# Appropriations Committee Testimony President Susan Herbst University of Connecticut -February 2013-

Senator Harp, Representative Walker, Senator Kane, Representative Miner, and members of the Committee:

Thank you for having us here today and for all your support of the University of Connecticut. Your tremendous investments in UConn are the reason we are a top choice for Connecticut residents, and ranked 21<sup>st</sup> among public research universities.

The primary reason I came to UConn is how well-supported it has been by this body over many years. We are so very lucky that our governors and legislators realize the importance of their flagship university in educating our future leaders, and being a key lever in economic development. Few *legislatures in the nation* understand this right now, and ours is one, thanks to you.

Nothing speaks as loudly about the success of a university than student demand. Students and parents know value, and they seek the kind of excellence we have, at such a competitive price. President Obama raised this in his State of the Nation speech this week – that we need to focus on value. You should be proud of both UConn and the CT State colleges in this regard. Our students leave UConn with an average debt under the national average because we are so good at supporting our students in need.

Demand to attend UConn is astounding and keeps growing. In 2012, we had approximately 31,400 applications for our freshman class of 4,400 (at all our campuses).

Of course the current fiscal year and the proposed FY14 state appropriation will challenge the University to make difficult decisions, and to do even more with less. But we fully understand the enormity of Connecticut's fiscal constraints. The cuts to our block grant have been very tough, as you know, and this has affected what we can do for our students. But in any case, we share the sacrifice, and look to the

future. It may be a terrible few years, but if we can see a brighter future, we will hang in there and do our best of course.

As you can imagine, the University of Connecticut is very grateful to Governor Malloy for including the extraordinary *Next Generation Connecticut* proposal in his budget. While there is a major 10-year capital component of this initiative that stretches out the UCONN 2000 program until 2024, there is also an operating budget component, reflected in the University's FY15 state appropriation.

Let me make some general remarks about this initiative and then ask Mun Choi, our Provost, to explain it in more detail. After that, I'm happy to answer questions about this, but also any others you may have on any aspect of the university.

You may be wondering, with such a large state deficit, is this the appropriate time for the type of initiative represented by Next Generation CT?

I believe that the answer is an emphatic "YES." Just as the Research Triangle in North Carolina has allowed that region to thrive despite economic downturns, this initiative will create a more prosperous, economically dynamic Connecticut.

It will create and support the very jobs we need to be an economically vibrant and successful state in the future. In this era, more than ever, states must rely on their public research universities to be the backbone and the driver of economic success. And that is exactly what this proposal would accomplish. It is the perfect complement to Bioscience Connecticut, Jackson Labs, and the Storrs Technology Park.

Next Generation Connecticut will expand critical STEM activities at UConn and drive innovation, enhancing job creation and economic growth. With targeted strategic investments in facilities, faculty and students, UConn will be an increasingly vital STEM institution, fueling Connecticut's economy with new technologies, highly skilled graduates, new companies, patents, licenses, and highwage STEM jobs. Next Generation Connecticut will allow UConn to:

- Enroll an additional 6,500 talented undergraduate students
- Build STEM facilities to house expanded materials science, physics, biology, engineering, cognitive science, and genomics programs, to name a few.
- Construct new STEM teaching laboratories and renovate current STEM facilities.

- Hire 259 new faculty above and beyond the faculty we are hiring under our current plan
- Upgrade infrastructure to accommodate these new faculty and students
- Facilitate moving the Greater Hartford Campus to downtown Hartford
- Increase digital media and risk management degree programs and provide student housing in Stamford

*Next Generation Connecticut* will create both construction jobs and sustainable long-term employment. Additionally, by 2024, *Next Generation Connecticut* will deliver:

- \$146M per year in new research expenditures
- \$285M per year in new business activity in Connecticut, or a 118% increase resulting from research at UConn
- 4,050 permanent jobs
- 30,000 total construction jobs through 2024

Other states have made similar investments in STEM research, creating jobs and increasing their economies. In each state, positive outcomes have accrued; jobs have been created, with strong returns on their investments.

Thankfully, we don't have to guess about return on investment. We have empirical data from other states demonstrating exactly how investments in research boost regional and state economies. This is covered in many journal articles, reports, and newspapers from around the nation, and we can get those to you if you'd like.

It is now Connecticut's time to act. *Next Generation Connecticut* will enable our state to compete effectively in the global marketplace, revive innovation and create jobs. And this initiative will finally enable us to reach the top. I believe that Connecticut is a great enough state to have a top research university that leads

scientific discovery. Why should Michigan or North Carolina have one and not us? We are as talented and as important, here in Connecticut.

I believe it is my duty to help get us there, to the top, and to always be honest with you about what it will take. I assure you that, if we pursue *Next Generation Connecticut*, we will have our University of Michigan for this state – an international university of the highest order. Connecticut deserves it and we can actually make this happen.

To riff off the great Rabbi Hillel: If not us, who? And, if not now, when? We must get started or we'll never get there.

One of the wonderful things about spending your life with young people, primarily 18-22, as I have, is that they are so positive all the time. They are effervescent; they have that life force that makes a university campus a positive place, no matter the trauma of the larger economy, the wars that have wounded so many, and the other horrors of 21<sup>st</sup> century adult life we know so well. Students shout out to me all the time, "Hey, President Herbst: YOLO! You only live once."

They are correct of course, and I hope that we can work together to achieve the kind of greatness we can actually reach *in our own lifetimes*, with the right strategic investments.

Again, my thanks for your incredible support of the University of Connecticut.



# NEXT GENERATION CONNECTICUT

Building Connecticut's Economic Future through STEM

March 2013

## The Need for CT STEM Investment



## **Connecticut Rankings:**

- #25 in Entrepreneurial Activity (Kauffman Foundation)
- #39 in Non-Industry R&D Investments (KF)
- #50 in Job Churn (KF)
- 2<sup>nd</sup> Quartile State funding for public research university per number of enrolled students (NSF)
- 1<sup>st</sup> Quartile Engineers as a % of workforce (NSF)
- 3<sup>rd</sup> Quartile BS degrees in natural science & engineering per 1,000 degree conferrals (NSF)
- 3<sup>rd</sup> Quartile Science & engineering Ph.D. conferrals as % of S&E degrees
- 4<sup>th</sup> Quartile New high tech business formation as % of all business establishments

## STEM: A SMART INVESTMENT FOR CT



- Strong support from industry partners to grow STEM enrollment, research & economic development
- STEM jobs grew 3 times faster than non-STEM jobs (2000-2010)
- 2/3 of GDP growth is driven by STEM innovations
- Nearly 20% of STEM workforce is 55+ years old
- Increased STEM activities will leverage CT's current STEM initiatives: Bioscience CT, JAX Genomics Medicine & Tech Park

# STEM: A SMART INVESTMENT FOR UCONN



#### STEM Education in 2012:

- More than 240% increase in STEM applications since 2001
- More than 120% increase in STEM degrees awarded since 2001
- STEM attracts high-potential students based on SAT & GPA

#### STEM Research in 2012

- \$900M in STEM research proposals (\$460M @ Storrs)
- \$170M in STEM research awards (\$98M @ Storrs)

## Workforce & Economic Development in 2012:

- 70% of UConn graduates work in CT to support the economy
- Over 100 intellectual property applications per year
- \$332M in business & economic activity from faculty research

# STEM INVESTMENTS TO BE COMPETITIVE



- STEM education involves learning through laboratory experience, capstone design, research and industry projects
- UCONN 2000 STEM facilities are at full capacity:
  - Chemistry, Info Technology & Engineering, Pharmacy/Biology, Biology/Physics, Marine Science, Ag-Biotech, etc
- Pre-1960's era STEM facilities are outdated and at full capacity:
  - Gant, Torrey, Beach, Koons, Atwater, Engineering II, Bio-Science Laboratory, Bronwell, Longley, UTEB, etc.
- Faculty cannot compete for major research grants or effectively teach students using outdated STEM facilities
- Needs include facilities & staff for Manufacturing, High Performance Computing, Bio-Safety Laboratories, fMRI, Electron Microscopes, Systems Genomics, etc.

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## **NEXT GENERATION CT OVERVIEW**



## Increase Undergraduate (UG) Enrollment by 6,580 (30%)

- Increase STEM UG students by 3,290 (42%)
- Increase Engineering UG students by 1,410 (70%)
- Increase other STEM UG students by 1,800 (33%)
- Create Premier STEM Honors Program, Scholarships & Living/Learning Communities
- Increase Digital Media UG students by 840
- Increase Risk Management & Global Business UG students by 680

## Hire Faculty & Improve Infrastructure

- 259 new faculty (in addition to 290 from current plan)
- 200 STEM faculty (in addition to 175 STEM faculty from current plan)
- Develop critical facilities for research & teaching



## **NEXT GENERATION CT COMPONENTS**



## \$902M to construct new facilities

- Multiple STEM buildings: \$760M for 750K gross square feet of research/teaching labs & offices for 375 STEM faculty
  - Additional floors for Engineering/Science building
  - Torrey addition
  - 2 new science buildings
  - Institute for Materials Science & Physics
- General Education Faculty Building: \$60M
- Classroom Building: \$50M for 80K gross square feet of new space
- Housing: \$32M for 2 dorms with 800 beds total & \$10M for housing in Stamford

## **NEXT GENERATION CT COMPONENTS**



## \$415.5M to renovate/repurpose facilities

- Repurpose Torrey & Gant research space for teaching labs and classrooms and general renovations: \$295.5M
- Housing: \$40M to convert existing housing to a STEM Living & Learning Community
- Greater Hartford Campus: \$70M to relocate & consolidate the West Hartford Campus, School of Social Work & Financial Accelerator to downtown Hartford

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## **NEXT GENERATION CT COMPONENTS**



## \$457.5M for equipment & infrastructure

## Equipment

- Information Technology data center & capacity upgrades: \$50M
- Faculty start-up equipment: \$67.5M
- fMRI, biosafety labs, additive manufacturing equipment: \$30M

#### Infrastructure

- Steam line repair: \$100M
- Water system & upgrade: \$17M (add'l \$8M from Tech Park)
- Sewer system upgrades: \$42M
- Other upgrades (electrical/heating/cooling): \$58M
- Parking, pubic transportation & roadways: \$93M

## **NEXT GENERATION CT COMPONENTS**



Stamford Component of New School of Fine Arts & Digital Media

 Undergraduate/graduate degrees in animation, visual effects & production, game development, motion media design, sports entertainment, data visualization & 'Big Data Analytics'

**Stamford Business Programs** 

• Undergraduate degrees & graduate certificates\* in financial risk management, crisis management, sports management, global business, business/engineering (dual graduate degree)

Proposed Gro	wth
Undergrad Enrollment	1,520/110%
Undergrad Degrees	304/119%
Faculty	35
State Operating Request	\$2.3M
UConn Commitment*	\$3.6M

\$10M Capital Request for Housing and Campus Enhancements

\* The expansion of the graduate degree and advanced certificate programs will all be funded by UConn

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# **NEXT GENERATION CT COMPONENTS**



#### Downtown Hartford Campus Relocation

- Greater Hartford Campus serves the most diverse student group at UConn
- Enhanced accessibility & service to low income/high-potential students
- Enhanced service learning & internship opportunities for undergraduate & graduate education programs
- Expanded economic activity through increased interaction with local businesses
- Direct contributions to state workforce development from professional graduate programs in Business, Engineering, Public Administration & Social Work
- Proximity will increase transfer access for community college students

## **RETURN ON INVESTMENT**



- Median income of CT residents with STEM degrees earn \$11K more per year than graduates with other degrees
- Every \$1M in NIH research funding supports 15 jobs (salary of \$60K)
- Each new science/technology job creates more than one additional job
  - A chemical manufacturing job creates 3.1 additional jobs
  - A computers & electronics job creates 1.3 additional jobs
- For every new research \$1, CT will gain \$1.95 in business activity
- Every \$2M in research expenditures yields a patent
- Investments will increase research productivity to \$300K for STEM faculty
- By 2024 this initiative will yield Connecticut:
  - \$146M in new research awards & \$285M in new business activity
  - 135 patents & disclosures per year
  - 2,190 new permanent jobs
  - 30,000 total construction jobs

Sources: State Higher Education Executive Officers, National Institutes of Health, Connecticut Economic Resource Center

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# FY 2015 OPERATING PROPOSAL: \$25.9M



- \$17.4M State request; \$8.5M UConn commitment
- Increase undergraduate enrollment by 785 (285 @ Stamford)
- Hire 38 faculty (20 STEM faculty)
- Establish premier Connecticut STEM Honors Program
  - 325 scholarships for the best students
  - 325 "Big Idea!" grants for undergraduate research projects with top faculty
  - STEM industry internship/co-op experiences
- Award 15 STEM fellowships to train outstanding doctoral students
- Increase Stamford Campus programs by expanding Digital Media & Business

# **FUNDING PROPOSAL**



Operating (\$M)*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
State Request	\$17.4	\$33.8	\$54.0	\$70.3	\$80.6	\$92.7	\$102.4	\$113.0	\$123.8	\$137.0
UConn Commitment	\$8.5	\$13.1	\$20.2	\$28.9	\$35.4	\$41.3	\$48.2	\$54.8	\$62.4	\$69.8

