FEARLESS IDEAS - A GREAT UNIVERSITY TOWN

OVERVIEW OF INNOVATION DISTRICT, RESEARCH PARK & STRATEGY TO LEVERAGE UMD ACADEMIC/RESEARCH STRENGTHS AS A CATALYST FOR JOB CREATION

4.16.15 // Ken Ulman, Chief Strategy Officer



COLLEGES & SCHOOLS / 91 UNDERGRADUATE MAJORS

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES WWW.AGNR.UMD.EDU

SCHOOL OF ARCHITECTURE, PLANNING AND PRESERVATION WWW.ARCH.UMD.EDU

COLLEGE OF ARTS AND HUMANITIES WWW.ARHU.UMD.EDU

> COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES WWW.BSOS.UMD.EDU

ROBERT H. SMITH SCHOOL OF BUSINESS WWW.RHSMITH.UMD.EDU

> COLLEGE OF COMPUTER, MATHEMATICAL, AND NATURAL SCIENCES WWW.CMNS.UMD.EDU

> > COLLEGE OF EDUCATION WWW.EDUCATION.UMD.EDU

A. JAMES CLARK SCHOOL OF ENGINEERING WWW.ENG.UMD.EDU

THE GRADUATE SCHOOL WWW.GRADSCHOOL.UMD.EDU

COLLEGE OF INFORMATION STUDIES WWW.ISCHOOL.UMD.EDU

PHILIP MERRILL COLLEGE OF JOURNALISM WWW.MERRILL.UMD.EDU

WWW.MERRILL.UMD.EDU

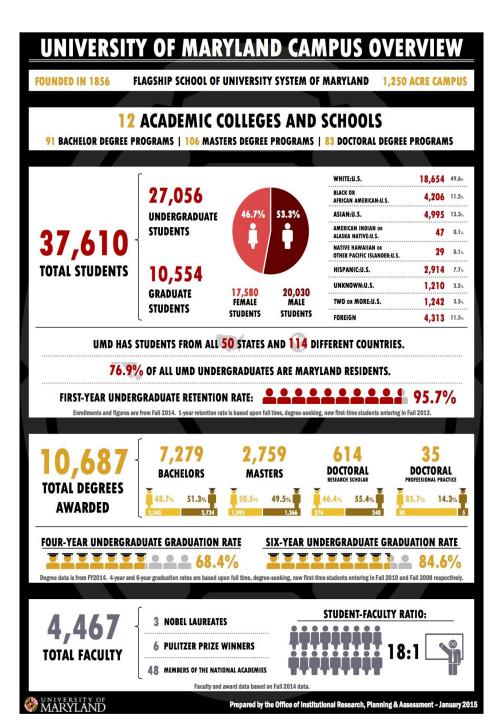
SCHOOL OF PUBLIC HEALTH WWW.SPH.UMD.EDU

SCHOOL OF PUBLIC POLICY WWW.PUBLICPOLICY.UMD.EDU

UNDERGRADUATE STUDIES WWW.UGST.UMD.EDU

UNIVERSITY LIBRARIES WWW.LIB.UMD.EDU





U.S. News & World Report (2014)

 #20 among national public universities

U.S News & World Report - Best Global Universities (2014)

 #51 among 500 institutions in 50 countries

Kiplinger's Personal Finance (2014)

 #1 among 30 best college values in the mid-Atlantic

Academic Ranking of World Universities (2014)

#43 in the world

Princeton Review Top 50 Schools for Entrepreneurship Programs (2015)

 #21 among undergraduate programs

BEST PUBLIC UNIVERSITIES IN THE U.S. - 2015



Evaluated based on the following

- Selectivity
- Prestige
- Advancement
- Cost
- Diversity
- Community

Data from the Nat'l Center for Education Statistics & the U.S. Census Bureau's American Community Survey

- 1. University of Michigan
- 2. UNC
- 3. UVA
- 4. College of William & Mary
- 5. UC Berkeley
- 6. UCLA
- 7. University of Florida

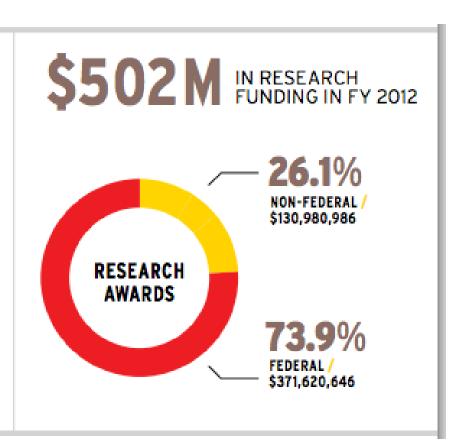
8. University of Maryland

- 9. University of Washington
- 10. University of Wisconsin

FUELING THE INNOVATION ECONOMY

FUELING THE ECONOMY

The university puts more than \$3.4 billion into the state economy every year and supports more than 23,000 jobs, according to a 2009 Sage Policy Group report. That means for every dollar the state invests in us, we pump out a healthy \$8.





Together, the University of Maryland, College Park and the University of Maryland, Baltimore are *MPowering the State*. Collaboration and joint initiatives between the two universities will have a profound effect on our productivity, on the economy, and on the very fabric of higher education.

