Finance, Revenue and Bonding Committee  
General Bonding Subcommittee  
March 16, 2017  
Testimony  
By  
Scott Jordan  
Executive Vice-President for Administration & Chief Financial Officer  
University of Connecticut  
And  
Andrew Agwunobi  
CEO UConn Health and Executive Vice President for Health Affairs

Co-Chairs, Ranking Members, and Members of the Committee, thank you for giving us the opportunity to update you on the transformative building initiatives that you have made possible at the University of Connecticut. My name is Scott Jordan and I am the Executive Vice-President of Administration and Chief Financial Officer at the University.

With me today is Jeremy Teitelbaum, our Interim Provost and Andrew Agwunobi, CEO of UConn Health and Executive Vice President for Health Affairs.

I will begin by providing a capital program overview, an update on Next Generation Connecticut (NextGenCT), followed by a summary of the Governor’s recommendations to defer authorizations and its impact on the program and clarifying language to the UCONN 2000 Statutes. I will close by providing an update on the Tech Park and then turn it over to my colleagues at UConn Health to provide an update on the Bioscience Connecticut Initiative.

The UCONN 2000 Infrastructure Improvement Program is designed to modernize, rehabilitate and expand the physical plant of the University, including UConn Health. The legislation provides for a twenty-nine-year capital budget program in three phases, estimated to cost $4.3 billion. The first two phases totaling $962 million are complete and have been fully bonded and expended. The third phase of the program totaling $3.3 billion includes the Next Generation Connecticut and Bioscience Connecticut initiatives. To date, $1.6 billion of Phase III has already been expended. The remainder of the program is well underway with over $433 million of projects in construction and over $1.2 billion of projects in planning or design.

In 2013, the General Assembly enacted Next Generation Connecticut. The goals are to hire and support outstanding faculty, train graduates to meet the future workforce needs of Connecticut, develop preeminence in our research and innovation programs, and initiate research and industry partnerships that lead to economic development. The cornerstone of this effort is the development of new facilities and renovation of critical infrastructure. Next Generation Connecticut will also support the historic move of the Greater Hartford campus
to downtown Hartford and expansion of critical programs at the Stamford campus as well as renovations at the Avery Point and Waterbury campuses.

We completed a bold Academic Plan – **UConn’s Path to Excellence** – and the **Campus Master Plan** to guide Next Generation Connecticut investments for the next 10 years.

We’ve already realized important gains through these strategic investments. Since fall 2012, we’ve funded 172 new faculty and enrolled 1,796 additional undergraduate students at the Storrs campus (with 1,066 or 54% more in engineering). We have graduated 12% more STEM undergraduates and 14% more STEM graduates since NextGenCT began. Our faculty also made dramatic increases in research productivity during this time. For example:

- research awards increased by $68M or 57%
- research proposals increased by $112M or 16%

**Next Generation Connecticut Capital Program Overview**

Now in its third year, the NextGenCT initiative is moving at full speed, making strategic investments in Connecticut’s future, laying critical groundwork for economic development, and creating hundreds of construction jobs in the process.

By investing in science, technology, and engineering as well as the overall infrastructure at UConn, we are attracting, educating, and retaining students, researchers, and future leaders in Connecticut in ever-greater numbers. These individuals will work, live, start businesses and create jobs in Connecticut. Future NextGenCT funds will allow us to continue to enhance and build on this growing success and contribute more fully to Connecticut’s economy and workforce.

Major investment has been necessary to support new and renovated laboratories for STEM research and teaching, classrooms, academic support, residence halls, parking, utilities, information technology, equipment and critical infrastructure upgrades.

To foster and enable faculty collaborations across diverse disciplines in STEM, shared equipment has been purchased, such as the functional magnetic resonance imaging system (fMRI), additive manufacturing equipment and materials characterization instruments. In addition, startup resources have been used to recruit and retain outstanding faculty. Startup equipment may include advanced lasers, sensors, cell culture facilities, atomic force microscopes, polymer extruders, metals processing equipment, etc. Faculty also use these instruments to successfully compete for major research grants in emerging areas of manufacturing, materials, energy, biomedical technologies, information science and systems genomics.

Last fall, a new 212,000 square foot residence hall opened, which is home to approximately 725 students who are participating in one of eight exciting living-and-learning communities including Innovation House, Women in Math, Science & Engineering, Eco-House among others. In addition, major renovations were completed in the Monteith Building and Putnam Refectory. Monteith is the new home of the Math Department and Putnam is the dining hall which will provide services for the new residence hall.

The campus growth has also required infrastructure upgrades, such as steam line replacement, sewer system upgrades, a supplemental water supply, and various other underground utility improvements.

**Status of Current Facility Projects**

The University is quickly moving forward on several projects to meet the needs of our expanded enrollment and new faculty. These projects include housing at our Stamford campus, a new Engineering & Science Building, and the Greater Hartford Campus relocation to the renovated and expanded Hartford Times building.
Stamford Housing
The University has entered into a long-term master lease of the building presently under construction at 900 Washington Boulevard (funded through our operating budget). The location will have 116 units including studio, one bedroom and two bedroom apartments and will provide approximately 290 students with occupancy starting in the Fall 2017. Our next steps include the execution of agreements and reviewing technology and security system extensions from the Stamford campus, and we expect student housing commitments will start in the next few months.

