CONGRESSMAN MICHAEL E. CAPUANO
MASSACHUSETTS' 8TH DISTRICT

2010 APPROPRIATIONS REQUESTS

Listed below in alphabetical order you will find all of my fiscal year 2010 appropriations requests. Please note that these projects are just requests. They have simply been submitted by me for funding consideration, all projects will not be funded and those that are funded may receive less than requested. Every year during the annual appropriations process, Members of Congress have the opportunity to submit requests for initiatives that they believe are worthy of federal support. All Members of the House are required to certify they have no financial interest in the requests they submit for consideration. You can also view this list on the web at http://www.house.gov/capuano/2010appropriationrequests. Project requests are listed in alphabetical order.

1. **AdMeTech Foundation ($4 million)**
   4 Longfellow Place, Suite 3802
   Boston, MA 02114

   Project Description:
   The AdMeTech Foundation and its university/hospital partners discover and test non-invasive imaging methods critical for early detection and treatment of prostate cancer. These technologies will make it possible to shift prostate cancer care from surgical theaters and hospital wards to ambulatory clinics, with minimal discomfort, complications and costs. This will directly benefit thousands of military personnel, millions of veterans and others confronting prostate cancer. Currently, when active-duty military have PSA blood tests for prostate cancer screening, if there is an elevated PSA reading, there is no intermediate step before biopsies and often unnecessary surgeries. This is an appropriate use of taxpayer funds because it will help extend work to improve early diagnosis and treatment of prostate cancer using prostate imaging and image-guided, minimally invasive approaches. Prior year funding of this imaging-related project has assisted, among others, researchers at Johns Hopkins University, Massachusetts General Hospital, Boston University, the Dana Farber Cancer Institute, Brigham and Women's Hospital, Harvard Medical School, and the University of Pennsylvania.

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2. **ALS Therapy Development Institute ($4.8 million)**
   215 First Street
   Cambridge, MA 02142

   Project Description:
   Most people know ALS as "Lou Gehrig's disease." Several studies conducted by the Department of Defense and the Veterans Administration have concluded that veterans of the first Gulf War can develop the fatal neurodegenerative disease known as ALS twice as frequently as the general population. Another study has concluded that military service is an identified risk factor for developing ALS. The ALS Therapy Development Institute seeks funds for the continued support of its Gulf War Research Project, a cutting edge fast track recovery and translational research program for ALS, and to support clinical trials of effective drugs. This is an appropriate use of taxpayer funds because it will add to efforts underway to treat and hopefully cure ALS, a fatal disease that devastates many families.

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3. **BBN Technologies ($2 million)**

10 Moulton Street
Cambridge, MA 02138

Project Description:
Funding is requested for an Acoustic Gun Detection System for Tracked Combat Vehicles. Today when Soldiers, Airmen or Marines are in their HMMWVs, Strykers, or MRAP vehicles, the Boomerang Gunfire Detection and Location System (GDS) can provide them immediate information on the shooter's location. Soldiers serving in OEF and OIF have requested this same protection on their Bradley Fighting Vehicles. Initial prototype integration proved promising however, funding has not been allocated to allow for formal, fieldable integration. BBN, in collaboration with the Army's ARDEC Acoustic Center of Excellence, proposes to incorporate novel acoustic techniques to detect and locate the sources of hostile small arms fire and in conjunction with an integrated UV sensor would allow for an extended localization performance of the System on High Noise Platforms such as the Bradley. This is an appropriate use of taxpayer funds because the technology being explored can help save the lives of our men and women in uniform by identifying the location of hostile fire.

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4. **Best Buddies Massachusetts ($63,513)**
45 Bromfield Street, Third Floor
Boston, MA 02108

Project Description:
Best Buddies is a nonprofit organization that provides friends and jobs to people with intellectual disabilities. Best Buddies Massachusetts achieves its mission of inclusion for children and adults with intellectual disabilities by organizing and overseeing volunteer-run chapters at middle school, high school, and college campuses, which pair students with and without intellectual disabilities in a one-to-one mentoring friendship. This is an appropriate use of taxpayer funds because it will help support the nine Best Buddies chapters located in the 8th district of Massachusetts.

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5. **Boston Architectural College ($2 million)**
320 Newbury Street
Boston, MA 02115

Project Description:
The Boston Architectural College's Urban Sustainability Project will evaluate the effectiveness of sustainable design in existing structures and densely built urban neighborhoods, while serving as a model for other college campuses and communities across the country. The project has three components: building a green roof on the college's main building in Boston's Back Bay Historic District, constructing a green alley in Public Alley 444 between 320 Newbury and 951 Boylston Street, and exploring the possibility of drilling geothermal wells to tap the earth's constant underground temperatures to provide air-conditioning and heat. This project can reduce the use of energy, and is an appropriate allocation of taxpayer funds.

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6. **Boston Conservatory ($500,000)**
8 The Fenway
Boston, MA 02215

Project Description:
These funds will be used as part of the Conservatory's Hemenway Project, a renovation of its 300-seat theater as well as new construction for instructional and rehearsal space. The dance, theater, and music programs that represent the core mission of the college will use this new space. It is the first major facilities initiative for the Conservatory in over 50 years. This is an appropriate use of taxpayer funds because the work done will create jobs and the renovated facility will offer additional programming for students.

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7. **Boston University Photonics Center ($6,700,000)**
8 St. Mary's Street
Boston, MA 02215

Project Description:
The Boston University Photonics Center is seeking funding to further develop a photonics-based device that identifies biological threats and radiation exposure. The Center, in concert with the U.S. Army Research Lab will perform high level research and development on these compact biological threat analyzers with the hope of identifying threats faster and more accurately than any technology available today. This is an appropriate use of taxpayer funds because the rapid detection and identification of chemical, biological, radiation, and nuclear threats on the battlefield will provide a positive diagnostic option which could save lives and prevent the spread of dangerous infections to both military and civilian populations.

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8. **Boston Urban Youth Foundation ($440,000)**
P.O. Box 1545
Boston, MA 02130
Physical Address:
130 Warren Street
Roxbury, MA 02119

Project Description:
The Boston Urban Youth Foundation (BUYF) is a non-profit faith-based organization that helps high-risk, low-income, minority youth develop spiritually, emotionally, academically, and economically. BUYF assists high school dropouts through early prevention strategies for chronically truant middle school students. Requested funding will be used for the BUYF's Building Futures Educational Initiative. 35% of Boston Middle School students are chronically truant. As a result, BUYF developed its methodology to partner with schools providing an in-school, after-school, and year round program to improve school engagement, attendance, and performance. The Building Futures Educational Initiative is the only school partnership program that begins in middle school to address truancy and potential school failure by providing a comprehensive continuum of services year round to high-risk minority youth. BUYF works with partnered BPS schools to improve attendance and performance. Staffers are placed in middle schools to assist truant students, helping improve school performance. Once out of middle school, students continue to be mentored throughout their high school and college careers. This current school year, BUYF has achieved a 68% reduction in truancy among those served versus a 7% truancy reduction rate for truant students who didn't participate in the BUYF program. This is an appropriate use of taxpayer funds because of the program's success in helping young people stay in school.

