlotte, NC 28262 704/972-5220 Fax 704/548-9939	Research & High Technology	1970	3,500 acres	31		Lots of variety: 37 acre to 1 acre		
4. Rensselaer Technology Park* Troy, NY	Rensselaer Polytechnic Institute	Michael Wiederhofer, *Director* Rensselaer Technology Park 100 Jordan Road, Troy, NY 12180 518/283-7102 Fax 518/283-8465 www.rpitechpark.com	To develop interactions between tenant companies and the university, in order to enrich the educational environment of both activities and help companies stay on the leading edge of their technologies	1981	250 acres (or 1,250 total contiguous acres)	50	2,000		Total of 825,000 sf in 12 multi-tenant & 8 single purpose tenant owned buildings	Total of 370,143 sf in multi-tenant buildings
5. Washington State University Research & Technology Park* Pullman, WA	Washington State University	Mary Edwards, *Property Manager* Washington State University Research Foundation NE 1610 Eastgate Blvd., Pullman, WA 99163 509/335-1216 Fax 509/335-2237 www.wsurp.wsu.edu	To foster economic growth, job creation, and the creation of an increased tax base for the local region in a manner that does not involve inappropriate competition with the private sector	1982	12 acres	12	150		Total of 71,213 sf in 7 buildings	Average office 481 sf
6. Arizona State University Research Park* Tempe, AZ	Arizona State University	Michele Pine, *Executive Director* Arizona State University Research Park 6721 South Science Drive, Tempe, AZ 85284 602-752-3400 Fax 602-965-2573 www.researchpark.asu.edu	To enhance Arizona's high value research based economic development and to build Arizona State University's capacity to educate and advance knowledge	1984	320 acres	12	1,400			
7. Massachusetts Biotechnology Research Park Worcester, MA	University of Massachusetts Medical Center	Tim Andrews, *Executive Director* Massachusetts Biotechnology Research Park One Innovation Drive, Worcester, MA 01605 508/755-3220 Fax 508/754-0487 www.biotechcenter.com	Life Sciences	1985	105 acres	20			Maximum size = 1,313,000 sf Total to date 360,000 sf	Maximum of 1,000 sf Maximum of 120,000 sf
8. Virginia Tech Corporate Research Center* Blacksburg, VA	Virginia Tech	Joe W. Meredith, *President* Virginia Tech Corporate Research Center 1872 Pratt Dr., Suite 1041, Blacksburg, VA 24060 540/961-3400 Fax 540/961-3214 www.vtcrc.com	To develop a growing, prestigious research park for technology companies. Concurrently, the CRC will, in collaboration with the university, advance the research, educational, and technology transfer missions of Virginia Tech	1985	120 acres currently. Long Term Size = 300 acres	130	1850			
9. Centennial Campus North Carolina State University* Raleigh, NC	North Carolina State University	Odessa Montgomery, *Communications Officer* Centennial Campus Partnership Office North Carolina State University Box 7105 Raleigh, NC 27695-7105 919/515-7456 Fax 919/515-1751 Odessa_Montgomery@ncsu.edu	Building a community of partners today to create the innovations of tomorrow. Centennial Campus celebrates its 20th Anniversary. Learn more at www.centennial.ncsu.edu	1987	1,000 acres	53				
10. University of Maryland Science & Technology Center Bowie, MD	University of Maryland	Grant Communities 2905 Crossvine Court Dr., Crownsville, MD 21032 301/963-3400	Research & Development	1988	486 acres			2 acre minimum, 15 acre maximum		30,000 – 125,000 sf Multi-tenant buildings
11. Virginia Biotechnology Research Park Richmond, VA	Virginia Commonwealth University	Virginia Biotechnology Research Park P.O. Box 980313, Richmond, VA 23298-0327 804/822-4675 Fax 804/828-4566 richardson@gems.vcu.edu www.vabiotech.com	To develop Virginia's biotechnology and biomedical industries, to foster technology transfer from life-sciences research at Virginia universities, to build a medium of new economic activity in Richmond and Virginia, and to enhance the development of Virginia Commonwealth University as a leading graduate research institution	1995	35 acres	34	450 1,000 when fully developed		1,911,120 sf Research complex planned	37,000 sf Incubator (max.) Standard lab/office is 500 sf
12. Fermata Research Park* Charlottesville, VA	University of Virginia	University of Virginia Foundation P.O. Box 400328, 465 Ivy Road Charlottesville, VA 22904-4328 434/982-4868 Fax 434/982-4852 http://www.uvafoundation.com/researchparks/fermata.html	It is the University of Virginia Foundation's vision that Fermata will be the home to organizations that have a relationship or synergy with the University. *Fully built-out w/ completion of last building.	1996	54 acres	9	1,250	n/a	Total of 400,000 sf when fully developed	n/a
13. University of Virginia Research Park* Charlottesville, VA	University of Virginia	University of Virginia Foundation P.O. Box 400328, 465 Ivy Road Charlottesville, VA 22904-4328 434/982-4868 Fax 434/982-4852 http://www.uvafoundation.com/researchparks/fermata.html	People-Oriented corporate village to meet the needs of today's businesses in a setting of unmatched natural beauty.	1996	332 acres	13	1,500	5 acres	Total of 3,663,120 sf	Minimum of 50 sf Maximum of 100 k
14. UMBC Research Park & Technology Center Baltimore, MD	University of Maryland, Baltimore County	Ellen Wiggins, *Executive Director* UMBC Research Park Corporation 1450 South Rolling Road, Baltimore, MD 21227 410/455-3223 Fax 410/455-1095 www.umbcrp.edu	Biotechnology, Medical Engineering	1997 (infrastructure construction)	Research Park = 41 acres, Tech Park = 74 acres	Tech Park contains 20 companies	750 projected		Research Park will contain 5 buildings totalling 340,000 sf Tech Park contains 170,000 sf total	Maximum of 500 sf, Maximum of 25,000 sf