<sup>\*</sup> Amounts shown are cumulative & in addition to support of current faculty hiring plan of \$79M

Capital Request (\$M)*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Academic & Research Facilities	\$45.0	\$60.0	\$90.0	\$120.5	\$128.0	\$187.0	\$97.0	\$45.5	\$68.0	\$29.0
Deferred Maintenance	33.5	46.5	59.9	99.1	97.0	65.0	50.0	31.5	30.0	30.0
Equipment	14.0	14.0	17.5	14.0	14.0	17.0	14.5	14.0	14.0	14.5
Hartford Relocation	30.0	40.0								
Residential Life Facilities	20.0	20.0			12.0			20.0		
Parking Garage # 3							30.0	33.0		
Stamford Campus Housing	5.0	5.0								
Total Request	\$147.5	\$185.5	\$167.4	\$233.6	\$251.0	\$269.0	\$191.5	\$144.0	\$112.0	\$73.5

 $<sup>\</sup>boldsymbol{^*}$  Amounts shown are annual increments and include the reallocation of existing UCONN 2000 funds

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# **ENROLLMENT & FACULTY INCREASES**



Enrollment*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Storrs STEM	325	627	1,075	1,503	1,808	2,098	2,404	2,692	2,998	3,290
Storrs non-STEM	175	338	580	810	975	1,130	1,294	1,451	1,615	1,770
Stamford	285	575	955	1,310	1,430	1,520	1,520	1,520	1,520	1,520
Total Enrollment	785	1,540	2,610	3,623	4,213	4,748	5,218	5,663	6,133	6,580
Faculty*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Storrs STEM	12	24	46	66	86	116	136	156	176	200
Storrs non-STEM	8	16	24	24	24	24	24	24	24	24
Stamford	18	26	35	35	35	35	35	35	35	35
Total Faculty	38	66	105	125	145	175	195	215	235	259

<sup>\*</sup> Amounts shown are cumulative

## **EXAMPLES FROM OTHER STATES**



- Over 20 years, Georgia's \$400M investment in research yielded \$2B in federal and private funds and created 5000 new technology jobs and 120 new technology companies
- In the University of California system, every dollar of statefunded research in 2000-2001 led to an additional \$3.89 in federal and private funding
- At UConn: Four new faculty in Pharmacy increased research expenditures in the department from \$2.9M in FY08 to \$5.3M in FY12 (up to \$600K per faculty member per year)

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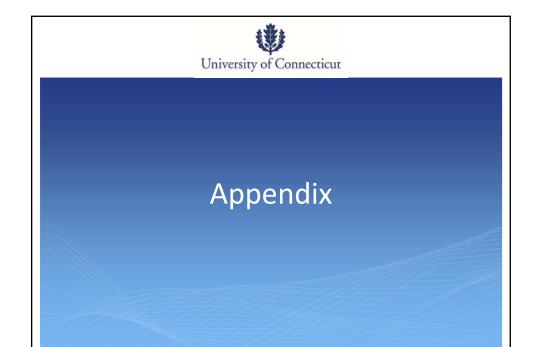
## **IMPACT OF STATE INVESTMENT**



	FY96 (Fall 1995)	FY13 (Fall 2012)
Undergraduate Students	14,667	22,301
Grad/Professional Students	7,804	7,427
Tenure/Tenure-Track Faculty	1,012	1,061
Full-Time Staff	2,662	3,028
UConn SAT (National Avg)	1113 (1013)	1226 ( <mark>1010</mark> )
Bachelor's Degrees	2,839	5,149
6 Year Graduation Rate	70%	82%
MS/PhD Degrees	1,310/239	1,573/341
Research Awards (w/UCHC)	\$56M (\$98M)	\$124M (\$200M)
Scholarships/Grants	\$28M	\$142M

#### From FY96-FY12:

- Research awards totaled \$1.5B (\$2.9B w/UCHC)
- Business activity from research totaled \$3.0B (\$5.6B w/UCHC)





To accommodate the additional faculty and staff and over 6,500 students, major capital investment is required. This investment includes new and renovated facilities for research and teaching labs, classrooms, academic support, dormitories, dining, parking, water, steam lines, information technology, equipment and various infrastructure upgrades.



New STEM facilities will provide state of the art research space to accommodate a growing faculty, students and their research. To enable the University to recruit outstanding faculty and develop emerging interdisciplinary research collaborations, expansion of research space is necessary. This includes multi-disciplinary laboratories, centralized core facilities and equipment. Funding of \$760 million will construct approximately 750,000 gross square feet of space to meet the needs of 375 STEM faculty and their students. The University anticipates expanding the new Engineering & Science building as well as the addition of new science facilities and/or the expansion of existing buildings.

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# Capital Plan



Other University initiatives include consolidation of programs and creation of new and renovated academic learning environments for various STEM and supporting initiatives which includes development of academic program space. A \$50 million building will provide 80,000 gross square feet of new classroom space to support the expansion of the student population and introduce new learning technologies. \$60 million will support other new buildings to replace out dated facilities and provide additional academic program support areas to ensure student success. \$295.5 million will allow the University to repurpose existing space into teaching laboratories in the Gant and Torrey



The consistently high demand for on-campus housing at the University and the planned enrollment growth will require new dormitories. To enable the University to recruit high achieving STEM students, \$40 million will be utilized to convert existing housing into a STEM Living & Learning Community. In addition, to meet the housing demands of the expanded student body, two new dorms will be constructed and will provide another 800 beds.

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# Capital Plan



The University expects to undertake, in consultation with local communities, improvements to its parking, public transportation and roadways to accommodate the growth in student enrollment and faculty populations. This includes \$93 million for centralizing parking through new structured facilities, relocation of existing parking lots and various traffic improvements throughout campus.



\$217 million in funding is included for infrastructure upgrades such as steam line replacement, sewer system upgrades in coordination with additional water supply, and various other underground utilities improvements such as power will be required to support the renovation of existing buildings and the development of new facilities.

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# Capital Plan



\$30 million is for acquisition of shared equipment such as the functional magnetic resonance imaging system (fMRI), Bio-safety laboratories, and additive manufacturing equipment that will enable faculty collaborations across diverse disciplines in STEM. \$67.5 million is for startup equipment to recruit 200 new STEM faculty. Startup equipment can include advanced lasers, sensors, cell culture facilities, atomic force microscopes, polymer extruders, metals processing equipment, etc. This equipment will be critical in growing the capabilities of the faculty to compete for major research grants in emerging areas of manufacturing, materials, energy, biomedical technologies, information science and systems genomics. In addition, \$50 million will be used for information technology data center and capacity upgrades.

#### Next Generation Connecticut

### Building Connecticut's Economic Future through STEM

### **Background & Overview**

Connecticut has historically been known as the birthplace of invention and innovation. Connecticut inventors created the cotton gin, anesthesia, the first submarine, helicopter, color television, the portable typewriter and a range of industrial technologies. The technical proficiency that contributed to Connecticut's economy has declined dramatically. According to the Kaufmann Foundation New Economy 2010 Report, Connecticut ranked #14 in high-tech jobs, #15 in patents, #22 in entrepreneurial activity and #37 in non-industry R&D investments. Connecticut's long-term economic competitiveness can be re-invigorated with key investments for pioneering R&D and vital educational programs in the STEM (science, technology, engineering, and math) disciplines. This proposal, *Next Generation Connecticut*, will expand critical STEM activities at UConn and drive innovation, enhancing job creation and economic growth. With these key, targeted strategic investments in facilities, faculty and students, UConn will be an increasingly vital STEM institution, fueling Connecticut's economy with new technologies, highly skilled graduates, new companies, patents, licenses, and high-wage STEM jobs.

#### Next Generation Connecticut

As part of this ambitious, ten-year plan, the University proposes to hire innovative faculty, build new facilities and enroll talented students, as follows:

- Hire 259 new faculty (of which 200 will be in STEM)
- Enroll an additional 6,580 talented undergraduate students
- Build STEM facilities to house materials science, physics, biology, engineering, cognitive science, genomics and related disciplines
- Construct new STEM teaching laboratories
- Create a premier STEM Honors program
- Upgrade aging infrastructure to accommodate new faculty and students
- Expand digital media and risk management degree programs and provide student housing in Stamford
- Relocate Greater Hartford Campus to downtown Hartford

#### Proposed Funding

Proposed capital and operating funding for *Next Generation Connecticut* will be allocated incrementally between FY15 and FY24.

Operating (\$M)*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
State Request	\$17.4	\$33.8	\$54.0	\$70.3	\$80.6	\$92.7	\$102.4	\$113.0	\$123.8	\$137.0
UConn Commitment	\$8.5	\$13.1	\$20.2	\$28.9	\$35.4	\$41.3	\$48.2	\$54.8	\$62.4	\$69.8

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Capital Request (\$M)*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Academic & Research Facilities	\$45.0	\$60.0	\$90.0	\$120.5	\$128.0	\$187.0	\$97.0	\$45.5	\$68.0	\$29.0
Deferred Maintenance	33.5	46.5	59.9	99.1	97.0	65.0	50.0	31.5	30.0	30.0
Equipment	14.0	14.0	17.5	14.0	14.0	17.0	14.5	14.0	14.0	14.5
Hartford Relocation	30.0	40.0								
Residential Life Facilities	20.0	20.0			12.0			20.0		
Parking Garage # 3							30.0	33.0		
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Total Request	\$147.5	\$185.5	\$167.4	\$233.6	\$251.0	\$269.0	\$191.5	\$144.0	\$112.0	\$73.5

<sup>\*</sup> Amounts shown are annual increments and include the reallocation of existing UCONN 2000 funds.

UConn will commit significant institutional resources to launch *Next Generation Connecticut* by contributing \$235M in reallocated UCONN 2000/21<sup>st</sup> Century UConn funds for the building program and \$149M in operating funds to support the academic program components.

## **Emphasis on STEM**

According to a recent study by Georgetown University's Center on Education & Workforce, eight million U.S. jobs will be available in STEM fields. Nationally, overall employment is projected to grow 9.6% from 2010 to 2020. Connecticut labor analysis projects a similar trend. For example, the Connecticut Department of Labor, projects the need for 54% more biomedical engineers. But report after report shows that the next generation of American employees will be unprepared for these jobs. Of 34 industrialized countries, American students rank 17th in science and 25th in math scores. This gap between demand and supply limits our nation's ability to solve the complex problems of our time, inhibits the innovation required to remain competitive, and results in severe long-term economic consequences for our country. However, this situation also provides Connecticut with a unique opportunity.

Next Generation Connecticut will have a tremendous impact on the reversal of these trends and grow Connecticut's STEM workforce to enable our state to compete effectively in the global marketplace. According to the National Academy of Engineering, two-thirds of the growth in our GDP has its roots in STEM. The U.S. Bureau of Labor Statistics reports that:

- STEM jobs grew 3 times faster than non-STEM jobs in the last decade
- STEM jobs are projected to continue to grow by 17% ('08-'18), as compared to 10% in non-STEM
- It is anticipated that approximately 20% of the STEM workforce is over the age of 55+ and may retire over the next 10 years.

For these reasons, increasing our STEM enrollment, hiring additional STEM faculty, doubling our research funding, and constructing and renovating STEM facilities comprise the components of this bold proposal.

### Return on Investment (ROI)

Next Generation Connecticut will create both construction jobs and sustainable long-term employment. This proposal will also leverage and maximize the state's related investments in Bioscience CT, JAX, UCONN 2000/21<sup>st</sup> Century UConn and the UConn Tech Park.

- By 2024, Next Generation Connecticut will yield:
  - o \$146M per year in new research awards (118% increase)
  - o \$285M per year in new business activity in CT (118% increase) resulting from research at UConn
  - o 2,190 new or 4,050 total permanent jobs
  - o 30,000 total construction jobs through 2024

ROI	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
New Research Awards	\$43	\$65	\$77	\$86	\$96	\$108	\$117	\$126	\$136	\$146M
New Business Activity	\$84	\$127	\$151	\$169	\$187	\$210	\$228	\$246	\$264	\$285M
New Jobs	643	975	1,158	1,296	1,435	1,618	1,757	1,895	2,034	2,190

Other states (Appendix A) have made similar investments in STEM research, creating jobs and increasing their economies. In each state, positive outcomes have accrued; jobs have been created, with strong ROI. It is now our time and the University is prepared to join the ranks of the top STEM institutions and states in the country.

#### **Return on Previous Investments**

Why does the University need an additional infusion for *Next Generation Connecticut?* Due to chronic under funding, UConn focused UCONN 2000 and 21<sup>st</sup> Century UConn on numerous teaching facilities, general utilities, information technology, residence halls, and infrastructure. Additionally, the University constructed science facilities, including the new Chemistry, Information Technology, Pharmacy/Biology, Marine Sciences and Agriculture Biotechnology buildings. Additionally, the University renovated a number of current facilities for Life Sciences, Biobehavioral Science, Education, and Nursing. The University has major projects underway, including our new Engineering and Psychology buildings, and the renovation of our Agricultural research facilities. While these university-wide investments have allowed us to increase STEM enrollment by 115 percent, UConn must do more to produce many more STEM graduates to meet workforce shortages and drive discoveries that will fuel Connecticut's long-term economic growth.