MPOWERING THE STATE IS > UM VENTURES / CENTER FOR HEALTH-RELATED INFORMATICS AND BIOIMAGING / COLLABORATIVE SCHOOL OF PUBLIC HEALTH / BIOENGINEERING AND HEALTH SCIENCES / EDUCATIONAL PROGRAMS AT SHADY GROVE / SEED GRANT PROGRAMS / CENTER OF EXCELLENCE IN REGULATORY SCIENCE AND INNOVATION / PRINCE GEORGE'S COUNTY ACCOUNTABLE CARE SYSTEM

CULTURE OF INNOVATION

School of Engineering

- Mtech, Hinman CEOs, Maryland Industrial Partnerships (MIPS)
- #23 Best Grad School U.S. News & World Report
 - #11 in Aerospace
 - #15 in Electrical Communications
 - #19 in Computer Engineering

Computer, Mathematical and Natural Sciences (CMNS)

- Brendan Iribe Center for Computer Science and Innovation
- #29 Best Global University Subject

School of Business

- Dingman Center

Academy for Innovation & Entrepreneurship

- Launched by President Wallace Loh in 2013; engages 35,000+ of our students in innovation & entrepreneurship to prepare them to tackle the world's toughest problems
- Reimagined Cole Field House

Hinman CEOs Program

- Innovative residential entrepreneurship program for 90 junior and senior students to *live, learn,* and *launch* new ventures
- 12-credit academic track + coaching and mentoring + incubator space
- Highly competitive application process yields the top students on campus with 1/3 business, 1/3 engineering, and 1/3 arts & sciences



2014 Graduate

- Legislation tracking and prediction software
- Co-founder and CTO Jonathan Chen is a senior CS major
- Raised \$1.2M in venture funding from Mark Cuban, NEA, and First Round Capital in Fall 2013



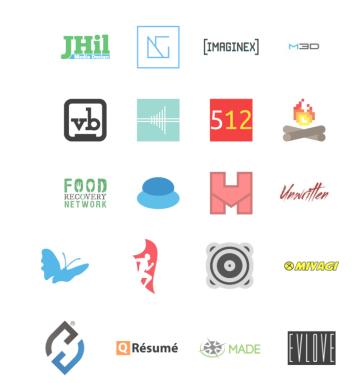
SQUARESPACE 2005 Graduate

- Online publishing platform for web and mobile experiences
- Founder & CEO is Anthony Casalena '05
- Raised \$30.5M in 2010
- Inc. 500 Fastest-Growing Companies
- 262 employees today
- Super Bowl ad in 2014



STARTUP SHELL

- 100% student-run incubator and collective that cultivates entrepreneurship through collaboration
- 25 student companies
- Sponsor several on-campus programs: Bitcamp, RECESS, TEDxUMD







"The goal of Cupid's Cup is to identify and reward students who have the entrepreneurial drive and conviction to take a risk and start a business while they are young. We took the competition to the national stage in 2012, and now we are seeking out the best student entrepreneurs in the world." – Kevin Plank

BITCAMP



- Formed in 2014

 after UMD won first
 place in the Fall
 2013 Major League
 Hacking season
- Centers on the idea of YOU+TECH
- Brings 1000+ students from universities across the country for 36 hours
- Inspired Brendan Iribe and Michael Antanov to gift \$30M towards new CMNS facility

THE BUZZ IS REAL – MARYLAND IS ON THE MAP

EDUCATION LIFE

The Hackathon Fast Track, From Campus to Silicon Valley

April 6, 2015

"University of Maryland....is building a lab for engineering students to experiment with virtual reality hardware and software. The initiative is a result of a \$31 million donation by Brendan Iribe, chief executive of Oculus VR, the virtual reality start-up acquired by Facebook last year for \$2 billion."

"Mr. Hashme, who directs the University of Maryland's Bitcamp, has participated in more than 40 hackathons since 2013. He says he attends because they force him to learn new tech skills. At hackathons he enjoys meeting like-minded students from across the country" —'It's a room full of doers'



The Washington Post

March 24, 2015 On Small Business

Uber parks \$25,000 investment in University of Maryland's Startup Shell

"The Uber partnership is the latest in a series of moves by university officials to position the school as an innovative and entrepreneurial university."

"Zuhairah Washington, head of Uber's D.C. division, said the company selected the university largely due to its "mantra of pursuing fearless ideas," which she believes complements the underlying mission at Uber."

MTECH INCUBATORS

- TAP First stage incubator 24,000 ft² of company space 14 current residents (>100 graduates) \$300M VC funding, 2 IPOs over \$1B, 2 acquisitions over \$1B Prototyping labs
- TVB Second stage incubator 32,000 ft² of company space 14 current residents
- MI² International incubator 9,200 ft² of company space 9 current residents (36 graduates)
- Startup Shell Student incubator 100% student-run incubator and collective
 - >25 student companies



PLACEMAKING ON CAMPUS -

Projects coming on-line to support the innovation that exists in the classroom

 Reimagined Cole Field House - \$155M / Phase I Completion 2017 / Phase II 2018

> To include: Terrapin Performance Center, the Center for Sports Medicine, Health and Human Performance and the future home of the Academy of Innovation and Entrepreneurship.