Engineering and Science Building
The School of Engineering is housed in several buildings throughout the campus. The three oldest and least adequate buildings on the main campus were built between 1959 and 1987 and cannot support emerging interdisciplinary programs. A planning study identified program components for a new Engineering & Science building that will include a state-of-the-art laboratory for research in Bio-Nano Engineering, Cyber-Physical System Engineering, Advanced Manufacturing and other trans-disciplinary programs that will catalyze innovation. Construction on this five-story $95 million facility began in June 2015 and completion is scheduled for summer 2017.

Hartford Campus Relocation
Relocating the Greater Hartford Campus to downtown Hartford will provide unparalleled educational, service learning and internship opportunities for undergraduate and graduate students. The new campus will also bring together the professional programs in the School of Social Work and the Department of Public Policy to serve industries and governmental agencies in Hartford. The downtown Hartford location will increase transfer access for community college students. UConn Hartford will become a neighborhood campus with one central iconic structure, supplemented by classrooms and support spaces located in a newly purchased building and in the Hartford Public Library through a shared use agreement. Existing parking facilities will be utilized and the streets of Hartford will be enlivened as students, faculty and staff walk to their destinations. The current target date for completion is summer 2017.

Academic and Research Facilities
Expansion of research space is necessary to enable the University to recruit outstanding faculty and develop emerging interdisciplinary research collaborations. Currently there are two major projects in various stages to meet this need. The first project is the STEM Research Center 1 building which is a keystone in the effort to fulfill the mandates of NextGenCT and will provide critical new research facilities. We are currently in the design phase for this new facility with construction completion expected in the summer 2021.

The second major project is renovations in the Gant Building complex, which includes the Institute of Materials Science as well as the Physics and Math departments, and was built more than 50 years ago. The Gant complex has a total of 285,000 gross square feet of space with offices, research labs, classrooms and computer facilities. A major renovation of this space is required to address the physical deterioration and to update the research and teaching facilities to meet modern program requirements. Phased construction will begin in spring 2017 and be complete in summer 2022.

Infrastructure Improvements
The University completed an expansion to the existing heating plant when the Cogeneration system was completed in 2006. The University will need additional chilled water, emergency power for life safety as well as emergency power to accommodate the new growth in faculty, students, research and teaching. Planning has begun to model the need for a Supplemental Utility Plant to serve new facilities in the north end of the campus. Future infrastructure projects include steam distribution lines in the central campus, an electrical substation and capacity improvements.
Governor’s Recommended – 2 Proposals

Deferral of Authorizations
Essentially, the Governor’s budget recommends the deferral of $334.1 million in authorizations and stretches out the program – which was scheduled to end in 2024 – to 2027.

While a deferral of this magnitude will have a dramatic impact on the NextGenCT program, we understand the state is faced with extraordinarily difficult financial circumstances. Given this, we will therefore aim to protect the core priorities of the program, preserve funding for projects currently in construction or scheduled to break ground this summer and allow funding for critical deferred maintenance and infrastructure projects necessary for continued operation and public safety at our campuses. However, please understand that the University is not able to achieve this level of deferral without impacting STEM teaching and research facilities as well as other important projects. Specifically, the University would meet the proposed plan by deferring the following projects:

- **STEM Research Center 2** – One of the primary intents of NextGenCT is to help UConn develop into an even more important driver of the growth of the Connecticut economy. The NextGenCT investment is focused on expanding research, workforce development, and technology commercialization capacity in engineering, physical, and life sciences, with the overall intent of keeping current industry competitive, and driving the creation of new companies and associated new jobs. As with faculty research equipment funding, this item is critical to the success of NextGenCT, and deferring it will slow down the achievement of the program’s goals.

- **Equipment for Faculty Research** – The latest research equipment is vital to attract the most qualified faculty and to perform cutting edge research. These investments also enable students and industry partners in Connecticut to access the instruments for research, development, and training. Competing with top flagship universities in research and economic development will require more than modern buildings; advanced instruments are critical to this strategy. If equipment funds are deferred, it will slow down the success of NextGenCT.

- **New Residence Hall (Honors Dorm)** - The impact of deferring this project may be that we lose the best Connecticut students to other schools and states with which we compete since we may not have room for them on campus.

- **Parking Garages** – New building construction on surface parking lots has created a significant need for replacement parking. Without State capital funds, the University would consider a public/private partnership to build and manage parking on campus. This action will result in increased parking rates for employees and students. Parking rates are collectively bargained for with University unions, which reflects the sensitivity of this issue.

- **Stamford Campus Repairs – Parking Garage** - The Stamford campus parking garage is dilapidated and dangerous, and it will likely be condemned in the near future if not repaired. The University planned to demolish and replace the garage. If funding is deferred, UConn might now have to seek a private partner to undertake the project. The result will be higher parking expenses for faculty, staff, and students in Stamford.