The UCONN 2000 and 21<sup>st</sup> Century UConn investments are the major contributors to UConn's growing reputation for academic excellence and its emergence as a leader in higher education in the Northeast, drawing top students from Connecticut and the rest of the nation. UConn's rise during the past 16 years has been astounding, the result of strategic state support that was wisely invested in both facilities and infrastructure. Beginning in 1996, UConn's

- Research awards increased by 119%
- Undergraduate enrollment increased by 52%
- Undergraduate STEM enrollment increased by 115%
- Average freshman SAT scores increased by 113 points to 1226

- Undergraduate degrees awarded per year increased by 75%
- Graduate/professional degrees awarded per year increased by 40%

Record numbers of applications from high-caliber students and support for student success resulted in UConn's increase in national rankings from #38 to #21 among public universities, according to U.S. News and World Report. UConn currently enrolls 13% of Connecticut's high school seniors and our fall 2012 class, once again, included the largest, most diverse, and most academically talented students ever admitted.

This further investment in STEM will result in dramatic increases in both STEM research and STEM graduates, in turn producing innovations and inventions that will directly contribute to sustainable economic growth for Connecticut.

## Capital Program:

To accommodate the additional faculty and staff and over 6,500 students, major capital investment is required. This investment includes new and renovated facilities for research and teaching labs, classrooms, academic support, dormitories, dining, parking, water, steam lines, information technology, equipment and various infrastructure upgrades.

New STEM facilities will provide state of the art research space to accommodate a growing faculty, students and their research. To enable the University to recruit outstanding faculty and develop emerging interdisciplinary research collaborations, expansion of research space is necessary. This includes multi-disciplinary laboratories, centralized core facilities and equipment. Funding of \$760 million will construct approximately 750,000 gross square feet of space to meet the needs of 375 STEM faculty and their students. The University anticipates expanding the new Engineering & Science building as well as the addition of new science facilities and/or the expansion of existing buildings.

Other University initiatives include consolidation of programs and creation of new and renovated academic learning environments for various STEM and supporting initiatives which includes development of academic program space. A \$50 million building will provide 80,000 gross square feet of new classroom space to support the expansion of the student population and introduce new learning technologies. \$60 million will support other new buildings to replace out dated facilities and provide additional academic program support areas to ensure student success. \$295.5 million will allow the University to repurpose existing space into teaching laboratories in the Gant and Torrey complexes.

The consistently high demand for on-campus housing at the University and the planned enrollment growth will require new dormitories. To enable the University to recruit high achieving STEM students, \$40 million will be utilized to convert existing housing into a STEM Living & Learning Community. In addition, to meet the housing demands of the expanded student body, two new dorms will be constructed and will provide another 800 beds.

The University expects to undertake, in consultation with local communities, improvements to its parking, public transportation and roadways to accommodate the growth in student enrollment and

faculty populations. This includes \$93 million for centralizing parking through new structured facilities, relocation of existing parking lots and various traffic improvements throughout campus.

\$217 million in funding is included for infrastructure upgrades such as steam line replacement, sewer system upgrades in coordination with additional water supply, and various other underground utilities improvements such as power will be required to support the renovation of existing buildings and the development of new facilities.

\$30 million is for acquisition of shared equipment such as the functional magnetic resonance imaging system (fMRI), Bio-safety laboratories, and additive manufacturing equipment that will enable faculty collaborations across diverse disciplines in STEM. \$67.5 million is for startup equipment to recruit 200 new STEM faculty. Startup equipment can include advanced lasers, sensors, cell culture facilities, atomic force microscopes, polymer extruders, metals processing equipment, etc. This equipment will be critical in growing the capabilities of the faculty to compete for major research grants in emerging areas of manufacturing, materials, energy, biomedical technologies, information science and systems genomics. In addition, \$50 million will be used for information technology data center and capacity upgrades.

#### **Selected References:**

Association of University Technology Managers. Web. 24 Jan. 2013 www.autm.net/Home.htm

Bioscience Discovery Evaluation Grant Program. Colorado BioScience Assocaition, varies. Web. 24 Jan. 2013 <a href="https://www.cobioscience.com/resources/bioscience-discovery-evaluation-grant-program">www.cobioscience.com/resources/bioscience-discovery-evaluation-grant-program</a>

Bioscience Initiative. Greater Baltimore Committee, varies. Web. 24 Jan. 2013 <a href="https://www.gbc.org/page/bioscience-initiative">www.gbc.org/page/bioscience-initiative</a>

Bureau of Labor Statistics. Web. 24 Jan. 2013 www.bls.gov

California, Economic Impact of Health Research. Research America: An Alliance for Discoveries in America, varies. Web. 24 Jan. 2013 <a href="https://www.researchamerica.org/econ\_california">www.researchamerica.org/econ\_california</a>

Carnevale, Anthony P., Nicole Smith, and Michelle Melton. Stem State-Level Analysis. Georgetown University Center on Education and the Workforce. (20 Oct. 2011): 68. Print

Families USA's Global Health Initiative. In Your Own Backyard: How NIH Funding Helps Your State's Economy. (June 2008): 28. Print

Florida, Economic Impact of Health Research. Research America: An Alliance for Discoveries in America, varies. Web. 24 Jan. 2013 <a href="https://www.researchamerica.org/econ\_florida">www.researchamerica.org/econ\_florida</a>

Georgetown University Center on Education. New Report on the Economic Value of 171 College Majors Links College Majors to Earnings. UA Management Information Systems, 24 May 2011. Web. 24 Jan. 2013 uamis.wordpress.com/2011/08/02/georgetown-university-center-on-education-and-the-workforces-new-report-on-the-economic-value-of-171-college-majors

IMPLAN CT 2010 Model. Web. 24 Jan. 2013 implan.com

National Academy of Engineering of the National Academies. Web. 24 Jan. 2013 www.nae.edu

National Science Foundation. Web. 24 Jan. 2013 www.nsf.gov/#4

O'Malley, Martin. Governor O'Malley Announces Maryland Bio 2020 Initiative. Office of Governor Martin O'Malley, 16 June 2008. Web. 24 Jan. 2013 <a href="https://www.governor.maryland.gov/pressreleases/080616b.asp">www.governor.maryland.gov/pressreleases/080616b.asp</a>

Ohio, Economic Impact of Health Research. Research America: An Alliance for Discoveries in America, varies. Web. 24 Jan. 2013 <a href="https://www.researchamerica.org/econ-ohio">www.researchamerica.org/econ-ohio</a>

Pellerito, Peter M. Successful State Initiatives That Encourage Bioscience Industry Growth. Biotechnology Industry Organization, 9 Feb. 2012. Web. 24 Jan. 2013 <a href="https://www.bio.org/node/5771/node/6551">www.bio.org/node/5771/node/6551</a>

The Washington Economics Group, Inc. Economic Impacts and Return on Investment to Florida from Public Financial Support of the Jackson Laboratory Institute for Personalized Medicine. (2009): 27. Print

Zaback, K., A. Carlson, and M. Crellin. A Report from the State Higher Education Executive Officers. (Dec. 2012). Print

#### Appendix A. State Investment Examples

#### A. California

United for Medical Research's 2011 study, An Economic Engine shows that in 2010, NIH invested \$4,021,000,000 in California, producing 71,633 new jobs. The National Institutes of Health contribute more than \$3 billion per year to the state economy through biomedical research facilities. This supports an industry that provides 267,000 California jobs with an average annual wage of more than \$71,000 according to the Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center and the Los Angeles Area Chamber of Commerce. The Association of American Medical Colleges reports that the member medical schools and teaching hospitals in the state had a combined economic impact of \$41.6 billion (ranked 3rd in the country) and a total employment impact of 238,000 in 2008. California's Proposition 71 authorized \$3 billion to support stem cell research and is expected to save between \$6.4 and \$12.6 billion in health care costs.

Each dollar of spending by the California State University (CSU) system generates another \$2.13 to the economy. The CSU system supports 150,000 jobs annually and pays over \$995 million in taxes to California.

Each dollar produced in the life sciences sector in San Diego generates \$1.10 beyond it through indirect and induced impacts. The life sciences industry in San Diego supports 55,600 jobs and has an economic impact of \$5.8 billion dollars (accessing report requires registration).

Within the University of California system, every dollar of state-funded research in 2000-2001 led to an additional \$3.89 through federal and private funding. Overall UC expenditures had an economic impact between \$14 and \$17 billion and supported 370,000 California jobs.

In 2005-2006, the UC Berkeley had a total economic impact of more than \$1.5 billion in the Bay Area and supported more than 31,000 area jobs. In addition, UC Berkeley spent \$469 million on research and reported 128 inventions.

UC Davis reports that every dollar the state invests in the university returns \$5 to the state. UC Davis generated 45,000 jobs for California and contributed \$2.7 billion to the state economy in 2001-2002.

UC Irvine has an annual economic impact of \$3.6 billion in Orange County and employs more than 17,000 people.

Every taxpayer dollar invested in the University of California, Los Angeles generates nearly \$15 in economic impact in the region. UCLA has a \$9.3 billion impact on the area and supports 70,000 jobs.

The University of California, San Diego had a national economic impact of \$5.1 billion and generated 319,000 jobs nationwide.

The University of California, San Francisco generates more than 23,000 jobs and reported \$1.8 billion in sales in 2003.

#### B. Maryland

Governor Martin O'Malley, joined by scientists and researchers at the Johns Hopkins Institute for Cell Engineering, today unveiled a new vision for the bioscience industry in Maryland. Under the BIO 2020 Initiative, the State of Maryland will invest \$1.3 billion in Maryland's bioscience industry over the next 10 years – the largest per capita investment in the biosciences made by any state in the country – to attract and grow biotechnology companies in Maryland. Recognizing potential for the region's growth in the emerging bioscience industry, the GBC has emerged as a leading organization, supporting the development of two bioscience parks. The University of Maryland Baltimore's BioPark on Baltimore's west side and the Science + Technology Park Johns Hopkins, coupled with an 80-acre neighborhood revitalization on Baltimore's east side are projected to generate up to 10,000 new jobs. Through communications and outreach, the GBC also works to educate business, community and political leaders about the regional economic growth potential in the life science industry.

#### C. Washington

The State of Washington has earmarked a portion of its tobacco settlement dollars to fund bioscience R&D through the \$350 million Life Sciences Discovery Fund (SB 5581), and in 2006 began allocating \$35 million annually to research projects with economic development potential, including recruitment and facility enhancements. The state projects to leverage \$1 billion in additional external research funding over its 10-year lifetime and create 20,000 jobs with about 15 years. The fund adopts a broad definition of the life sciences, encompassing biotech, pharmaceuticals, biomedical technologies, life system technologies, nutraceuticals, and food processing, environmental and biomedical devices. It is governed by an 11-member board of trustees that evaluates grants for their potential health-care impact, future employment impact, and geographic diversity. A 2-1 match from external sources is required.

#### D. Georgia

The Georgia Research Alliance Eminent Scholars Program was created by business and university leadership to attract the world's pre-eminent scientists to Georgia's universities to lead programs of research and development in areas with the most potential for generating new high-value companies, helping established companies grow and creating new high-wage jobs. With the financial backing of the state legislature in 2010, the state's research universities, private foundations and other supporters, the Eminent Scholars Program is marshalling the required talent and resources and driving an effective strategy for achieving these results. To date, the Alliance has invested some \$400 million, which has helped to attract more than 50 Eminent Scholars, leverage an additional \$2 billion in federal and private funding, create more than 5,000 new technology jobs, generate some 120 new technology companies, and allow established Georgia companies to expand into new markets.

#### E. Ohio

The Biosciences industry directly supports over 62,000 jobs in Ohio. Ohio's bioscience employees' average salary is more than \$68,0001. The overall average salary for Ohio workers is about \$41,000. The biosciences industry paid employees from 1,800 + locations in Ohio more than \$4.2 billion dollars in 2009.1 \$796 million in NIH-funding supports more than 13,000 in-state jobs.

#### F. Colorado

The Bioscience Discovery Evaluation Grant Program (BDEGP) was created in 2006 by the Colorado General Assembly to grow the bioscience industry in the state. The BDEGP provides gap funding to advance promising research from Colorado's outstanding research institutions into the market place. The bioscience industry in Colorado is strengthened by such efforts, resulting in long-term job creation and company formation.

The State leverages this investment in the industry by requiring a one-to-one match for both Proof of Concept and Early-Stage Company grants. The economic benefit is realized near-term in the strengthening of our research institutions, the jobs required to fulfill the grant work, and the products and services purchased to complete grant work. Longer-run payouts come in the form of additional capital investment into the technologies and companies, the creation of new companies, and growing businesses adding high quality jobs. Approximately \$22.1 million from the BDEGP Cash Fund has been granted and will garner at least an equal amount in matching funds (excluding Commercialization Infrastructure grants). Of 184 grants made or approved under the program by the end of 2011, 96 have completed work while the others are in process. To date, the program successes include the creation of 34 new Colorado companies and the direct creation of 302 jobs. Additionally, these funds have helped the technologies acquire an additional \$95 million dollars in grants and investments to further commercialize these bioscience technologies.