- St. John Learning & Teaching Center \$112M / 2016
- Iribe Center for Computer Science & Innovation \$138M / 2018
- A. James Clark Hall \$90M / 2017
- The Hotel at UMD \$146M / Winter/Early Spring 2017

COLE FIELD HOUSE



\$25M ANCHOR GIFT

"The lessons I learned on the football field in College Park continue to fuel my entrepreneurial spirit and shape my professional approach." "By fostering a generation of entrepreneurial-minded young adults, we are preparing our students not just for the next four years, but for many years to come."

- Kevin Plank, Founder & CEO, Under Armour ('96)

COLE FIELD HOUSE -OVERVIEW

https://youtu.be/3ZT488jaTQ8

IRIBE CENTER FOR COMPUTER SCIENCE & INNOVATION

LEAD DONORS



BRENDAN IRIBE

"There's something really special and personally and emotionally important about going to college. A university is not just about education...it's about the social experience of meeting people."

"I want The Iribe Center to feel like Silicon Valley just hit College Park."

MICHAEL ANTONOV

"Work on projects and do the best you can. As you learn, you'll have to start with smaller projects, but then you'll build a bigger one—alone or with other people—and **you'll feel the power to create**."



IRIBE CENTER – FORMER STUDENTS INVESTING IN INNOVATION

\$31M donated by Brendan Iribe

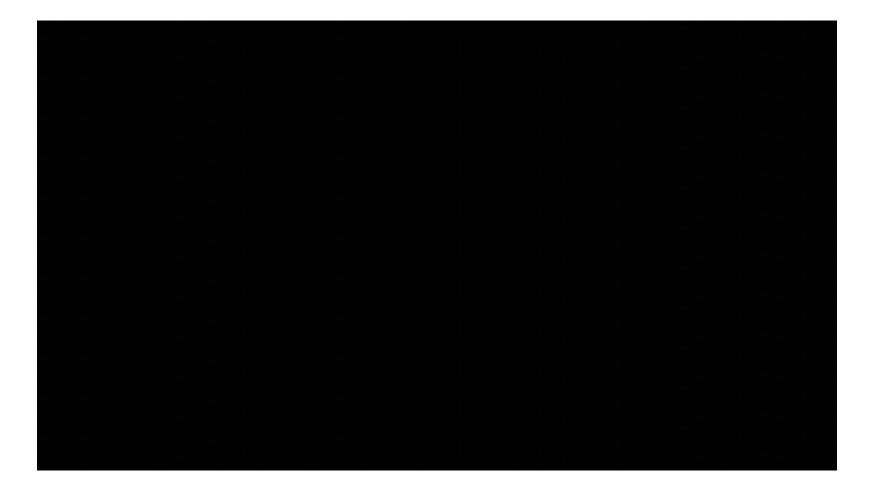
\$4M donated by Michael Antanov

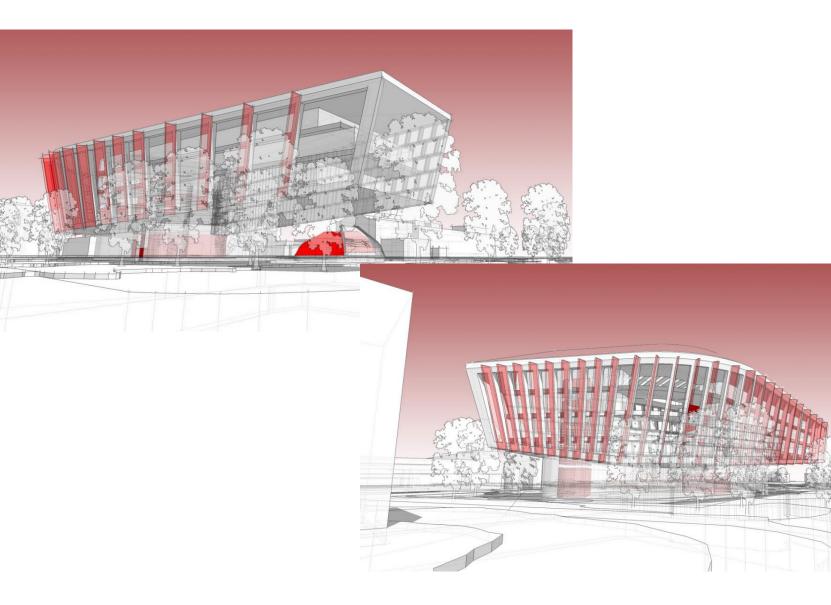
\$3M donated by Lizzie Iribe

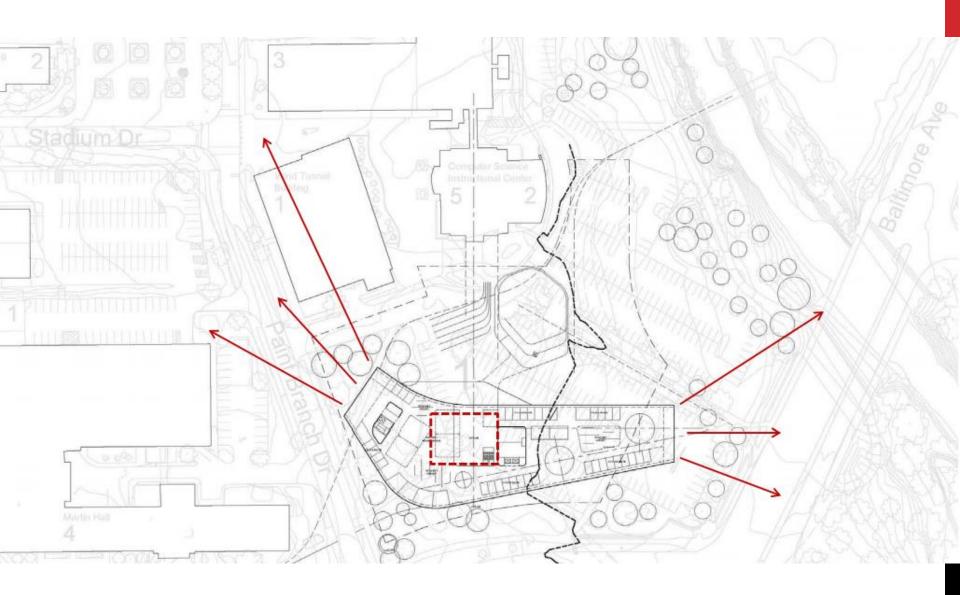
\$500k pledged by Professor Emeritus Bill Pugh

\$1M contributed by faculty to date

IRIBE CENTER FOR COMPUTER SCIENCE & INNOVATION







EDWARD ST. JOHN LEARNING & **TEACHING CENTER**



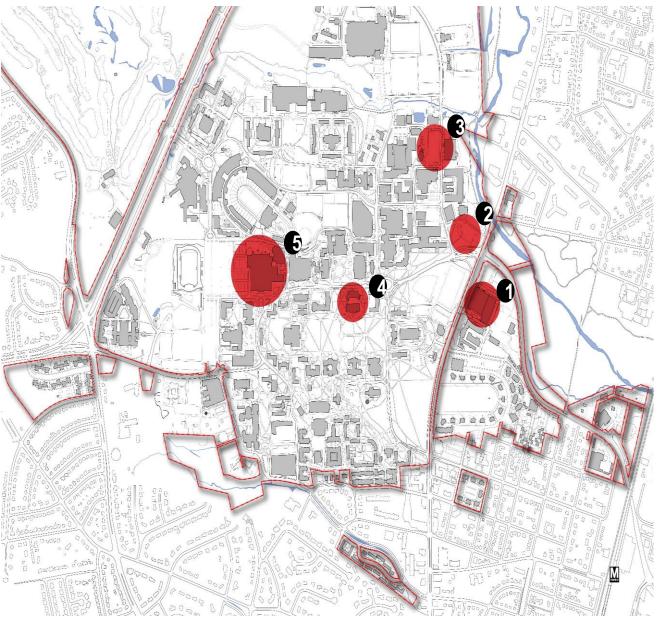


A. JAMES CLARK HALL -BIOENGINEERING





BIG FIVE IN FIVE



1. The Hotel at UMD

- 2. Iribe Center for Computer Science and Innovation
- 3. A. James Clark Hall
- 4. Ed St. JohnLearning &Teaching Center
- Human
 Performance and
 Academic
 Research Facility

PLACEMAKING OFF CAMPUS

- Activating all corners of the main entrance
- Extending spirit of entrepreneurship beyond campus borders
- Create the environment for companies created at UMD to grow and thrive in College Park
- The Hotel
- "Innovation District"
- Research Park
- Real Estate Opportunities along Route 1 and Paint Branch Parkway