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9. **Bunker Hill Community College ($500,000)**

250 New Rutherford Avenue
Boston, MA 02129

Project Description:
The Welcome Back Center for Internationally Educated Nurses utilizes a unique approach to expand the number of qualified nurses employed in Greater Boston by targeting the existing, under-utilized resource represented by internationally educated nurses. The Center provides a comprehensive range of educational and support services that assist internationally educated nurses in obtaining the necessary educational credentials and/or licenses to obtain employment and progress in their careers in the nursing field. This is an appropriate use of taxpayer funds because the Center creates new pipelines into the nursing field, which will help relieve regional shortages in this area. The project also addresses several needs in health care delivery in Greater Boston including enhancing the racial, ethnic and linguistic diversity of the area's nursing workforce and; building and expanding cultural competencies in the nursing workforce.

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10. Cambridge Redevelopment Authority (CRA) ($1 million)
1 Cambridge Center
Cambridge, MA 02142

Project Description:
Funds will be used by the Cambridge Redevelopment Authority (CRA) for the Gateway Project for the Longfellow Bridge Approach Corridor at Kendall Square. A variety of improvements are planned to create a city gateway that is fitting to this distinguished location that houses the Massachusetts Institute of Technology, the Whitehead Institute, and the Broad Institute. This is an appropriate use of taxpayer funds because of enhancements planned such as improved signage, pedestrian enhancements and area-wide lighting, which will help enhance transportation.

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11. Center for Integration of Medicine and Innovative Technology ($25 million)
165 Cambridge Street. Suite 702
Boston, MA 02114

Project Description:
The Center for Integration of Medicine and Innovative Technology (CIMIT), a consortium of 11 institutions, was founded over ten years ago by a medical innovator and Vietnam veteran (former battalion surgeon) to improve combat casualty and soldier care by bringing together clinicians and engineers to catalyze rapid and effective development of innovative technology and procedures. The challenges of driving these powerful, life-saving technologies to the point of care in the battlefield, acute care center, and rehabilitation setting are daunting. CIMIT successfully established fifteen science programs, including new programs in Traumatic Brain Injury (TBI) and Post Traumatic Stress Disorder (PTSD). CIMIT investigators have demonstrated extraordinary success in developing innovative technologies and new treatments in a timely fashion in major areas of need including traumatic brain injury, infection control and sepsis, and spinal cord injury. CIMIT investigators have developed innovative technologies and procedures that address many other major health issues, including a focus on diagnostics and therapeutics to treat cancer. This is an appropriate use of taxpayer funds because it will continue CIMIT's efforts in this area.

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12. Central Square Theater ($300,000)

450 Massachusetts Ave.
Cambridge, MA 02139

Project Description:
The Central Square Theater is a new theatrical arts center in Cambridge, home to the Underground Railway Theater and The Nora Theatre Company, two award-winning, nonprofit, professional theater companies. The Central Square Theater is a model artistic and managerial partnership that fosters civic engagement, creates jobs, stimulates the local economy, and promotes community development through the arts. It benefits the local economy and contributes to tourism in Cambridge by offering theater programming for children and adults, including regional visitors, cultural tourists, and local residents. This is an appropriate use of taxpayer funds because they will be used to increase programming, thereby increasing local economic development.

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13. **Children's Hospital Boston ($1.5 million)**
300 Longwood Avenue
Boston, MA 02115

Project Description:
Children's Hospital will continue research of Angiogenesis and Tissue Engineering focused on the development of new medical therapies and regenerative medicine approaches for treating injured soldiers. Research will focus on the development of new angiogenesis-based therapies caused by major trauma, toxins, infection or shock; stem cell-based revascularization for tissue and organ regeneration; and advanced engineering technologies for combat casualty care. The proposed continued research represents a contribution to regenerative medicine, combat casualty care and global health by developing unique approaches to repair injured organs, and prevent infectious diseases, by applying new insights into angiogenesis and developing entirely new tissue engineering technologies. This is an appropriate use of taxpayer funds because the technologies will save lives, reduce costs and enable new life saving therapies both in the battlefield and in hospitals.

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14. **Choice Thru Education ($200,000)**
140 Pearl Street
Chelsea, MA 02150

Project Description:
For the past 40 years, Choice Thru Education, Inc. (CTE) has provided educational and career development programs for at-risk youth and their families. Its mission is to assist youth and families with breaking the cycle of poverty through educational achievement and gainful employment. CTE offers a number of unique programs including an alternative school for pregnant and parenting teens, which allows young mothers to earn a Chelsea High School diploma. There are also programs that offer assistance to youth and their families in decision making for vocational training and post-secondary education, including participating in college and employment fairs, and providing job search assistance and training. This is an appropriate use of taxpayer funds because it will allow for the expansion of these programs.

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15. **City of Boston ($400,000)**
Environment and Energy Services
1 City Hall Square, Room 603
Boston, MA 02201

Project Description:
This funding will be used to build on the work already underway in the City of Boston to address areas with low groundwater levels by installing additional monitoring wells where appropriate, continuing well monitoring and providing information about groundwater to property owners. The City of Boston will also review options for standard design of recharge systems, assessment of underpinning systems, to investigate a method to determine the elevation of the tops of wood piles, and to evaluate fill stratum. This is an appropriate use of taxpayer funds because it will help to address the issues surrounding groundwater, which will aid in the preservation of many structures currently at risk.

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16. **City of Boston ($450,000)**
Commission on Affairs of the Elderly
Boston City Hall,
Boston, MA02201

Project Description:
In June of 2005, the City of Boston released a comprehensive analysis of racial disparities in Boston. Officials have worked to analyze and address the problem of health inequities in minority populations. Through these outreach efforts, the City became aware of the increasing number of homebound elders needing services. As a result, the City is launching the Boston Elderly Health Disparities Project. The elderly population is the fastest growing population in Boston. The quality of life for thousands of seniors would be significantly enhanced if they were connected to better health care, social outlets and support services. The Boston Elderly Health Disparities pilot will help connect individuals with services. This is an appropriate use of taxpayer funds because it will identify underserved, at risk, homebound low-income elders of color in Roxbury and Mattapan and connect them with services.

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17. **Community Boating Inc. (CBI) ($4,080,000)**
21 David G. Mugar Way
Boston, MA 02114

Project Description:
The docks at Community Boating Inc. (CBI) are owned by the Commonwealth of Massachusetts, Department of Conservation and Recreation. CBI is the nation's oldest and largest community sailing program. Its mission is to minimize physical, social, and economic barriers to sailing. Serving over 2100 children in 2008, CBI charges only $1 per child for an entire summer of sailing, windsurfing, and kayaking. Additionally, CBI serves over 300 sailors with disabilities, both physical and cognitive, also for the nominal fee of $1.The DCR has completed plans with permitting to replace the docks which are in danger of structural failure. Funding will help insure that future generations of children will have access to water sports on the Charles River. This is an appropriate use of taxpayer funds because it will help to preserve the deteriorating docks and it will give people access to water activities that wouldn't otherwise have that opportunity.