#### G. Florida

United for Medical Research's 2011 study, An Economic Engine shows that in 2010, NIH invested \$509,000,000 in Florida, producing 13,741 new jobs. The Association of American Medical Colleges reports that the member medical schools and teaching hospitals in the state had a combined economic impact of \$19.4 billion (ranked 9th in the country) and a total employment impact of 147,000 in 2009. Florida's Jackson Laboratory Institute for Personalized Medicine attracts \$60,000,000 million annually in NIH grants for their research in genetic therapy. In 2005-2006, the University of Florida had an economic impact on the state of \$5.85 billion and supported 74,900 jobs. The University of South Florida has an economic impact of \$3.2 billion on the Tampa Bay area. In 2001, the State of Florida's investments in University Research Centers generated nearly 7,000 jobs. The return on investment of state funding of research was 217%. The Scripps Florida Biotech Research Institute is expected to support nearly 6,500 jobs and contribute \$3.2 billion to the Gross State Product during its first 15 years.

# University of Connecticut Next Generation Connecticut: Science, Jobs and Retaining Connecticut's Best Minds Funding Request

Operating Request	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	FY18	<u>FY19</u>	FY20	<u>FY21</u>	<u>FY22</u>	FY23	<u>FY24</u>	
Positions											
Faculty	38		105	125	145	175	195	215		259	
Staff	28	48	68	88	108	118	128	138	148	158	
Total Positions	66	114	173	213	253	293	323	353	383	417	
UConn Operating Contribution											
Tuition Revenue (from additional enrollment)	\$7,849,914	\$12,435,896	\$19,562,050	\$26,450,278	\$32,214,960	\$37,673,483	\$44,082,990	\$50,176,504	\$57,287,995	\$64,123,677	
Provost/School of Business Reallocations	658,931	658,931	658,931	658,931	658,931	658,931	658,931	658,931	658,931	658,931	
Philanthropy				1,750,000	2,500,000	3,000,000	3,500,000	4,000,000	4,500,000	5,000,000	
Total UConn Operating Contribution	\$8,508,845	\$13,094,827	\$20,220,981	\$28,859,209	\$35,373,891	\$41,332,414	\$48,241,921	\$54,835,435	\$62,446,926	\$69,782,608	
Personal Services Other Expenses	\$9,938,969	\$16,102,005	\$24,907,574	\$32,612,978	\$41,130,388	\$51,496,762	\$60,481,595	\$70,334,819	\$81,125,194	\$94,079,717	
Misc Operating Needs	7,518,813	13,098,813	21,378,813	29,274,813	34,914,813	40,254,813	45,894,813	51,234,813	56,874,813	62,238,813	
Staff Operating Support	800,000	1,600,000	2,600,000	3,400,000	4,200,000	5,000,000	5,600,000	6,200,000	6,800,000	7,480,000	
STEM Scholarships	5,224,200	11,158,800	17,511,648	24,235,624	25,250,517	26,304,492	27,093,626	27,906,435	28,743,628	29,605,937	
Big Idea Grants	1,625,000	3,250,000	5,000,000	6,750,000	7,500,000	8,000,000	8,500,000	9,000,000	9,500,000	10,000,000	
STEM Fellowships	811,710	1,670,580	2,812,851	2,878,494	2,946,668	3,017,502	3,091,127	3,167,683	3,247,317	3,330,183	
Total Operating Expenses <sup>A</sup>	\$25,918,692	\$46,880,198	\$74,210,886	\$99,151,908	\$115,942,387	\$134,073,568	\$150,661,161	\$167,843,750	\$186,290,952	\$206,734,650	
Less UConn Operating Contribution	(8,508,845)	(13,094,827)	(20,220,981)	(28,859,209)	(35,373,891)	(41,332,414)	(48,241,921)	(54,835,435)	(62,446,926)	(69,782,608)	
State Operating Request	\$17,409,847	\$33,785,372	\$53,989,905	\$70,292,699	\$80,568,495	\$92,741,154	\$102,419,240	\$113,008,315	\$123,844,026	\$136,952,041	
State Operating Request-Storrs	\$15,087,748	\$31,463,273	\$51,667,806	\$67,970,600	\$78,246,396	\$90,419,055	\$100,097,141	\$110,686,216	\$121,521,927	\$134,629,942	
State Operating Request-Stamford	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	\$2,322,099	
Capital Request											Т
Academic & Research Facilities	\$45,000,000	\$60,000,000	\$90,000,000	\$120,500,000	\$128,000,000	\$187,000,000	97000000	45500000	68000000	29000000	\$870
DM: Water & Steam	15,000,000	20,000,000	15,000,000	27,000,000	20,000,000	20,000,000					117
DM: General Renovations	18,500,000	26,494,000	44,900,000	72,106,000	77,000,000	45,000,000	50,000,000	31,500,000	30,000,000	30,000,000	425
Equipment	14,000,000	14,000,000	17,500,000	14,000,000	14,000,000	17,000,000	14,500,000	14,000,000	14,000,000	14,500,000	147
Hartford Relocation Acquisition/Renovation	30,000,000	40,000,000									70
Residential Life Facilities	20,000,000	20,000,000			12,000,000			20,000,000			72
Parking Garage #3							30,000,000	33,000,000			63
Stamford Campus Improvements/Housing	5,000,000	5,000,000									10
					40=4 000 000	ć260 000 000	\$191,500,000	\$144,000,000	\$112,000,000	\$73,500,000	¢1 77
Total Capital Proposal	\$147,500,000	\$185,494,000	\$167,400,000	\$233,606,000	\$251,000,000	\$269,000,000	\$191,500,000	\$144,000,000	\$112,000,000	\$73,500,000	<b>γ1,//</b>
Total Capital Proposal Existing UCONN 2000 Funding	<b>\$147,500,000</b> 42,500,000	<b>\$185,494,000</b> 75,494,000	<b>\$167,400,000</b> 61,900,000	<b>\$233,606,000</b> 55,106,000	\$251,000,000	\$269,000,000	\$191,500,000	\$144,000,000	\$112,000,000	\$73,500,000	235

<sup>&</sup>lt;sup>A</sup> Amounts shown are cumulative and are in addition to support of current faculty hiring plan of \$79 million.

<sup>&</sup>lt;sup>B</sup> Amounts shown are annual increments.

# Workforce Expertise in Demand



In Connecticut, the demand for professional digital media and business expertise exceeds supply, and Fairfield County contributes significantly to this state-wide demand:

Job Title	Hiring Companies	Job Growth 2008-2018	Annual Job Openings	Supply / Demand (2010-2012)	Annual Wage (2010)
Digital Media/Multi Media, Digital Graphic Artists & Animators	92	239% (980-3,326)	1,250	736 active candidates for 2,501 jobs	\$85,000 Median
Financial Managers & Analysts	282	5% (20,520- 21,620)	1,123	433 active candidates for 1,653 jobs	\$112,469 Average
Credit Analysts/Risk Management Specialist	45	12% (1,060-1,190)	251	187 active candidates for 413 jobs	\$101,000 Average
International Business	394	2008: 23,334	Data Unavailable	Data Unavailable	Data Unavailable

<sup>~</sup>Chart reflects Connecticut state-wide data, except the Digital Media compensation which represents the New York City Area median, from the following sources: CT Department of Labor, CareerBuilder, FCBC, SEC, Salary.com, and publicly traded multinational companies



# **Supply & Demand Report**

Job Title: "Digital Media" Location: Connecticut

Timeframe: August 2010 to July 2012

Filters Applied: None

Report Date: September 4, 2012



This report gives Client the ability to use the report and data for its internal business purposes only. Client may not sell, transfer or assign the report or the data provided by CareerBuilder to any third party without the express written authorization of CareerBuilder.

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# Why CareerBuilder Talent Intelligence?

CareerBuilder is uniquely positioned to satisfy needs for talent intelligence. Through its proprietary databases and partner network, CareerBuilder data encompasses:

- 35 million active resumes
- 135 million worker profiles
- 12 million salary data points

CareerBuilder databases are updated daily, providing detailed information on job seekers in real-time. Data is provided by the job seekers themselves through resumes, registration, and applicant experience surveys. This labor 'supply-side' data is then matched to categories using our proprietary technology and validated using statistical analysis and external benchmarks. The data can be filtered by demographic categories including education, experience, EEO protected categories and salary ranges.

Our partner, EMSI, Inc. provides benchmarking data on the total US workforce of 135 million people. Their data is similar to that used by the Bureau of Labor Statistics and organizes the labor force into Standard Occupation Classifications (SOCs) and geographically into Metropolitan Statistical Areas (MSAs). The main difference is that EMSI uses modeling and survey sampling techniques to update their data; the BLS tends to run 1-2 years behind while EMSI data benchmarks are current to the most recent full calendar month. Using EMSI for benchmarking improves the relevancy of CareerBuilder's data as it is more up to date than public sources and the information has been checked against real-world conditions whereas many other data aggregators cannot do this.

The labor 'demand-side' data goes beyond just CareerBuilder job postings to cover 90 percent of the current online job market. CareerBuilder partners with a third-party data aggregator to gather all jobs posted to a variety of sites including job boards, corporate careers websites, and recruiter businesses. Once collected, proprietary CareerBuilder processes remove duplicate job postings, categorize jobs into SOCs and MSAs, and separate recruiter business postings from those posted directly by companies. In total, the data tracks about 2.7 million unique job postings per month.

Together, these data sources give CareerBuilder a deeper insight into how the labor supply interacts with the demand for their services.



## DATA AVAILABLE and PRACTICAL USES

#### Put science behind your recruiting efforts.

Today's economy demands that firms recruit the best talent efficiently and at a low cost. CareerBuilder's Supply & Demand products provide strategic intelligence on labor markets and the competition for talent. This data will help you to outmaneuver your talent competitors by analyzing where the greatest supply of your target talent is, where the demand is the least, and who else is looking for the talent.

Empowered with such intelligence, you can maximize your recruitment spend and stop wasting time and money on strategies that push you into the most competition with the least amount of supply.

#### What makes this report unique?

- Full data set In addition to accessing our CareerBuilder network jobs and resume database, we partner with EMSI and Wanted Technologies to provide:
  - 48 million jobs over the last two-years
  - 135 million worker profiles
  - 35 million in-depth active resumes

#### 2. Improved search and reach

- For keyword: search by industry, job title or skill
- For location: search nationwide or focus on just one city
- Beyond CareerBuilder data, we cover 90% of the online job market
- Capability to search by high level categories or granular skills, programs, or systems on both job descriptions and active resumes

#### 3. Flexibility and customization

- View data as a visual chart or graph and view raw numbers in a table
- Choose filters on Standard Occupation Classification, industry, or company

#### 4. One-stop shop data source

- Active iob seekers
- Passive workforce
- Companies that are posting jobs

#### How can this information be used?

- Strategic sourcing: advertise in the markets with the most favorable ratio of job postings to active job seekers
- Education: provide data that will help when partnering with hiring managers to strategize recruitment engagements
- Personnel forecasting: anticipate talent shortfalls and resolve them before they happen
- Site selection: assess the labor market before investing in a new location



## **CONTENT OVERVIEW**

#### **Supply & Demand Report Overview**

# "Digital Media" Connecticut for August 2010 to July 2012

Supply<sup>(1)</sup>

736

Active Candidates

Demand<sup>(2)</sup>

2,501

Job Postings

**0.29** Active Candidates for every Job Posted<sup>(3)</sup>

17,166 Total Available Workers<sup>(4)</sup>

6,054 Marketing Managers4,151 Market Research Analysts

3,101 Public Relations Specialists2,453 Advertising Sales Agents

1,407 Computer Specialists, All Other

#### (1) Supply

The Supply data set is a combination of job seeker activity from those on CareerBuilder.com and CareerBuilder niche sites. We include all candidates who do any of these activities:

- Create a new resume
- Apply to a job using a saved resume
- Modify a resume

#### (2) Demand

The Demand data set is the count of job postings across the Internet from multiple websites, provided by Wanted Technologies. The data is deduplicated so the number is the total unique set of job postings for your search.

#### (3) Labor Pressure

The labor pressure is the ratio of the supply versus the demand.

### (4) Total Available Workers

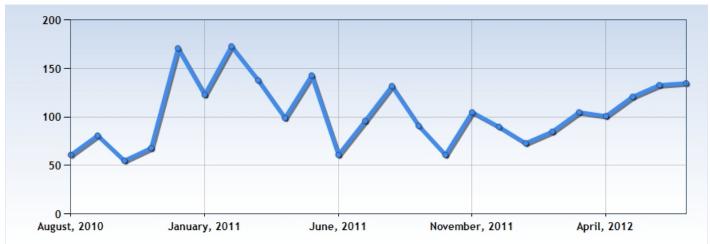
The total available workforce data is representing 135 million worker profiles that our partner, EMSI (Economic Modeling Specialists Inc), consolidates and categorizes into the Standard Occupational Classification system.



# **Demand Trends of Top Companies and Job Titles**

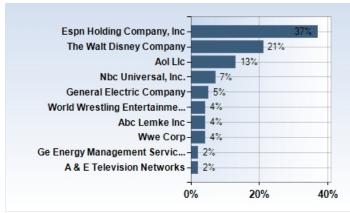
#### **Job Posting Trend Over Last 24 Months**

Demand for Job Seekers: Below are the job posting trends over past 24 months for "Digital Media" in Connecticut.



