



April 26, 2011

Dear All,

Massachusetts has nurtured the growth and development of successful global industries such as life sciences, telecommunications and healthcare. Now, arising from the Commonwealth's unique mixture of leading academic and cultural institutions, a talented workforce, experienced investors and innovative entrepreneurs, a new creative industry cluster is rapidly taking shape: **digital game design and development.**

Over the last year, the Commonwealth of Massachusetts has witnessed tremendous energy and enthusiasm in support of the digital games industry. Building on this momentum, and focusing on the economic development and job creation potential of the industry, we are pleased to announce the creation of the Massachusetts Digital Games Institute (MassDiGI).

A strong coalition of industry, academia and government, MassDiGI will be hosted by Becker College, home to a top ten nationally-ranked digital games design and development program. MassDiGI will facilitate cooperation among the digital games industry, higher education and the public sector to strategically foster job growth and economic development in Massachusetts.

To lead the MassDiGI planning process, the Patrick-Murray Administration and Becker College formed a Steering Committee and working group representing a cross-section of core stakeholders from the Massachusetts digital games ecosystem. The resultant plan provides the necessary guidance for MassDiGI to serve as a center for statewide initiatives that will promote academic collaboration, entrepreneurship, business formation and growth, job creation and retention.

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On behalf of all those who participated in this effort, we are proud to offer “Getting in the Game: A Plan to Establish the Massachusetts Digital Games Institute.” We look forward to a continuing partnership that will leverage growth and opportunities for the digital games industry in the Commonwealth of Massachusetts.

Yours truly,



Timothy P. Murray  
Lieutenant Governor of the Commonwealth of Massachusetts



Robert E. Johnson, Ph.D.  
President of Becker College



Patrick Larkin  
Director of the Massachusetts Technology Collaborative  
John Adams Innovation Institute



Vincent A. Pedone  
State Representative of the 15<sup>th</sup> District, Worcester

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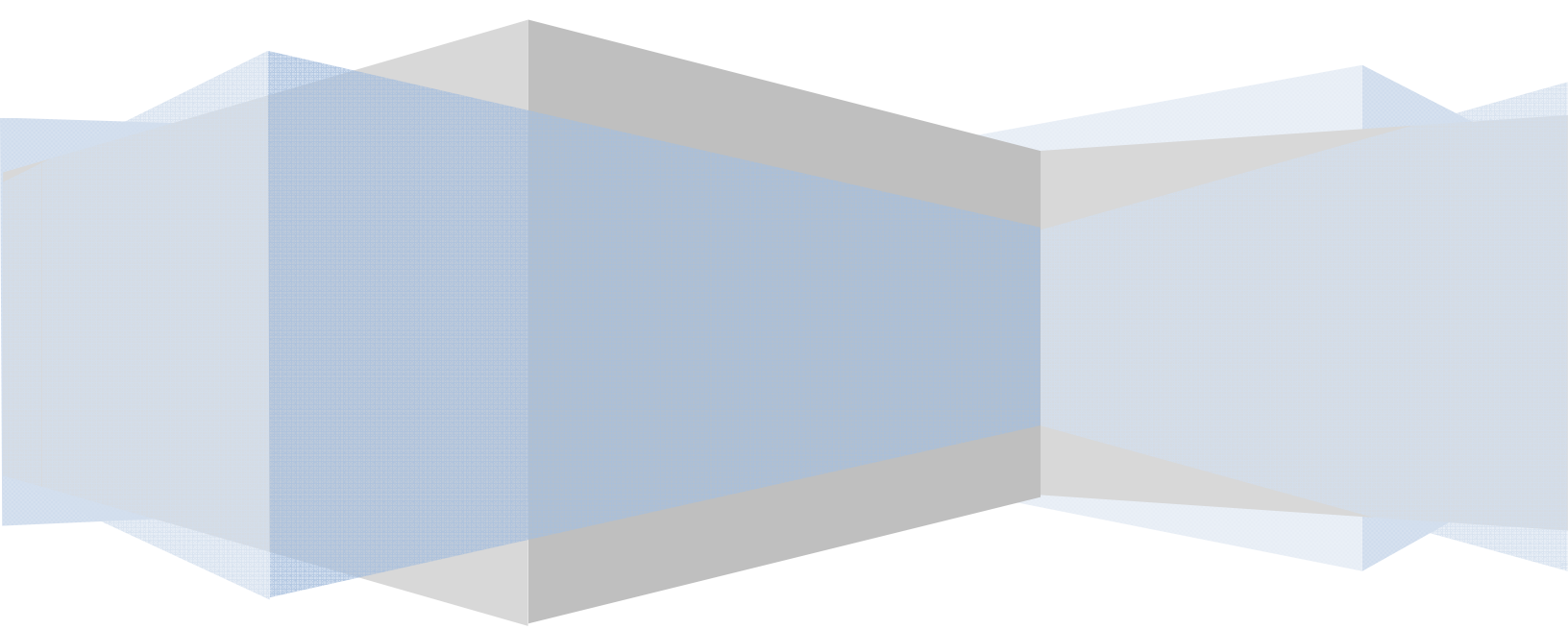
Massachusetts Digital Games Institute Steering Committee Report

# Getting in the Game

A Plan to Establish the Massachusetts  
Digital Games Institute



April 26, 2011



“There is an urgent need to create new jobs—lots of them...we cannot stop the clock of history from ticking and we cannot magically bring back the old industrial economy. We need to support the growth of higher-paying knowledge, professional and creative jobs, and make sure that greater numbers of workers are prepared for them.”

Richard Florida, *The Great Reset*

## Getting in the Game: A Plan to Establish the Massachusetts Digital Games Institute (MassDiGI)

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## **Getting in the Game: A Plan to Establish the Massachusetts Digital Games Institute (MassDiGI)**

### **Introduction**

Digital games are playing a remarkable role in changing global economies, societies and behaviors. Step function growth in digital games-based emerging technologies is surging across borders, markets and sectors. Growth curves consistently trend positive as consumers, institutions and corporations around the world explore, adopt and embed digital games into their personal lives, and social, educational and business models. Entertainment applications and products are now pervasive and ubiquitous. Billions of dollars in revenue, hundreds of thousands of jobs and untold creative opportunities are in migration. By coordinating efforts and aligning people, resources and ideas, Massachusetts can stake claim to an important share of the growing opportunities, jobs and revenues within the ascendant digital games industry.

Today, Massachusetts finds itself in the middle of one the most challenging economic cycles since the Great Depression. Like much of the United States, the Commonwealth is striving to retain jobs within its economy. The conditions that traditionally generated job creation in the recent past are now and will continue to be impacted by megatrends that are global and technology driven. To be competitive in a global economy, Massachusetts must develop high-quality, creative, relevant, entrepreneurial and diversified opportunities that will withstand the new competitive circumstances that are basic economic facts of life. States, let alone regions and countries, which do not embrace and master these new realities, will risk exposure to perilous economic circumstances and chronic employment problems.

One of the most powerful forces of modern life is the adoption of technology. Waves of technological advancement have fundamentally flattened the competitive landscape and have produced new economic winners. Through decades of prescient public and private support and investment, Massachusetts has become one of the preeminent technological, engineering, entrepreneurial, educational and cultural powerhouses in the world—clear competitive advantages that place the state in select company. Moreover, the Commonwealth's per capita educational achievement exceeds that of many national economies. By effectively leveraging its competitive strengths, Massachusetts has witnessed the steady growth of its knowledge-based sectors through the transfer of intellectual property to and from academia and the marketplace. The growth and success of sectors such as computer hardware and software, financial services, life sciences, healthcare and environmental technologies bear testament to the efficient utilization of the state's intellectual infrastructure.

### **The Opportunity**

The question for the Commonwealth's leaders and policy makers is: Where will the vital, knowledge-based jobs for future generations of Bay State citizens come from? It is clear that the Commonwealth must expand and broaden its available inventory of knowledge-based jobs and open new markets of innovation. By diversifying the state's creative industries and leveraging existing talent, knowledge and innovation, Massachusetts will preserve, expand and develop

new opportunities for job creation and compete successfully in the technology-driven emerging global marketplace of goods and services.

The digital games industry offers Massachusetts leaders both an opportunity and a challenge in answering the critical question of where the future generations of vital, new knowledge-based jobs will come from. Digital games—at the confluence of the Commonwealth’s competitive advantages in higher education, technology, engineering, entrepreneurship and culture—present part of the potential solution.

What Massachusetts plans next is central in determining just what share it will capture of the massive worldwide demand for digital games-based consumer, business and educational products. As Clay Shirky writes in *The Political Power of Social Media*, from the Jan/Feb 2011 issue of *Foreign Affairs*, “Since the rise of the Internet in the early 1990s, the world’s networked population has grown from the low millions to the low billions.”

### **The Industry**

Globally, according to PricewaterhouseCoopers, the digital games entertainment industry was \$52.5 billion in 2010 and projected to reach \$86.8 billion by 2014—currently tripling the music industry and approaching the movie industry in size. In the United States, the industry is \$15.1 billion and growing fast.<sup>1</sup> The Entertainment Software Association reports real annual growth rate of the United States digital games software industry as 10.6% from 2005-2009 while during the same period real growth for the United States economy as a whole was 1.4%. The average industry salary is \$89,000. Nearly 70% of American households play games on everything from consoles to laptops to smart phones and mobile devices.<sup>2</sup>

Digital games, comprising a broad set of terms such as interactive and playable media, virtual worlds, video, social, casual, mobile, online and serious games and associated middleware and transaction products, have clearly redefined the entertainment industry and have profoundly changed what games makers must offer to an increasingly “digitalized” consumer. Games are one of the driving forces behind today’s rapid technological iteration which is quickly transforming many aspects of social and economic existence. Fortunately for the Commonwealth, the pieces are already in place to become a world player in digital games.

According to the Massachusetts Technology Leadership Council (MassTLC), the cluster of existing digital games companies in Massachusetts represents as much as \$2 billion in gross annual sales within the Commonwealth’s growing creative economy.<sup>3</sup> More than 75 digital games companies attract and employ, directly and indirectly, more than 4,000 people in the Bay State—representing one of the larger digital games clusters in the United States. Well-known titles like Harmonix’ Rock Band, Turbine’s Lord of the Rings Online, and Irrational Games’ BioShock were all born here.

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<sup>1</sup> PricewaterhouseCoopers Global Entertainment and Media Outlook, 2010-2014

<sup>2</sup> Entertainment Software Association, *Video Games in the 21<sup>st</sup> Century: 2010 Report*

<sup>3</sup> MassTLC 2009 Digital Games Cluster presentation

Nearly twenty leading Massachusetts higher education institutions offer degree programs or individual courses in digital games design and development.

In March 2011, more than 69,000 people attended PAX East, an international games industry conference and trade show in Boston—one of the largest events in the history of the Boston Convention and Exhibition Center. Clearly, the digital games industry has become mainstream big business in Massachusetts and is poised at the tipping point.

Furthermore, digital games-based technologies have transitioned well beyond entertainment into a spectrum of intersecting industries including, but not limited to, all levels of education, defense, language and corporate training, healthcare, publishing, film, marketing, advertising, science and medicine.

In fact, digital games are having an increasingly important impact on K-12 education particularly in the areas of STEM (Science, Technology, Engineering and Mathematics) and arts education. Compelling digital learning tools and applications that inspire creativity, critical thinking and problem solving among students and teachers and lead to positive educational outcomes across disciplines are becoming more prevalent on a daily basis. As school systems incorporate new technologies into the classroom experience and curricula, digital games technology is playing a progressively more critical role in enhancing student achievement results.

### **The Competition**

Over the last year, the digital games industry’s potential has captivated the attention of important leaders in the Commonwealth’s public and private sectors. However, Massachusetts is certainly not the only jurisdiction recognizing the value of this industry. California and Washington, with two of the largest clusters of digital games companies in the country, and Texas have moved quickly to target the growth potential of the digital games industry. As of 2010, 21 states and six Canadian provinces also saw this potential and now have incentive policies to attract companies in the industry. Most prominent is Quebec, a province that offers assistance and incentives to digital games companies. This has reaped enormous benefits: 600% job growth and 7,000 jobs created since 2003.<sup>4</sup>

### **The Initiative: Massachusetts Digital Games Institute**

Governor Deval L. Patrick and Lieutenant Governor Timothy P. Murray have emphasized job creation as a top priority for Massachusetts. As key elements of this focus, the Patrick-Murray Administration promotes strategic investment and growth in the innovation economy. Toward this end, the Administration has engaged in an effort to support potential jobs and opportunities offered by the digital games industry.