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18. **Converging Industries Research Foundation (CIRF) ($1.2 million)**
64 Oxford Street, Suite 14
Cambridge, MA02138

Project Description:
The Massachusetts Initiative for Real-Time Wireless Emergency Communications provides real-time alerts to the entire population, lets ordinary citizens communicate with one another when networks become overloaded and calls can't get through, and provides first responders with an all-in-one handset. Funds will be used to implement this network in Cambridge. First responders have responsibility for a concentration of valuable national resources, including biotechnology industries (where critical medicines are manufactured), medical service industries, world-renowned research universities, and high-technology and defense industries. Cambridge has one of the highest densities of private and institutional biotechnology, infectious disease, and hazardous materials laboratories in the nation. In addition, MIT has a nuclear reactor. The Massachusetts Initiative speeds up the deployment of Cambridge's advanced communications infrastructure. The same network that can provide traffic alerts and snow days for school can also be used for weather alerts, chemical spills, hurricanes, earthquakes, terrorist attacks, and other large-scale events. Because it is built into the commercial network, Real-Time Emergency Wireless service is tested daily and upgraded regularly. This is an appropriate use of taxpayer funds because it will help improve communication during emergencies.

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19. Dana Farber Cancer Institute ($3 million)
44 Binney Street
Boston, MA 02115

Project Description:
Funding will be used for biological and immunological infectious agent and cancer vaccine research. The techniques developed by the Dana-Farber Cancer Institute Cancer Vaccine Center will provide important new tools for protecting military personnel from biological weapons, while simultaneously addressing acute needs of cancer patients. The safety of military personnel in 21st century theaters must include plans for protection against bioweapons. Part of that preparation is efficient and effective vaccination against agents likely to be encountered on the battlefield. The Center will use cutting edge technology and groundbreaking new knowledge about immunology to develop multivalent vaccines against those agents, which could be administered to military personnel prior to deployment. Another necessary part of military preparedness is an ability to respond quickly and effectively to unanticipated battlefield threats. The techniques developed by the Cancer Vaccine Center can be applied to the analysis of new bioweapons in order to develop novel and effective vaccines in the shortest time possible. This is an appropriate use of taxpayer funds because the Center's work will have a high likelihood of leading to the development of acute, "therapeutic" vaccination approaches that can be delivered on the battlefield after exposure has already occurred. Together, these outcomes will enhance the protection, capability, and readiness of our armed forces.

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20. Dana Farber Cancer Institute ($5 million)
44 Binney Street
Boston, MA 02115

Project Description:
This funding will be used by the Dana-Farber Cancer Institute (DFCI) to support the implementation of a cyclotron facility as part of its new Center for Biomedical Imaging in Oncology (CBIO). CBIO is dedicated to using imaging science to discover new methods to diagnose and treat patients with cancer. This mission is being realized through a unique

program that fully integrates clinical and preclinical imaging, thus ensuring that translational opportunities are rapidly identified and fully realized. The implementation of a cyclotron facility will allow CBIO to become an international leader in the development and implementation of imaging methods to allow clinicians to better diagnose cancer, choose targeted therapies, monitor treatment efficacy, and improve the outcomes of adult and pediatric patients with cancer. Just as conventional imaging modalities (ultrasound, CT, MRI, and X-ray) play a key role in guiding the current methods of diagnosing and treating cancer, the next-generation of imaging approaches made possible with access to a cyclotron facility will be indispensable in achieving the goal of truly personalized cancer medicine. This is an appropriate use of taxpayer funds because it improves efforts to diagnose and treat cancer.

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21. Draper Laboratory ($2 million)
555 Technology Square
Cambridge, MA 02139

Project Description: Funding is requested for Precision Airdrop Resupply Technologies. U.S. and Allied forces in Afghanistan receive 75% of their supplies from Pakistan via truck supply line. In December 2008 Pakistan suspended these shipments after a series of raids on truck depots left several casualties and destroyed hundreds of vehicles. Helicopter resupply missions have resulted in unacceptably high casualty rates for Operation Enduring Freedom and International Security Assistance Force. The U.S. is preparing to almost double the number of soldiers in Afghanistan next year, and airdrop is now one of the only viable alternatives for daily resupply of this force. This is an appropriate use of taxpayer funds because guided and unguided aerial delivery systems are the fastest way to get supplies to ground forces. In the last two years, over 20 million pounds of supplies have been delivered this way. Further technology development is required to improve delivery accuracy. The requested funding will be used to develop mission planning capability as well as guidance, navigation and control development for small, high value payloads. Specifically, software and sensor upgrades are required to improve landing accuracy in difficult urban and mountainous terrain.

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22. E Ink Corporation ($1.4 million)
733 Concord Avenue
Cambridge, MA02138

Project Description:
This project further develops a Soldier Situational Awareness Wrist Band for field testing. Today, little tactical information flows below the Brigade and Battalion level other than by voice radio. Current command and control (C2) devices are limited to commanders and depend on rigid, heavy, power hungry displays to convey information. The Raytheon Corporation further integrated its wearable display with an Army standard radio to display friendly troop locations to develop the first Soldier Situational Awareness Wrist Band that is a light-weight, hands-free solution to display troop locations to the dismounted soldier. It addresses a key Army priority to improve human factor interfaces, and solves a critical mission issue of providing situational awareness without compromising soldier survivability through additional tasking.

E Ink Corporation in Cambridge is a world leader in electronic paper-like displays. E Ink's electronic displays are a key enabling technology for the SAW Band device. To date, all wearable displays have been rigid devices that add unnecessary weight to a soldier's load.

Funding will allow E Ink to refine the black and white display capability for the initial SAW Band prototypes and develop a pathway to a color display device. This is an appropriate use of taxpayer funds because it will help improve soldier communication, which can help save lives.

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23. Emerson College ($500,000)
120 Boylston Street
Boston, MA 02116

Project Description:
The Federal Communication Commission requires that in 2009 all large television stations complete their conversion from analog to digital broadcasting. At the same time, the television industry has invested heavily in High Definition production and transmission equipment to offer a high-resolution service in addition to the mandated standard digital format. In order to provide its students with educational facilities that will prepare them for this new technology, and that will allow them to continue producing high quality video for community non-profit organizations and public service announcements, Emerson College has requested assistance making a substantial investment to upgrade its TV production studios with equipment meeting industry standards. This is an appropriate use of taxpayer funds because it seeks to enhance the educational capabilities of the only comprehensive college or university in America dedicated exclusively to the communication arts.

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24. Emmanuel College ($1,750,000)
400 The Fenway
Boston, MA 02115

Project Description:
Emmanuel College is committed to doing its part to increasing excellence in math and science with the establishment of the Center for Science Education. This commitment to educational advancement in the sciences is exemplified through its partnership with Merck Research Laboratories-Boston, as well as through the construction of its Academic Science Center, which represents the College's continued goal of building distinctive academic programs in the liberal arts and sciences by leveraging its location in Boston, in the heart of the Longwood Medical Area. This is an appropriate use of taxpayer funds because the establishment of the Center for Science Education will enable Emmanuel to further its long-standing commitment to urban youth outreach in addition to providing opportunities for professional teacher development.