The Research Park Option

Select Research Park Overview Information

	Current acreage	Planned Total Acreage	Number of buildings in Park	Current developed square footage (1,000 sf)	Is the Park Master-Planned?	Restrictive Covenants
Arizona State University Research Park	324	na	23	1,700	Yes	Yes
Georgia Tech - Enterprise Park	11	50 +	1	180	Yes	Yes
Penn State - Innovation Park	118	118	8	750	Yes	Yes
Saskatchewan - Innovation Place	80	na	18	1,000	Yes	Yes
University of Arizona Science and Technology Park	1,345	1,000	15	2,000	Yes	Yes
University of Nebraska Technology Park	137	137	4	145	Yes	Yes
University of Wisconsin, Madison - University Research Park	255	544	34	1,500	Yes	Yes
Virginia Tech Corporate Research Center	120	210	19	685	Yes	Yes
Wake Forest University (IdeaAlliance)	45	211	5	519	Yes	Yes
Washington State - Tri-Cities Science & Technology Park	4,000	4,000	300	3,400	No	No

The Research Park Option

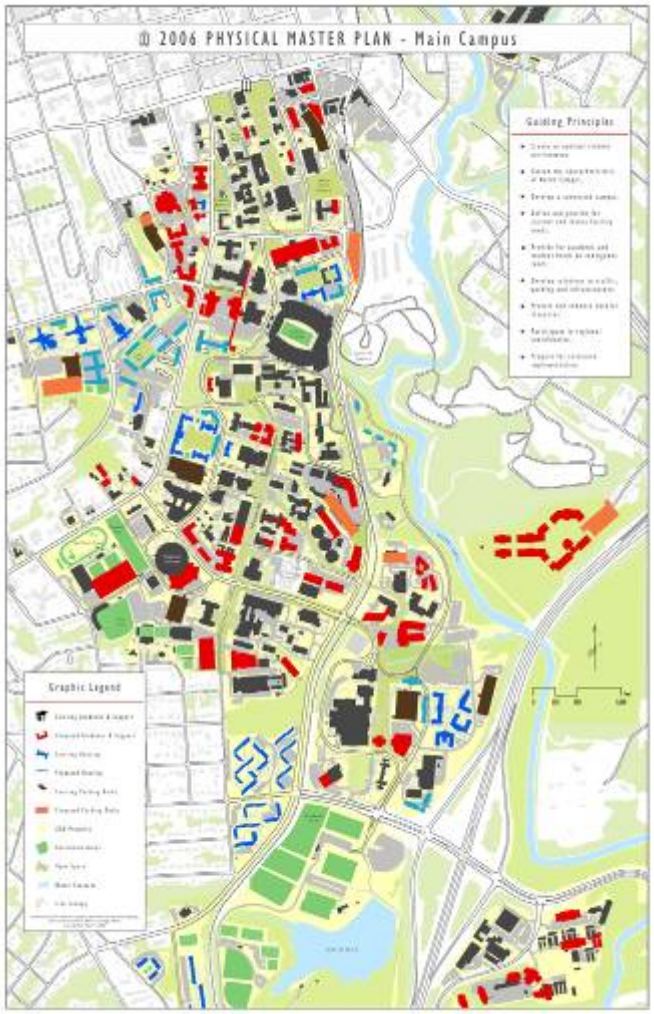
	Business Services	Information Technology	Life Sciences (Bio, Pharma Ag)	Health Sciences	Research and Development	Engineering
Arizona State University Research Park	52%	3%	1%	12%	32%	0%
Georgia Tech - Enterprise Park	0%	0%	50%	0%	0%	50%
Penn State - Innovation Park	12%	19%	12%	0%	41%	17%
Saskatchewan - Innovation Place	8%	33%	25%	8%	17%	8%