As part of this effort, the Patrick-Murray Administration has launched an initiative to designate the Massachusetts Digital Games Institute (MassDiGI or the institute), a center for statewide

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<sup>4</sup> <http://www.cbc.ca/news/technology/story/2010/09/08/video-game-incentives-subsidies.html>

coordination, engagement and cooperation among the digital games industry, government and higher education, focused, through collaborations and partnerships, on job creation and economic development. Becker College, home to a nationally-recognized game design and development academic program, has been asked to host MassDiGI at its Worcester campus. Becker and nearby Worcester Polytechnic Institute, with its own nationally-recognized program, are important institutions in a region that for the past thirty years has been a case study for the economic transformation from smokestacks to stem cell science. Harnessing its powerful education, research and innovation resources, Central Massachusetts and Worcester have experienced many benefits from the numerous and successful collaborations among its colleges, universities, medical and veterinary institutions and the private sector to create knowledge-based jobs for the new generation of workers.

### **Planning Process**

To support the institute's designation, the Patrick-Murray Administration directed the Massachusetts Technology Collaborative John Adams Innovation Institute (MTC) to assist Becker College in developing a plan for MassDiGI. The planning process included creating a Steering Committee and working group representing a healthy, deeply-engaged cross-section of core stakeholders from the digital games ecosystem, higher education and government. The planning process delved into the digital games industry, gathering information, engaging with industry leaders and conducting focus groups across Massachusetts. The dynamic mix of people who served on the committee and working group enthusiastically articulated ideas and provided valuable knowledge and experience in demonstrating the need for an institute; shaping the plan's vision and mission, goals and objectives; and delineating services. This process validated the institute's role as a state-wide center dedicated to supporting growth and opportunity within the Commonwealth's digital games industry.

### **Purpose**

MassDiGI exists solely to catalyze and support the digital games industry in its pursuit of growth and new job creation within the Commonwealth. Ultimately, MassDiGI's success will be measured by a visible system of accountability that measures job growth and opportunity creation. A matrix, or industry fact sheet, will be developed to benchmark accomplishments by this new public-private collaboration. Over time, the fact sheet will be a key component in determining MassDiGI's future direction and value.

In the context of economic uncertainty, characterized by the fast pace of globalization and the impact of new technologies that put a high value on ingenuity and inventiveness, MassDiGI must function within an emerging technology ecosystem that requires profitable enterprises to develop new business and social models. Strong leadership will be necessary to create the kind of public-private partnerships and collaborations that will leverage the considerable institutional resources of Massachusetts, particularly the state's substantial higher education infrastructure.



Within the Commonwealth, issues such as human capital formation and development, financial support systems and new market and product development must also be addressed. MassDiGI's work towards those ends must resonate with the digital games industry to maintain its confidence and sustained engagement.

As the Commonwealth encounters new economic and social challenges and evaluates its competitiveness in a global and changing economy, preserving and growing the digital games industry in Massachusetts is an important piece of the puzzle. The economic vulnerability experienced over the past few years adds a spark of urgency to the work ahead and teaches that nothing short of creating a bold and prosperous vision for the future will give the citizens of Massachusetts opportunities to find fulfillment for themselves and their families. A world-class digital games industry, catalyzed by the Massachusetts Digital Games Institute and focused to win more global market share, gives Massachusetts hope to achieve this vision now and for the next generation.

### **Vision and Mission**

The Massachusetts Digital Games Institute's **vision** declares the desired state of the institute and serves as the standard against which actions and decisions are measured.

*The vision of the Massachusetts Digital Games Institute is to be a center for innovative collaboration and partnership that positions the Commonwealth of Massachusetts as a global leader in the digital games industry by 2020—resulting in job growth and economic development.*

The Massachusetts Digital Games Institute's **mission** serves as the road map for how it will lead activities and orient outcomes.

*The mission of the Massachusetts Digital Games Institute is to facilitate cooperation among the digital games industry, government and academia to strategically foster job growth and economic development in Massachusetts. As a center for state-wide initiatives that promote academic collaboration, entrepreneurship, business formation and growth, job creation and preservation, it enhances the Commonwealth's ability to attract and retain digital games companies and to expand the industry cluster.*

### **Goals and Objectives**

The goals and objectives of the Massachusetts Digital Games Institute align with its role as a statewide center for coordination, engagement and cooperation among the digital games ecosystem, government and higher education that supports job creation and opportunity. Focusing on developing collaborative efforts and partnerships among industry, academia and government, the institute seeks to increase opportunities for job creation and enhanced educational outcomes. The institute's start-up phase will run from April to December 2011 with a ribbon-cutting ceremony in September 2011. First year operations will begin in January 2012.

By aligning people, resources and ideas and by minimizing barriers, the institute's value proposition to Massachusetts, by sector, is:

- Digital games industry:
  - Create intellectual property
  - Improve access to capital for entrepreneurs and small businesses
  - Pipeline highly-educated and trained workers
  - Support the retention and growth of existing digital games companies
  - Attract digital games companies to relocate or begin operations
  - Build an extended community of support for digital games companies
- Higher education:
  - Support educational institutions in better preparing graduates for careers in digital games companies
  - Create internship and mentoring opportunities
  - Increase enrollment
  - Increase the visibility of educational institutions with digital games programs
  - Connect digital games professionals with both educators and students in an educational setting
- Government:
  - Increase revenue
  - Stimulate job creation
  - Promote a high quality of life

In the start-up phase, MassDiGI's objectives will revolve around setting the stage for scalable longer-term objectives. Within year one of operation the institute intends to:

- Recruit a 19-member Advisory Board
- Establish collaborations and partnerships within the state that support the institute's mission and vision
- Coordinate industry data and develop an industry fact sheet, annually updated and aggregated for anonymity
- Convene regular meetings and support dialog between stakeholders and the broader digital games ecosystem
- Encourage stakeholder participation in expanding internship and mentoring programs across academic institutions
- Collaborate on awareness initiatives to raise the visibility of the industry and academic opportunities within the Commonwealth
- Seek out immediate opportunities for job creation
- Identify and develop resources in the following areas: outreach and industry marketing; workforce development; business development; education and research; conference planning; and practices, policy and advocacy
- Continue the planning process and produce a business plan

MassDiGI's longer-term goals and objectives will evolve from input provided by stakeholders, the institute's Advisory Board and the lessons learned during the first year of operation.

## Services

The institute's services will be driven by its vision, mission, goals and objectives and will be designed to maximize long-term stakeholder benefits.

- Outreach and industry marketing
  - Serve as a web-based and physical resource center for digital games ecosystem companies interested in starting, locating or growing operations in Massachusetts
  - Organize efforts to assist Massachusetts digital games companies in marketing their products in global markets
  - Support a marketing and communications effort that highlights the contributions of Massachusetts' games cluster and the positive attributes of the state's business environment
  - Produce presentations, demonstrations and workshops etc.
- Workforce development
  - Coordinate internship opportunities between higher education and digital game companies
  - Facilitate training and retraining including course and curriculum development
  - Promote continuing education including course and curriculum development
  - Coordinate mentorship opportunities
- Business development
  - Provide resources for entrepreneurs in early-stage digital games companies
  - Guide entrepreneurs seeking access to capital
  - Support the creation of an innovation center or incubator(s) for early-stage digital games companies, providing assistance with access to technology, and marketing, accounting and legal services, etc.
- Education and research
  - Develop and align curriculum, syllabus and course content for K-12 and higher education with a focus on STEM as well as the arts
  - Foster creation of professional development, testing, delivery and assessment tools for K-12 and higher education game and interactive media-based curricula with a focus on STEM as well as the arts
  - Coordinate industry and government-sponsored subject area and interdisciplinary research, sponsorship of graduate research assistants
  - Provide a website for electronic publication of scholarly and educational materials
- Conference planning
  - Plan scholarly conferences
  - Support commercial conferences

- Practices, policy and advocacy
  - Conduct industry research, manage databases, studies and publications
  - Promote cooperation among higher education institutions resulting in shared research, databases, studies and publications
  - Serve as a source and repository for government studies and reports

### **Key Performance Indicators**

Over time, in order to measure the impact of MassDiGI, key performance indicators (KPIs) must be established, measured and assessed annually. Measuring KPIs will be accomplished, with the participation of the digital games industry, through developing of an “anonymous” industry fact sheet.

- Student development indicators
  - Change in enrollment in narrowly-defined digital games design and development programs at all degree levels in Massachusetts
  - Change of enrollments in related subject area programs at all degree levels in Massachusetts
  - Percentage of students with internships and/or mentors
  - Rate of degree attainment for students enrolled in each of the above
  - Percentage of graduates who remain in Massachusetts for jobs related to their degree
  - Change in K-12 school systems with digital games courses or curricula
  
- Business development indicators
  - Change in total number of digital games companies in Massachusetts
  - Change in total number of digital games companies in various industry sub categories in Massachusetts
  - Environmental scans of digital games companies on factors contributing to their future plans, qualified workers, freelancers/independent contractors, vendors, mentoring, incentives, facility costs, housing costs, proximity to other resources
  - Reports on markets and customers served in Massachusetts, the United States and abroad
  - Change in census of freelancers/independent contractors in Massachusetts

- Financial indicators
  - Change in digital games companies' gross annual sales
  - Change in digital games companies' payroll in Massachusetts
  - Change in angel, venture capital or corporate investment in digital games companies
  
- Job creation and retention metrics
  - Change in total number of digital games jobs in Massachusetts
  - Change in total of digital games jobs in various industry sub-categories in Massachusetts
  - Change in digital games extended community of support jobs in Massachusetts (i.e. intellectual property lawyers, public relations firms, marketing firms, etc.)

### **Operating Assumptions**

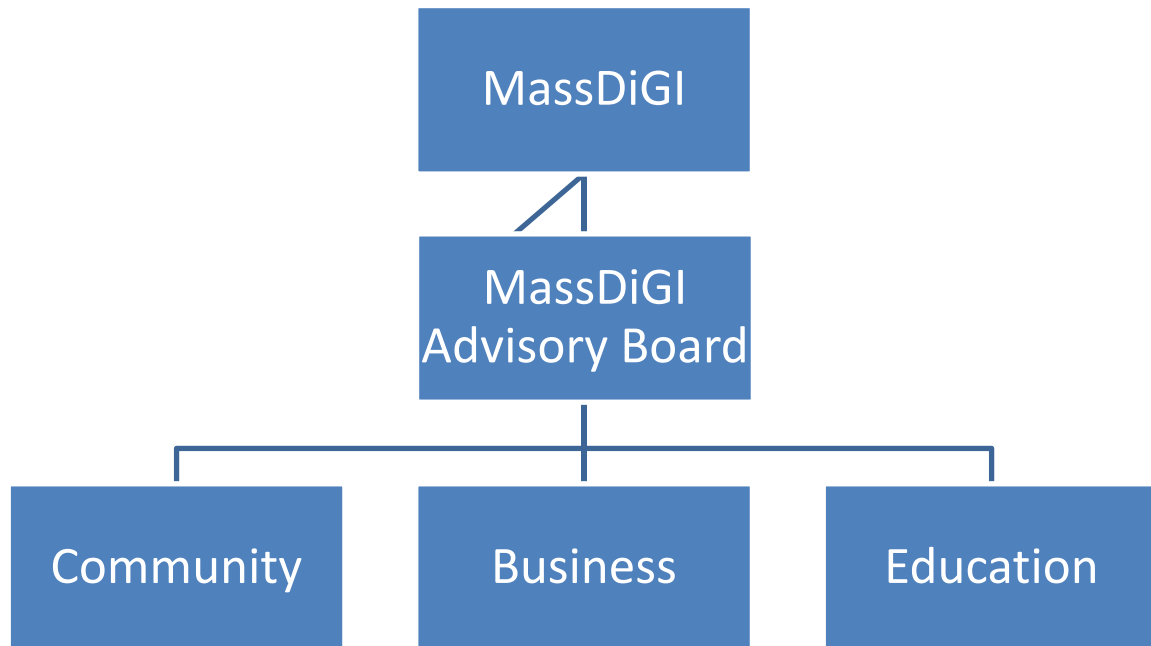
In the start-up phase, Becker College will host the institute and also will be the lead provider of resources and services supporting it. To foster a broad base of support, a 19-member Advisory Board, chaired by Becker College's president, and comprising business, education, and community leaders, will provide leadership, guidance and direction to MassDiGI.