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25. Executive Office of Transportation ($2,250,00)
10 Park Plaza, Suite 3170
Boston, MA 0211

Project Description:
Funding is requested to continue the Commonwealth Avenue Road Improvement Project. This phase involves the reconstruction of Commonwealth Avenue between Amory Street and Packard's Corner. An estimated 38,000 to 44,000 vehicles travel on this portion of Commonwealth Avenue on an average weekday making it one of the busiest arterials in Boston. Reconstruction of this heavily traveled area is an appropriate use of taxpayer funds due to the number of vehicles, bicycles and pedestrians who utilize this area.

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26. Executive Office of Transportation ($725,000)
10 Park Plaza, Suite 3170
Boston, MA 02116

Project Description:
The intersection and nearby surface roadways of Commonwealth Avenue and the Boston University Bridge represent some of the busiest regional interchanges within the metropolitan Boston area. The supporting infrastructure has historically been a congested area for vehicles and a confusing and dangerous environment for pedestrians. Because of this, work done on the area is an appropriate use of taxpayer funds. The Mountfort Street area is deteriorating in the face of significant regional development and use. Funds will be used for the Mountfort Street Corridor Improvement Study to examine a number of measures along the corridor to improve the sustainability of transportation operations for transit, bicyclists, pedestrians and vehicles.

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27. Forsyth Health Foundation ($1 million)
140 The Fenway
Boston, MA 02115

Project Description:
The Forsyth Institute is requesting funding to expand its *ForsythKids* program. The money will also be used to purchase additional laboratory and diagnostic equipment. *ForsythKids* is a school-based cavity prevention program that operates in needy communities to increase access to oral health care and eliminate dental decay. The program began in 2003 in six elementary school located in the Lynn, Hyannis, and Boston communities. Today, *ForsythKids* operates in 50 elementary schools. Prior to treatment, more than 50 percent of participating children have untreated cavities and approximately 13 percent have acute infections or abscesses. After one round of treatment, children enrolled in the program have a 50% reduced occurrence of new decay. After three years of preventative care, children are virtually free of new tooth decay. *ForsythKids* expects to serve an additional 3,000 children through this expansion program. This is an appropriate use of taxpayer funds because gives children access to dental care that may not otherwise have it.

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28. From the Top ($500,000)
295 Huntington Ave
Boston, MA 02115

Project Description:
From the Top is a Boston based non-profit organization that celebrates the nation's outstanding young classical musicians. Through radio and television broadcasts, online media, and a national tour of live events and outreach programs, these performers inspire the pursuit of excellence, and encourage participation in the arts as an integral part of a vibrant and civil society. This is an appropriate use of taxpayer funds because From the Top's education and community outreach programs currently bring performers and education resources into classrooms, youth organizations, and arts programs across the country. Funding is requested for Massachusetts Makes Music. Aware of the barriers that impede many children's access to programs like these, From the Top also engages in efforts to target underserved populations and deliver customized "packages" of programs to meet their particular needs. Utilizing the power of peer role modeling, these programs inspire students to

not only get engaged in music and the arts, but to pursue excellence in other areas of their life.

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29. Home for Little Wanderers ($1 million)
271 Huntington Avenue
Boston, MA02115

Project Description:
This funding will be used to help renovate the Knight Children's Center (KCC) in Jamaica Plain. The KCC residence and special education school that currently operate at this site will relocate to Longview Farm in Walpole, a property already owned by the Home. A new Community-Based Services Center will operate in the KCC. The KCC has served children and families in the Boston area for almost 100 years. Programming includes intensive psychological, behavioral, educational, and other social services to children ages 5-13. KCC consists of a residential program for children and a Special Education Day School. Many of the children served in the KCC residential program have been physically abused, are from families with domestic violence and/or substance abuse histories, and/or are dealing with other issues such as poverty and mental illness. Often, they are also 2-4 years behind their age-appropriate grade levels.

This project involves moving the KCC residence and school off the Jamaica Plain site into Walpole, and establishing the new Community-Based Services Center in the remodeled KCC facilities. The Home offers many early intervention and prevention services that extend into the community through work in schools, hospitals and families' homes. This is an appropriate use of taxpayer funds because the new Center will integrate four distinct programs under one roof including; (1) Safe-at-Home, an intensive home-based family preservation service, (2) Intensive Foster Care, (3) Adoption and (4) The Child and Family Counseling Center, a licensed outpatient mental health clinic which offers an array of assessment, treatment, and consultation services to children, adolescents, and their families.

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30. Horizons for Homeless Children ($1,500,000)
1705 Columbus Avenue
Roxbury, MA 02119

Project Description: This funding will help Horizons for Homeless Children (HHC) make improvements to its Community Children's Centers and Playspace Program sites. In Massachusetts, an estimated 100,000 children are homeless on any given day. As the shortage of affordable housing grows more acute, families are remaining homeless for longer periods – often staying in shelters for 12 months or more. The early years are crucial to a child's development and homelessness puts children at significant risk. HHC provides developmentally enriching care for children. Since 1994, HHC has served more than 1,600 homeless children through its three Community Children's Centers. This is an appropriate use of taxpayer funds because at these centers, homeless children from two months to five years of age have access to high quality early care and education every day of the week. HHC has served another 10,000 homeless children since 1990 through its Playspace Programs, an initiative to install a Playspace in family shelters and train volunteers to provide nurturing, stimulating play opportunities for the children living in those shelters.

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31. Lesley University ($1.4 million)

29 Everett Street
Cambridge, MA 02138

Project Description:
Over the last ten years, Lesley University has grown from a resident student body of 500 to a national student body of over 8,000. The library must be upgraded to keep pace with the demands of its increasing student and faculty bodies, as well as its 60,000 strong alumni educator base. Funding will help Lesley expand and renovate its Main Library to provide a state-of-the-art, integrated learning environment that combines technology and expertise to support the scholarly use of information resources. The concept incorporates library services, computer technology and assistance, and media production services, allowing students to pursue the entire research process from beginning to end in one supportive environment. This is an appropriate use of taxpayer funds because it will help to improve resources for students as well as for teachers, who can utilize the materials available to improve the educational experience for their pupils.

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32. Lesley University ($1.4 million)
29 Everett Street
Cambridge, MA 02138

Project Description:
Lesley is nationally recognized as one of the largest providers of graduate professional education for K-12 educators with a presence in 23 states. This funding will be used to assist Lesley in creating a National Center for Teachers and School Leaders. The desire to do so falls in line with one of the primary tenets of the No Child Left Behind Act which maintains that high-quality teachers must be provided to all students regardless of race, ethnicity or income. The Center itself will focus on current issues in educational practice and public policy; curriculum theory and development; dissemination of best practices and several other areas. Moreover, the goal of the Center will be to facilitate access to the University's resources, district level involvement, and meaningful teacher interactions, with staff assisting to enhance district relations; regional operations and recruitment planning; and research and development. This is an appropriate use of taxpayer funds because of the resources that will be made available to improve the educational experience for teachers and their students.

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33. Massachusetts Bay Transportation Authority ($2 million)
10 Park Plaza, Suite 3720
Boston, MA 02116

Project Description:
The City of Somerville is working to re-develop the Assembly Square section of the city, focusing on the principles of transit oriented development. To that end, the multi-use development that has been planned for this area – a combination of commercial and residential – would take full advantage of a new station on the Massachusetts Bay Transportation Authority's (MBTA) Orange Line subway. The project was authorized for $25.0M in the SAFETEALU legislation under the FTA's New Starts program. The MBTA will plan, design, construct and operate the Assembly Square station. The Assembly Square developer, Federal Realty Investment Trust, has agreed to fund the local match portion of the project. This request would go toward funding the amount authorized under SAFETEALU. It is an appropriate use of taxpayer funds because the new T station will improve transit options for commuters and increase economic development opportunities in the area.