The Hotel at University of ------Maryland

> INNOVATION DISTRICT

DOWNTOWN COLLEGE PARK

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COCP PRESENTATION 3/17/15







































1/12/15



PLACEMAKING ALONG ROUTE 1

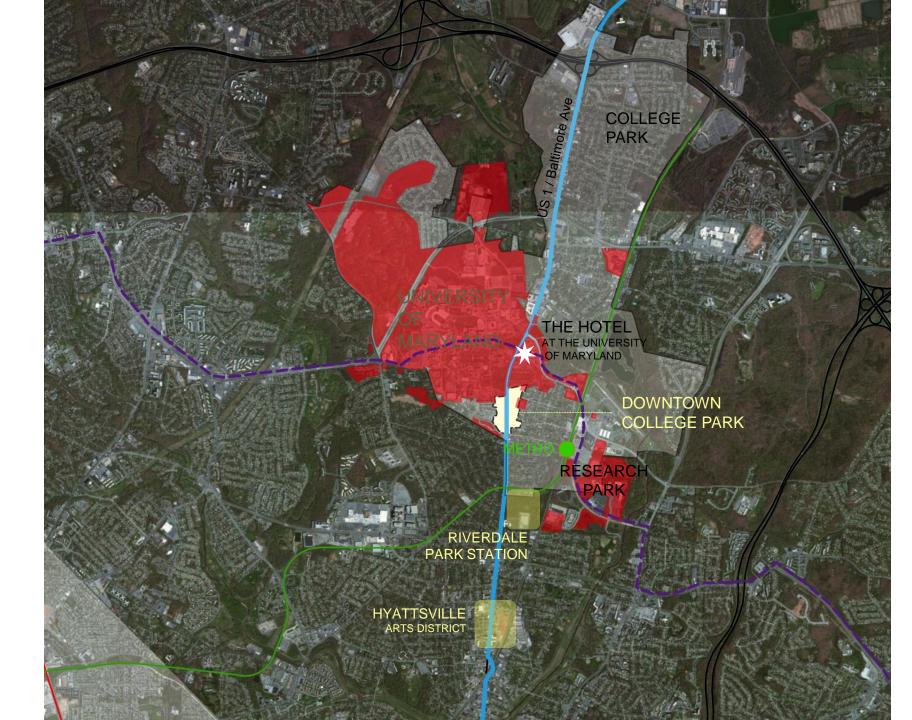
Sense of community matters

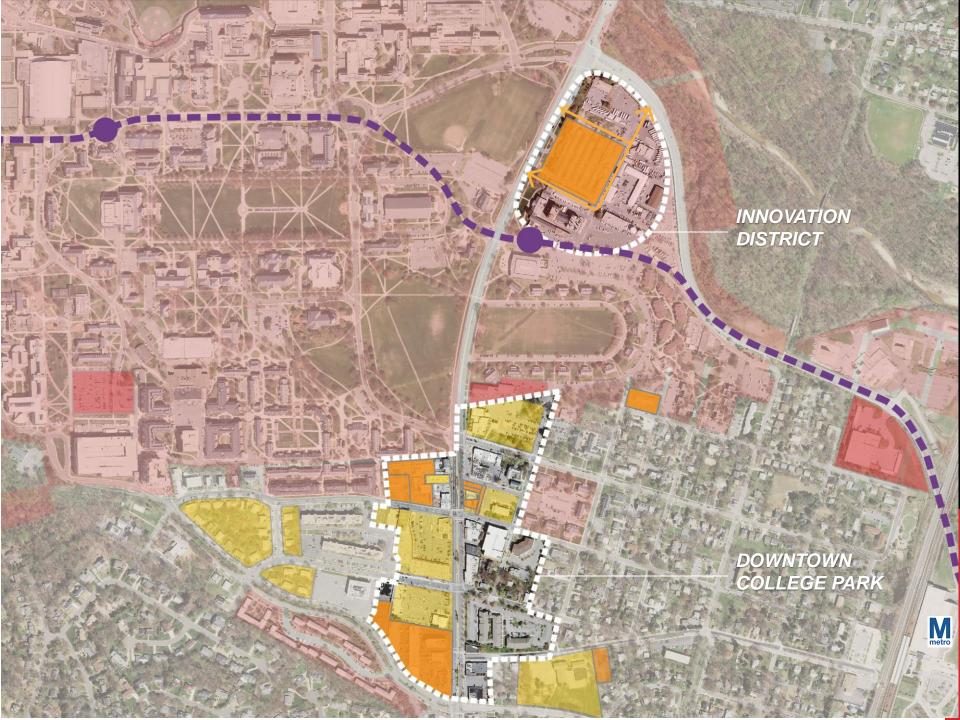
Attracting more world class faculty

Engaging private sector