#### **Top Job Posters For Last 2 Years**

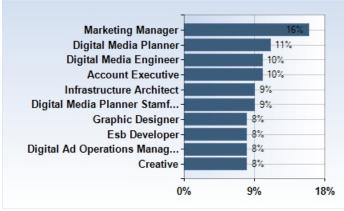
Demand for Job Seekers: Below are the top 10 companies posting jobs between August 2010 and July 2012 for "Digital Media" in Connecticut.



Company	Count
Espn Holding Company, Inc	358
The Walt Disney Company	205
Aol Llc	128
Nbc Universal, Inc.	71
General Electric Company	51
World Wrestling Entertainment, Inc.	40
Abc Lemke Inc	36
Wwe Corp	35
Ge Energy Management Services, Inc.	24
A & E Television Networks	18

#### **Top Job Titles For Last 2 Years**

Demand for Job Seekers: Below are the top 10 similar job titles that companies have posted between August 2010 and July 2012.



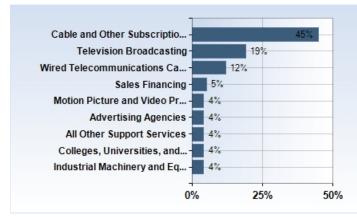
Job Title	Count
Marketing Manager	15
Digital Media Planner	11
Digital Media Engineer	10
Account Executive	10
Infrastructure Architect	9
Digital Media Planner Stamford Mni	9
Graphic Designer	8
Esb Developer	8
Digital Ad Operations Manager Mni Stamford	8
Creative	8



# **Demand Trends of Top Industries, States, MSAs and Cities**

#### **Jobs Posted in Top Industries For Last 2 Years**

Demand for Job Seekers: Below are the top 10 industries' companies reside in that have posted for "Digital Media" in Connecticut.



Industry (NAICS)	Count
Cable and Other Subscription Programming	486
Television Broadcasting	211
Wired Telecommunications Carriers	129
Sales Financing	51
Motion Picture and Video Production	49
Advertising Agencies	46
All Other Support Services	41
Colleges, Universities, and Professional Schools	39
Industrial Machinery and Equipment Merchant Wholesalers	39

#### **Jobs Posted in Top States and MSAs For Last 2 Years**

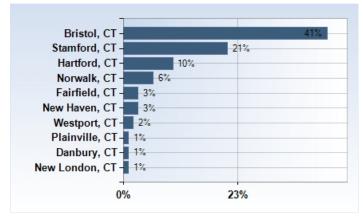
Demand for Job Seekers: Below are the top 10 states and metropolitan statistical areas for "Digital Media" between August 2010 and July 2012.

	State	Count
California		26,247
New York		22,867
Illinois		4,724
Washington	= ===	4,177
Massachusetts	careerbuilder	3,903
Florida	carecipaliaei	3,805
Texas		3,700
Georgia		3,537
New Jersey		3,350
District of Columbia		2,835

Metro Area (MSA)	Count
Greater New York City Area	20,844
Greater Los Angeles Area	10,533
San Francisco Bay Area	7,511
Washington D.C. Metro Area	4,881
Greater Chicago Area	4,174
San Jose, California Area	3,825
Greater Seattle Area	3,622
Greater Boston Area	3,473
Greater Atlanta Area	3,087
Greater Philadelphia Area	1,607

#### **Jobs Posted in Top Cities For Last 2 Years**

Demand for Job Seekers: Below are the top 10 cities where the most "Digital Media" jobs have been posted between August 2010 and July 2012.



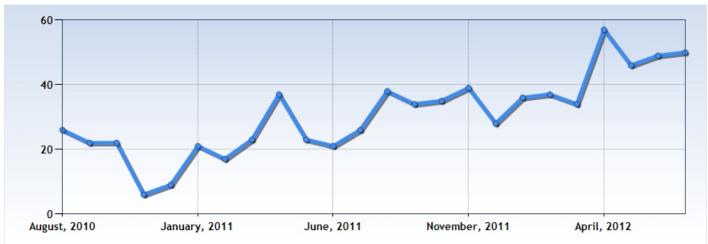
	City, State	Count
Bristol, CT		934
Stamford, CT		474
Hartford, CT		224
Norwalk, CT	= ===	129
Fairfield, CT	caroorbuildor	76
New Haven, CT	careernanaer	73
Westport, CT		38
Plainville, CT		19
Danbury, CT		19
New London, CT		18
New London, CT		18



# **Supply Trends of Education Level and Experience**

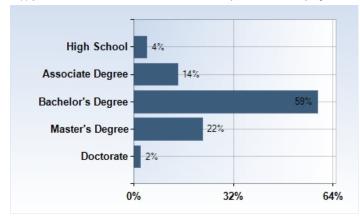
#### **Active Workforce Trend Over Last 24 Months**

Supply of Job Seekers: Below are the active workforce trends over past 24 months for "Digital Media" in Connecticut.



#### **Active Workforce by Education Level For Last 2 Years**

Supply of Job Seekers: Below are the counts of available job seekers listed by highest education level achieved for "Digital Media" in Connecticut.

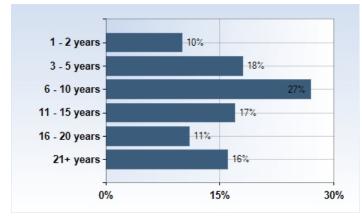


	Education	Count
High School		17
Associate Degree		53
Bachelor's Degree		227
Master's Degree		83
Doctorate	careerbuilder	6
	Garderbunder	

Reporting 386 out of 448 total responses.

#### **Active Workforce by Years of Experience For Last 2 Years**

Supply of Job Seekers: Below are the counts of available job seekers listed by years experience for "Digital Media" in Connecticut.



	Years of Experience	Count
1 - 2 years		40
3 - 5 years		72
6 - 10 years		105
11 - 15 years		68
16 - 20 years	-careerbuilder	44
21+ years	Gargaruallagi	64

Reporting 393 out of 448 total responses.



# **Supply Trends of Top States, MSAs and Cities**

### Active Workforce in Top States and MSAs For Last 2 Years

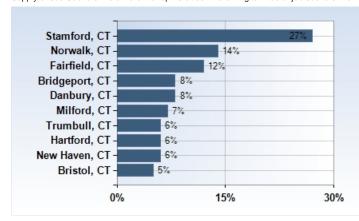
Supply of Job Seekers: Below are the top 10 states and metropolitan statistical areas where "Digital Media" job seekers live between August 2010 and July 2012.

	State	Count
California		3,650
New York		2,937
Florida		2,873
Texas		1,792
Illinois	careerbuilder	1,626
New Jersey	careernanaer	1,443
Georgia		1,265
Pennsylvania		1,028
Michigan		997
Virginia		840

Metro Area (MSA)	Count
Greater New York City Area	3,715
Greater Los Angeles Area	1,957
Greater Chicago Area	1,561
Greater Atlanta Area	1,098
Washington D.C. Metro Area	1,076
Miami/Fort Lauderdale Area	958
Greater Philadelphia Area	795
Orlando, Florida Area	793
Dallas/Fort Worth Area	757
Greater Detroit Area	666

# **Active Workforce in Top Cities For Last 2 Years**

Supply of Job Seekers: Below are the top 10 cities where "Digital Media" job seekers live.



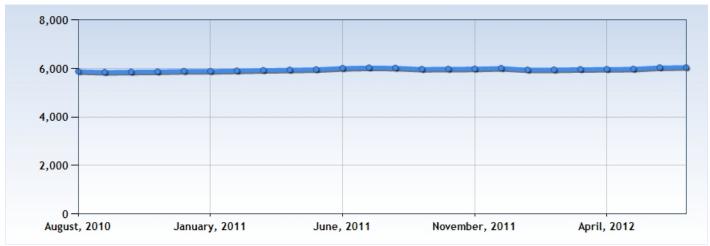
	City, State	Count
Stamford, CT		51
Norwalk, CT		27
Fairfield, CT		22
Bridgeport, CT		16
Danbury, CT	caroorhuildor	15
Milford, CT	<u> </u>	14
Trumbull, CT		12
Hartford, CT		12
New Haven, CT		11
Bristol, CT		10



# **Supply Trends of Total Available Workforce**

### **Total Available Workforce Trend Over Last 24 Months**

Supply of Total Workforce: Below are the total available workforce trends over past 24 months for Marketing Managers in Connecticut.



# Total Available Workforce in Top States As of 07/31/2012

Supply of Total Workforce: Below are the top 10 states where the total available workforce of Marketing Managers as of 07/31/2012.

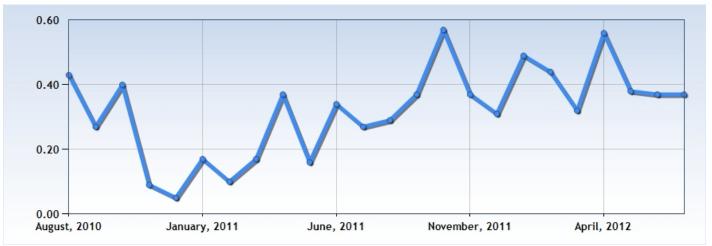
	State	Count
California		41,018
Texas		19,901
New York		16,766
Illinois		12,260
Florida	careerbuilder <sup>o</sup>	10,351
New Jersey	carcernanaei	9,256
Massachusetts		8,552
Georgia		8,297
Pennsylvania		8,208
Ohio		6,737



# **Labor Pressure Trends of Active Workforce**

# **Labor Pressure Trends of Active Workforce Over Last 24 Months**

Below are the labor pressure trends for "Digital Media" job seekers in the active workforce over the past 24 months.



# Labor Pressure of Active Workforce by State For Last 2 Years

Below is a list of the states where it's easiest to recruit "Digital Media" job seekers in the active workforce for Last 2 Years.

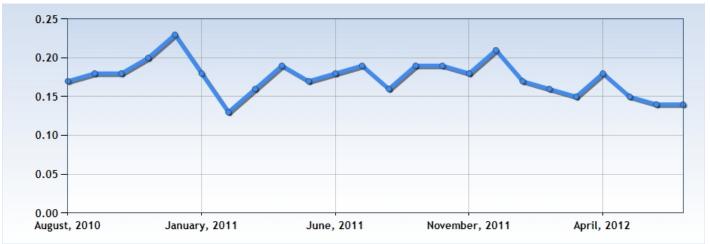
	State	Ratio
South Carolina		0.83
Florida		0.76
Mississippi		0.75
Indiana		0.70
Kentucky	careerbuilder <sup>*</sup>	0.66
Kansas	Carcernanaei	0.63
West Virginia		0.58
Michigan		0.53
North Carolina		0.51
Texas		0.48



# **Labor Pressure Trends of Total Available Workforce**

# **Labor Pressure Trends of Total Available Workforce Over Last 24 Months**

Below are the labor pressure trends for Marketing Managers in Connecticut in the total available workforce over the past 24 months.



# Labor Pressure of Total Available Workforce by State As of 07/31/2012

Below is a list of the states where it's easiest to recruit Marketing Managers in the total available workforce as of 07/31/2012.

	State	Ratio
Connecticut		0.01
California		0.01
Illinois		0.01
New Hampshire	= -= -	0.01
Georgia	careerbuilder <sup>e</sup>	0.01
Delaware	carcernanaer	0.01
Oregon		0.00
Oklahoma		0.00
Massachusetts		0.00
Kansas		0.00





# **Talent Compensation Report**

Job Title/Skill: Digital Media

Timeframe: August 2010 to July 2012

Filters Applied: None

Report Date: September 09, 2012



This report gives client the ability to use the report and data for its internal business purposes only. Client may not sell, transfer or assign the report or the data provided by CareerBuilder to any third party without the express written authorization of CareerBuilder.

# **Total Compensation Range**

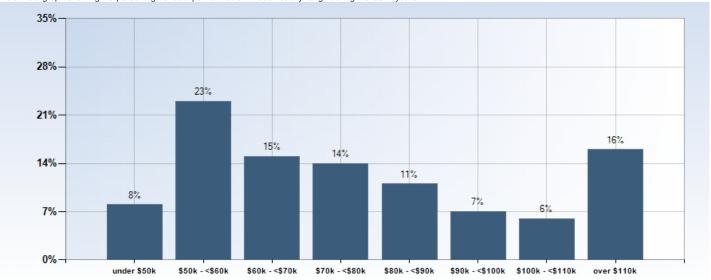
Below is the low, median, and high total compensation, including bonus and commission, during the last 2 years based on a total of 45,795 data points.