Initial provision of in-kind resources and services will include office space, equipment and operational support, staffing, administrative assistance, grant-writing, fund-raising and other resources to be determined. Becker College has contracted to purchase a facility adjacent to its Worcester campus. A portion of that facility will be allocated to the institute. Renovation and upgrades to the facility, projected to cost more than \$1,500,000, will begin in July 2011 and are expected to take 12 to 24 months to complete fully. A ribbon-cutting ceremony for MassDiGI is anticipated for September 2011 as the first phase of renovations wrap up.

Taking everything into account, Becker College intends to support MassDiGI annually in the range of \$300,000 to \$350,000 with an additional capital investment in the new facility of up to \$150,000 to \$200,000 during the start-up phase alone.

As the institute matures and resources are developed, it will extend its operations in accordance with goals and objectives as set forth by the Advisory Board within the context of the services offered. Over time, the operating assumptions for the institute will adjust in line with growth in capacity and funding.

## Organization at Start-up



### Key management personnel

- MassDiGI executive director
- MassDiGI support staff

### Governance

- Becker College policies and procedures

### Sustainability

As with any entity, MassDiGI will identify and develop resources: internal (Becker College) and external (from an array of possible funding sources). External sources could include: foundation and individual philanthropy, government grants, corporate giving, other academic institutions, and intellectual property. The ability of the institute to successfully raise funds, compete for grants and form resource-based partnerships and collaborations will be of utmost importance.

Becker College has pledged to support the institute in the start-up phase and to allocate an appreciable amount of its grant-writing and fund-raising capabilities to MassDiGI over the long term. More comprehensive budget information regarding the first year of operation will be produced as part of the business planning process.

## Start-up

- In-kind resources, services and allocated capital investment valued at up to \$450,000 to \$550,000 pledged by Becker College

## On-going

- Becker College
- Foundation and individual philanthropy
- Government grants
- Corporate giving
- Other academic institutions
- Other institutions
- Intellectual property

## Budget Schedule

Preliminary pro forma budget schedule (mid-point estimate)

<i>Source</i>	<i>Description</i>	<i>Outcome</i>	<i>Amount</i>
Becker College	Personnel	Management	\$110,000
Becker College	Support and services	Supplies, office equipment, etc.	20,000
Becker College	Faculty resources	Release time	25,000
Becker College	Development and grant-writing	Resource identification	50,000
Becker College	Marketing and communications	Promotion, web, travel, etc.	50,000
Becker College	Rent and overhead	Office space, overhead, etc.	25,000
Becker College	Consulting	Outside expertise	20,000
Becker College	Other	Other	10,000
Becker College	Services	Planning	40,000
		<b>Sub-total:</b>	<b><u>\$350,000</u></b>
Becker College	Renovation: facility allocation	Capital	\$150,000
		<b>Sub-total:</b>	<b><u>\$150,000</u></b>
		<b>Total:</b>	<b><u>\$500,000</u></b>

## Appendices

### Appendix A: MassDiGI Steering Committee—Planning Process Member List

Mr. Jeff Anderson Secretary Greg Bialecki	Founder/CEO Executive Office of Housing and Economic Development	Quick Hit, Inc. Commonwealth of Massachusetts*
Dr. Gail Carberry	President	Quinsigamond Community College
Mr. Richard Corredera Dr. Ian Lane Davis	Founder/Director President, Rockstar Games- New England	DoubleTap Games, LLC Rockstar Games, Inc.
Mr. Jeff Goodsill Ms. Dayna Grayson	Vice President/General Manager Principal	Tencent Boston North Bridge Venture Partners
Mr. Hank Howie Dr. Robert Johnson Mr. Pat Larkin	President President Director	Blue Fang Games, LLC Becker College MTC John Adams Innovation Institute
Mr. Scott MacMillan Dr. Beth Marcus Lt. Governor Timothy P. Murray	Founder Founder/CEO	Macguffin Games Playrific, Inc. Commonwealth of Massachusetts*
Dr. Karen Kashmanian Oates	Dean of Arts and Sciences	Worcester Polytechnic Institute
Rep. Vincent A. Pedone	15 <sup>th</sup> Worcester District	Massachusetts House of Representatives*
Mr. Jon Radoff Mr. Monty Sharma	CEO Founder/Vice President/General Manager of Integrated Services	Disruptor Beam, LLC Vivox, Inc.
Mr. Jeremy Shea Mr. Aaron St. John Mr. Ken Surdan Mr. Alex Uzgin	Vice President Founder Vice President of Operations Owner	GSN Digital Labs, LLC Hitpoint Studios, Inc. Turbine, Inc. Halaxi, Inc.

\*or designee



## Appendix B: Working Group—Planning Process Member List

Mr. Michael Cavaretta	Attorney	Morse, Barnes-Brown, & Pendleton, PC and MIT Enterprise Forum New England Games Special Interest Group
Dr. Mark Claypool	Professor, Director Interactive Media & Game Development	Worcester Polytechnic Institute
Dr. Paul Cotnoir	Chair, Design Programs	Becker College
Mr. Gerard D'Amico Mr. William Ennen	Consultant Program Director	Becker College Massachusetts Technology Collaborative, John Adams Innovation Institute
Ms. Jacqueline Grady	Project Leader	Massachusetts Technology Collaborative, John Adams Innovation Institute
Mr. Dean Hickey	Vice President, Institutional Advancement	Becker College
Mr. Mark Horan	Senior Vice President	Massachusetts Technology Leadership Council
Mr. Michael Kane Mr. Darius Kazemi	Consultant Lead Analyst	Becker College Boston Post Mortem Chapter of the International Game Developers Association and Blue Fang Games, LLC
Ms. Lauren Jones	Director of Policy & Communications	Office of the Lieutenant Governor
Mr. Timothy Loew	Director, Academic Planning	Becker College
Mr. Eric Nakajima	Senior Policy Advisor	Executive Office of Housing and Economic Development
Mr. Christopher Scranton	Investment Funds Manager	Massachusetts Technology Collaborative, John Adams Innovation Institute

## **Appendix C: Digital Games Industry Background: Invention, Evolution and Major Revenue Models**

Massachusetts played a central role in the development of the digital games industry. In 1961, a group of MIT students created “Spacewar!” – one of the earliest interactive video games and the first widely-known and influential computer game. In 1971, the eventual founders of Atari, Inc., started a coin-operated arcade version of “Spacewar!,” creating the first popular revenue model associated with video games: the classic “coin-op arcade game” where individual users insert coins to pay for each use of the video game. The success of their follow-on effort “Pong” established the first hit arcade video game, selling 19,000 “Pong” machines. Slow expansion of arcade games turned to rapid growth in 1978 with the release of Taito’s “Space Invaders” and the golden age of arcade games began, with machines popping up in shopping malls, restaurants and convenience stores across the nation.

In the late 1970’s and early 1980s, the advent of both home computers, like the Apple II, and mainstream console video game makers, like Atari and Nintendo, paved the way for the second major revenue model: “personal game and games system ownership” – consumers purchased both their game of choice and the system on which to play it. This model steadily assumed greater market share throughout the ensuing two decades, eventually completely supplanting public arcades as the gaming experiences of most video game players in North America.

During the 1990’s, the rise of the Internet created the foundation for the subscription-based revenue model, now known as “pay-for-play” – frequently a monthly fee paid by game users for unlimited access to the game “service.” Early examples such as “The Sierra Network,” comprised a collection of simple games offered via the user’s existing subscriptions to their Internet service providers (ISPs). Stand-alone, multiplayer game titles became popular subscription-based products, such as the early massively multiplayer online role-playing game (MMORPG) “Ultima Online.”

As high-speed broadband Internet access eventually became widely available, it provided sufficient bandwidth for the development of the more recent, graphic-heavy hits like “World of Warcraft,” “Eve Online” and “Lord of the Rings Online.” These, and many other online games were able to expand their revenue sources by offering “downloadable content” (DLC) for a fee, to expand the gaming experience with additional game levels or special bonuses for the game player.

The individual fee-model associated with subscription services has continued to diversify, evolving new models for revenue such as “free-to-play,” small payments made for “virtual goods” and, with the expansion to social networking and mobile platforms, the growing “microtransactions” model.

The advent of online games also expanded the opportunity for “ad-supported” games, frequently provided for free to game players, which also included paid advertisements either alongside or even integrated within the game experience.

Beyond entertainment, digital games technology is being utilized to enable innovation in other sectors such as education, training, scientific and financial visualization.

## Appendix D: Characterization of the Industry in Massachusetts

The digital games industry is an emerging sector in Massachusetts. As noted in the Entertainment Software Association's *Video Games in the 21st Century: The 2010 Report*, over the five-year period from 2005 to 2009 the industry in Massachusetts has shown 8.86% real annual growth and directly employs 1,295 people. As a niche within the larger digital technology sector in Massachusetts, the digital game industry is sustained and bolstered by the talent and innovation flowing through its surrounding digital ecosystem. An ecosystem represented by colleges, universities, companies, schools, government and the public sector, students, faculty, programmers, designers, engineers, investors, independent developers, freelancers, marketers, lawyers, artists, writers, musicians and other professionals.

In October 2010, referencing MassTLC's 2009 Digital Games Cluster report, the *Worcester Business Journal* reported 76 firms and approximately 1,200 jobs in the industry. As of April 2011, approximately 110 companies across the state self-identify as participants in the sector, with a presence in nearly every corner of the state—from Boston to Williamstown and from Newburyport to Brockton. See Appendix F for a full list of these identified Massachusetts digital games industry-related businesses is available.

The presence and growth of a vibrant video games industry in Massachusetts provides certain long-term and sustainable benefits to the state, including job growth, and STEM talent retention among others. These benefits may be realized beyond the growth of the digital games industry sector itself; as the sector's growth will also support and foster innovation and job creation across a set of related industries. The digital games industry has the potential to positively impact productivity, innovation and the competitiveness within other industries including healthcare, defense and education by applying digital game technologies such as computer graphics, modeling and simulation, and high performance computing.

## Appendix E: Findings from Focus Groups and Research

### Focus Groups Findings:

Focus groups were conducted in March 2011 at locations in Northampton, Westborough and Cambridge, Massachusetts.

#### 1. Trends: There are several very important trends happening on a macro-level in the industry.

- The Digital Games Industry (industry) is very fast-moving due in large part to the pace of technological change and the shifting interests of the consumer market (age and gender are the most significant factors). As a consequence, the industry is more volatile and unpredictable than other industries and economic sectors.
- The definition of what constitutes ‘games’ is undergoing a significant transition—among other things, the industry is no longer defined principally as action-oriented.
- The industry structure is quite varied, i.e., independent freelancers, small studios, publishing houses, large game development companies, talent agencies, etc.
- Casual games and social games are two of the fastest growing segments of the industry and provide new opportunities to reach, and bring in, new customers. For example, the social game development, at least for a few of the companies we met with, is tied to Facebook and therefore provides exposure to a very large market. Additionally, the educational and military applications, the more ‘serious’ side of the industry, present tremendous growth opportunities.
- The pricing dynamics of the industry are a challenge, that is, companies are required to expose new customers to their products, often at no cost, but they then have to create a system or mechanism for getting customers to pay for the product or service. As a consequence, the so-called “free-to-play, but pay-to-continue” is one strategy that companies are testing out.
- Mobile devices will become the platform of the future for the industry – the concentration on this platform is already starting to transform the way games are developed and distributed.
- Boston used to be a center for the industry when Hasbro was still in business. But their absence, and the loss of some other companies that couldn’t find or keep their market niche, led to a temporary decline of the industry in the greater-Boston area. That has changed to an extent, and the metro Boston area seems to have rebounded and there is a much stronger industry presence.
- Also, Boston and Massachusetts are currently home to the development side of the industry, rather than the publishing side of the industry. For some, the lack of big publishing firms compromises the long-term growth and competitiveness of the industry in the state. For others, it makes the state more entrepreneurial and positions the state to be a home for smaller firms and entrepreneurs.