34. Massachusetts Bay Transportation Authority ($3 million)
10 Park Plaza, Suite 3720
Boston, MA 02116

Project Description:
The Massachusetts Bay Transportation Authority (MBTA) is completing its program of providing a transit system compliant with the Americans with Disabilities Act (ADA). These funds will be used as part of a project to relocate the existing station platform and shelter from Newton to Boston, and construct a center platform in the middle of Commonwealth Avenue near the Lake Street intersection. Lighting, tactile edging, pedestrian crossings and a shelter will be added. The initial designs for accessibility improvements at the Boston College Station involved upgrading the existing facility to be compliant with ADA requirements. During the final design, structural deterioration was discovered and repairs became necessary. Construction on the existing site was also deemed difficult because the MBTA's property line is adjacent to an MWRA easement and two large pipes running along the rear of the platform. Moving the station allows the MBTA to make the necessary ADA accessibility improvements and make needed repairs, an appropriate use of taxpayer funds. Work done will also provide room to add new three car trains which cannot be accommodated safely at the current station.

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35. Massachusetts College of Pharmacy and Health Sciences ($750,000)
179 Longwood Avenue
Boston, MA. 02115

Project Description:
Funds are requested to establish the Center for Drug Information and Natural Products (CDINP) and to support instructional technology at the Boston Campus of Massachusetts College of Pharmacy and Health Sciences. The Center will provide up to date, comprehensive and non-biased drug and natural product information to healthcare professionals and consumers. The CDINP will also respond to a variety of requests concerning drugs and natural products, including but not limited to foreign product identification, adverse reactions, drug-drug and drug-natural product interactions, safety of use during pregnancy and breast feeding, and the therapeutic use of conventional and natural products. This is an appropriate use of taxpayer funds because the Center will collect important facts about a range of drugs and natural products in one system, making it easier for medical professionals and consumers to access the information.

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36. Massachusetts Executive Office of Transportation ($2 million)
10 Park Plaza, Suite 3170
Boston, MA 02116

Project Description:
Massachusetts is required to extend the MBTA's Green Line subway west from the current terminal point at Lechmere Station in Cambridge. This is part of the Commonwealth's Central Artery/Tunnel mitigation plan that has been mandated by the state legislature. While the subway line will be maintained and operated by the Massachusetts Bay Transportation Authority, it will be planned, designed and constructed by the Executive Office of Transportation (EOT).

There are several segments to the Green Line Extension, including extending rail to Union Square in Somerville, to Medford Hillside/Tufts University on the Medford/Somerville line and to a natural terminal point at Route 16/Alewife Brook Parkway. This request is specifically for funding to be used to plan/design/construct the segment running from Medford Hillside to Route 16.The state has publicly committed to meet the local match for this project. This is an appropriate use of taxpayer funds because it will increase transit options for commuters and create economic development opportunities in the area.

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37. Massachusetts League of Community Health Centers ($600,000)
40 Court Street, 10th Floor
Boston, MA 02108

in partnership with the
East Boston Neighborhood Health Center
10 Gove Street
East Boston, MA 02128

Project Description:
The Massachusetts League of Community Health Centers (MLCHC) and the East Boston Neighborhood Health Center (EBNHC) are expanding their healthcare workforce development initiatives focusing on clinical career tracks to nursing, medical assistant and other allied health roles. They will continue to work collaboratively to advance their goal of increasing the number of highly-trained state residents who work in the healthcare field, providing clinical services as a member of primary care teams, particularly in the community health setting. This is an appropriate use of taxpayer funds because we face a growing shortage of primary care physicians.

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38. Museum of Fine Arts ($1,250,000)
465 Huntington Avenue
Boston, MA 02115

Project Description:
The Museum's Department of Museum Learning and Public Programs is gaining 12,000 additional square feet. By building and equipping a 150-200 seat film theater, seminar rooms, studio arts classrooms, and workshops, students will benefit from new educational technologies and greater opportunities to understand American history and culture. New educational capabilities will improve the Visual Thinking Strategies (VTS) curriculum, Visual Understanding in Education (VUE), and Thinking Through Art – a program empowering teachers to use works of art in their classrooms in more direct ways. Funds requested will assist the Museum in further expanding its education programs. This is an important use of taxpayer funds because it will enhance the offerings of the Museum, an important cultural and tourist destination.

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39. Museum of Science ($500,000)
National Center for Technological Literacy
Science Park
Boston, MA 02114-109

Project Description:

These funds will be used to promote adoption of best practices in engineering education across Massachusetts through the Museum's established leadership training and teacher training programs, and to insure access to this program by economically distressed districts. The museum's goals are to insure that all school districts in Massachusetts are informed and prepared to address state standards in Technology and Engineering, to insure that all teachers are prepared to deliver relevant and effective content in Technology and Engineering, and to insure that all students are able to successfully perform on Technology and Engineering related MCAS assessment items. This is an appropriate use of taxpayer funds because it will to improve student success when it comes to technology and engineering.

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40. Museum of Science ($450,000)
Science Park
Boston, MA 02114-1099

Project Description:
This request will support increased access to the Museum of Science programs and services by students and teachers from economically distressed communities. This is an appropriate use of taxpayer dollars because it will provide: scholarship funds to promote broad access to a wide range of Science, Technology, Engineering, and Math (STEM) professional development for teachers from urban and economically challenged districts; support for the development and enhancement of these STEM teacher programs; scholarship funding to ensure broad student access to the Museum of Science via field trips, traveling programs, courses, and camp-ins; and, development of a new lab-based, Science Fair Saturdays program for urban low-income students.

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41. Museum of Science ($750,000)
Science Park
Boston, MA 02114-1099

Project Description:
The Charles Hayden Planetarium is a fifty-year old facility that has served 75 million New England visitors and is now extremely out-dated. This is an appropriate use of taxpayer funds because they will support technical upgrades, create contemporary programming, related exhibits and education materials, and enhance access by under-served youth groups. This support will enable the delivery of superior planetarium programs, previously unavailable in the New England region. Federal funding will leverage additional gifts from foundations, corporations, and individuals.

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42. Museum of Science ($1,200,000)
Science Park
Boston, MA 02114-1099

Project Description:
The Museum of Science seeks funding for Engineering of Sustainability, a multi-faceted initiative that includes exhibits, related multi-age educational programming, and multi-media broadcasts that will focus on ecosystems and both beneficial and detrimental human impacts on those systems. Creating a sustainable future is a critical challenge facing us, and perhaps the defining science and technology issue of our times. Our actions have consequences, for us and for other forms of life on the planet. Technological literacy and science literacy are important because together they allow us to understand our world and to design technologies

and ways of acting with consequences consistent with our values – they allow us to make intelligent choices about our future. The fate of our planet and its ability to support life are dependent upon those choices. This is an appropriate use of taxpayer funds because of the impact it will have on understanding our effect on the environment.