- **Infrastructure & Deferred Maintenance** – Much of UConn’s existing infrastructure is old and in critical need of repairs which are estimated to cost nearly half a billion dollars. By cutting $122.4 million for infrastructure in this proposal, UConn is moving further away from being able to rectify these critical needs. The UConn Storrs campus provides its own electric generation, heat, cooling, water, and wastewater utilities. These assets have urgent deferred maintenance needs that, if not addressed, will impact the safe operation of the campus. Over the past year, UConn has experienced failures and safety
issues nearly every week such as power outages, potentially life threatening events, water main breaks and/or life safety issues, including a manhole explosion in the center of campus.

- **Projects related to State Requirements** - The least painful impact of the deferrals to our students would be these projects. Multiple projects on campus are not necessary from the University’s perspective, but have been mandated by various State agencies. Together this amounts to $34.9 million. Cancelling these projects will not impact the University or our students.

**Clarifying Language**

We support language in SB 788 that clarifies a named line project in the UCONN 2000 Act (CGS 10a-109e (a)) and provides an accompanying new definition.

The clarified named line would read: **Deferred Maintenance/Code Compliance/ADA Compliance/Infrastructure Improvements & Renovation Lump Sum & Utility, Infrastructure, Administrative & Support Facilities**. The clarifying language and new definition are required to address a number of new construction and or renovation of infrastructure related projects (e.g. new utility structures and upgrades—water pollution control sludge processing plant, utility tunnels, etc.) that are critically important for continued operations at the Storrs campus that are not expressly listed as named projects in the UCONN 2000 Act. There also are new construction or renovation projects that are non-academic in nature, but are essential to ensuring that the campus can continue to serve more than 20,000 students, faculty and staff on a daily basis.

Section 61 of SB 788, includes a corresponding definition by amending Section 10a-109 (c) and reads:

(NEW) (34) "Utility, infrastructure, administrative and support facilities" includes any project as defined in subdivision (16) of this section for such facilities at Storrs or the regional campuses or at the health center including any building or structure essential, necessary or useful for such facilities and includes, without limitation, new construction, expansion, extension, addition, renovation, restoration, replacement, repair and deferred maintenance of such facilities, and all appurtenances and facilities either on, above or under the ground that are used or usable in connection with any of such facilities and all other aspects of a project related to or in support of such facilities.

**UConn Tech Park**

In collaboration with industry partners and entrepreneurs, UConn is developing a Technology Park at the Storrs campus. As a result of PA 11-57 & 14-98, $169.5 million of funds have been authorized and allocated by the Bond Commission. The Innovation Partnership Building (IPB) construction began in June 2015 and some portions of the building are nearing completion. This 114,000 square foot building will comprise flexible-use laboratories that will serve key industry partnership with an emphasis on engineering and materials science.

When completed in mid-2018, the IPB will be the most innovative research facility for materials science, systems engineering, cyber-security and manufacturing in Connecticut. Its advanced materials characterization laboratories, fitted with a suite of state-of-the-art electron microscopes, will be truly world-class. The IPB will feature highly specialized equipment to support collaborative R&D activities with industry partners that will lead to significant economic and workforce development. In this regard, the US Economic Development Administration has awarded two grants to UConn (in partnership with Connecticut Innovations) to develop a Proof-of-Concept Center (POCC) for rapid prototyping, and a Modeling and Simulation Center to facilitate advanced manufacturing and process optimization. These centers will help support new companies as well as small to medium-sized enterprises state-wide.

The Tech Park will enhance Connecticut’s global competitiveness and will become a critical component of the State’s future economic growth by attracting and retaining world-class industry partners to develop their new technologies in collaboration with the University of Connecticut.
The School of Engineering and the Institute of Materials Science faculty have already developed innovative partnerships with leading manufacturing, energy, cyber-security and materials companies that include:

- $25M UConn-FEI Center for Advanced Microscopy & Materials Analysis*
- $10M UTC Institute for Advanced Systems Engineering
- $9M Eversource Energy Center
- $7.5M GE Advanced Technology Initiative
- $7.5M Additive Manufacturing & Innovation Center*
- $6.6M ZEISS Partnership for Hardware Security*
- $6M Comcast Center for Security Innovation
- $5M NextFlex Flexible Electronics Manufacturing Institute **
- $4M Advanced Robotic Manufacturing Institute**
- $3.6M US EDA/Connecticut Innovations Proof-of-concept center and modeling/simulation center*
- $3M Clean Energy Smart Manufacturing Innovation Institute**
- $2.2M Synchrony – C3/CHASE Partnership in Cybersecurity
- $2M EDAX Partnership for Advanced Electron Microscopy Cameras & Detectors*
- $1M UTAS-UConn Center for Advanced Materials
- $0.94M DSI partnership on thermomechanical testing*

**Note**: All industry partnerships have match contributions from UConn and /or State/Federal (e.g. DECD, Connecticut Innovation, US EDA) sources and in some instances (*) include equipment procurement. ** Represents the maximum award based on internal competition for sub-awards within a consortium.