#### 2. Massachusetts as a location: Massachusetts has some competitive advantages as a location for the industry.

- According to some in the industry, the East Coast is a ‘hot-bed’ of activity and Massachusetts is essentially the East Coast location of the industry. Even cities like New York haven’t developed the kind of breadth that is found in the industry in Massachusetts.
- The East Coast time zone is a very big competitive asset for the industry. The industry is global and this means that transactions, sales, collaborations and outsourcing are going on 24/7. ‘East Coast time’ allows for the easiest access to partners and customers in Europe and Asia, as well as the U.S. West Coast.

- Massachusetts is home to many technology companies and has a very strong innovation culture—the digital games industry could both build upon on this base of technology and innovation, and draw upon it to make the industry more competitive.
- Boston may become a hub of the industry—Mayor Thomas Menino and the Boston Redevelopment Authority are embarking on a major initiative that will focus on the digital games industry and position it as an economic priority. Boston is an attractive and very desirable location, in part, because of the strong network of so-called “indies”, people who are independent freelancers and new entrepreneurs in the digital games industry. This network, nurtured to some extent by organizations like Boston Post Mortem, functions as a support community and system for those in the start-up and early stages of business development. The presence of MIT and Northeastern is also a major factor.
- In spite of the growth of the industry here, and the expanding base of entrepreneurs, the state is still not well-known as a location for the industry – “Massachusetts is a little-known secret, and we don’t promote ourselves enough.”
- The quality and quantity of industry-related programs and degrees that are offered at Massachusetts-based higher education institutions presents one of the strongest competitive advantages for this state becoming a first-tier location for the industry (see below).
- At the moment, Massachusetts has a diverse set of enterprises and entrepreneurs, as well as small and medium-sized companies in the industry. However, it lacks a proportionate share of larger-scale companies, the kind that usually function as the persona and identity of an economic sector. Also, the larger-scale companies serve as magnets that attract other enterprises, other entrepreneurs and talent.
- The Commonwealth of Massachusetts and the industry haven’t effectively, and in a sustained fashion, promoted and marketed the state as a location for the industry. If a concerted effort is made, it could help attract new entrepreneurs and small companies.
- Also, the venture capital community is still more focused on technology in Massachusetts and the digital game industry is not yet a focal point of their investments. This could hamper some of the growth that could be expected to occur here in the next several years.

### **3. Higher education: The state’s higher education institutions have been a source of talent and entrepreneurial development, but there are a few challenges.**

- Several people within the state’s higher education system (two-year and four-year) believe that Massachusetts has one of the strongest concentrations of industry-related programs in the country. Other higher education institutions, like USC and CMU, may have strong programs, but Massachusetts has more high-caliber higher education programs than other states.
- Industry-related programs in the state are relatively young—between three and five years old—but the programs are growing in interest and popularity among the student-age demographic. Given the growing interest in this field and industry, most of the higher education institutions in the state are continuing to strengthen their existing programs and adding new programs, particularly at the graduate level. These new program elements and features will enhance the state’s reputation and capability.
- Some in the industry believe that the course curriculum in some programming and software development areas are at least 10 years out of date.
- Industry believes that experience in game development, and with games that are currently on the market, is essential for faculty who are teaching in the field. In some of the institutions, industry experience among faculty could clearly be stronger. In other institutions, however, principally in the Boston area, the relationships between the industry and the institutions are quite strong – faculty have direct experience, institutions have created industry advisory boards, and discussions between faculty and industry are on-going. Where the relationships between an

institution and industry are robust, the curriculum is likely to be well-grounded and reflective of key dynamics and trends in the industry.

- Industry, particularly the smaller studios and firms, needs students/employees who are well-rounded, good communicators, able to work in teams, and have experience in game development from all sides of the product. Further, students/employees who know “how to learn” are a premium. As a consequence, the higher education institutions need to be mindful of these skills and aptitudes when educating and training their students.
- Industry believes that giving students some training in business management is critical – especially in marketing, analytics and distribution. Also, helping students comprehend cost/value ratios, cost estimating, and time management is essential.
- Some of the public higher education institutions have barriers to hiring experienced industry people as faculty. For example, some of the institutions require a master’s degree, and are not able to take into account the direct experience someone may have in the industry as a ‘credential.’ This is not the case for the private higher education institutions.

#### **4. Talent: Attracting and keeping talent for the industry is difficult for several reasons.**

- The number of young people wanting to go into the game development field is growing – many are introduced to games at a very young age and they become enamored by the possibility of being a game developer. As the popularity of games increases, along with social media like Facebook, the pipeline of students entering the field is also going to grow.
- Some of the talent is coming from other states, some from foreign countries, but there is a strong cohort that comes from Massachusetts.
- In and around Boston, the racial mix of students is quite varied – a good indication that black, Latino and Asian will become part of the workforce. On the other hand, the majority of students in the field are male. Consequently, attracting females will have to be a priority if the higher education institutions and the industry want a diversified workforce.
- A major barrier to keeping students in the state is the lack of entry-level jobs in the industry. Without large companies, where the entry-level jobs are more plentiful, the state may have difficulty retaining a broad talent base.
- Undergraduates and graduates of the state’s higher education institutions aren’t fully aware of the size and diversity of the industry – this lack of awareness translates, in part, to the graduates looking to other states for jobs in the industry.
- Additionally, students in some of the state’s higher education institutions have not developed the kind of relationships (e.g. internships, collaborative research projects) that typically exist with companies in other industries and economic sectors.
- Furthermore, there has not been a formalized Attraction & Retention plan put in place that could lead to more talent coming into and staying in the state. Until a formalized Attraction & Retention campaign is put in place, the state’s ability to have a strong and sustainable talent base will be compromised.

#### **5. Growing the industry: new business development in the industry could be strong with the proper support services and systems.**

- Some industry leaders indicate that students who graduate from the state’s higher education institutions could be better prepared for starting a business if they had more entrepreneurial training and exposure.
- The industry will grow and mature as long as there is a pipeline of new businesses coming into existence and thereby broadening the base of companies in the sector. In order for this dynamic to succeed, these new entrepreneurs need the ‘staples’ of starting a new business – access to the kind of affordable space, shared services and collaboration typically found in small business

incubators. Currently, there doesn't appear to be enough of this kind of space and services where there is a concentration of entrepreneurs and start-ups in the industry

- The state of Massachusetts has a very strong system of organizations and services to support new entrepreneurs and start-up businesses (e.g. MOBD, SBDC, business schools at higher education institutions, etc.). However, this system and these services are not well connected to the industry. Additionally, the system is not well-versed in the business models and dynamics of the industry. Consequently, the industry is not benefiting from the kind of resources that have a positive impact on the long-term viability of a business or small enterprises.

#### **6. Opportunities: There are opportunities for growing and strengthening the industry in Massachusetts.**

- Boston appears to be a magnet for the 'indie' part of the industry. Growing this component of the industry would clearly position Boston and the state to be leaders in the smaller, entrepreneurial side of the industry. Since several of the higher education institutions in the state do focus on the business side of the industry, this could further strengthen the state's ability to keep talent here in Massachusetts.
- Companies are eager to have a stronger relationship with the state's higher education institutions. They understand the benefit of having so many programs and degrees, and access to student talent, and they want to help the institutions enhance their programs and degrees.
- There is a strong interest within the industry and within the higher education institutions for more networking and relationship-building. Currently, most of the networking is informal or dependent on a few individuals.
- Older veterans of the industry, i.e., those who had an early start in the industry and decided to move, could be real assets to the higher education institutions, principally as teachers and/or mentors.
- There appears to be growing interest among students to enter the field of digital games. Several faculty members from higher education institutions indicate that many of these students would like to work in the industry or start their own enterprises. In order for this to occur, students need more exposure and contact with Massachusetts-based firms and entrepreneurs, and they need the kind of support systems most often found in small business incubators.

### **Research Findings:**

#### **Comparison: How Does Massachusetts Rank?**

While Massachusetts is a leader in national digital games markets, several other states and countries represent the competitive context within the digital games space. MassTLC's 2009 Digital Cluster report ranks Massachusetts fourth in the country for number of digital games companies. According to The Entertainment Software Association's *Video Games in the 21st Century: The 2010 Report*, Massachusetts ranks fifth in the country in number of digital games industry jobs with 1,295 direct employees, a 5.31% share of the country's estimated total number of digital game employees. The state currently ranks behind California (13,041 employees), Texas (3,307 employees) Washington (2,986 employees), and New York (1,650 employees.) The Commonwealth employs approximately another 3,400 people considered to be indirect employees of the digital games industry.

## International Competition

Several foreign countries and regions are also making significant moves competing for digital games companies. Most prominent is Canada, where the province of Quebec offers particularly large incentives to target firms. Quebec's long list of attractors include state-supported video game research institutes, a university degree program and highly-trained talent, faculty support, tax incentives for a wide variety of business operations, support for networking opportunities, and other additional government support services.

Despite these competitors, Massachusetts maintains a unique position in the interactive media global market for at least three reasons. First, the industry continues to grow at a steady rate. Second, we continue to produce and retain first-rate talent graduating from Massachusetts colleges and universities. Third, we are in the position to act as an intermediary alternative between the West Coast and the up-and-coming foreign countries. These three strategic strengths put the Commonwealth at the front end of the interactive media and video gaming industries worldwide.

- a. *Steady Growth:* With an annual growth rate of nearly 9% since 2005 (more than 27 times the growth of the state's overall economy) and over \$180 million added to the Massachusetts economy in 2009 alone, the interactive media sector is a powerhouse industry for the state. The steady increase in growth throughout the Commonwealth makes the interactive media sector a stronghold for jobs and progress even in the face of an economic recession. The industry's resilience is testimony to its enduring qualities and foothold into the future economy of the state.
- b. *Strong Higher Education:* Massachusetts has eight colleges and universities with undergraduate degrees in digital games. Several graduate programs exist and numerous programs are in development. And many other colleges and universities offer courses in closely related subject areas such as interactive media or animation as well as generally related areas such as computer science and graphic design. This steady stream of highly-educated, motivated and entrepreneurial talent makes Massachusetts a thought-leader in this sector. While other states and countries are only beginning to get their academic programs in line with industry opportunities and needs, Massachusetts schools have a strong history of being at the front end of the technology race. Games and interactive media programs are no different; in fact, the state's programs are becoming national leaders and models in these fields.
- c. *Geographic Position:* Anecdotal evidence supports the theory that West Coast companies are having a difficult time coordinating and interacting with other countries and their interactive media companies and entrepreneurs. These connections are vital to the health and growth potential of the industry as a whole. Because of the time differentials, Massachusetts and its companies are uniquely positioned to act as intermediaries—and thereby partners—in the global interactive media innovation economy. By positioning the state as such, the industry will need to pass through the Commonwealth, further encouraging growth and development here.

The digital games industry in Massachusetts is characterized by a large number of small firms (1-10 employees), with some middle-size firms (11-50 employees) and comparatively few large firms (50-250+ employees).