Options for companies to grow

College Park as a unique, innovative, world class university town





The Hotel at University of ------Maryland

> INNOVATION DISTRICT

DOWNTOWN COLLEGE PARK

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Quality Inn / Rosenfeld Redevelopment

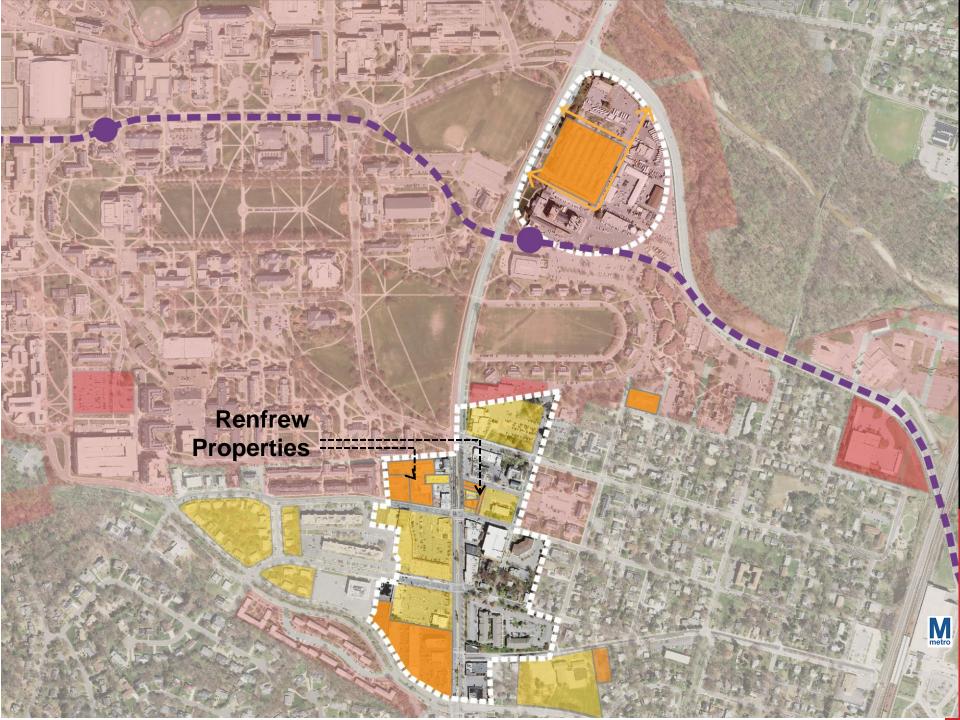
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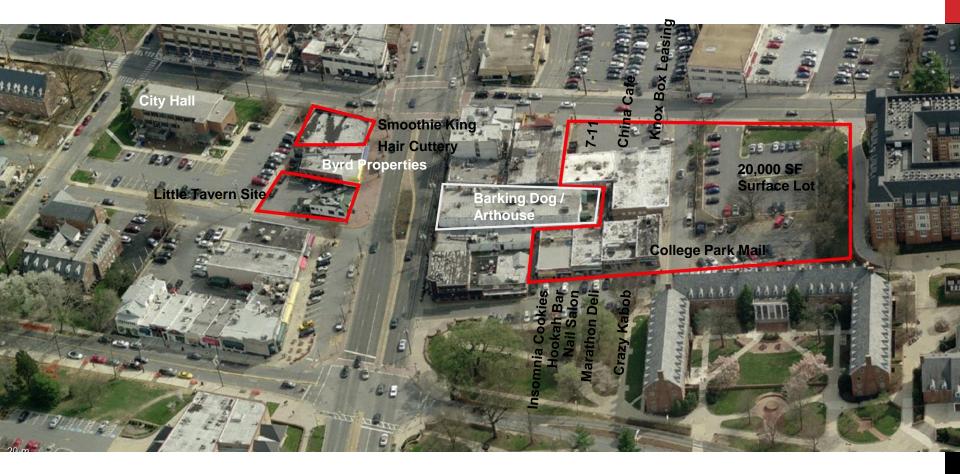
