UConn is well underway in the process of building new relationships that include:

- direct research contracts from industry
- joint development of products and processes
- joint proposals to federal agencies
- training of students through internships, senior design projects and co-operative education with companies will be a key priority

**Conclusion**

In conclusion, we are meeting many of the key goals we've established for Next Generation Connecticut and the Tech Park. We are very excited about the growth in enrollment, hiring of outstanding faculty who are nationally-competitive, growth in funded research and development, and key partnerships with world-class industry partners. While the deferrals contemplated in the Governor’s budget are challenging, the University is committed to protecting the core tenets of NextGenCT and ensuring that Connecticut reaps the economic benefits of the program.

Thank you for your strong support of the University of Connecticut. I would now like to ask Andy Agwunobi to provide you with an update on Bioscience Connecticut and UConn Health’s Electronic Health Record project.
Dr. Andrew Agwunobi, CEO of UConn Health

Good afternoon. I am Andy Agwunobi, CEO of UConn Health. With me today is Jeffrey Geoghegan, our CFO and Tom Trutter, our Associate Vice President for Campus Planning, Design and Construction.

On behalf of our employees and students, we thank you for your continued support of UConn Health and for the leadership you have shown by investing in UConn and the State’s growing bioscience industry.

Because of your support, our campus has undergone an incredible transformation. These changes have already begun to – and will continue to – contribute in real and positive ways toward creating jobs in our State, developing the State’s future workforce, spurring bioscience innovation, and improving the healthcare needs of Connecticut’s citizens.

Bioscience Connecticut - Capital Program Overview

By way of background, in 2011, the General Assembly enacted the Bioscience Connecticut initiative. This was an important component of the Governor’s and the State’s plan to jumpstart Connecticut’s economy by creating construction-related jobs immediately and by generating long term sustainable economic growth in the State by making Connecticut a national and global leader in bioscience.

As a catalyst for that growth, the State committed to making strategic investments in UConn Health.

In the interest of time, I will briefly summarize the progress we have made on the Bioscience Connecticut capital projects that have been supported by State bond funds. As you know, the handout that we have passed out provides more detail on these projects.

Overall, I am pleased to report that our Bioscience Connecticut infrastructure projects are all within budget and on schedule. The capital program is 88% complete with the remainder ending in 2018, just over one year away.

Through February, over 6,000 construction-related jobs have been created, and 83% of construction contracts have been awarded to Connecticut companies, with a value of more than $370 million.

We have also far exceeded the State’s set-aside goals for contracts awarded to minority-, women- and disadvantaged-owned Connecticut businesses.

Research Laboratory Renovations

We continue to make significant progress in the renovations to our research facilities to convert our old, outdated labs into open, flexible lab space that can accommodate new technologies and that allow greater collaboration among research departments.

The first lab renovation project is complete, and the second is in construction and is on schedule to be completed later this month.

New Incubator Lab Addition

The Incubator Lab Addition to the Cell and Genome Sciences Building was completed in 2015. This project doubled UConn’s incubator lab space and is ideal for start-up biotech companies. New bio-tech start-up companies have been moving into the new space since it opened in January 2016, and the expanded space is already 64% full.
Academic Building

We also completed our Academic Building Addition and the schools began using the new space in August of last year. The new Academic Rotunda classroom allows the implementation of our new, modernized Medical School and Dental School curricula, and also allows us to incorporate advanced technology into the teaching environment.

New Patient Care Tower

Construction of our new hospital tower is complete and in its first year of operation.

With the opening of this new facility, we now offer 169 private patient rooms, an expanded emergency department, and modernized operating room suites – greatly improving the patient experience, enabling us to use more advanced communication and medical technologies, and improving information sharing among clinical team members.

Clinical Care Renovations

Finally, renovations are well underway to modernize the Dental School teaching clinics and to expand the Pat and Jim Calhoun Cardiology Center. The renovations will be completed in 4 phases. Phase 1 is scheduled to be complete in June of this year; and the remainder of the work will continue through the end of 2018.

The transformation of UConn Health’s campus is nothing short of extraordinary. We urge you to come visit the campus in Farmington if you have not seen it in recent years; we would be happy to host you at any time.

As you can see, our capital improvements at UConn Health are nearly complete; in fact, the state funding supporting these capital improvements through UCONN 2000 and Bioscience Connecticut is scheduled to end in 2018.

Electronic Medical Record (EMR) System

Apart from the Bioscience CT building projects, I wanted to give you an update on UConn Health’s Electronic Medical Record system (EMR).

This is a $98 million project for an electronic medical record system that will integrate through all of UConn Health’s inpatient and outpatient services. $41 million of the cost has been supported with State bonds. The remainder of the project will be funded by reallocated UCONN 2000 Storrs funds and UConn Health operating funds.

As we shared with you last year, our existing electronic health systems are disparate and outdated, and will not meet future federal requirements for interoperability or support enhancements that improve patient safety and clinical care. This project is critical for us.

After a rigorous, open competitive procurement process, we chose an EMR vendor. We have established the necessary governance structures, and have engaged both experienced consultants as well as our own physicians, health care professionals and staff, to ensure that the implementation of this project is fully successful. We are currently in the design / build phase and will start the detailed testing phase in May of this year. Our “go-live” is scheduled for April 2018.
Before I close, I want to stress the importance of our transformed campus in recruiting world-class faculty, students and staff to UConn Health and in positioning us and the State for success in this era of personalized medicine.