University of Arizona Science and Technology Park	2%	56%	0%	0%	2%	41%
University of Nebraska Technology Park	79%	15%	4%	0%	0%	3%
University of Wisconsin, Madison - University Research Park	19%	19%	38%	9%	8%	8%
Virginia Tech Corporate Research Center	na	na	na	na	na	na
Wake Forest University (IdeaAlliance)	16%	30%	45%	9%	0%	0%
Washington State - Tri-Cities Science & Technology Park	na	na	na	na	na	na

The Research Park Option

Tenant Mix – Select Research Parks

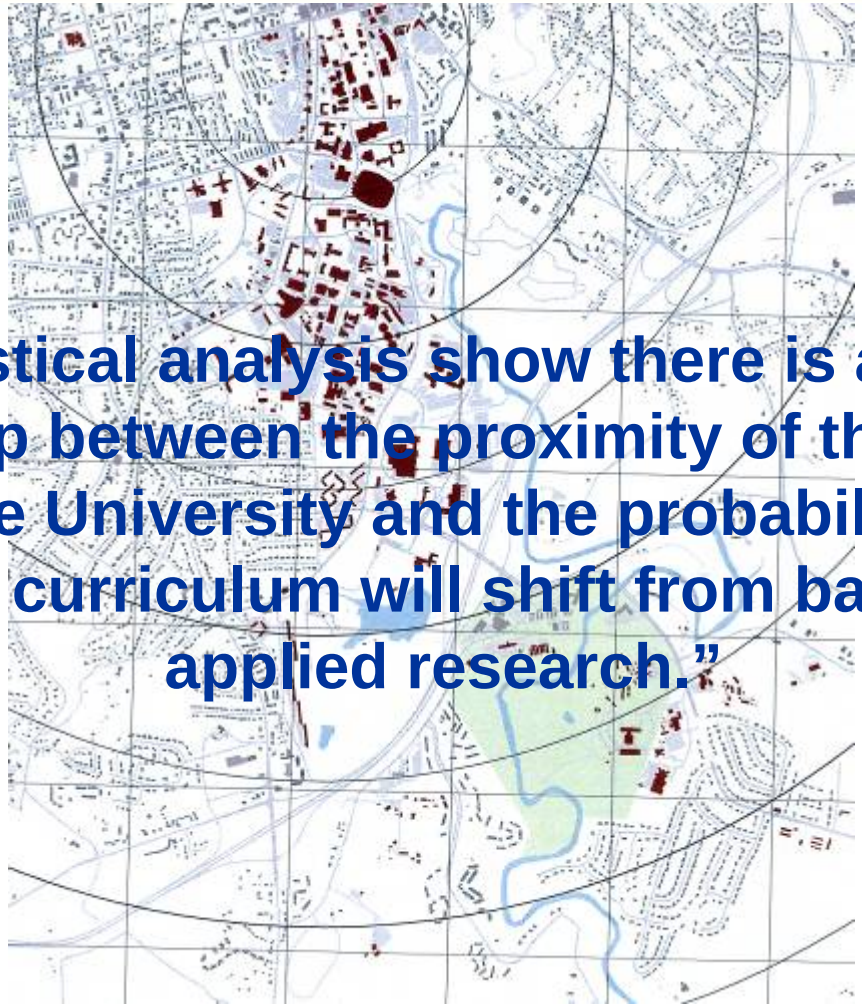
	Business Services	Information Technology	Life Sciences (Bio, Pharma Ag)	Health Sciences	Research and Development	Engineering
Arizona State University Research Park	52%	3%	1%	12%	32%	0%
Georgia Tech - Enterprise Park	0%	0%	50%	0%	0%	50%
Penn State - Innovation Park	12%	19%	12%	0%	41%	17%
Saskatchewan - Innovation Place	8%	33%	25%	8%	17%	8%
University of Arizona Science and Technology Park	2%	56%	0%	0%	2%	41%
University of Nebraska Technology Park	79%	15%	4%	0%	0%	3%
University of Wisconsin, Madison - University Research Park	19%	19%	38%	9%	8%	8%
Virginia Tech Corporate Research Center	na	na	na	na	na	na
Wake Forest University (IdeaAlliance)	16%	30%	45%	9%	0%	0%
Washington State - Tri-Cities Science & Technology Park	na	na	na	na	na	na