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43. Niño-Terra, Inc. ($2.3 million)
790 Memorial Drive, Suite 202
Cambridge, MA 02139

Project Description:
Anti-reflective (AR) coatings are desirable for many applications in civilian and military settings. Reflected light from lenses, watch faces, windshields or the lenses of sniper rifles can disclose a warfighter's or a vehicle's position making antireflective coatings preferable to current low-tech solutions such as covering the reflective surface when not in use. This is an appropriate use of taxpayer funds because in night vision systems, the elimination of reflection losses significantly improves performance that is otherwise constrained by diminished lighting and the limitations of optical components.

Niño-Terra Inc. has developed an innovative approach to the fabrication of anti-reflective coatings that can be applied to both curved and flat substrates. These coatings are comprised of several layers of nanowires, and are extremely effective at reducing reflection. Most importantly, this approach enables the fabrication of ultra-low refractive index layers that represent significant improvements in performance and cost over conventional methods. In collaboration with Night Vision and Electronic Sensors Directorate of the U.S. Army Research, Development and Engineering Command, Niño-Terra seeks funding to develop, demonstrate and qualify highly efficient cost-effective anti-reflective coatings applicable to diverse surfaces to meet military requirement with a focus on further development of antireflective coatings for infrared windows and lenses.

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44. Niño-Terra, Inc. ($2.1 million)
790 Memorial Drive, Suite 202
Cambridge, MA 02139

Project Description:
Niño-Terra Inc. has developed an innovative approach to the fabrication of novel anti-reflective coatings that can be applied to both curved and flat substrates. It is well-suited for the application of coatings for missile seeker optics where it is often necessary to reduce reflections across a wide range of wavelengths, often from the visible all the way up in to the infrared, due to the different types of cameras and sensors that are employed. The purpose of this project is to develop, demonstrate and qualify highly efficient cost-effective anti-reflective coatings that can be applied to diverse surfaces to meet military requirements with a focus on further development of antireflective coatings for missile seeker optics. This project will assure that the Army has capability for production of efficient cost-effective anti-reflective coatings for missile seeker optics. This is an appropriate use of taxpayer funds because it will help the Army to detect missiles, thus saving lives.

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45. National Braille Press ($1,118,750)
88 Saint Stephen Street
Boston, MA 02115

Project Description:
The literacy rate for blind school-age children has dropped significantly in America. Forty years ago approximately 50 percent of the population was literate, whereas today it is only 10 percent. A significant factor in this decline is the misconception that technology and "talking" computers can replace Braille reading. The National Braille Press is seeking funding to research, develop and deploy a low-cost, scalable, refreshable Braille personal device. This is an appropriate use of taxpayer funds because such a device will enhance the learning capability of blind school-age children, as well as support the learning integration of adults that become blind.

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46. National Safety Council ($400,000)
1121 Spring Lake Drive
Itasca, IL 60143
For a project at the Volpe Center in Cambridge

Project Description:
This funding would support an evaluation of the Young Driver Safety Training Program at the U.S. Department of Transportation's Volpe National Transportation Systems Center in Cambridge. This training program is reported to reduce young driver death and injury rates. Although teens and young adults represent only 14% of the U.S. population, they account for 28% of all vehicle driver and passenger deaths. Between 2003 and 2007, Massachusetts lost 566 lives due to young driver crashes. This is an appropriate use of taxpayer funds because a driver safety program designed specifically for young drivers by the National Safety Council has the potential to significantly reduce motor vehicle crashes among this age group. It would benefit Massachusetts and the nation to better understand the effectiveness of this young driver training program as states develop interventions to reduce the rate of death and injury due to young drivers' lack of skill and experience.

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47. New England College of Optometry ($100,000)
424 Beacon Street
Boston, MA02115

Project Description:
The New England College of Optometry's Electronic Medical Record Curriculum Demonstration Project is an innovative teaching system integrating an electronic medical record (EMR) with a tablet-computer network into educating primary eye care optometry students to practice in the upcoming health care environment. In addition, this system will incorporate real-time instructor oversight of academic and clinical information to improve health care education. This is an appropriate use of taxpayer funds because this initiative could revolutionize health care education while reducing medical errors and the administrative costs of training programs. Funding will be used to assist the college in this effort.

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48. Northeastern University ($3 million)
360 Huntington Ave.
Boston, Massachusetts 02115

Project Description:
Funding for this project will support the development of infrared antenna to harvest solar energy and for thermal energy conversion that utilizes the directed assembly of nanoparticles

into wires and networks and device fabrication. This is an appropriate use of taxpayer funds because this will ultimately lead to improvements of nanotechnology enhanced solar and thermal harvesting in aerospace and missile systems.

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49. Parametric Technology Corporation ($3 million)
140 Kendrick Street
Needham, MA 02494

Project Description:
This project provides software and technical services to give the Army the ability to securely share weapon system technical data with its partners using digital rights management. This secure process will allow a variety of options from partial data viewing to data time-out (where organizations would only be able to view data for a fixed period of time).This solution, specific to a models-based engineering enterprise, will be marketable to other military services as well as industry, the nuclear weapons complex, NASA and other organizations. This is an appropriate use of taxpayer funds because the technology will help protect sensitive military data.

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50. Presentation School Foundation, Inc. ($1 million)
P.O. Box 35834
Brighton, MA 02135

Project Description:
The Presentation School Foundation, Inc., ("PSF") is a community-based nonprofit formed to help strengthen Allston-Brighton. PSF seeks to transform a former parochial school building into a Multi-Use Community Center. It would serve as the centerpiece of an Oak Square Community Campus that will coordinate health, education and social programs to support urban youth and families. This is an appropriate use of taxpayer funds because the PSF project will create economic benefits for Allston-Brighton including immediate construction activity, job creation, workforce development programming, and crucial health, education, and social programs for diverse families. The community center will offer a range of services to support local families and boost the local economy. Working with WGBH, Wheelock College, and Little Sprouts pre-school, PSF has developed an early education program that will serve 140 middle- and low-income Boston children. PSF also has agreements with St. Elizabeth's Medical Center's "REACH" program, the Brighton WIC program, and an established provider of job training and workforce development to offer programs at the PSF center following renovation.

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51. QM Power, Inc. (2,070,000)
441 Marlborough Street, Unit 2
Boston, MA 02115

Project Description:
This program will develop a line of high efficiency, high power density alternators for use in current and next generation military generator sets. While initially targeted at DoD's underperforming 3kW generator requirement, long-term development will focus on next generation Advanced Medium-sized Mobile Power Sources (AMMPS).

This program will utilize QM Power's patented Parallel Path Magnetic Technology to develop a series of alternators for military generator sets with increased efficiency, decreased

weight and volume, and increased survivability. This is an appropriate use of taxpayer funds because updated generators will lessen the logistical burden on deployed units, requiring substantially less fuel and less maintenance, while providing the additional power necessary to meeting the expanding requirements of the modern battlefield. With over $370 million gallons of fuel consumed each year by generators, a 5% efficiency gain would save DoD over $350 million annually.