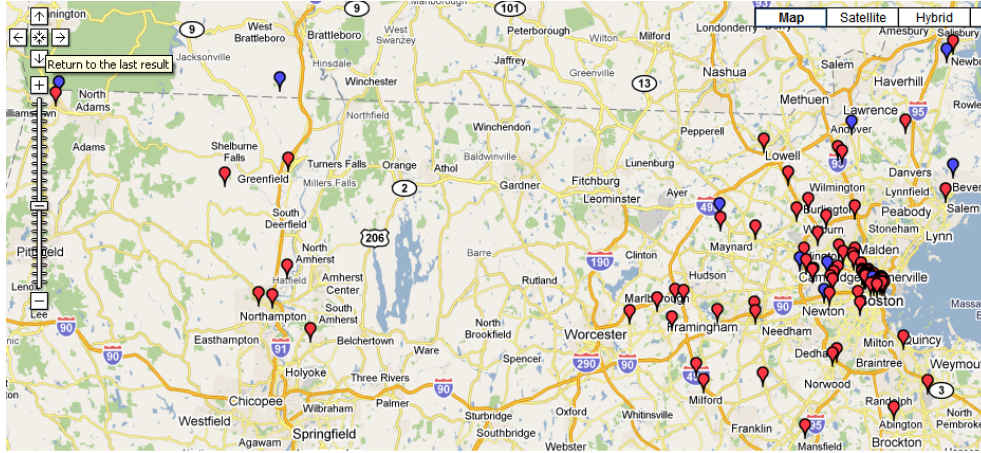
## Appendix F: List of Digital Games Companies in Massachusetts

The following list of companies was compiled from January to March 2011 and may not represent all companies in business as of the date of this report.

10x10 Room	ImaginEngine Corp.
2EastMusic	Infrared5
360KID	InjoyGames
7-128 Software, LLC	iRacing
8DWorld	Irrational Games
Activeworlds.com Inc.	iZotope
Activision	Krush
Akamai	Lantana Games
All in Play	Linden Labs
AMD	LiquidBits
Anzovin Studio	Macguffin Games
Apple	Max Gaming Technologies, LLC
Arcane Journeys	Meblur Inc
Atari	Mecha Software, LLC
Ayeah Games	Meditech
Blackberry/Research in Motion	Metaversal Studios
Black Screen Studios	Microsoft
Blink Music	Moonshot Games
Blue Fang Games	Motus Games
Brass Monkey	Muzzy Lane Software
Brickyard Filmworks Atlantic	Oddfellow Studios
Cognitoy	Orbus Gameworks
Conduit Labs/Zynga	Owlchemy Labs
Crate Entertainment	People Operating Technology
CREAT Studios	Pileated Pictures
Dailyfeats.com	Pod Design
Dejobaan Games	Play140
Demiurge Studios	Playrific
Digital Fauxtography	Quick Hit
Disrupter Beam	Raw Diamond Inc.
Double Tap Games	ReliSource US, Inc.
East Coast Games, Inc.	Rockstar New England
eClinicalWorks	Sanrio Digital
EMC	SCVNGR
Evony	Seven45 Studios
FableVision	Skyscape
Fat Frog Studios	Small Fry Studios
Fire Hose Games	SONIVOX
Floodgate Entertainment	SouthField Studios
Froghop Inc.	Sports Mogul Inc.
Funkitron	Stock's Eye
Galactic Village Games	Synthespian Studios
Gale Games	Tencent Boston
GameLogic, Inc./Scientific Games Corp.	Tilted Mill Entertainment, Inc.
Game Empire Enterprises	Turbine, Inc.
GamerDNA	Verizon
Gamesville	Vivox
Google	Viximo
Halex	Whatif Productions
Hangout Industries	WorldWinner.com
Harmonix Music Systems, Inc.	MeYou Health, LLC
HitPoint Inc.	Zeemote Production

## Appendix G: Map of Digital Games Companies in Massachusetts

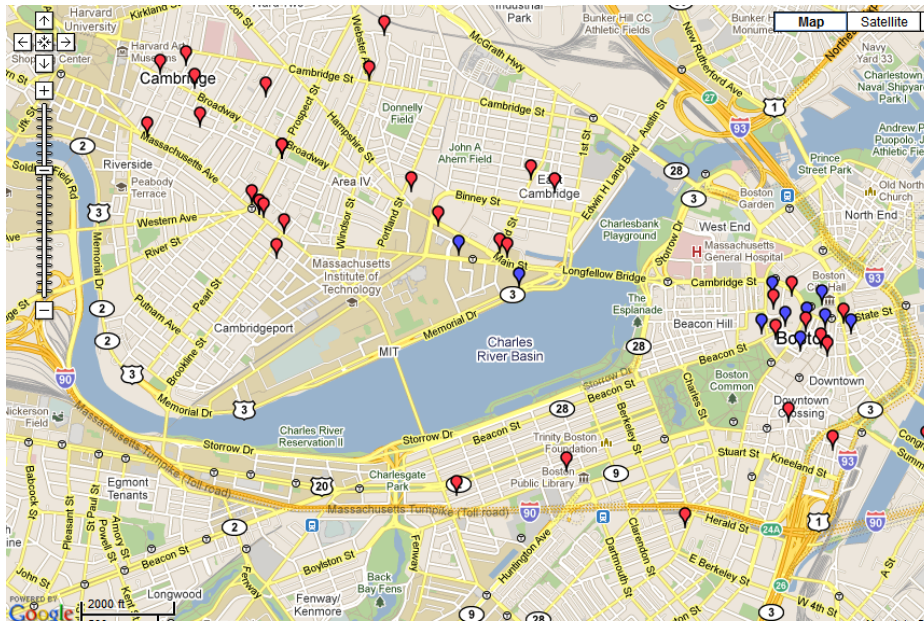
### Statewide Map of Digital Games Companies



Map available at: <http://www.zeemaps.com/map?group=205985>

Map available at <http://www.zeemaps.com/map?group=205985>

### Boston/Cambridge Area Map of Digital Games Companies



Map available at: <http://www.zeemaps.com/map?group=205985>

Map available at <http://www.zeemaps.com/map?group=205985>

## Appendix H: List of Higher Education Institutions with Digital Games Programs or Courses

Institution	City/Town	Program Name	Gaming Degree	Degree Level *
American International College	Springfield	New Media	No	B
Amherst College	Amherst	Computer Science	No	B
Anna Maria College	Paxton	Art and Business	No	B
Assumption College	Worcester	Computer Science	No	B
Babson College	Wellesley	MBA - MTIE	No	M
Bard College at Simon's				
Rock: The Early College	Great Barrington	Electronic Media & the Arts	No	B
Bay State College	Boston	Entertainment Management	No	A, B
Becker College	Worcester	Game Design; Game Development and Programming	Yes	B, C^
Benjamin Franklin Institute of Technology	Boston	Computer Technology	No	A
Bentley University	Waltham	Media & Culture	No	B
Berklee College of Music	Boston	Electronic Production & Design; Film Scoring	No	B
Berkshire Community College	Pittsfield	Computer Science	No	A, C
Boston College	Chestnut Hill	Computer Science	No	B
Boston University	Boston	CDIA; Computer Science	No	B, M, D, C
Brandeis University	Waltham	Computer Science	No	B, M, D, C
Bristol Community College	Fall River	Game Development-Game Creation; Game Development-Game Programming	Yes	A, C
Bunker Hill Community College	Boston	Computer Media Technology-Gaming/Computer Simulation Option	Yes	A
Cape Cod Community College	Barnstable	Computer Science	No	A
Clark University	Worcester	Computer Science; Innovation & Entrepreneurship	No	B
College of Our Lady of the Elms	Chicopee	Computer Information Technology	No	B
College of the Holy Cross	Worcester	Computer Science	No	B
Dean College	Franklin	Arts & Entertainment	No	B
Eastern Nazarene College	Quincy	Computer Engineering	No	B
Emerson College	Boston	Visual & Media Arts	No	B

Institution	City	Program Name	Gaming Degree	Degree Level
Emmanuel College	Boston	Art-Graphic Design & Technology; Information technology	No	B
Endicott College	Beverly	Computer Science- Interactive Computing Technologies	No	B
Fitchburg State University	Fitchburg	Interactive Media; Computer Science	No	B, M
Framingham State University	Framingham	Graphic Design; Computer Science	No	B, C
Franklin W. Olin College of Engineering	Wellesley	Computer Engineering	No	B
Gordon College	Wenham	Computer Science	No	B
Greenfield Community College	Greenfield	Digital Media; Computer Science	No	A^
Hampshire College	Amherst	Digital Media; Computer Science	No	B
Harvard University	Cambridge	Computer Science	No	B, M, D
Holyoke Community College	Holyoke	Electronic Media	No	A
Lasell College	Newton	Graphic Design	No	B
Lesley University/AIB	Cambridge	Animation; Visual Arts; Computer Technology	No	B, M, C
Massachusetts Bay Community College	Wellesley	Computer Science	No	B, C
Massachusetts College of Art and Design	Boston	Animation; Graphic Design	No	B, M, C
Massachusetts College of Liberal Arts	North Adams	Computer Science	No	B
Massachusetts Institute of Technology	Cambridge	Computer Science; Comparative Media Studies	No	B, M, D
Massasoit Community College	Brockton	Graphic Design	No	A
Merrimack College	North Andover	Computer Science; Digital Design	No	B
Middlesex Community College	Bedford	CAD; Graphic Design	No	A, C
Montserrat College of Art	Beverly	Animation & Interactive Design; Graphic Design	No	B
Mount Holyoke College	South Hadley	Computer Science; Art	No	B
Mount Ida College	Newton	Game Art & Animation	Yes	B
Mount Wachusett Community College	Gardner	Computer Graphic Design; Art	No	A, C
New England Institute of Art, The~	Boston	Media Arts	No	B
Newbury College	Brookline	Graphic Design	No	B
North Shore Community College	Danvers	Graphic Design; Computer Applications	No	A, C
Northeastern University	Boston	Game Design & Interactive Media	Yes	B, M^
Northern Essex Community College	Haverhill	Art & Design; Computer Applications	No	A, C

Institution	City	Program Name	Gaming Degree	Degree Level
Pine Manor College	Brookline	Visual Arts	No	A, B
Quincy College	Quincy	Computer Science-Media Arts; Visual Arts	No	A, C
Quinsigamond Community College	Worcester	Applied Arts	No	A
Regis College	Weston	Graphic Design; Computer Applications	No	B
Salem State University	Salem	Art & Design; Computer Science	No	B
Simmons College	Boston	Graphic Design; Computer Science	No	B
Smith College	Northampton	Computer Science	No	B
Springfield College	Springfield	CIS - Game Programming	Yes	B
Springfield Technical Community College	Springfield	Multimedia; Computer Science; Graphic Arts	No	A, C
Stonehill College	Easton	Computer Science; Graphic Design	No	B
Suffolk University	Boston	Interactive Media & Game Development	Yes	B
Tufts University	Medford	Computer Science	No	B
University of Massachusetts, Amherst University of Massachusetts, Dartmouth	Amherst Dartmouth	Computer Science; Studio Art Computer Science; Visual Design	No	B, M, D B, M
University of Massachusetts, Lowell	Lowell	Art; Computer Science	No	B, M, D
Wellesley College	Wellesley	Media Arts; Computer Science	No	B
Wentworth Institute of Technology	Boston	Computer Science	No	B
Western New England College	Springfield	Computer Science	No	B
Westfield State University	Westfield	Graphic Design; Computer Science	No	
Wheaton College	Norton	Computer Science; Studio Art	No	B
Wheelock College	Boston	Visual Arts	No	B
Williams College	Williamstown	Computer Science; Studio Art	No	B
Worcester Polytechnic Institute	Worcester	Interactive Media and Game Design; Computer Science	Yes	B, M^, D
Worcester State University	Worcester	Computer Science	No	B

**\* Legend**

A	Associate's Degree
B	Bachelor's Degree
C	Certificate
M	Master's Degree
^	Program pending
~	For profit

The above list was compiled from January to March 2011 and may not represent all institutions of higher education with digital games programs or courses as of the date of this report.