Research Park Planning at The University of Georgia



The University of Georgia

The Research Park Option



"Statistical analysis show there is a direct relationship between the proximity of the Research Park to the University and the probability that the academic curriculum will shift from basic toward applied research."

Albert N. Link, UNC
John T. Scott. Dartmouth

Proximity to Main Campus

The Research Park Option

Riverbend Research Village

The Research Park Option

Landscape Character

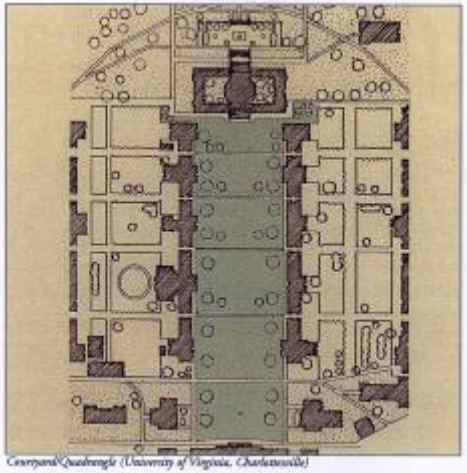
The Research Park Option

Landscape Character

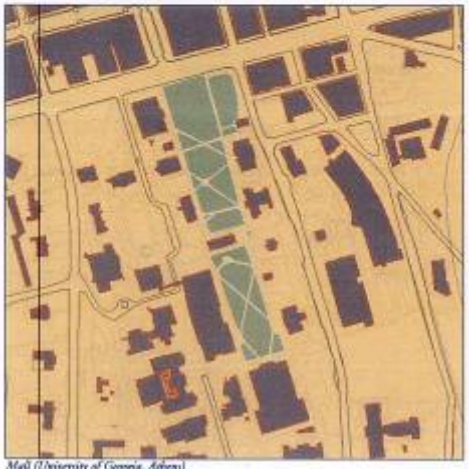
The Research Park Option

Berlin, Germany

University of Virginia



Washington, D.C.



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Versailles, France

The Acropolis, Athens, Greece

Design Studies

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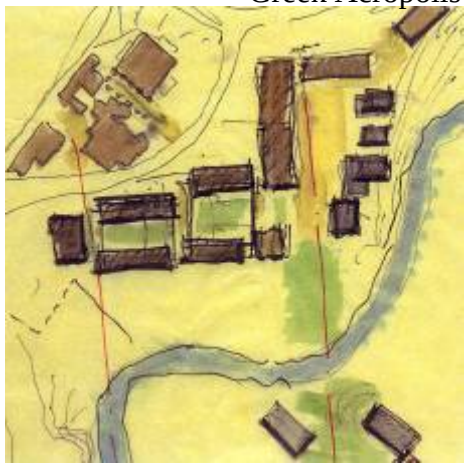
Romantic Landscape

Greek Acropolis



Medieval Hill town

American Campus

Conceptual Diagrams

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Desired Research Park Campus Aesthetic

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Riverbend Research Village Master Plan