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52. Schepens Eye Research Institute ($7 million)
20 Stanford Street
Boston, MA 02114
Brief
Project Description:
Schepens Eye Research Institute is seeking funding for its Military Low Vision Research Program, which supports the development of new technologies to protect military personnel from blinding eye trauma, new treatments for eye injuries, and innovative methods to enhance visual performance in combat situations. This is an appropriate use of taxpayer funds because currently, over 15% of battlefield injuries include the eye, and the result is often vision loss or blindness. Schepens Eye Research Institute is working with military ophthalmologists and optometrists, and researchers within the Department of Defense, to meet this important battlefield need. Battlefield eye injuries result largely from blast trauma and from intentional and accidental exposure to laser light. The Military Vision Research Program's research is focused on improving the treatment of these injuries to save vision following battlefield injury, as well as developing vision enhancement devices to meet the needs of our military partners. The Institute also brings significant expertise in the vision complications of neurovascular cerebral injury that may help military optometrists interpret some of the symptoms they see in troops returning home.

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53. Schepens Eye Research Institute ($3 million)
20 Stanford Street
Boston, MA 02114

Project Description:
Schepens Eye Research Institute of Boston is seeking funding for its Vision and Traumatic Brain Injury Research Center. The Vision and Traumatic Brain Injury Research Center would address Traumatic Brain Injury Post Traumatic Visual Syndrome in coordination with the cooperative program established through Section 1623 of the FY2008 Defense Authorization Bill targeting the prevention, diagnosis, mitigation, treatment and rehabilitation of military eye injuries. The Center would fund collaborative research matching Schepens scientists with clinician-scientists from the Harvard system, clinicians at Walter Reed Army Medical Center, and clinicians from the medical centers of the Department of Veterans' Affairs. An Advisory Panel appointed through the United States Army Medical Research and Materiel Command (USAMRMC) would choose among proposed research topics, and would review and evaluate progress of research at dedicated review meetings at six months and one-year intervals after projects begin. This is an appropriate use of taxpayer funds because of the work the Center will undertake to take military eye injuries.

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54. Science Research Laboratory ($2 million)
15 Ward Street
Somerville, MA 02143

Project Description:
Science Research is working to create thin, lightweight micro-coolers for a variety of photonic and electronic components including high-power laser diodes and visible LED lamps, UV LEDs and next-generation, high-performance electronics. These micro-coolers will have thermal conductivities more than ten-times the thermal conductivity of copper and will be able to remove multi-kilowatts per square centimeter of waste heat. A key aspect of these coolers will be matching thermal-expansion coefficients to the expansion coefficients of microelectronic photonic material such as silicon and gallium arsenide. This is an appropriate use of taxpayer funds because the rapid advances in photonic and electronic technologies have placed an ever-increasing demand on waste-heat removal from high-performing components. As a result, present and next generation systems will be limited by thermal engineering. The military's need for performance leads inevitability to operating systems at the limits of thermal technology.

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55. Semprus BioSciences ($5 million)
One Kendall Square, Building 1400, 1st Floor
Cambridge, MA 02139

Project Description:
Over half of servicemen and women who are wounded overseas sustain orthopedic trauma, often requiring the use of "fracture fixation devices" to stabilize bone fractions and promote healing. Despite marked advances in medical facilities, personnel, and evacuation efficiency, the military healthcare system is suffering from an epidemic of virulent, drug resistant bacteria complicating the recovery of these injuries. In Iraq and Afghanistan, high-energy explosive devices as well as small arms fire routinely wound service members, causing massive orthopedic trauma in contaminated environments, which leads to infection of the injured tissue and fixation devices. Initial treatment is on the battlefield and at combat zone trauma facilities, which present challenging environments to maintain completely sterile conditions. As a result, half of injured service members transferred to stateside facilities, such as Walter Reed, have dangerous bacterial contamination of their wounds, and an additional 30% are already seriously infected. These infections lead to amputation in 30% of cases.

Unfortunately, the use of systemic antibiotics has proven less effective due to the evolution of drug-resistant bacteria and their ability to attach to medical device surfaces to safeguard themselves from the immune system. Semprus is developing an antimicrobial surface modification which is permanently bonded to orthopedic device surfaces to prevent bacterial attachment and growth on the surface. Unlike alternative approaches, Semprus' technology does not cause microbial resistance or lose activity over time, which is critical for maximal infection prevention. This funding will be used to bring the technology from the lab to the battlefield in conjunction with the US Army Institute of Surgical Research. This is an appropriate use of taxpayer funds because of the impact it could have on reducing bacterial attachment and growth on orthopedic device surfaces.

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56. South End Community Health Center ($650,000)
1601 Washington St
Boston, MA 02118

Project Description:

These funds are requested for staffing to meet the increasing need for medical and mental health services for the center's growing homeless and Latino patient populations. The South End Community Health Center is preparing for the build-out and expansion of existing clinical space to accommodate six additional medical examination rooms and more efficient nursing support areas. This is an appropriate use of taxpayer funds because they will be used to support two full-time physicians and related support staff during the first year of the Center's expanded services. The main emphasis of these expanded services will be prevention of chronic diseases such as diabetes, asthma, mental health, and hypertension.

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57. St. Elizabeth's Hospital ($500,000)
736 Cambridge Street
Brighton, MA, 02135

Project Description:
Funds are requested to assist in renovating an existing 10-room operating suite to create customized surgical rooms that support contemporary surgical practices in cardiac surgery, minimally invasive surgery, robotics, endovascular procedures, neurosurgery, and other growing surgical subspecialties. The project will ensure there is sufficient operating room capacity to meet volume growth over the next ten years. This is an appropriate use of taxpayer funds because the project will enhance the hospital's ability to provide high-end surgical care in a tertiary care setting in a community where the demand for such services is overwhelming.

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58. T2 Biosystems ($2.5 million)
286 Cardinal Medeiros
Cambridge, MA 02141
Contact: John McDonough, CEO

Project Description:
The funding will support the development of a rapid diagnostic test for the detection of a broad range of health and environmental threats, including bioterrorism, in contaminated water using a portable device incorporating magnetic resonance and nanoparticles. The company's founders include scientists from MIT and Massachusetts General Hospital. T2 Biosystems' MR detection is based on miniaturized instruments and magnetic nanoparticles specially treated to bind with specific analyses for detection of infectious agents. Potential targets for detection include: MRSA, anthrax, plague, tularemia, smallpox, and botulism toxin, and water-borne contaminants such as cryptosporidium and cholera. Funding will help support a 3-year development project to produce a rugged portable instrument and develop a broad range of diagnostic tests for the detection of water contamination. This is an appropriate used of taxpayer funds because of the improvements possible in water contamination detection.

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59. Textron Systems Corporation ($5 million)
201 Lowell Street
Wilmington, MA01887

Project Description:
On June 19, 2008, the Department of Defense issued a policy requiring the Air Force to remove more than 110,000 weapons that result in more than 1% unexploded ordnance from its active inventory by 2018. This weapons removal will create an operational gap for the Air

Force, specifically in the ability to engage massed targets and targets spread over an area. The Clean Lightweight Area Weapon (CLAW) is an affordable, highly effective, unexploded ordnance-safe replacement for legacy cluster weapons. This is an appropriate use of taxpayer funds because it will help the Air Force to maintain its required inventory while implementing the DoD's new policy.