## Appendix I: List of State and Provincial Incentive Programs

### United States of America: State-by-state Digital Games Incentive Programs as of December 2010

The following information pertaining to the states of Alabama, Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Hawaii, Indiana, Kentucky, Louisiana, Maine, Michigan, New Jersey, New Mexico, North Carolina, Ohio, Rhode Island, Texas, and Virginia has been excerpted from:

*A State-by-State Guide to Business Incentives for Your Interactive Entertainment Production.* By Sean Kane. December 7, 2010. White Paper. 2010 Pillsbury Winthrop Shaw Pittman LLP. The full text is available at <http://www.pillsburylaw.com/index.cfm?pageid=34&itemid=39939>

#### **Alabama**

*In order to develop its potential in terms of attracting the entertainment industry, Alabama recently enacted the Entertainment Industry Incentive Act of 2009 (“Alabama Rebate”). The Alabama Rebate, which specifically includes interactive games and video games among other entertainment media covered, offers companies up to 25% of qualifying expenditures, excluding payroll expenses. Additionally, the Alabama Rebate will offer up to 35% of all payroll paid to state residents. In order for a video game production to qualify for the Alabama Rebate, expenditures must be more than \$500,000 but not more than \$10 million. The rebate will be first applied to any income tax liability the company incurs and any excess amounts will be paid directly to the company. The rebate is fairly inclusive with regard to what expenses qualify. Almost all video game production expenses paid in the state of Alabama qualify, including most preproduction, production and postproduction costs, payroll expenses, music, equipment and facilities costs. However, postproduction marketing costs are not included in the definition of covered expenses. Additionally, a qualifying company intending to spend more than \$150,000 in a year may apply to be exempted from state sales, use and lodging taxes for funds expended in Alabama.*

*To take advantage of the Alabama Rebate the video game company is not required to be an Alabama corporation, only a corporation, partnership, limited liability company or other business entity that is a qualified production company under the act. The Alabama Rebate is administered by the Alabama Film Office, and as is often the case with state-sponsored programs, any video game which includes content that is sexually explicit, or involves gambling or wagering, does not qualify for this benefit. Obtaining the Alabama Rebate involves applying to the Alabama Film Office to be considered a qualified production at least 30 days prior to the commencement of the production activities on the project.*

#### **Arizona**

*Arizona’s Entertainment Tax Credit (“Arizona Tax Credit”) offers development companies a transferable nonrefundable tax credit against business taxes of up to 30% of qualifying expenditures over \$1 million (20% for expenditures between \$250,000 and \$1 million) made over the course of producing a game. If the expenditures are less than \$250,000 the project does not qualify for an Arizona Tax Credit. Additionally, at least 50% of the full-time employees on the development project must be Arizona residents. Expenses that qualify for purposes of meeting the \$250,000 mark include salary compensation and rental of facilities or equipment, among other direct in-state costs. Even the purchase or optioning of intellectual property on which to base one’s game qualifies under certain circumstances. Notwithstanding, any video game which*

*includes content that is obscene, as defined in the applicable state statute, depicts material harmful to minors or that sexually exploits a minor does not qualify for this benefit.*

*To take advantage of the Arizona Tax Credit the video game company must have an in-state office and bank account. To qualify the development company must first complete an application and submit it to the Arizona Film Office. Within 30 days after receipt of the application the Department of Commerce will determine if the production qualifies for the Arizona Tax Credit. After the production has been pre-qualified, (within 90 days) the development company must provide evidence that the project has commenced. Finally, 30 days after the expiration of a 12-month certification period, or at the completion of the project, the development company must submit a Completion Report and may then make use of the awarded tax credits.*

### **Arkansas**

*Arkansas recently replaced its Motion Picture Incentive Act of 1997 by enacting the Digital Product and Motion Picture Industry Development Act of 2009 (“Arkansas Rebate”). The Arkansas Rebate, which specifically includes interactive games and video games among the entertainment media it is intended to support, offers development companies a non-transferable rebate against qualified production costs of up to 15%, so long as said expenditures add up to more than \$50,000 within a six-month period. Additionally, the Arkansas Rebate will offer an additional 10% of payroll paid to certain types of employees who are fulltime state residents. Almost all expenses incurred in Arkansas which are directly related to the preproduction, production or postproduction of a video game qualify, including developer compensation (for salaries under \$500,000). Even the purchase or optioning of intellectual property relating to the development of the game will generally qualify. However, most marketing, media and public relations costs are not considered to be qualified production costs.*

*To take advantage of the Arkansas Rebate the video game company is required to be a corporation, partnership, LLC or other entity principally engaged in a qualifying production which is registered with the Arkansas Secretary of State to engage in business within the state. The tax credit is administered by the Arkansas Film Office, which is part of the Arkansas Economic Development Commission. Obtaining the Arkansas Rebate involves first applying to the Arkansas Film Office for approval prior to incurring any production expense and then later certifying the total costs of the production (within 90 days after the last production expense is incurred in the state). The commission will then review the supporting documentation and prepare and send a recommendation for rebate to the Arkansas Revenue Division of the Department of Finance and Administration. Within 90 days the Revenue Division will certify the amount of rebate due to the production company and issue the rebate (within an additional 10-day period).*

### **Colorado**

*In 2009 the Colorado Film Incentives program was enacted (“Colorado Rebate”). The Colorado Rebate, which specifically includes video games in its definition, offers development companies a non-transferable rebate against up to 10% of qualifying expenditures in the state of Colorado, so long as said expenditures add up to more than \$100,000 for a Colorado company or \$250,000 for an out-of-state company. In addition, at least 25% of the workforce on the project must be residents of Colorado. Essentially all expenses paid in the state of Colorado that directly related to the production of a video game will qualify, including developer compensation (up to \$3 million per employee). Even the purchase or optioning of intellectual property to be used in the game qualifies.*

*To take advantage of the Colorado Rebate the video game company is not required to be a Colorado corporation, only a corporation, partnership, LLC or other entity principally engaged in a qualifying production. However, an out-of-state company must register with the Secretary of State as a "foreign entity." The rebate is administered by the Colorado Office of Film, Television and Media. Obtaining the Colorado Rebate involves submitting a "Statement of Intent" with the Office of Film, Television and Media for approval prior to the commencement of the project. Once a "Notice of Conditional Approval" has been received by the developer, the State of Colorado will thereafter enter into a formal contract. When the development company has finished the project it must submit "Proof of Performance" within 90 days and, upon approval by the Office of Film, Television and Media, a rebate check will be issued within 30 days.*

### **Connecticut**

*In order to promote the production of video games and other digital media within its borders, Connecticut enacted the Connecticut Digital Media and Motion Picture Tax Credit in 2006 ("Connecticut Tax Credit"). The Connecticut Tax Credit, which specifically includes video games among the entertainment media it is intended to support, offers development companies a transferable nonrefundable tax credit against business taxes of up to 30% of qualifying expenditures made over the course of producing a game, so long as said expenditures add up to more than \$50,000. The credit is also quite lenient with regard to what expenses qualify for purposes of meeting the \$50,000 mark. Essentially all expenses paid in the state of Connecticut that the developer can demonstrate were directly related to the production of a video game will qualify, including developer compensation, design and preproduction costs, development equipment and software, and certain postproduction and marketing costs. Even the purchase or optioning of intellectual property on which to base one's game qualifies under certain circumstances.*

*To take advantage of the Connecticut Tax Credit the video game company is not required to be a Connecticut corporation, only a corporation, partnership, LLC or other entity principally engaged in a qualifying production. To qualify the development company must also register with the Connecticut Secretary of State. The tax credit is administered by the Digital Media and Motion Picture Division of the Connecticut Commission on Culture and Tourism, and as is often the case with state-sponsored programs, any video game which includes content that is obscene, as defined in the applicable state statute, does not qualify for this benefit. Obtaining the Connecticut Tax Credit involves applying to the Digital Media and Motion Picture Division of the Connecticut Commission on Culture and Tourism for an eligibility certificate (within 90 days after the first qualified production expense or cost is incurred) and then applying for a tax credit certificate (within 90 days after the last production expense is incurred in the state). No credits may be claimed before the production tax credit certificate is issued.*

### **Florida**

*In order "to develop and sustain the [in-state] workforce and infrastructure for film and entertainment production," including video games and interactive media, the Florida legislature has earmarked millions of dollars in tax credits to be dispersed to Florida producers of video games and interactive entertainment. Under Florida's plan at least 75% of the employees on the project must be in-state residents. Moreover, video game development companies that demonstrate expenditures of at least \$625,000 in expenses, wages and salaries on a single video game project within a year qualify to be reimbursed by the State for 20% of those expenditures in the form of a tax credit. Additionally, smaller productions may be able to qualify for tax credits under the "Independent and Emerging Media" definition if they have expenditures of at least \$100,000.*



*While it is important to note that the Florida Entertainment Industry Financial Incentive Program ("Florida Program") excludes from eligibility those video games which contain obscene content as defined by state law (mostly a restriction on content of a sexual nature) the Florida Program does include a bonus for productions with less objectionable content. An otherwise eligible project which is determined by the Florida Commissioner of Film and Entertainment (with advice of the Florida Film and Entertainment Advisory Council) to be "family friendly," based on several subjective criteria, is eligible for an additional 5% cash reimbursement, raising the available cash rebate to a possible 25% of qualifying expenditures.*

*To take advantage of the Florida tax credit the video game company must submit a program application to the Florida Commissioner of Film and Entertainment for an eligibility certificate (within 180 days prior to the first qualified production expense or cost is incurred) and then the office will notify the applicant concerning certification of the production (within 20 days). At the end of the production, the applicant must submit an audited version of the amount of actual qualified expenditures. Thereafter, the Florida Commissioner of Film and Entertainment will notify the applicant of the final tax credit award.*

### **Georgia**

*Using the slogan "If You Could Create a Virtual World for Your Business Georgia Is What It Would Be Like," Georgia has sought to position itself as a fertile ground for game development. To demonstrate its support of game development within its borders Georgia passed the Entertainment Industry Investment Act in the spring of 2008 ("Georgia Act"), offering producers of qualifying video games a transferable nonrefundable tax credit of 20% of in-state expenditures against Georgia tax liability. In addition, game production companies can increase their available tax credit by an additional 10% by including a Georgia promotional logo in all units sold and imbedded in all online promotions, raising the available tax credit for Georgia game companies to 30%. To be eligible for tax credits, production companies must first be certified by the Georgia Film, Music & Digital Entertainment Office, which is a fairly quick process generally taking only a few days. Additionally, companies may also qualify to obtain a Georgia sales tax exemption.*

*To qualify for the tax credit, game developers do not have to be incorporated in Georgia, they only have to spend a minimum of \$500,000 within the state on one project or across several projects in the course of a single year. For purposes of calculating the \$500,000 in expenditures, game developers can include all expenses paid within the state for materials, services and labor "directly used" in the video game production. Under the Georgia Act, "directly used" is expansive, including rental of facilities and equipment, leasing of vehicles, food and lodging costs, and even airfare expenses if purchased through a Georgia-based travel agency or travel company. For calculating labor expenditures, game developers can include payments made to both resident and out-of-state employees working in Georgia. However, monies spent on marketing and distribution will not be included as qualifying expenditures.*

### **Hawaii**

*In July of 2006, Hawaii passed the Motion Picture, Digital Media, and Film Production Income Tax Credit ("Hawaii Tax Credit"), ostensibly to promote local development of entertainment productions and offer incentives for the hiring of local talent for said productions. Administered by the Hawaii Film Office and the Hawaii Department of Taxation, the Hawaii Tax Credit offers video game developers with a minimum of \$200,000 in qualified production expenditures a refundable tax credit for 15% of those costs (the amount may be raised to 20% for productions located in certain less-populated counties). Unlike the nonrefundable tax credits already discussed, a refundable tax credit will be applied to reduce tax payments due, but in the event that the incentive is greater than any tax liability, a direct cash payment will be made to the*

development company by the Hawaii Department of Taxation. Qualified expenditures under the Hawaii Tax Credit include both resident and non-resident compensation for the time that the employee is physically working in Hawaii and subject to Hawaii income tax. Other qualifying expenditures must be subject to Hawaii's general excise or income tax and can include travel and shipping costs both between islands and from Hawaii to the mainland.

In addition to including Hawaii among the production credits of the final product, game development companies that wish to take advantage of the Hawaii tax credit must make reasonable efforts to hire Hawaiian employees and also make a financial or in-kind contribution to education or the interactive media workforce in Hawaii. Contributions have specific requirements but may generally include hardware or software donations to Hawaii public schools, offering on-site internships to public school students, or planning or participating in seminars or educational programs that benefit local unions and industry members.