\$93,728
AVERAGE



# Distribution of Total Compensation

Below is a graph showing the percentage of data points that fall in each salary range during the last 2 years



# Total Compensation in the Top 10 Metropolitan Statistical Areas

Below is the total compensation for the top metro areas (based Metro Areas	on the total number	of data points) during the last Avg. #	st 2 years 10th	25th	50th	75th	90th
Greater New York City Area	5,686	\$101,193	\$44,000	\$56,000	\$85,000	\$130,000	\$185,000
Greater Los Angeles Area	3,181	\$100,798	\$44,000	\$56,000	\$85,000	\$125,000	\$189,500
Greater Chicago Area	2,377	\$96,142	\$44,500	\$52,750	\$75,000	\$122,813	\$178,000
Washington D.C. Metro Area	2,159	\$99,106	\$44,000	\$55,000	\$80,750	\$125,000	\$180,000
Dallas/Fort Worth Area	1,630	\$94,179	\$43,000	\$53,000	\$78,000	\$125,000	\$165,000
Greater Atlanta Area	1,611	\$95,206	\$42,600	\$53,000	\$77,500	\$125,000	\$168,400
Greater Philadelphia Area	1,183	\$93,411	\$44,000	\$52,000	\$75,000	\$120,250	\$165,000
Miami/Fort Lauderdale Area	1,149	\$89,052	\$42,000	\$52,750	\$70,000	\$120,000	\$150,000
Phoenix, Arizona Area	1,031	\$80,418	\$40,000	\$55,000	\$65,000	\$90,000	\$133,800
San Francisco Bay Area	1,026	\$83,811	\$45,000	\$55,000	\$80,000	\$108,000	\$130,000



# Total Compensation for Top Companies

Below is the total compensation reported for the top speci Companies	# Reporting	Avg. *	10th	25th	50th	75th	90th
Triple Crown Services Company	503	\$75,046	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
People 2.0 Global, Inc.	502	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
United Natural Foods, Inc.	407	\$48,084	\$45,000	\$45,000	\$50,000	\$50,000	\$50,000
Cydecor Inc.	255	\$49,922	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Mindbank Consulting Group Of Virginia, Inc.	252	\$50,298	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Quartet Service Inc.	252	\$50,179	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Senior Sava Care	252	\$40,091	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Taylor Corporation	252	\$40,159	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Clarion Capital Partners, Llc	251	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Employbridge Of Dallas Inc	251	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

# Median Total Compensation by State

Below is a graph showing the total compensation reported in the top states (based on the total number of data points) during the last 2 years



### Total Compensation by Industry

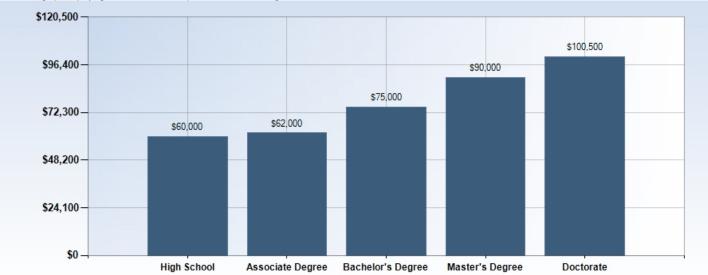
Below is the total compensation for the top industries (based on the total number of data points) during the last 2 years Avg. ቾ Industries # Reporting 10th 25th 50th 75th 90th **Computer Systems Design Services** 1,340 \$55,000 \$58,000 \$65,000 \$96,000 \$190,000 **Temporary Help Services** 1.225 \$56,741 \$48,000 \$50,000 \$50,000 \$50,000 \$80,000 **Advertising Agencies** 731 \$95.550 \$42,000 \$56,000 \$77,000 \$125,000 \$175,000 **Administrative Management and General Management** 593 \$40,000 \$44,000 \$80,000 \$110,000 \$62,817 \$40,000 **Consulting Services** General Freight Trucking, Long-Distance, Truckload 535 \$75,000 \$75,000 \$75,000 \$75,000 \$75,000 Colleges, Universities, and Professional Schools 498 \$36,000 \$40,250 \$50,000 \$68,000 \$95,000 **Cable and Other Subscription Programming** 465 \$42,700 \$51,000 \$75,000 \$113,000 \$159,000 \$179,400 **Custom Computer Programming Services** 431 \$105,728 \$44,000 \$60,000 \$95,000 \$140,000 Other Grocery and Related Products Merchant 428 \$48,371 \$45,000 \$45,000 \$50,000 \$50,000 \$50,000 Wholesalers **Employment Placement Agencies** 408 \$70,433 \$36,000 \$45,000 \$65,000 \$95,000 \$115,000



# Total Compensation by Years of Experience

Below is the total compensation based on the cumulative years Years of Experience	of experience # Reporting	Avg. ቾ	10th	25th	50th	75th	90th
1 - 2 years	1,750	\$94,135	\$53,000	\$80,000	\$95,000	\$105,000	\$130,500
3 - 5 years	4,661	\$84,166	\$39,100	\$48,000	\$70,000	\$102,375	\$150,000
6 - 10 years	7,533	\$80,328	\$39,500	\$47,000	\$65,000	\$97,000	\$140,000
11 - 15 years	8,525	\$93,130	\$44,000	\$52,500	\$77,000	\$117,000	\$170,000
16 - 20 years	6,315	\$100,870	\$44,000	\$57,500	\$85,000	\$130,000	\$184,000
21+ years	10,489	\$105,573	\$45,500	\$60,000	\$92,000	\$135,000	\$190,000

# Median Total Compensation by Education Level Below is a graph displaying the median total compensation based on degree level achieved.



# Total Compensation by School

Schools	# Reporting	Avg. ቾ	10th	25th	50th	75th	90th
Jniversity Of Phoenix	735	\$93,363	\$44,000	\$56,000	\$78,000	\$113,000	\$154,600
California State University-Fullerton	479	\$104,619	\$47,000	\$55,375	\$88,000	\$140,000	\$191,000
niversity Of California-Berkeley	391	\$113,976	\$51,000	\$68,000	\$100,000	\$140,000	\$200,000
lew York University	338	\$106,868	\$47,000	\$64,000	\$93,000	\$125,000	\$194,000
niversity Of Florida	304	\$103,079	\$44,600	\$58,000	\$85,000	\$129,000	\$197,500
niversity Of Maryland-College Park	283	\$110,972	\$50,000	\$60,500	\$92,000	\$140,000	\$200,500
Pennsylvania State University	269	\$75,444	\$41,000	\$50,500	\$70,000	\$90,000	\$120,000
evry University	263	\$66,849	\$38,000	\$46,000	\$60,000	\$84,000	\$105,000
he University Of Texas At Austin	251	\$103,167	\$46,050	\$58,875	\$86,000	\$133,500	\$190,000

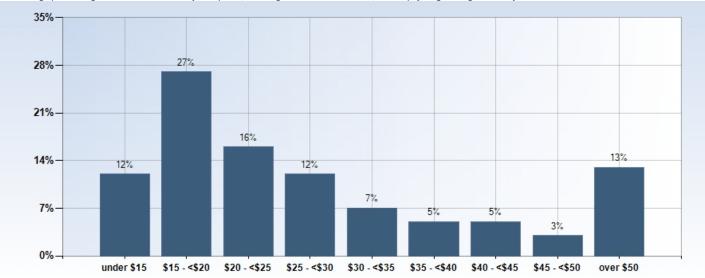
# **Total Compensation Range**

Below is the low, median, and high total hourly pay, including bonus and commission, during the last 2 years based on a total of 24,451 data points.





Distribution of Total Compensation per Hour
Below is a graph showing the total number of hourly data points, including bonus and commission, in each pay range during the last 2 years





# REPORT METHODOLOGY

### **Data Collection**

We, at CareerBuilder, strive to provide the most reliable, valid compensation information to our clientele. Our dataset encompasses two proprietary sources: data derived directly from job seekers that reflect only their most recent pay and employer pay rates directly from the jobs they post. Transparency in our methods of data collection, analysis, and presentation isn't only integral for users to trust our information; it's the only way we do business at CareerBuilder.

# **Data Integrity**

Job seekers and job postings provide both salary and hourly pay rates. Knowing that different occupations and industries adhere to varying compensation practices, we present the pay rates within two distinct data sets. Meaning that the data points presented in the Hourly View tab within the Talent Compensation Portal are only those provided to us by job seekers and job postings in an hourly pay format. The same designation holds true for the Salary View tab. This allows users to compare salary versus hourly pay trends for occupations as well as which compensation practice is most commonly utilized for a position.

# **Data Segmentation**

From the extensive job seeker profiles and company job postings which we source our compensation data, we also have the ability to utilize the demographics that characterize those people and jobs. Within the Compensation Portal, users can sort, or filter through, our compensation information by the following areas:

# **Classification System**

- Occupation Type We classify job seekers and job postings by O\*Net code, which is based off of the United States
  Bureau of Labor's Standard Occupational Coding (SOC) system. Not only does this allow for more accurate reporting by
  job title or position, it allows the user to only source the compensation information he or she deems valuable within a
  specific occupational code.
- Industry Type We classify job seekers and job postings by the United States federal statistical agencies' North American Industry Classification System (NAICS). Pay trends differ immensely by industry and we see large value for users by being able to segment the U.S. labor landscape into more granular levels.

### Location

- Nationwide Search for trends and compare/contrast compensation in different regions of the entire United States.
- State Differences in pay can be heavily dependent on location within the country.
- Metropolitan Statistical Area (MSA) Utilized by the United States government's Office of Management and Budget as geographic reporting entities, Metropolitan Statistical Areas are core urban areas which house a specific threshold of population.

### **Company Profile**

- Company Name Source benchmark competition data against competing businesses
- Company Size Companies of differing sizes structure compensation systems differently

### Job Seeker Demographics

- Education Level Highest job seeker educational level attained
- Years Experience Amount of time in workforce
- School Attended Trade School, College, or University attended
- School Major Program listed on resume

# **Guide to Interpreting Percentiles**

- 10th Percentile (10th) The value below which 10% of all the data in the sample is found when ranked low to high.
- 25th Percentile (25th) The value below which 25% of all the data in the sample is found when ranked low to high. Also known as the first quartile.
- 50th Percentile (50th) The value below which 50% of all the data in the sample is found when ranked low to high. Also known as the median; which refers to the data point that splits the sample in two halves.
- 75th Percentile (75th) The value below which 75% of all the data in the sample is found when ranked low to high. Also known as the third quartile.
- 90th Percentile (90th) The value below which 90% of all the data in the sample is found when ranked low to high.



# **Similar Digital Media-focused academic programs in Connecticut:**

<u>Institution</u>	<u>Program</u>	# of Students Enrolled	# of students apply	Do graduates have jobs?
Quinnipiac University	BA, MS Interactive Digital Design	~25/class	~100	High placement rate
Yale University	Concentration in Computing and the Arts & Digital Media Center	~14 (7 juniors/7 seniors)	No application process - declare after sophomore year	New program
Eastern Connecticut State University	Concentration in Digital Art & Design			
Sacred Heart University	BA, MA in Digital Communications			
University of Hartford	BFA in Media Arts, MA in Communications	~10 students per class - P	ROGRAM CURRENTLY SUSPENDI	ED
Manchester Community College	AA in Multimedia Studies and Game Design			
Western Connecticut State University	BA in Communications (Media Arts), Minor in Digital Media		No application process - declare	

While these programs exist and incorporate various components of what is proposed for UConn's DMD major, there are significant differences across the spectrum of institutions. The UConn Digital Media & Design majors are comprised of a unique combination of applied and theoretical substance and pedagogy in the areas of Creative, STEM, Business, Digital Humanities/Digital Social Sciences, strong outreach components, and are based on on-going state-of-the art research. At UConn, this important blend of learning opportunities are combined with the ability of students to achieve their degree at an affordable price, yet receive a comprehensive state-of-the-art, experiential education.