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60. Thompson Island Outward Bound Education Center (475,000)
P.O. Box 127
Boston, MA 02127

Project Description:
The Thompson Island Outward Bound program is seeking funds to support its ongoing development of grade-specific programming, curricula and instructional materials for all middle school grades and the spring, fall and summer operating seasons. That includes professional development programs for client school teachers and customization of activities to school-system specific science and math curricula as well as the general Massachusetts Curriculum Frameworks. This is an appropriate use of taxpayer funds because it supports educational programs for thousands of middle school children from Massachusetts; the vast majority from underserved urban communities.

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61. TIAX LLC ($4,500,000)
15 Acorn Park
Cambridge, MA 02140

Project Description:
In the U.S. Special Forces' joint Capability Gap Analysis of 2005, Power & Energy and Signature Reduction (e.g. noise, heat, and smell) were identified as two of the three overarching capability gaps. Additionally, the US Army has a requirement for small, fueled electric power sources in the next decade. However, there is currently no acceptable fueled solution today that offers the desired combination of runtime, durability, low lifecycle cost, fuel flexibility (including befouls), and stealth (low thermal and aural signature). In the second year of this two-year project, TIAX will conclude the development of a fieldable advanced electrical generator that satisfies the capability gap and these DoD requirements. The design of the current demonstration unit will be further refined to reduce weight and volume, improve user interface, and package and ruggedize the generator for military applications. This is an appropriate use of taxpayer funds because the project will help provide the Army with durable and efficient power sources, an identified need.

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62. Trophos Energy, Inc. ($2,500,000)
363 Highland Avenue
Somerville, MA 02144

Project Description:
Trophos Energy and the Department of Energy will develop long-term energy sources based on microbial fuel cell (MFC) technology. Microbial fuel cells are an emerging renewable energy technology that uses naturally occurring microorganisms to transform virtually any form of organic carbon directly into electricity or hydrogen. It has broad applications and the potential to transform industries ranging from security, to water and agriculture. Moreover, Macs have demonstrated using municipal effluent; and converting the waste-stream into clean renewable energy, while simultaneously reducing the cost of managing the waste and the

production of CO2, methane and other greenhouse gasses. This is an appropriate use of taxpayer funds because MFC technology offers a broad range of compelling energy solutions that can address our Nation's energy production and conservation needs.

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63. Tufts University ($600,000)
Medford, Massachusetts 02155

Project Description:
The Human Nutrition Research Center on Aging was established by the Department of Agriculture in 1977, and is one of six USDA-funded nutrition centers across the country. The research performed by the scientists and faculty at HNRCA, has resulted in the development of dynamic preventative nutrition solutions for chronic health problems, and many of the Center's research findings have been incorporated into the US Dietary Reference Intakes and the Dietary Guidelines for Americans.

Last year, the federal government initiated a research project that will focus on obesity, as well as study the relevance of the US Dietary Guidelines for weight control of the nation's population. Given that a significant number of HNRCA investigators have been involved in designing the proposed study, and the fact that the Center has a specific focus on nutrition and the physiological needs of the body, HNRCA found itself in a potentially leading role in this effort. To this end, HNRCA has requested federal funding to hire scientists and researchers for this work. Over the last six years, the HNRCA budget has endured severe cuts or level funding which has forced a reduction in staffing levels. This funding is critically needed support for the obesity project and is an appropriate use of taxpayer dollars because of the rise in obesity and the damages caused to one's health as a result.

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64. University of Massachusetts Boston ($1,870,000)
100 Morrissey Boulevard
Boston, MA02115

Project Description:
This funding will help the University of Massachusetts Boston launch a new interdisciplinary research center to facilitate a comprehensive approach to healthcare reform and health disparities: The Center for Urban Health and Disparities. The work conducted at the new Center will address, among other issues, those that are central to any effort to enact healthcare reform, including delivery, access and quality of care, and the very critical matter of health disparities based on race, ethnicity, gender, class and age. This is an appropriate use of taxpayer funds because of the need to understand health disparities so we can work toward eliminating them.

The creation of the Center for Urban Health and Disparities is timely and the University is the ideal sponsor of the initiative because of its focus and strengths in urban health and public policy. Moreover, Boston is a key location for a center of this nature in light of recent healthcare reform in Massachusetts that is viewed as a model from which lessons can be learned in reforming healthcare nationally.

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65. WGBH ($350,000)
1 Guest Street
Brighton, MA02135

Project Description:
WGBH is seeking funds for production costs associated with Season 4 of Design Squad, a PBS television series, with an accompanying outreach campaign and Web site. Targeted to 9- to 12-year-olds, this TV series is the fuel behind a national, multimedia initiative designed to attract kids to engineering. Design Squad was created in response to a national imperative to attract more young people to engineering studies and careers. Engineers have led a technological revolution that has improved the quality of our lives, yet children and adults do not understand how the technology they use in their daily lives works. They are also unclear about the engineer's role in society or even what an engineer does. Coupled with the lack of public understanding is the dearth of students, especially women and minorities, studying engineering in school. This "pipeline" issue is directly related to the fact that most of our country's K–12 schools do not teach engineering. Design Squad exposes kids to real-world applications of science and math concepts. This is an appropriate use of taxpayer funds because it helps young people become more aware of how engineering touches our everyday lives, and consequently how it connects to a range of careers (technology, business, art, fashion, and other fields).

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66. Wheelock College ($860,000)
200 The Riverway
Boston, MA 02215

Project Description:
Wheelock College is seeking to expand on its Math and Science Education Initiative (MSEI) to more deeply engage schools, community based preschools, out-of-school program providers and families in math and science instruction. This is an appropriate use of taxpayer funds because Wheelock's Math and Science Learning Community will help to enhance math and science teaching, as well as foster interest in science, technology, engineering and math (STEM) related careers.

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67. Wheelock College ($305,000)
200 The Riverway
Boston, MA 02215

Project Description:
The goal of the Early Childhood Higher Education Access Project is to improve access to professional development, bachelor's degrees and compensation for early childhood practitioners in the community. The proposed project will work to design, implement and evaluate a Pilot Program for improving access to higher learning and degree attainment for early childhood practitioners in the Boston Area over a two year period. In addition, the project will import the TEACH model to begin to respond to the need for improved compensation.

Wheelock will develop a program to create a well defined road map that values where people in the field find themselves academically and helps move them seamlessly through a higher learning pathway that will ultimately raise the level of quality in classrooms, family childcare homes and other environments that care for and educate young children. This is an appropriate use of taxpayer funds because the program will help educators enhance their training, increasing their value in the classroom and expanding their earning potential.

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68. Wheelock College ($500,000)

200 The Riverway
Boston, MA 02215

Project Description:
Wheelock is requesting federal funding to purchase and equip new facilities and update aging facilities with the most cutting-edge, energy efficient, LEED-certified technology. Federal funding will allow Wheelock to meet LEED requirements on upcoming "Master Plan" construction and renovation projects. Some examples of technologies that could be purchased with federal aid are HVAC control systems, chiller plant, towers, and piping, and the design and engineering for the previously mentioned technologies. This is an appropriate use of taxpayer funds because of its impact on energy and the environment.