The Research Park Option

TOWN CONCEPT

Existing to Remain	Proposed Building	Parking
West Town 303,000 sq.ft.	1,078,000 sq.ft.	5,184
East Town 281,000 sq.ft.	1,687,000 sq.ft.	5,946
Total 584,000 sq.ft.	2,765,000 sq.ft.	11,130

VILLAGE CONCEPT

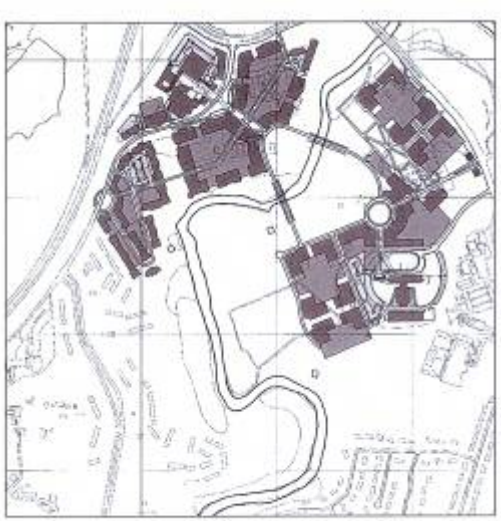
Existing to Remain	Proposed Building	Parking
West Village 261,000 sq.ft.	1,061,000 sq.ft.	3,477
East Village 206,000 sq.ft.	936,000 sq.ft.	2,920
South Village 0 sq.ft.	1,687,000 sq.ft.	360
Total 467,000 sq.ft.	2,097,000 sq.ft.	6,757

CAMPUS CONCEPT

Existing to Remain	Proposed Building	Parking
West Campus 273,000 sq.ft.	895,000 sq.ft.	3,007
East Campus 281,000 sq.ft.	578,000 sq.ft.	2,571
Total 554,000 sq.ft.	1,473,000 sq.ft.	5,578

Conceptual Plans

The Research Park Option



TOWN CONCEPT

Building Square Footage	Required Parking	Provided Parking Surface	Provided Parking Deck
West Town 1,168,000 sq.ft.	5,108 cars	262	3,840
East Town 859,000 sq.ft.	2,446 cars	276	5,670
Total 2,027,000 sq.ft.	5,792 cars	538	9,510

VILLAGE CONCEPT

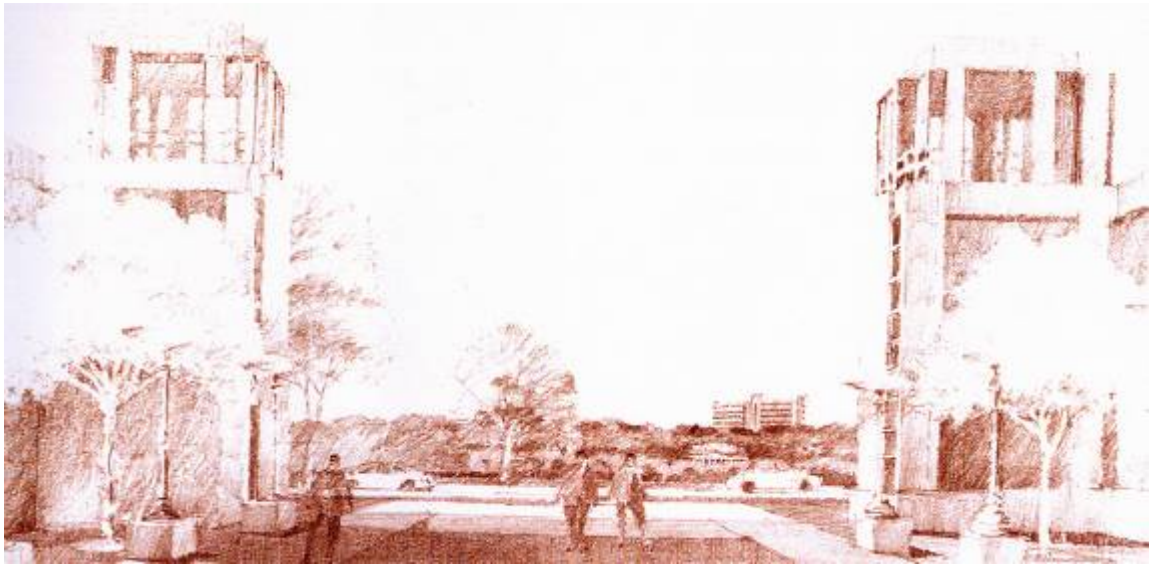
Building Square Footage	Required Parking	Provided Parking Surface	Provided Parking Deck
West Village 1,322,000 sq.ft.	5,268 cars	337	3,140
East Village 1,142,000 sq.ft.	3,543 cars	75	2,845
South Village 100,000 sq.ft.	350 cars	0	360
Total 2,564,000 sq.ft.	9,161 cars	412	6,345