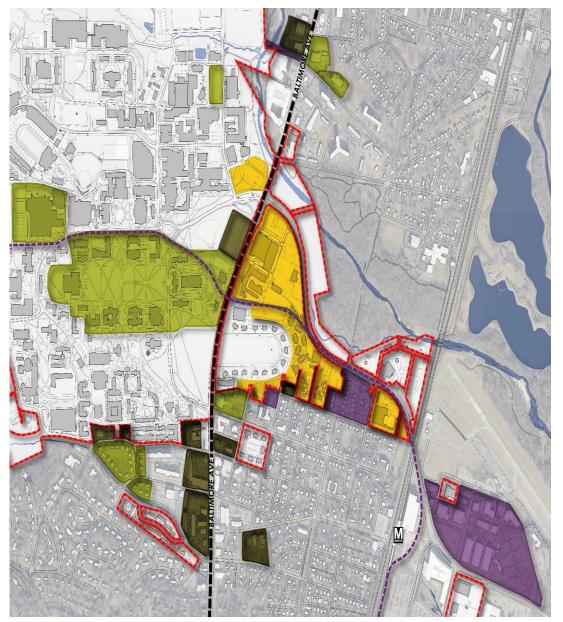


The Whole Foods Effect Riverdale Park Station WFM & other retail



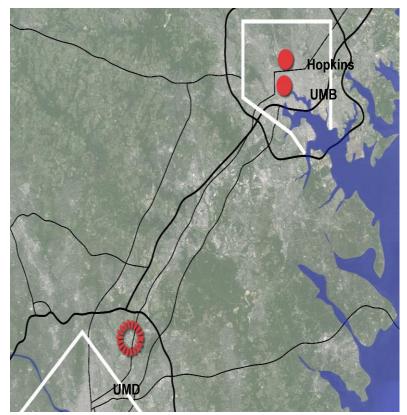


INNOVATION DISTRICT CONTEXT



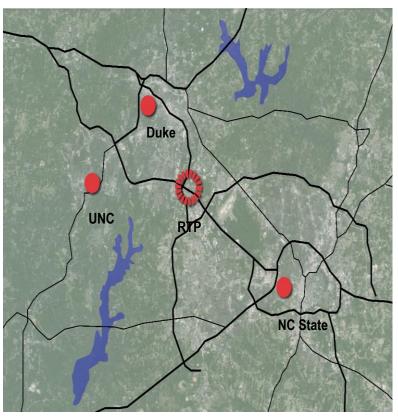
UMD Property Ownership
Designated Innovation District Area
Current Revitalization/Development
Potential Future Redevelopment
Potential Acquisitions

INNOVATION DISTRICT COMPARISON



MARYLAND

Population:	5.6M	
Science + Engineering Doctorates Employed	28,000	1
Academic R+D	\$2.16B	
Federal R+D	\$11.9B	



NC

Population:	9.2M
Science + Engineering Doctorates Employed	20,000
Academic R+D	\$1.82B
Federal R+D	\$1.81B