Our success, however, will not be found in the construction of buildings alone; it is what goes on inside those buildings, with the people and resources that will guarantee our success and benefit the State the most.

With operational dollars from the State for Bioscience Connecticut, we have successfully recruited new faculty who continue to ramp up and will be instrumental in helping us grow our clinical services and expand our research portfolio.

We have also been working diligently with The Jackson Laboratory to jointly hire preeminent researchers; we have already hired three, and a number of candidates are in the interview pipeline.

Clinical and research faculty are hired with the expectation that they will bring or receive grant funding or earn clinical revenues to support their salary.

As you see, we have been extraordinarily focused and productive. We thank you again for understanding the value of investing in UConn and UConn Health -- not only to spur short-term jobs for Connecticut businesses and citizens, but also to secure the long-term economic growth of bioscience in the State and region, and to the education and development of the next generation of Connecticut doctors, dentists and health care professionals.

We are happy to answer any questions you may have.
Proposed UCONN 2000 Changes

Governor’s budget proposes deferral of $334.1 million in authorizations and extends the program 3 years to 2027

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>UCONN 2000 NextGenCT Amount</th>
<th>Deferral Amounts</th>
<th>Revised UCONN 2000 NextGenCT Amounts</th>
<th>Deferral Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$295.5</td>
<td>($29.6)</td>
<td>$265.9</td>
<td>(10%)</td>
</tr>
<tr>
<td>2019</td>
<td>251.0</td>
<td>(25.1)</td>
<td>225.9</td>
<td>(10%)</td>
</tr>
<tr>
<td>2020</td>
<td>269.0</td>
<td>(43.3)</td>
<td>225.7</td>
<td>(16%)</td>
</tr>
<tr>
<td>2021</td>
<td>191.5</td>
<td>(31.2)</td>
<td>160.3</td>
<td>(16%)</td>
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<tr>
<td>2022</td>
<td>144.0</td>
<td>(90.9)</td>
<td>53.1</td>
<td>(63%)</td>
</tr>
<tr>
<td>2023</td>
<td>112.0</td>
<td>(75.2)</td>
<td>36.8</td>
<td>(67%)</td>
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<tr>
<td>2024</td>
<td>73.5</td>
<td>(38.8)</td>
<td>34.8</td>
<td>(53%)</td>
</tr>
<tr>
<td>Total</td>
<td>$1,336.5</td>
<td>($334.1)</td>
<td>$1,002.4</td>
<td>(25%)</td>
</tr>
<tr>
<td>2025</td>
<td>125.0</td>
<td></td>
<td>125.0</td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td>110.0</td>
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<td>110.0</td>
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<tr>
<td>2027</td>
<td>99.1</td>
<td></td>
<td>99.1</td>
<td></td>
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<tr>
<td>Total</td>
<td>$334.1</td>
<td></td>
<td>$1,336.5</td>
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- Deferral will dramatically impact the NextGenCT initiative
Proposed UCONN 2000 Changes

In developing the list of projects to be delayed, UConn:

- Protected the core priorities of the NextGenCT program
- Preserved projects currently in construction or scheduled to break ground this summer, including the Hartford Campus construction, Engineering Building and the Gant Science and Technology Building
- Protected funding for critical deferred maintenance and infrastructure projects necessary to ensure continued operation and public safety at our campuses

<table>
<thead>
<tr>
<th>Proposed Deferrals to FY25 - FY27</th>
<th>Project Status</th>
<th>Total ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Research Center 2</td>
<td>Planning</td>
<td>$ 62.5</td>
</tr>
<tr>
<td>New Residence Hall (Honors Dorm) and Parking Garages</td>
<td>Planning/Design</td>
<td>$ 83.5</td>
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<tr>
<td>Equipment for Faculty Research</td>
<td>Planning</td>
<td>$ 21.2</td>
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<tr>
<td>Stamford Campus Repairs - Parking Garage</td>
<td>Planning</td>
<td>$ 9.7</td>
</tr>
<tr>
<td>Infrastructure &amp; Deferred Maintenance</td>
<td>Planning/Ongoing</td>
<td>$ 122.4</td>
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<td>State Requirements:</td>
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<tr>
<td>Facility Code Repairs (former Correctional Facility)</td>
<td>Planning</td>
<td>$ 7.5</td>
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<tr>
<td>Fats, Oil &amp; Grease Compliance (DEEP)</td>
<td>Design</td>
<td>$ 4.4</td>
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<td>Heating Plant - Boiler Replacements (EPA)</td>
<td>Planning</td>
<td>$ 15.3</td>
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<tr>
<td>Historic Exterior Repair (SHPO)</td>
<td>Planning</td>
<td>$ 6.7</td>
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<tr>
<td>Public Art</td>
<td>Planning</td>
<td>$ 1.0</td>
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<tr>
<td>Total Deferrals</td>
<td></td>
<td>$ 334.1</td>
</tr>
</tbody>
</table>

Other proposed changes include:

- Revision of current named line to Deferred Maintenance / Code Compliance / ADA Compliance / Infrastructure Improvements & Renovation Lump Sum and Utility, Administrative and Support Facilities