### **Indiana**

In 2008 Indiana enacted the Media Production Expenditure Tax Credit ("Indiana Tax Credit"). The Indiana Tax Credit, which specifically includes digital media, offers a non-transferable but refundable tax credit against business taxes of up to 15% of qualifying expenditures made in Indiana, so long as said expenditures add up to more than \$50,000. Essentially all expenses paid in the state of Indiana which the developer can demonstrate were directly related to the production of a video game will qualify, including developer compensation, legal costs, development equipment and software, certain postproduction and marketing costs. Even the purchase or optioning of intellectual property on which to base one's game qualifies under certain circumstances.

To take advantage of the Indiana Tax Credit the video game company is not required to be an Indiana corporation, only a corporation, partnership, LLC or other entity principally engaged in a qualifying production in Indiana. The tax credit is administered by the Indiana Economic Development Commission, and as is often the case with state-sponsored programs, any video game which includes content that is obscene, as defined in the applicable state statute, does not qualify for this benefit. Obtaining the Indiana Tax Credit involves applying to the Indiana Economic Development Commission for approval (prior to the first qualified production expense or cost being incurred). If approved, the Indiana Economic Development Commission will then enter into a formal agreement specifying the terms and obligations for claiming the Indiana Tax Credit. Thereafter, upon completion of the qualified production, the applicant must submit proof of all claimed qualifying expenditures and the Indiana Economic Development Commission shall issue a letter indicating the amount of the authorized Indiana Tax Credit.

### **Kentucky**

In order to promote increased production activity in Kentucky, the Kentucky Film Office Tax Credit ("Kentucky Tax Credit") was enacted. The Kentucky Tax Credit offers development companies a refundable tax credit against business taxes of up to 20% of qualifying expenditures, so long as said expenditures add up to more than \$500,000. While the enacting legislation does not mention video game productions, the application for the Kentucky Film Office Tax Credit lists video games as a covered production category. The Kentucky Tax Credit is somewhat more limited than other jurisdictions in identifying which expenses paid in the state of Kentucky will qualify. Specifically, compensation (not to exceed \$100,000 per employee), rental of space or equipment, and certain other costs are defined as qualified expenses. In addition to the Kentucky Tax Credit, companies may also qualify to obtain a Kentucky sales tax rebate.

*The tax credit is administered by the Kentucky Film Office, and as is the case with many of the other programs discussed, any video game which includes content that is obscene, as defined in the applicable state statute, does not qualify for this benefit. Obtaining the Kentucky Film Office Tax Credit involves applying to the Kentucky Film Office at least 30 days before the first qualified production expense or cost is incurred. The Kentucky Film Office will notify the applicant of its status (within 30 days thereafter) and, if the application is approved, will enter into a formal tax incentive agreement. Upon completion of the video game production (or within 180 days thereafter) the qualified company must submit a detailed cost report. After full review of the cost report the applicant will be notified of the total amount of refundable credit awarded to the production.*

### **Louisiana**

*With the stated objective of encouraging “development in Louisiana of a strong capital base for the production of digital interactive media,” the state of Louisiana passed The Louisiana Digital Media Act (“Louisiana Act”). The Louisiana Act offers the developer a transferable but nonrefundable tax credit on funds invested in the production and expended within the state of Louisiana on production-related costs. The enacting legislation of the Louisiana Act contemplates both video games designed to be sold through regular marketing channels and projects involving virtual worlds and online games with long-term producer involvement. The tax credit offered by the Louisiana Act is equal to 25% of the investments made in those years, with no minimum spending requirements. Additionally, an additional 10% may be awarded based on labor costs paid to Louisiana residents. In the event that the tax liability of the game producer is less than the tax credit earned by the producer in any given year, the credit may be carried forward and applied to tax liability accrued in the future for a period of up to 10 years.*

*To receive the benefits offered under the Louisiana Act a video game or other digital interactive media production must first submit an application to the Louisiana Department of Economic Development with details about the production, including the budget, anticipated employment, schedule, and the intended distribution plan for the finished product. The Louisiana Department of Economic Development shall review the application and provide an initial certification if applicable. Prior to final certification the developer must submit an audited cost report of production expenditures and the Louisiana Department of Economic Development will make its final tax credit certification based thereon.*

### **Maine**

*Adopted in 2006, the Maine Attraction Film Incentive program (“Maine Incentive”) includes two incentives available to qualified companies that develop video games intended for a national audience: the Certified Media Production Credit and the Certified Media Wage Reimbursement. To qualify for the dual benefits of the Maine Incentive, a video game developer must spend a minimum of \$75,000 in Maine over the course of one year on one or more video game productions which have been certified by the Maine Film Office, a division of Maine’s Department of Economic and Community Development (the “Film Office”). To get a video game production certified, the game developer must apply for and receive a media production certificate from the Film Office prior to beginning work on a video game production. After completion of each certified video game production the development company must then request from the Film Office a Tax Reimbursement and Credit Certificate.*

*The Certified Media Production Credit is a non-refundable, non-transferrable credit equal to 5% of a developer’s visual media production expense related to the production of a certified video game. The Certified Media Wage Reimbursement portion of the Maine Program consists of a partial reimbursement*

to qualifying game developers for compensation paid for work done within Maine on certified video game productions. Qualifying game developers are generally reimbursed in an amount equal to 12% of total wages and salaries paid to Maine residents and 10% for total wages and salaries paid to non-residents. The Certified Media Wage Reimbursement must be applied for from Maine Revenue Services separately from the income tax credit.

### **Michigan**

Taking effect in April of 2008, the Film Production Incentive (“Michigan Incentive”) offered by the Michigan Film Office and the State Treasurer specifically includes “interactive games, video games [and] interactive website[s]” within the definition of productions which qualify for a refundable tax credit. The Michigan Incentive is available to producers of video games and other interactive media that have a minimum of \$50,000 in qualified expenditures and who have entered into an agreement with the Michigan Film Office certifying the particular video game or interactive media production. Developers enter into an agreement with the Michigan Film Office after they have applied for the Michigan Incentive and the details of their production have been approved by the Michigan Film Office.

The Michigan Incentive consists of a refundable and transferable tax credit equal to 40% of qualified expenditures (an additional 2% is available if development occurs in a “Core Community”), in this case, Michigan expenses directly attributable to the production or distribution of a video game, including all in-state payments for wages and compensation, production software and equipment, facilities rental, purchase or optioning of intellectual property, insurance coverage, postproduction advertising (including the creation of trailers and commercials), and even commercial airfare for travel to and from the state if purchased through an in-state travel agent. Employee compensation for credit calculation purposes is capped at \$2 million and it should also be noted that development companies will receive only a 30% credit on wages and compensation for employees who have lived in Michigan for less than 60 days prior to state certification of the video game production.

An interactive game, video game or interactive website cannot qualify for the Michigan Incentive, even if it meets all of the other requirements as described by the Michigan Film Office, if it contains “obscene matter or obscene performance” as described by the applicable Michigan statute.

### **New Jersey**

New Jersey offers a transferable, nonrefundable Digital Media Tax Credit (“New Jersey Tax Credit”) to development companies against business taxes of up to 20% of qualifying digital media expenditures made over the course of producing a game. At least \$2 million of the total digital media content production expenses of the developer must be incurred for services performed and goods used or consumed in New Jersey, with 50% of these expenses being associated with wages and salaries paid to one or more new full-time employees in New Jersey. The vast majority of expenses paid in the state of New Jersey which were directly related to the production, including wages, computer software and hardware, are considered qualified expenses. However, any project which includes content that is obscene, as defined in the applicable state statute, does not qualify for this benefit.

The New Jersey Tax Credit is administered by the Division of Taxation in the Department of the Treasury and the New Jersey Economic Development Authority. Obtaining the New Jersey Tax Credit involves submitting an application to the New Jersey Economic Development Authority prior to commencement of

*the project. If approved, the Division of Taxation in the Department of the Treasury and the New Jersey Economic Development Authority shall issue the developer notice of the full tax credits awarded.*

*Because of New Jersey budget constraints, the Fiscal Year 2011 budget (July 1, 2010 to June 30, 2011) enacted a temporary suspension of the credit program by effectively reducing the existing annual tax credit caps from \$5 million per year for digital media content to \$0 for digital media content in State Fiscal Year 2011. Therefore, no such credits can be utilized to reduce tax liability for any return which is due between June 30, 2010 and July 1, 2011.*

### **New Mexico**

*Despite “tax” being included in the name of the program, New Mexico’s 25% Film Production Tax Rebate (“New Mexico Rebate”) is actually a non-transferable reimbursement of the total cost of all direct production expenditures on qualifying media productions, including video games. As an added benefit for small to mid-size video game productions, unlike incentive programs in other states that require minimum in-state expenditures of tens and sometimes hundreds of thousands of dollars, the New Mexico program has no minimum in-state spending requirement. A developer’s rebate begins to accrue upon their first expenditure directly attributable to the video game production after they have sent in the required form agreement and company registration forms to the New Mexico Film Office.*

*The New Mexico Rebate, jointly administered by the New Mexico Film Office and the State of New Mexico Taxation & Revenue Department, does place a few limits on what expenditures are eligible for receiving a 25% reimbursement. While most of the in-state expenditures contemplated by programs already discussed qualify for the New Mexico Rebate, a video game development company will not be reimbursed for any portion of compensation for employees who are not residents of New Mexico, nor will they receive a rebate on expenses for advertising, marketing, distribution, or expenditures which were not subject to New Mexico taxation, which includes purchases made over the Internet from non-New Mexico companies, purchases made on tribal lands, and purchases of intellectual property from non-residents. Also, for a video game producer to be reimbursed for expenditures made on a video game, the game’s script must not contain obscene material.*

### **North Carolina**

*North Carolina recently enacted a tax credit for the development of interactive digital media (“North Carolina Tax Credit”) which will become effective January 1, 2011. The North Carolina Tax Credit, which specifically includes a rather broad definition of interactive digital media that covers video games and related products, offers development companies a non-transferable tax credit of up to 15% of wage and compensation expenditures (20% if expenses are paid to a qualifying community college or research university). The North Carolina Tax Credit is only available to producers of interactive digital media who have a minimum of \$50,000 in qualified expenditures and will not cover any interactive digital media product that includes obscene content, as defined in the applicable state statute, or is a gambling or casino game.*

*The North Carolina Tax Credit is expected to be administered by the North Carolina Department of Commerce. However, since it is not effective yet, it is unclear what the final application and certification requirements will be.*

## **Ohio**

*For the purpose of "encouraging and developing a strong film industry," in 2009 Ohio enacted its Motion Picture Tax Incentive ("Ohio Tax Credit"). The Ohio Tax Credit, which specifically includes interactive games and video games within the definition of a "motion picture," offers development companies a nontransferable but refundable tax credit against business taxes of up to 25% of qualifying expenditures (not including in-state wages) made over the course of producing a game, so long as said expenditures add up to more than \$300,000. An additional 35% tax credit may be awarded against expenditures for Ohio resident wages. Eligible production expenditures to qualify for the \$300,000 mark include most goods and services purchased and consumed in Ohio, including wages, facilities and equipment. The Ohio Tax Credit will not cover any product which depicts digital images of actual sexually explicit conduct, as defined in the applicable federal statute.*

*To take advantage of the Ohio Tax Credit the video game company must first register and file an application to be considered a tax credit-eligible production. Once the development company has been certified, it may apply for a credit against its state tax. Within 90 days after certification as a tax credit-eligible production, and at any time thereafter at the Ohio Film Office's request, the development company must submit sufficient evidence of the progress of the project. Upon completion of the project an audited report of the developer's expenses must be submitted for review. Once the report is approved the Ohio Office of Film shall issue a tax credit certificate to the development company.*