# UNIVERSITY UPDATE MARCH 2013

# **UConn: A Connecticut Success Story**

- ► The State's unprecedented investment in physical capital has catapulted UConn from a 3rd or 4th choice school to a 1st choice for highly prepared in-state, out-of-state and international students
- ► UConn ranked 21st among public universities nationally according to U.S. News and World Report
- ► UConn ranked in the top 30 best value public colleges for in-state costs by Kiplingers Personal Finance



# **Exciting Period of Growth**

- ▶ 290 new faculty hiring program
- ▶ UCONN 2000 construction & renovations
- Bioscience CT & JAX Lab partnership for personalized medicine
- ► Tech Park for innovation and industry collaboration
- ▶ Future: Next Generation Connecticut



3

# Contributing to the Economic Health of Connecticut

- ► Growth in research funding=innovative technologies (patents, technology startups & licenses)
- ► Technology Incubation Program: job creation & revenue generation in many industries
- Eminent Faculty Programs: Center for Clean Energy Engineering and Advanced Manufacturing & Materials Genomics
- ▶ Stem Cell Institute
- ► Center for Entrepreneurship & Innovation



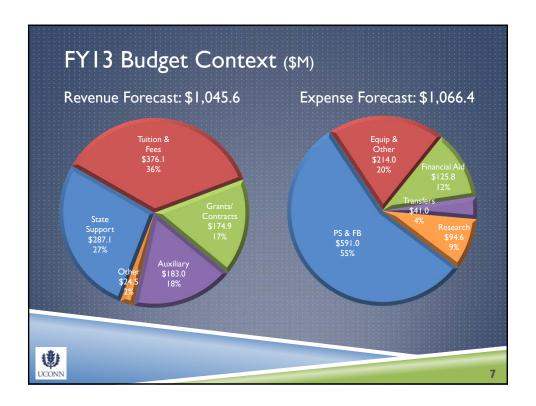
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UConn Statistics	Fall 2005	Fall 2009	Fall 2012	% Change
Undergrad Students	20,525	21,496	22,301	9%
Bachelor's Degrees	3,816	4,610	5,149	35%
Doctoral Degrees	261	266	341	31%
Undergrad Applications	19,763	23,289	31,363	59%
Grad Applications	6,628	8,229	9,352	41%
SAT Scores	1189	1212	1226	3%
Freshmen in top 10%	37%	44%	48%	11%
6 Year Grad Rate	72%	78%	82%	10%
Tenured/TT Faculty (Total Faculty)	1,004 (1,251)	989 (1,286)	1,061 (1,377)	6% (10%)
	FY06	FY10	FY13 Estimates	% Change
Scholarships & Grants	\$71.8M	\$116.1M	\$141.8M	97%
Research Awards	\$181.8M	\$233.2M	\$200.0M	10%
Research Proposals	\$355M	\$660M	\$552M	55%

# FY13 Budget Plan vs Forecast

- ▶ Tuition increases to support faculty hiring plan
- ► State appropriation
  - ➤ 2% less prior to funds for Eminent Faculty, CT Center for Advanced Technology, CommPACT, Kerr Grant
  - ▶ 5% rescission in December
- Increased financial aid
- ▶ No wage increases per SEBAC agreement
- ▶ Higher fringe benefit rates than budgeted
- Funding for initiatives & investments
- ► Continuation of university-wide savings efforts





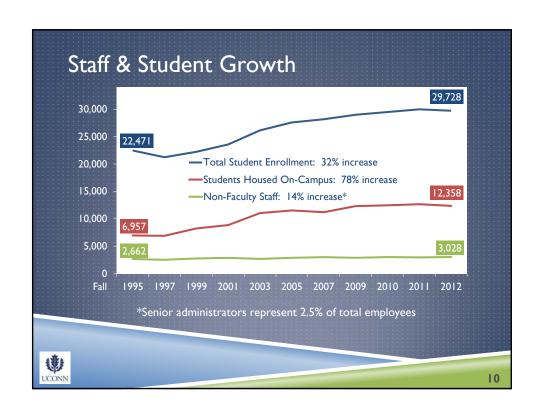
# Increase in Student Demand for Admission

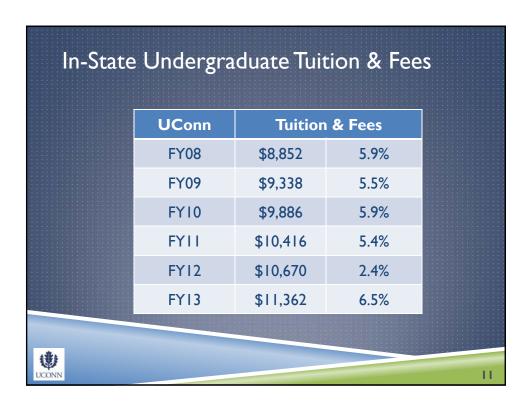
# Fall 2012 compared to fall 1995:

- Freshman Applications at all campuses increased 190% (10,809 to 31,363)
- ▶ SAT scores increased 113 points at Storrs (1113 to 1226)
- I,529 valedictorians and salutatorians enrolled at all campuses since 1995
- Freshman enrollment at Storrs increased 54% (2,021 to 3,114)
- Minority freshman enrollment at Storrs increased 169% (308 or 15% to 827 or 27%)
- Undergraduate enrollment at all campuses increased 52% (14,667 to 22,301)
- ➤ Students housed at Storrs increased 78% (6,957 to 12,358)









Pittsburgh 2.8% 21.6% 13 2.9% 20.0% 27.7% llinois 13 8.1% UC Irvine 12 14,046 7.0% 74.6% In-State UC Davis 13,877 60.6% UC Santa Barbara 10 13,660 0.5% 62.9% William & Mary 13,570 3.3% 32.4% Tuition & Minnesota 25 13,524 3.9% 25.7% UC San Diego 1.4% 65.7% 13,379 Mandatory Fees Rutgers 13.073 2.5% 13.3% Michigan 12,994 2.8% 17.7% UC Berkeley 12,876 0.3% 68.2% for UCLA 12.692 0.0% 68.0% Michigan State 12,674 3.9% 24.1% 28 Top 30 Public Clemson 25 12,674 3.0% 22.9% Virginia 12.224 3.7% 28.8% Universities 12,155 15.0% Washington 13 78.7% UConn 11,362 6.5% 21.7% Virginia Tech 28 10.923 3.9% 33.2% Wisconsin 10,380 7.4% 37.2% Georgia Tech 7 10,098 4.6% 67.2% Ohio State 18 10.037 3.1% 15.6% Texas 13 9,938 1.5% 16.8% Purdue 9,900 4.5% 27.7% 9,842 3.9% 63.2% Georgia Maryland 8,909 2.9% 11.3% Texas A&M 23 8,505 1.0% 8.4% 8,061 3.8% 23.2% 12 UNC Chapel Hill 9.8% 42.6%

	Public Schools	US News Public Rank	FY13 Tuition & Fees	FY12-13 Change	FY09-13 Change	
	Michigan	4	\$39,122	3.5%	18.3%	
	Virginia	2	38,236	4.0%	28.4%	
	William & Mary	6	37,344	3.8%	27.3%	
	UC Irvine	12	36,924	2.6%	28.9%	
Out-of-State	UC Davis	8	36,755	0.0%	25.7%	
Out-01-5tate	UC Santa Barbara	10	36,538	0.2%	26.0%	
Tuition &	UC San Diego	8	36,257	0.5%	26.4%	
iuiuoii $\alpha$	UC Berkeley	1	35,754	0.1%	26.5%	
	UCLA	2	35,570	0.0%	26.3%	
Mandatory Fees	Texas	13	33,780	3.9%	20.4%	
	Michigan State	28	32,632	4.8%	27.1%	
for	Washington	13 25	29,710	5.9%	28.0%	
	Clemson	7	29,600	4.0% 5.5%	26.9% 16.8%	
Top 30 Public	Georgia Tech UConn	21	29,402 29.194	5.5%	21.4%	
Top 30 Public	Illinois	13	29,102	4.0%	14.1%	
	Penn State	13	28,746	2.4%	15.3%	
Universities	Purdue	23	28,702	3.8%	23.6%	
	Florida	17	28,448	1.8%	37.9%	
	UNC Chapel Hill	5	28,446	6.0%	27.6%	
	Georgia	21	28,052	1.3%	25.6%	
	Maryland	19	27,288	4.8%	18.3%	
	lowa	28	26,931	7.3%	30.4%	
	Wisconsin	10	26,630	4.8%	22.1%	
	Rutgers	25	26,393	3.8%	22.8%	
	Pittsburgh	19	26,280	2.9%	12.8%	
<b>#</b> : <b>**</b>	Virginia Tech	28	25,915	5.9%	24.4%	
Ψ	Ohio State	18	25,445	3.3%	16.1%	
CONN	Texas A&M	23	25,035	5.1%	12.9%	

# FY 2014 Undergraduate Increases In-State Out-of State Ou

	In-State		Out-o	f-State
Undergraduate	FY13 Approved	FY14 Approved*	FY13 Approved	FY14 Approved*
Tuition	<b>\$8,712</b> 5.52%	<b>\$9,256</b> 6.24%	<b>\$26,544</b> 5.53%	\$28,204 6.25%
Other Fees	2,650	2,766	2,650	2,766
Room - Double	6,096	6,278	6,096	6,278
Board - Value Plan	<u>5,044</u>	<u>5,196</u>	<u>5,044</u>	<u>5,196</u>
Total	\$22,502	\$23,496	\$40,334	\$42,444
Increment 12/19/11	\$1,016	\$878	\$1,952	\$1,994
Increment 2/27/13		\$116		\$116
Percentage	4.7%	4.4%	5.1%	5.2%

\*Tuition, Room & Board percentage increases were approved by the Board of Trustees on 12/19/11. Other fees were approved by



# FY 2014 Graduate Increases

	In-S	tate	Out-of	-State
Graduate	FY13 Approved	FY14 Approved*	FY13 Approved	FY14 Approved*
Tuition	\$10,782 5.46%	\$11,456 6.25%	<b>\$27,990</b> 5.50%	\$29,740 6.25%
Other Fees	2,084	2,206	2,084	2,206
Room - Double	7,250	7,540	7,250	7,540
Board - Value Plan	<u>5,044</u>	<u>5,196</u>	<u>5,044</u>	<u>5,196</u>
Total	\$25,160	\$26,398	\$42,368	\$44,682
Increment 12/19/11	\$1,160	\$1,116	\$2,060	\$2,192
Increment 2/27/13		\$122		\$122
Percentage	4.8%	4.9%	5.1%	5.5%

\*Tuition, Room & Board percentage increases were approved by the Board of Trustees on 12/19/11. Other fees were approved by the Board of Trustees on 2/27/13.



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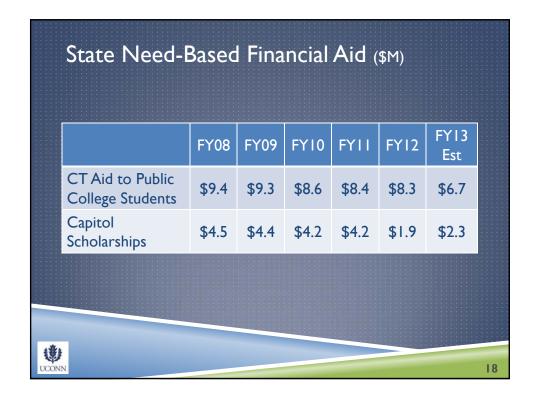
# Assisting Students with Financial Need

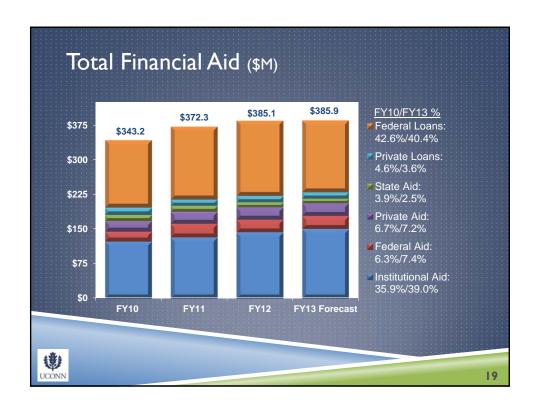
- Our best financial aid packages are provided to in-state, low income students
  - ► Tuition funded need-based grants increased 33% since FY10
  - ➤ Tuition funded need-based grants as a percentage of net tuition revenue is forecasted to be 18.4% for FY13
- During FY12, more than 21,000 students received financial aid from all known sources (more than 17,500 were packaged by Financial Aid Office)
- ► For FY13:
  - Additional one-time aid of \$4.1M (\$5.8M in FY12) is attributable to the change in continuing student demand
  - \$1.2M to replace State reduction in CAPCS funding for FY13 only
  - ▶ \$500k in new Law School scholarships



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Tuition Funded	FYI0 Actual	FYII Actual	FYI2 Actual	FY13 Forecast	FY10-FY13 % Change
Need-Based Grants	\$36.3	\$40.8	\$46.2	\$48.1	33%
Work Study/Student Labor	5.9	6.1	5.8	6.3	7%
Scholarships	18.4	20.7	23.0	26.2	42%
Tuition Waivers	<u>45.2</u>	<u>46.9</u>	<u>48.8</u>	<u>53.5</u>	18%
Total Tuition Funded	\$105.8	\$114.5	\$123.8	\$134.9	28%
Total Tuition Funded as a % of Gross Tuition Revenue	38.9%	39.1%	40.1%	39.4%	
Tuition Funded Need- Based Aid as a % of Net Tuition Revenue	17.6%	18.1%	19.2%	18.4%	





# FY 2014 Goals

- Continue to consolidate and streamline current services
- Develop infrastructure and support needed to implement the Faculty Hiring Plan
- ► Further enhance academic quality
- Invest in innovation, technology development and new jobs
- ► Train highly skilled professionals to meet the needs of Connecticut businesses
- ▶ Begin implementation & recruitment for Next Generation Connecticut



# APPENDIX

# Student Facts & Figures

Fall 2012 compared to fall 1995:

- Freshman Applications at all campuses increased 190% (10,809 to 31,363)
- ▶ SAT scores increased 113 points at Storrs (1113 to 1226)
- I,529 valedictorians and salutatorians enrolled at all campuses since 1995
- ➤ Freshman enrollment at Storrs increased 54% (2,021 to 3,114)
- Minority freshman enrollment at Storrs increased 169% (308 or 15% to 827 or 27%)
- ▶ Undergraduate enrollment at all campuses increased 52% (14,667 to 22,301)
- ► Students housed at Storrs increased 78% (6,957 to 12,358)