- Added new definition:
  - "Utility, infrastructure, administrative and support facilities" includes any project as defined in subdivision (16) of this section for such facilities at Storrs or the regional campuses or at the health center including any building or structure essential, necessary or useful for such facilities and includes, without limitation, new construction, expansion, extension, addition, renovation, restoration, replacement, repair and deferred maintenance of such facilities, and all appurtenances and facilities either on, above or under the ground that are used or usable in connection with any of such facilities and all other aspects of a project related to or in support of such facilities.
UCONN 2000 Capital Program

- **Program Structure:**
  - Project list in law
  - Annual bond caps
  - Authority delegated to Board of Trustees
  - University administers program
  - Semi-annual reports to Governor & General Assembly (Book 43)
  - Annual audit

- **Board of Trustee Process:**
  - Approval of capital plan
  - Approval of annual project list & supplemental indenture
  - Submit list to Governor
  - List triggers expenditure plan
    - Projects >$500k approved at Planning, Design, Final stages by Board
  - Program & planning adjustments via phasing schedule & indenture changes are ongoing

UCONN 2000 Capital Program Funding

- **29 year program:** $4.3B State bond funds
  - Phase I: $382M (FY 1996-1999)
  - Phase II: $580M (FY 2000-2005)
  - Phase III: $3.3B (FY 2005-2024):
    - Storrs: NextGenCT=$2.0B and $0.5B Other
    - UCH: Bioscience CT=$0.6B and $0.2B Other

- **$709M of other funds:**
  - $259M in other State bonds (i.e. Tech Park, Law School, Waterbury, Stamford)
  - $189M in special obligation bonds (UConn funded)
  - $162M+ in operating, gift, grant and research funds (UConn funded)
  - $82M tax exempt lease (UConn funded)
  - $17M in federal funds
UCONN 2000 State Bond Fund Status

- Phases I & II - $962M authorized & allocated, bonds fully issued & expended
- Phase III - $1.98B (Storrs=$1.21B, UCH=$0.77B) authorized & allocated to date; $1.88B of bonds issued and $1.64B fully expended
- Remaining Phase III authorizations not yet allocated of $1.3B
  - Due to the phasing of funds over multiple years, most projects pending allocations in future years are already under construction or in planning/design
  - UCH funding ends in FY18

UCONN 2000 Phase III Bond Fund Status

<table>
<thead>
<tr>
<th>FY05-FY24 Summary ($M)</th>
<th>Expended</th>
<th>Under Construction*</th>
<th>Planning &amp; Design</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Academic &amp; Research Facilities</td>
<td>$307</td>
<td>$46</td>
<td>$554</td>
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<tr>
<td>Deferred Maintenance/Infrastructure</td>
<td>324</td>
<td>110</td>
<td>488</td>
<td>922</td>
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<tr>
<td>Residential Life Facilities</td>
<td>129</td>
<td>13</td>
<td>21</td>
<td>163</td>
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<tr>
<td>Parking</td>
<td>70</td>
<td>70</td>
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<td>70</td>
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<tr>
<td>Equipment</td>
<td>114</td>
<td>20</td>
<td>96</td>
<td>230</td>
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<tr>
<td>Electronic Medical Record System (funding provided to UCH)</td>
<td>48</td>
<td></td>
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<tr>
<td>Regional Campuses</td>
<td>119</td>
<td>70</td>
<td>14</td>
<td>203</td>
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<tr>
<td>Total Storrs &amp; Regional Campuses</td>
<td>$993</td>
<td>$307</td>
<td>$1,243</td>
<td>$2,543</td>
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<tr>
<td>Deferred Maintenance/Renovations</td>
<td>$106</td>
<td>$14</td>
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<td>$120</td>
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<tr>
<td>Equipment</td>
<td>58</td>
<td>9</td>
<td>1</td>
<td>68</td>
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<tr>
<td>Bioscience CT</td>
<td>487</td>
<td>103</td>
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<td>590</td>
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<tr>
<td>Total UConn Health (ends in FY18)</td>
<td>$651</td>
<td>$126</td>
<td>$1</td>
<td>$778</td>
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<tr>
<td>Grand Total</td>
<td>$1,644</td>
<td>$433</td>
<td>$1,244</td>
<td>$3,321</td>
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</table>

*Net of expenditures; includes funds phased over future years
Next Generation Connecticut Overview

Thanks to the strong support from the State, UConn continues the transformation of modernizing, rehabilitating and expanding the physical plant of the University through the NextGenCT initiative

- Approved in 2013, NextGenCT is an ambitious 10-year plan (FY15-FY24) to improve UConn’s STEM capabilities. Specifically, the initiative is designed to:
  - Build STEM facilities including classrooms, equipment and laboratories
  - Upgrade aging infrastructure to accommodate faculty and students
  - Hire new faculty & enroll more talented undergraduate students primarily in STEM areas (dependent on new State operating funds)
  - Increase research productivity & innovation

- Includes capital and operating components
  - Capital Budget $1.5B Approved
  - Operating Budget $137M Increase requested in State Appropriation