SCHEME ITERATIONS |PROPOSED|





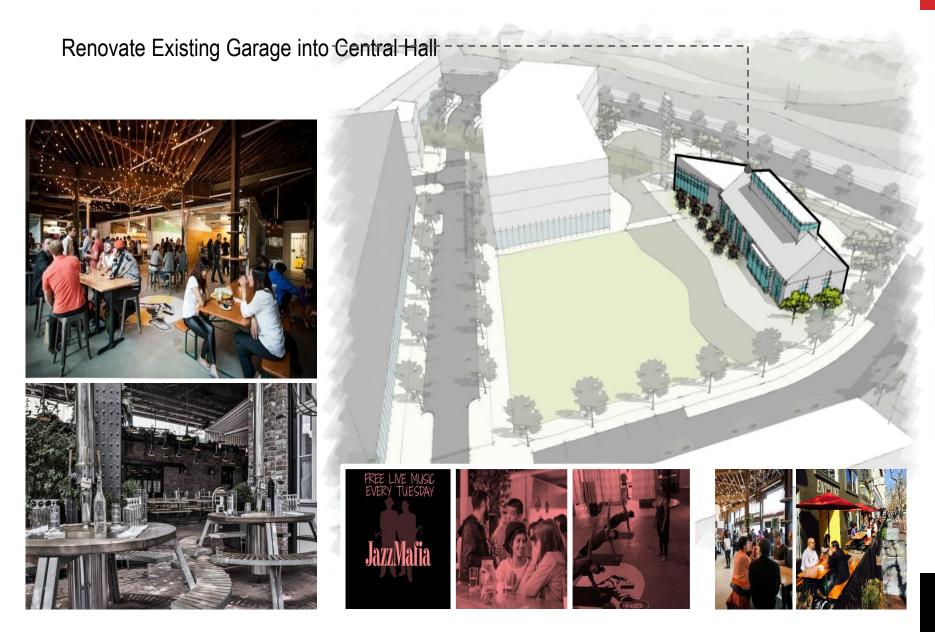




CREATING A COMMUNITY HEART



CREATING A COMMUNITY HEART |RENOVATE GARAGE|



CREATING A COMMUNITY HEART |CENTRAL GREEN|

ate Existing Garage into Central Hall

Create Active & Beautiful Village-Green-

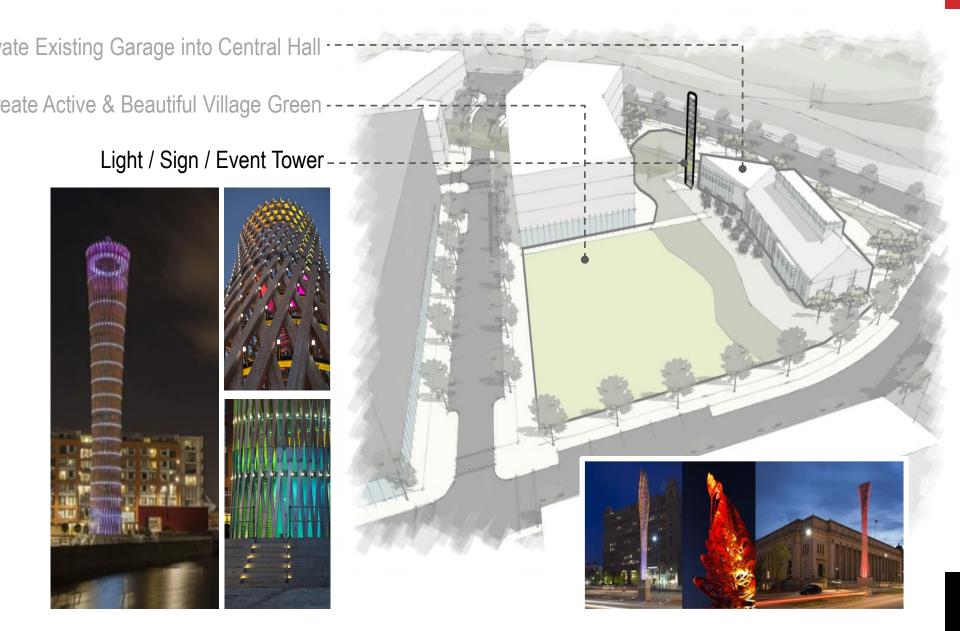








CREATING A COMMUNITY HEART |ICONIC SIGNAGE TOWER|



CREATING A COMMUNITY HEART [CO-WORKING SPACE]

ate Existing Garage into Central Hall ------

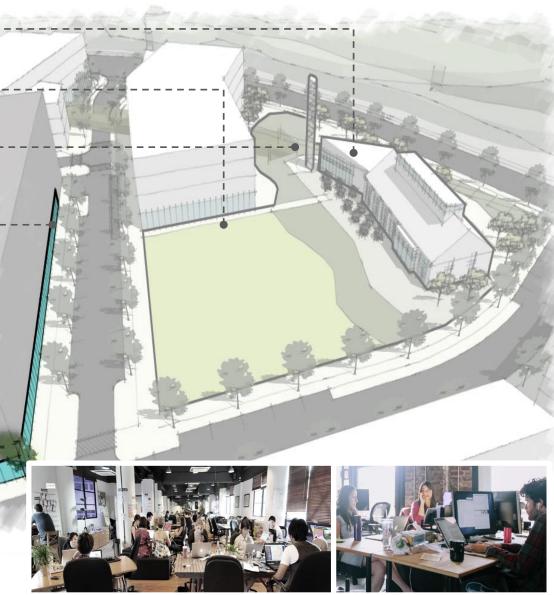
eate Active & Beautiful Village Green ---