CAMPUS CONCEPT

Building Square Footage	Required Parking	Provided Parking Surface	Provided Parking Deck
West Campus 1,168,000 sq.ft.	3,346 cars	375	2,632
East Campus 859,000 sq.ft.	2,446 cars	1,088	1,483
Total 2,027,000 sq.ft.	5,792 cars	1,463	4,115

Conceptual Plans - Parking

The Research Park Option



Reclaim Open Spaces

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Center for Applied Genetics Technology

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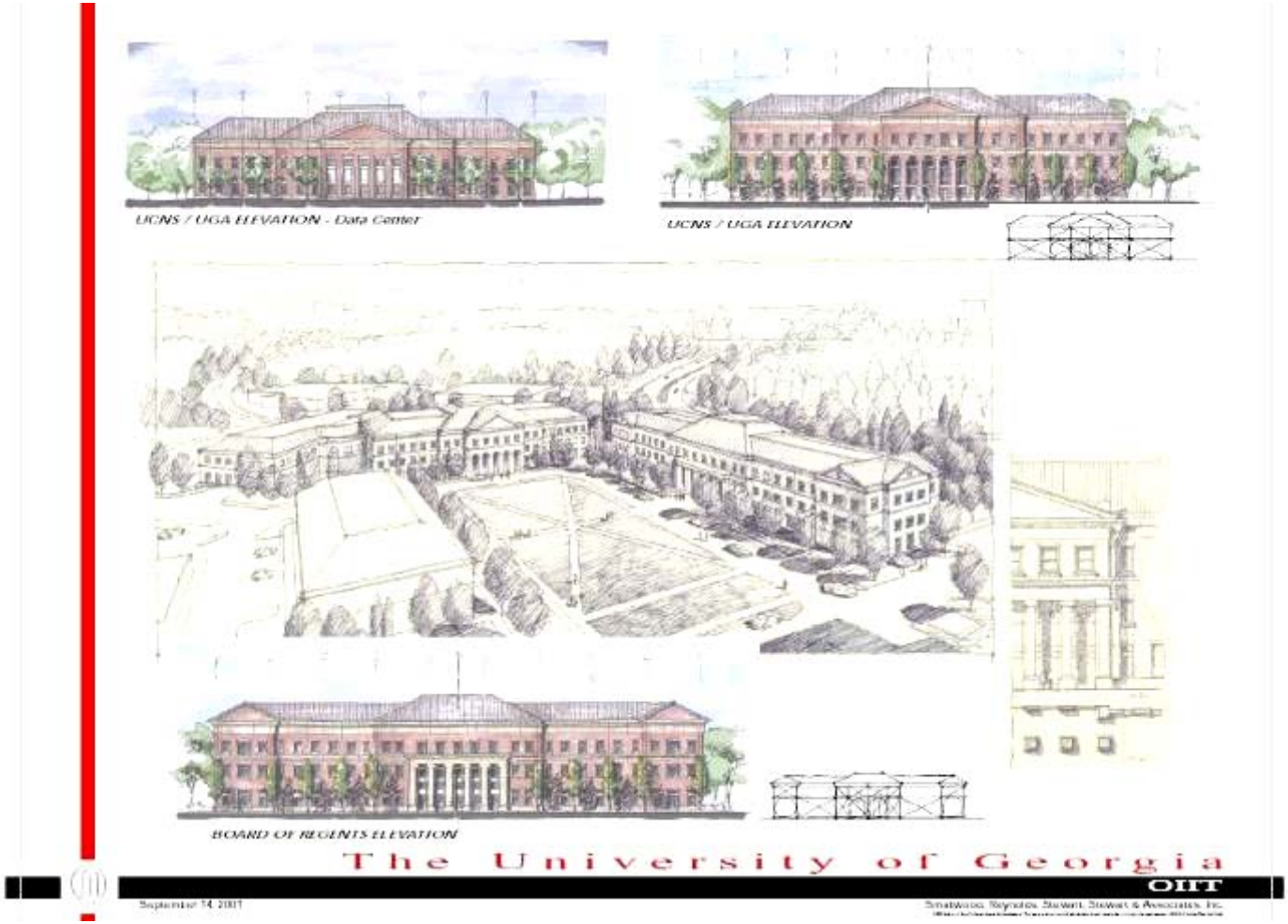