---

NextGenCT Capital Budget

Continued stable funding is essential for execution of the capital plan

<table>
<thead>
<tr>
<th>Prior Year FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18*</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
<th>FY24</th>
<th>FY25</th>
<th>FY26</th>
<th>FY27</th>
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<tbody>
<tr>
<td>Budget ($M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>$140.6</td>
<td>$205.0</td>
<td>$204.4</td>
<td>$205.0</td>
<td>$260.1</td>
<td>$251.0</td>
<td>$269.0</td>
<td>$291.5</td>
<td>$444.0</td>
<td>$112.0</td>
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<tr>
<td>FY17 Deferral</td>
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<tr>
<td>Proposed Deferral</td>
<td>(29.6)</td>
<td>(15.1)</td>
<td>(41.1)</td>
<td>(31.2)</td>
<td>(90.0)</td>
<td>(76.2)</td>
<td>(68.8)</td>
<td>125.0</td>
<td>110.0</td>
<td>99.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Budget</td>
<td>$140.6</td>
<td>$205.0</td>
<td>$204.4</td>
<td>$179.3</td>
<td>$256.5</td>
<td>$225.9</td>
<td>$225.7</td>
<td>$186.2</td>
<td>$53.1</td>
<td>$36.8</td>
<td>$34.7</td>
<td>$125.0</td>
</tr>
</tbody>
</table>

- Completed
  - Next Generation Hall $101M
  - Putnam Renovation $23M
  - Montefiore Renovation $24M

- Construction
  - New Hartford Campus $140M
  - Engineering & Science Building $915M
  - STEM Research Center ~$245M
  - Gant Renovation ~$180M
  - Fine Arts Addition $24M
  - Parking Garages & Lots ~$78M

- Planning & Design
  - Major Infrastructure Upgrades (i.e. sewer, water, steam, electrical repairs & upgrades)

- On-going
  - Deferred Maintenance/Academic Renovations (i.e. roof/HVAC repairs, research lab renovations)
  - Equipment Acquisitions (i.e. MRI, fire truck, ambulance, CORE-CT implementation)

*FY18 UCONN 2000 funding also includes $5M for Bioscience CT.
Note: Chart reflects which fiscal years the funding is phased over for selected major projects and not the specific construction period.

NextGenCT Capital Plan

**Selected projects currently in construction:**
- Hartford Campus Relocation
- Innovation Partnership Building (State Tech Park funding)
- North Hillside Road (renamed Discovery Drive)
- Engineering and Science Building
- Main Accumulation Area (chemical waste transfer facility)
- Central Campus Infrastructure Improvements-Phase I (UConn funded)
- Energy Services Performance Contract (ESCO) – infrastructure and building retro-commissioning improvements (UConn funded)

**Selected projects currently in planning & design**
- Construction starts Summer 2017:
  - Fine Arts Production Facility Addition
  - Gant Building Renovation
  - Gampel Pavilion Dome Repair
  - North Eagleville Road Infrastructure - Phase III
- Selected projects in Design:
  - Northwest Science Quad Infrastructure Improvements
  - Science 1 Research Building
  - Horsebarn Hill Road Pedestrian Safety Improvements
  - Babbridge Library Phased Renovations
  - Student Recreation Center (UConn funded)
  - University Athletic District Stadia – soccer, baseball, softball (UConn funded)
- Programming, space planning, site design review and construction support for various capital projects – ongoing
Major Buildings Opened in Summer 2016

The first 3 major projects of the NextGenCT capital program completed

Monteith Building Renovation
- This 73,000 square-foot building will be the new home for the Math Department
- Cost: $24M

Next Generation Connecticut Hall
- New 212,000 square-foot facility, with 725 new beds + staff & director apartments
- Cost: $101M

Putnam Refectory Renovation
- This 42,000 square-foot dining hall is undergoing major renovations, will service new Next Generation Connecticut Residence Hall
- Cost: $23M

Major Building Openings in Summer 2017

The new Engineering & Science Building and Hartford Campus will open this summer

Engineering & Science Building
- 115,000 square feet, 5 floors + penthouse
- $95M budget
- May 2017 completion

UConn Hartford Campus: $140M
- Hartford Times Building: 164,000 square feet, 5 floors, August 2017 completion
- 38 Prospect Street Building: 38,870 square feet, 4 floors + penthouse, May 2017 completion
- Hartford Public Library: 12,000 square feet, July 2017 completion
Stamford Residential Housing

- **Scope:**
  - Long-Term Master Lease of the building presently under construction at 900 Washington Blvd, Stamford (funded via operating budget)
  - 116 Units (Studio, 1BR and 2BR Apartments) totaling approximately 290 students
  - Occupancy expected in Fall 2017

- **Next Steps:**
  - Execution of Agreements completed; student housing commitments will start early 2017
  - Closing and turn-over of building anticipated in early Summer 2017
  - Reviewing technology and security system extensions from Stamford campus

Technology Park Status

- $169.5M of funds authorized per PA 11-57 & 14-98 for the purpose of the development of a technology park & related buildings including planning, design, construction & improvements, land acquisition, purchase of equipment, on-site and off-site utilities and infrastructure improvements

- **3 projects:**
  - Innovation Partnership Building (in construction)
  - North Hillside Road Completion (substantially complete)
  - Water Supply Planning (substantially complete)

<table>
<thead>
<tr>
<th>Authorized &amp; Allocated</th>
<th>Allocated but Unexpended</th>
<th>Unexpended but Encumbered</th>
</tr>
</thead>
<tbody>
<tr>
<td>$169.5M</td>
<td>$71.8M</td>
<td>$41.0M</td>
</tr>
</tbody>
</table>
Tech Park: Innovation Partnership Building

- This 114,000 square-foot facility, the first phase of UConn’s expansive Technology Park, will house various specialized instruments, enabling UConn researchers to readily partner with industry scientists - in its first decade, those partnerships are expected to include collaborations on technologies such as 3-D printing and cybersecurity.