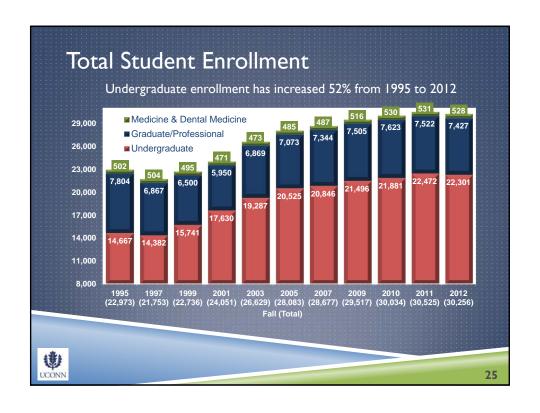
# Student Facts & Figures

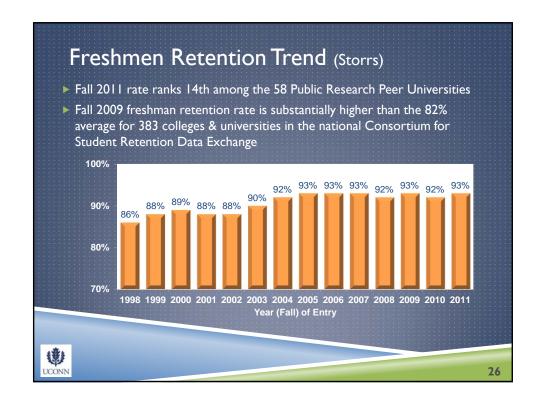
- ► Fall 2011 freshman retention is 93% and minority freshman retention is 91%
- ► Fall 2005 average time to graduate of 4.2 years at Storrs (ranks 4th among public research universities)
- ▶ Fall 2008 4-year graduation rate is 67% at Storrs
- ► Fall 2006 6-year graduation rate is 82% at Storrs
- Undergraduate degrees at all campuses increased 75% since fall 1995 (2,951 to 5,174)
- ► Graduate/Professional degrees at all campuses increased 40% since fall 1995 (1,757 to 2,462)

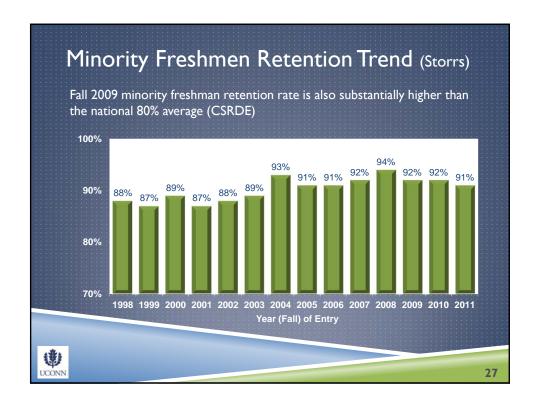


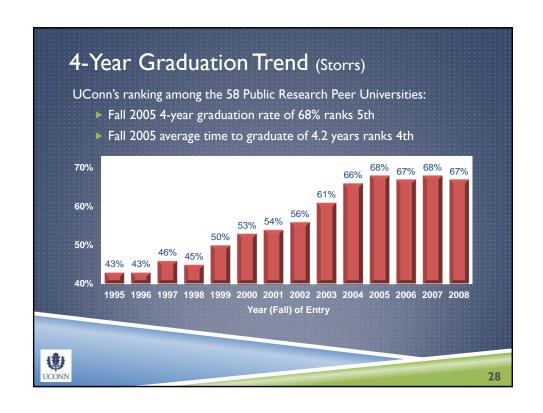
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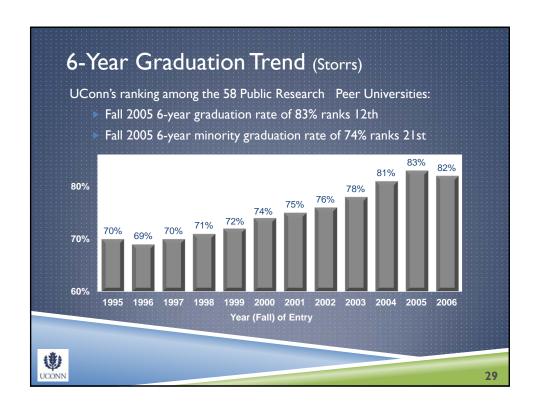
### Freshman Application Trends (Storrs & Regionals) Applications at all campuses have increased 190% from Fall 1995 to Fall 2012 32,000 31,363 28,584 28,000 22,355 23,289 24,000 19,763 18,724 20,000 16,000 13,673 12,642 12,000 10,809 10,730 8,000 2003 2005 Fall 1995 1997 1999 2001 2007 2009 2011 2012 24

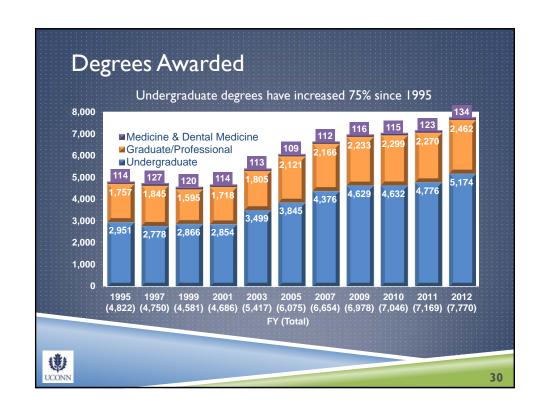












# **Campus Information**

Founded 1881 Main Campus: Storrs

5 Regional Campuses:

Avery Point, Greater Hartford, Stamford, Torrington, Waterbury School of Law and Graduate Business Learning Center: Hartford

School of Social Work: Greater Hartford Campus

Health Center: Farmington

(Schools of Medicine & Dental Medicine, graduate programs, medical & dental clinics & John Dempsey Hospital)

Land Grant & Sea Grant college, Space Grant consortium institution Storrs & Regionals = 4,067 acres; Health Center = 205 acres

### **UCONN 2000**

As of October 2012:

- 108 projects totaling \$2.1 billion in bonds have been authorized
- \$2.0 billion in construction-related contracts issued from all fund sources
  - 64% of funds to Connecticut contractors
  - 19% of funds to set-aside contractors
- In excess of 10 million square feet of new and renovated space completed
- Bond Credit Ratings by Fitch, Moody's and Standard & Poor's remain consistently strong

# Academic Programs & Degrees

14 Schools & Colleges

Agriculture & Natural Resources, Business, Dental Medicine, Neag Education, Engineering, Fine Arts, Graduate, Law, Liberal Arts & Sciences, Medicine, Nursing, Pharmacy, Ratcliffe Hicks, Social Work

8 undergraduate degrees: 102 majors

17 graduate degrees: 88 research and professional practice fields of study

5 professional degree programs (J.D., LL.M., M.D., D.M.D., Pharm.D.)

Degrees 2011-12	7,770
Bachelor's	5,149
Master's	1,573
Doctorates	341
Law (J.D., LL.M.)	234
Pharm.D.	94
Medicine	87
Dental Medicine	47
Graduate/Professional Certificates	141
6 Yr. Education	79
2 Yr. Agriculture	25

Degrees by: Female 53% Minority 19%

### Total Fall 2012 Student Enrollment: 30,256

17,528	Undergraduate at Main Campus
4,773	Undergraduate at Regional Campuses
22,301	Subtotal Undergraduate
6,613	Graduate (M.A./Ph.D., incl. 321 at Health Center)
623	Law
191	Pharm.D.
359	Medicine
169	Dental Medicine
7,955	Subtotal Graduate/Professional

# Fall 2012 Entering Freshmen at Main Campus: 3,114

- 48% were in top 10% of high school class
- 84% were in top 25% of high school class
- 63 valedictorians and 63 salutatorians
- 213% more minority freshmen than in Fall '95
- Since 1995: 1,538 valedictorians and salutatorians enrolled at all campuses

### Student Characteristics Fall 2012

	Undergraduate 22,301	Grad/Professional 7,955
Female	50%	51%
Minority	26%	17%
International <sup>1</sup>	3%	18%
Connecticut Residents <sup>2</sup>	81%	70%

<sup>&</sup>lt;sup>1</sup> 98 countries were represented in the Fall 2012 international student population.

# SAT Scores and Retention & Graduation Rates

2012 SAT Scores (Critical Reading and Math)	National High School 1010	Connecticut High School 1018	Storrs Entering Freshmen 1226
Main Campus Freshmen Retention: Graduation:	1-Year Rate 4-Year Rate 6-Year Rate	All 93% 67% 82%	Minority 91% 59% 77%

UConn (Main Campus) ranks 12 out of 58 public research universities in graduation rate for all freshmen and 21 out of 58 public research universities for minority freshmen. (Sources: *U.S. News 2013 America's Best Colleges & 2011 IPEDS Graduation Rate Survey*) UConn (Main Campus) average time to graduate is 4.2 years among those who graduate within 6 years, and ranks 4 out of 58 public research universities.

# **Total Undergraduate Student Cost 2012-13**

	in-State	Out-or-State	
Tuition, Fees, Room <sup>1</sup> & Board <sup>2</sup>	\$22,502	\$40,334	
Tuition & Mandatory Fees	11,362	29,194	
Tuition Only	8,712	26,544	

<sup>&</sup>lt;sup>1</sup> 72% of Main Campus undergraduates live in campus housing (117 residential halls).

# Student Financial Aid FY 2012

Financial Aid Support: \$406.5 million

	Main Campus/ Regional <sup>1</sup>	Health Center
Scholarships & Grants Loans Student Employment Tuition Waivers	\$137.9 million 177.1 million 21.3 million 48.8 million	\$5.3 million 16.1 million

<sup>&</sup>lt;sup>1</sup> 40.1% of all tuition dollars are dedicated to financial aid. Approximately 21,000 students received financial aid packages in FY 2012.

<sup>&</sup>lt;sup>2</sup> 76% of undergraduates on Main Campus are Connecticut residents.
All 169 Connecticut towns and 46 of 50 states are represented in the Fall 2012 total undergraduate student

<sup>&</sup>lt;sup>2</sup> Board rate shown reflects most popular plan available.



# Total Current Funds Budget FY 2013: \$1.9 billion

### STORRS & REGIONAL CAMPUSES

STORKS & REGIONAL CAMPOSES	
Revenue	In Millions
State Appropriation	\$205.6
Fringe Benefits	86.9
Student Tuition & Fees	533.0
Gifts, Grants & Contracts	176.1
Sales/Services - Auxiliary Enterprises	34.0
Sales/Services - Educational	17.5
Investment Income	0.8
Total	\$1,053.9
Expenditures	
Academic Services	\$434.8
Research Services	78.1
Student Services	383.6
Operating, Support & Physical Plant Services	158.4_
Total <sup>1</sup>	\$1,054.9

### **HEALTH CENTER**

HEALIH CENTER	
Revenue	In Millions
State Appropriation	\$112.7
Fringe Benefits	48.0
Tuition & Fees	18.5
Gifts, Grants & Contracts	84.9
Interns & Residents	55.2
Net Patient Care	365.2
Correctional Managed Care	85.6
All other revenues	41.3
Total	\$811.4
Expenditures	
Hospital & Health Services	\$428.6
Academic Services	168.4
Research Services	94.6
Operating, Support & Physical Plant Services	119.8_
Total <sup>1</sup>	\$811.4

<sup>&</sup>lt;sup>1</sup>The net loss is due to a planned use of fund balance.

# **Private Giving FY 2012**

- Total Endowment: At the close of FY 12, the University's endowment, which stood at \$42 million at the start of 1995, was valued at approximately \$329 million.
- In FY 12, private fundraising receipts totaled \$60 million: \$27.4 million for Storrs and the regional campuses, \$10.9 million for the Health Center, and \$21.8 million for Athletics.
- Alumni contributed \$21 million in FY 12. Additional commitments included \$19 million from parents and other individuals, and \$20 million from corporations, private foundations and other organizations.

# Staff Characteristics (Fall 2012)

### Number of Full-time & Part-time Faculty & Staff: 9,872

Full-time & Part-time Faculty & Staff Full-time Faculty & Staff Part-time Faculty & Staff <sup>1</sup>	Main Campus/ Regional 4,624 4,405 (95%) 219 ( 5%)	Health Center 5,248 4,002 (76%) 1,246 (24%)
Full-time Faculty Tenured & Tenure Track Non-Tenure Track	<b>1,377</b> 1,061 (77%) 316 (23%)	<b>505</b> 190 (38%) 315 (62%)
Full-time Staff	3,028	3,497
Full-time & Part-time Faculty Female Minority	40% 22%	39% 28%
Full-time & Part-time Staff Female Minority	58% 17%	77% 24%

<sup>1</sup>An additional 686 adjunct lecturers teach one or more courses at Storrs and Regional Campuses.

# **Staff Covered by Collective Bargaining Agreements:**

Main Campus & Regional Campuses	90%
Health Center	80%

# Research, Training & Public Service

# FY 12 external funding, sponsored activities: \$207.4 million

(excluding financial aid):

Main & Regional Campuses: \$122.5 million (59%) Health Center: \$ 84.9 million (41%)

**Total by Funding Source** 

Federal: 73% Private/Other: 16% State: 11%

### **Sponsored Activities at Main & Regional Campuses** Research 80.9%

**Education and Training Programs** 1.7% Public Service 17.4%

### Sponsored Activities at the Health Center

Research	93.0%
Industry Support	1.2%
Education and Training Programs	3.6%
Other	2.2%

### **UConn Alumni**

- More than 217,000 total alumni worldwide
- More than 121,000 alumni live in Connecticut