Building Aesthetic

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Complex Carbohydrate Research Center

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Hardin Property Acquisition

The Research Park Option

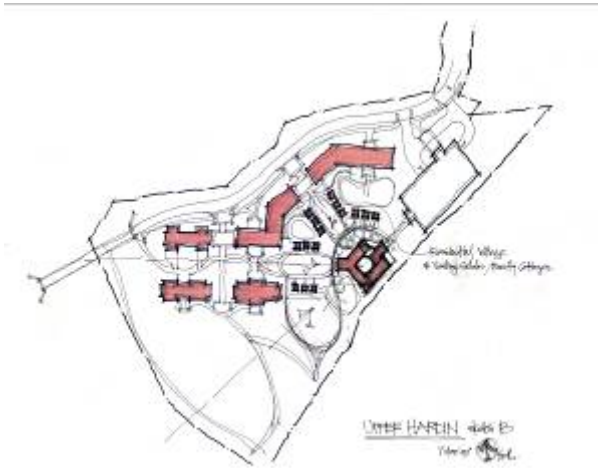






Infrastructure Network

The Research Park Option



Preliminary Planning Concepts

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Building Aesthetic

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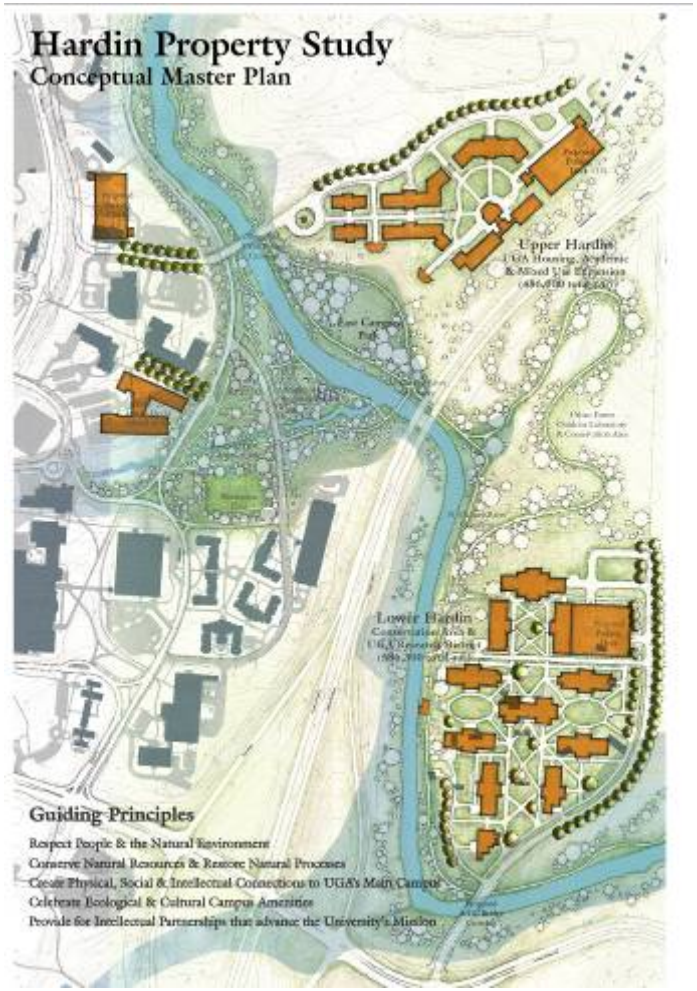

Hardin Property Master Plan

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- How is Research Park Planning affecting your Campus?
- How are you dealing with it as a Planner?
- Is the Campus Planning department involved?
- What impacts do Research Parks have on the academic missions of their Universities?
- Do Research Park initiatives take funds away from Capitol Outlay Projects?
- What funding mechanisms exist to cover the cost?
- What does the future hold for Research Park Campuses?

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