- Construction began in June 2015, with completion of tenant fit-out targeted for March 2018.

Electronic Medical Record: Project Status

- With the evolution of healthcare reform (electronic medical systems, increasing compliance mandates and the need for access and interoperability of patient data across many healthcare organizations), the movement to more fully integrated healthcare systems has become crucial.

- Implementation of an integrated Electronic Medical Record system (HealthONE) was approved by the Board of Trustees in December 2015.

- $98M budget approved through collaboration between:
  - State of Connecticut $41M (approved by Bond Commission);
  - UConn $48M (UCONN 2000 funds in FY18 & FY19); and UConn Health $9M
Electronic Medical Record: Timeline

- Published an RFI in spring/summer 2014
- Used the data received from RFI responses to develop initial options, costs and benefits/risks
- Published RFP in March 2015
- July-October 2015 – Rigorous selection process, which included 36 selection team members, vendor demos, site visits and reference calls; expertise from outside firm specializing in EMR selection/implementation used throughout the process
- November 2015 – Vendor of choice selected
- FY 2017 – Currently the project is in the adoption and build phase; HealthOne Steering Committee meets monthly to review project status; project is on-time and on-budget
- May 2017 – 8 month testing phase will begin
- Project completion expected in April 2018

Bioscience Connecticut

Making Connecticut a Leader in Bioscience

- Stimulate short and long term economic activity / job creation
- Spur bioscience innovation
- Meet healthcare needs of Connecticut’s future
- Provide access to state-of-the-art care
Bioscience Connecticut

Facilities and Infrastructure

- Overall program 88% complete
- Construction industry benefits

Programs and People

- Essential to success
- Sustainable economic benefits

Bioscience Connecticut helps drive economic growth and innovation in Connecticut.
Facilities and Infrastructure

Construction Jobs
- 6,025 jobs created
- 2,771,300 hours worked on the project through January 2017
- 83% of construction contracts awarded to CT companies - valued at $371M

Small/Minority Participation:

<table>
<thead>
<tr>
<th>Hospital Construction</th>
<th>Requirement</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Businesses</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Minority/Women’s/Disadvantaged Businesses</td>
<td>6.25%</td>
<td>23%</td>
</tr>
</tbody>
</table>
Facilities and Infrastructure Timeline

March 2017

- Construct Ambulatory Care Center
  - Design: 10 mo.
  - Construction: 20 mo.

- Construct New Patient Tower
  - Design: 26 mo.
  - Bed Tower Construction: 30 mo.

- Academic Addition and Renovations
  - Design: 10 mo.
  - Construction: 26 mo.

- Renovate Research Labs: Phase 1
  - Design: 24 mo.
  - Construction: 30 mo.

- Renovate Research Labs: Phase 2
  - Design: 26 mo.
  - Construction: 30 mo.

- Renovate Existing Clinical Buildings

- Incubator Lab Addition to CGSB
  - Design: 14 mo.
  - Construction: 16 mo.

- New Hospital Tower

- 169 private rooms
- New and expanded Emergency Department and Operating Room suite
- 2 new parking garages (first garage opened April 2013, second garage January 2016)
- Completed Tower: April 2016
Main Building Lab Renovations

- Renovates over 200,000 square feet of research space
- Project 1: Project is complete
- Project 2: Construction will complete in March 2017

Incubator Lab Addition to the Cell and Genome Sciences Building

- 28,000 square foot addition to the Cell and Genome Sciences Building
- Fosters new business start-up
- Work completed December 2015
Academic Building Addition and Renovations

- Allows for the growth in schools
- Construction began in April 2015
- The addition opened in July 2016
- Renovation work will be complete in September 2017

Clinic (“C”) Building Renovations

- Renovates and expands capacity of the Dental School teaching clinics and the Pat and Jim Calhoun Cardiology Center
- Construction work is ongoing, Phase 1 scheduled to be complete in June 2017, Phase 2, 3, & 4 continue through December 2018
Jackson Laboratory for Genomic Medicine

- Internationally renowned research leader
- New building on UConn Health campus dedicated to personalized medicine
- Collaborating with universities and hospitals in the region
- Opened in October 2014

Outpatient Pavilion

- 306,000 square foot, state-of-the-art, multispecialty outpatient clinical building on lower campus
- 1,400 car parking garage (opened in November 2013)
- Private financing through TIAA-CREF $203M
- Opened 2015
- Women's Center opened 2016