Light / Sign / Event Tower - - - -

Activate Hotel Garage w/ Co-working Space







CREATING A COMMUNITY HEART |OFFICE/RESEARCH W/ GROUND FLOOR RETAIL|

rate Existing Garage into Central Hall

eate Active & Beautiful Village Green - - -

Light / Sign / Event Tower - - -

e Hotel Garage w/ Co-working Space ----

Ofc/ Research Bldg w/ Ground-Flr Retail-





CREATING A COMMUNITY HEART

rate Existing Garage into Central Hall -

eate Active & Beautiful Village Green - - -

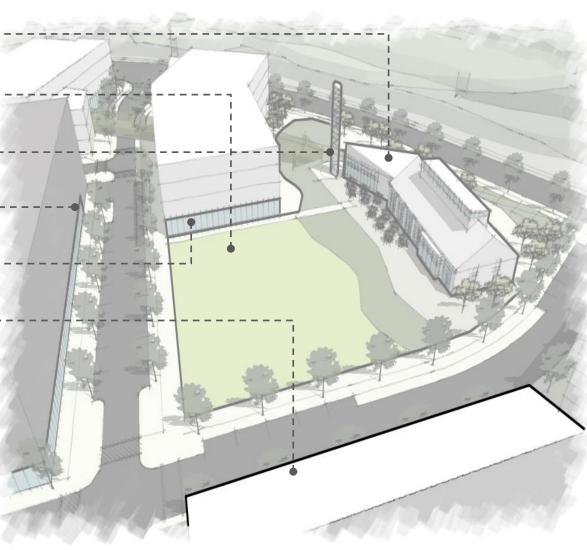
Light / Sign / Event Tower - - -

e Hotel Garage w/ Co-working Space ----

esearch Building w/ Ground-Flr Retail - - -

Housing Wrapping Garage - -





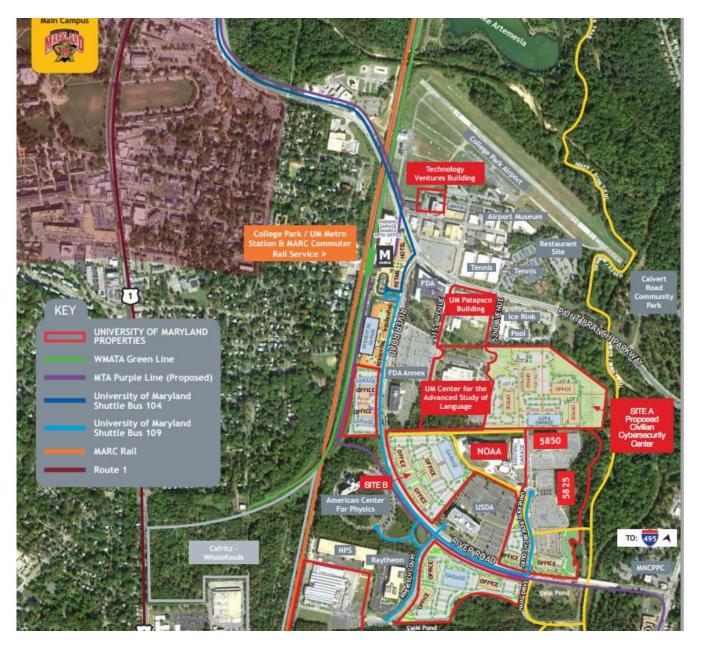
CREATING A COMMUNITY HEART



SCHEME ITERATIONS |PROPOSED|



Research Park



RESEARCH PARK TENANTS

Environmental & Earth Sciences

- NOAA National Center for Weather and Climate Prediction
- UMD/Pacific Northwest National Lab Joint Global Change Research Institute
- Earth System Science Interdisciplinary Center (ESSIC)

Language & National Security

- Center for Advanced Study of Language (CASL)
- National Foreign Language Center (NFLC)
- Raytheon
- Deep Thought 2 Supercomputer Center
- Intelligence Advanced Research Projects Activity (IARPA)

TENANTS CONT.

U.S. Government

- Food Safety and Agriculture Policy
- USDA Animal and Plant Health Inspection Service
- UMD/FDA Joint Institute for Food Safety and Applied Nutrition
- FDA Center for Food Safety and Applied Nutrition

Other

- American Center for Physics (ACP)
- Fraunhofer Center for Experimental Software Engineering
- Mid-Atlantic Crossroads (MAX)
- Optimal Solutions Group
- Technology Ventures Building (TVB)

RESEARCH PARK – KEY STATS

- Approximately 4,000 employees
- USDA: 1,100
- American Center for Physics: 246
- NOAA: 800
- FDA CFSAN: 765
- IARPA: 300
- UMD Research Park accounted for 26% of recent construction in Prince George's County

OPPORTUNITY

- 124 Acres
- 1.5M SF Capacity
- Build-to-suit & custom design buildings from 30k to 500k
 SF
- Specialized research facilities customized to needs
- Multiple deal structure alternatives
- Walking distance to DC Metro and MARC/shuttle services
- University owned real estate surrounding Hotel
- Whole Foods and other retail coming online
- Extending center of campus to Route 1/Baltimore Ave

CAPITALIZING ON INNOVATION

Oculus VR[®]

MARTEK

life enriched."

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