## **Rhode Island**

*Rhode Island's Motion Picture Production Company Tax Credit, created in 2006 and administered by the Rhode Island Film and Television Office, was created for the express purpose of promoting and encouraging production of entertainment media within the state of Rhode Island, including video games ("Rhode Island Credit"). The Rhode Island Credit offers a transferable but non-refundable tax credit to qualifying production companies equal to 25% of expenditures directly attributable to certified video game productions within the state. Rhode Island expenditures which may be counted towards a production's tax credit are expansive, including wages and other compensation to both residents and non-residents (so long as the work is done in Rhode Island), rental of facilities and equipment, leasing of vehicles, and even airfare expenses if incurred to bring an employed person to Rhode Island. Notable expenditures for which the game developer cannot receive a tax credit include travel expenses for persons departing Rhode Island and any costs associated with the postproduction promotion or marketing of the video game. Moreover, the Rhode Island Credit will not cover any product containing actual sexually explicit conduct, as defined in the applicable federal statute.*

*To qualify for the Rhode Island Credit, a video game production must first be certified by the Rhode Island Film and Television Office, which requires a budget that includes a minimum of \$300,000 of in-state expenditures directly attributable to the video game production. The video game production company must also be incorporated or organized under the laws of Rhode Island to qualify for the Rhode Island Credit. Benefits received under the Rhode Island program can only be applied for in the year in which the production is completed, but can thereafter be transferred, sold or carried forward for up to three years.*

## **Texas**

*The Texas Film Commission offers two incentive programs that are specifically applicable to video game development: a rebate on eligible in-state spending under the Moving Image Industry Program, and a tax*

*exemption for the purchase or lease of qualifying items and services used in the development and manufacture of a finished video game.*

*Under the Moving Image Industry Program, a video game production can qualify for a cash rebate equal to 5% of all eligible in-state spending so long as a minimum of 60% of the production days are completed in Texas, at least 70% of the development team are Texas residents, and the development company spends a minimum of \$100,000 in Texas on the game's development. Video game productions can also receive an additional 2.5% rebate on all qualifying expenditures across the entire span of the production if at least 25% of the production days are spent in an underused area (generally defined as locations outside of Dallas or Austin). Expenditures which qualify for the rebate and may be counted towards the \$100,000 minimum in-state spending include wages and compensation to in-state residents (within limits), payments to Texas companies for goods and services directly attributable to the production of the video game, shipping within Texas, and air travel to or from Texas on a Texas-based airline. Some preproduction expenses may also qualify, but cannot exceed 30% of the project's combined Texas expenditures.*

*Expenditures which will not count towards the \$100,000 minimum in-state spending requirement and on which the game developer will not receive a 5% rebate include all wages and compensation paid to non-Texas residents and any lease or mortgage payments on facilities that are part of an ongoing business. The maximum incentive amount available to Texas game developers on a single video game production under the Moving Image Industry Program is \$250,000. It is also worthy of note that rebates are unavailable or will be denied for video games directly used for gambling or which "contain inappropriate content or content that portrays Texas or Texans in a negative fashion."*

*Developers of computer and video games also qualify as software manufacturers under Texas law and as such are eligible for a tax exemption on items or services the use or consumption of which are "necessary and essential" to production of the completed game. These items include software that will be used in game production and computers or other equipment used solely for game development. Services which would rise to the level of necessary and essential include repairs to qualifying items, sound recording, and motion capture. By claiming the tax exemption, the game developer is stating under risk of future tax penalties that the items or services will be used directly and exclusively in development of the video game.*

*As recently as the E3 2008 Expo, Texas Governor Rick Perry has also expressed his intention to utilize monies from the Texas Enterprise Fund to support further growth of the game industry within Texas. The Texas Enterprise Fund includes a \$200 million "deal closing fund" from which the governor can offer grants to applicant companies that will bring new jobs to Texas.*

## **Virginia**

*Virginia recently enacted a tax credit ("Virginia Tax Credit") which will become effective January 1, 2013. The Virginia Tax Credit, administered by the Virginia Film Office, was created in part for the purpose of promoting and encouraging digital interactive media production. The Virginia Tax Credit offers a nontransferable but refundable tax credit to qualifying production companies equal to 15% of expenditures (20% if development occurs in economically distressed area) directly attributable to certified digital interactive media productions within the state during the specific tax year. Virginia expenditures which may be counted towards a production's tax credit are expansive, including goods and services leased or purchased and compensation and wages (for employees earning less than \$1 million). A development company may be allowed an additional 10% tax credit of the total aggregate payroll for*

*Virginia residents for projects costing between \$250,000 and \$1 million and 20% for projects over \$1 million. Developers may also be eligible for an exemption to Virginia's state sales tax.*

*To qualify for the Virginia Tax Credit, a video game production must incur a minimum of \$250,000 of instate expenditures directly attributable to the video game production. The Virginia Tax Credit will not cover any product containing obscene material. Since it is not effective yet, it is unclear what the final application and certification requirements will be. At a minimum an applicant will likely have to enter into a memorandum of understanding with the Virginia Film Office. Once the requirements of the memorandum have been satisfied or the development project is completed the applicant may claim the applicable tax credit amount.*

### **Wisconsin**

*The Wisconsin Department of Commerce, working with the Wisconsin Department of Revenue, offers a mix of refundable and nonrefundable tax credits to video game developers who either engage in video game production or make investments to start a video game company in the state of Wisconsin. The Film Production Services Credit is the umbrella program under which three separate tax credits are offered to video game companies: a nonrefundable credit equal to 25% of wages and compensation paid to Wisconsin residents for Wisconsin work done on an accredited video game (up to a maximum credit of \$25,000 per employee), a refundable but nontransferable tax credit equal to 25% of eligible expenditures paid by the game developer in producing an accredited video game (excludes expenditures for marketing and distribution), and a nonrefundable credit equal to the 5% sales tax paid by the game developer on taxable purchases of items and services that were used directly in producing an accredited video game in Wisconsin, including preproduction, production and postproduction expenditures.*

*To be eligible for any of the benefits available under the Film Production Services Credit a video game production must not contain digital images of actual sexually explicit conduct, as defined by federal statute, and must be approved by the Department of Commerce and have a minimum in annual employee salaries and wages of \$50,000 included in production costs for the first 36 months of production. In addition, the video game developer must either own the copyright in the video game being produced or have contracted directly with the owner of said copyright and have a viable plan for the commercial distribution of the finished video game.*

*In addition to the Film Production Services Credit, Wisconsin also offers the Film Production Company Investment Credit. For the first three years that a game developer produces electronic games in Wisconsin the Film Production Company Investment Credit provides a 15% nonrefundable income tax credit for all capital investments made in the business, including expenditures on depreciable personal property and business equipment (so long as at least 50% of the use will be for the purchaser's business as a game developer) and amounts spent on purchasing, constructing or repairing real property for use by the game development company. To be eligible for the Film Production Company Investment Credit one must of course be a company located and doing business in Wisconsin.*

## **Canada: Province-by-Province and National Digital Games Incentive Programs as of December 2010**

The following information pertaining to the provinces of British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island and Québec, and about The Canada Media Fund (Nationwide), Bell Broadcast and New Media Fund (Nationwide) has been excerpted from:



### **British Columbia**

*While British Columbia does not offer any cash rebates or production tax credits to the producers of video games and interactive media, the British Columbia Ministry of Economic Development demonstrates its commitment to stimulating investment in what it perceives to be a thriving sector of the economy by offering the New Media Venture Capital Program (“BC VC Program”). Under the BC VC Program, British Columbia residents or companies that purchase shares of eligible business corporations which are substantially engaged in the production of qualifying interactive media (including video games) within British Columbia may receive an income tax credit equal to 30% of the cost of said investments. For investments by individuals the tax credit is refundable but capped at \$65,000, for corporations the tax credit has no maximum but is not refundable.*

*For the investing individual or corporation to qualify for tax credits offered by the New Media Program the game development company receiving the investment must be comprised of 100 persons or fewer (including affiliates) and pay at least 75% of its wages to residents of British Columbia (or 50% if the game will be exported). To qualify as an interactive media product for the purposes of the New Media Program, a video game must educate, inform or entertain, and present information using at least two of text, sound or visual images. The game cannot be developed purely for internal corporate use nor be primarily used for interpersonal communication. Also, a video game will not qualify an investor in its developer’s corporation for benefits under the New Media Program if it promotes hatred of an identifiable group, contains a significant amount of sex, violence, crime, horror or cruelty, or the administering authority feels that financial support would be against public policy.*

### **Manitoba**

*Administered by Manitoba Science, Technology, Energy & Mines (“STEM”), Manitoba offers an Interactive Digital Media Tax Credit. The Manitoba Interactive Digital Media Tax Credit offers qualifying corporations a refundable tax credit equal to 40% of eligible labor expenditures during the period in which the corporation is developing and producing an eligible video game, up to a maximum credit of \$500,000. To receive an Eligibility Certificate for the Manitoba Tax Credit from STEM, a game development company must be incorporated in Canada with a permanent establishment in Manitoba and must pay at least 25% of the salaries and wages to employees who are residents of Manitoba during the project period. For purposes of the Manitoba Tax Credit a permanent establishment in Manitoba includes a place of business, significant production equipment, or an employee located in Manitoba with the authority to enter into contracts on behalf of the corporation.*

*Labor expenditures for purposes of calculating the amount of a corporation’s tax credit include all salaries and wages paid to employees who are Manitoba residents during the project period, 65% of fees for Manitoban third-party labor incurred during the project period, and 20% of salaries, wages or fees paid to non-Manitoba residents. Also, as a requirement of receiving the Manitoba Tax Credit, the corporation agrees to be a part of New Media Manitoba’s Skills Transfer Incentive, through which a Manitoba resident receives training during the project period by working alongside the hired non-resident. The product period for purposes of the Manitoba Tax Credit is the shorter of either the period between the commencement*

*date and the completion date included on the corporation's Certificate of Eligibility or the two-year period ending on the completion date on the corporation's Certificate of Eligibility.*

*While there is no limit on the number of projects for which an eligible corporation may apply for the Manitoba Tax Credit in a given year, the credit will not be available to game projects that will receive an Adults Only (AO) rating from the ESRB that include hate propaganda or child pornography, or contain content considered obscene according to the Canadian Criminal Code. Projects will also be excluded if they have a specific industrial, corporate or promotional focus, or public financial support would be contrary to public policy in the opinion of the Minister of STEM.*

### **Nova Scotia**

*With the Financial Measures Act of 2007, Nova Scotia established the Digital Media Tax Credit which offers a refundable tax allowance to developers of video games and other interactive digital media products within Nova Scotia. Administered by the Nova Scotia Department of Finance, the program offers eligible corporations a refundable tax credit equal to either 50% of their qualifying Nova Scotia labor costs or 25% of the corporation's total qualifying expenditures within the province, whichever is less. For Nova Scotia game developers located outside of the Halifax Regional Municipality there is also an additional bonus available of 10% of qualifying labor expenditures or 5% of total expenditures (depending on which of the above measures is being used to calculate the amount of the corporations tax credit) so long as at least half of the total salaries and wages for development of the game are being paid to employees working out of a non-Halifax office. At the discretion of the Nova Scotia Department of Finance, eligible corporations may also receive a credit of up to \$100,000 per interactive media product for marketing and distribution expenses incurred both within and outside of Nova Scotia.*

*Qualifying expenditures and labor costs include those payments made for work or services directly related to the interactive production. To be eligible for the tax credit a game developer must be incorporated in Canada (though not specifically in Nova Scotia) and have a "permanent establishment" within Nova Scotia. A permanent establishment is defined in this instance as a fixed place of business within Nova Scotia which includes assets and personnel, including at least person capable of entering into a contract on behalf of the corporation. A game production for which an eligible corporation is applying for the tax credit must not be pornographic, discriminatory, primarily used for advertising or promoting a company or organization, or be of such subject matter that its funding would be contrary to public policy in the opinion of the Nova Scotia Minister of Finance.*

### **Ontario**

*The province of Ontario has more programs specifically designed to benefit developers of video games and other interactive media than any other Canadian province. Beginning with the Ontario Interactive Digital Media Tax Credit ("Ontario Tax Credit"), Ontario game development companies may be eligible for a refundable tax credit of 40% of qualifying labor costs and expenditures on marketing and distribution in connection with the production of an eligible digital media product. Game development companies providing development services to third parties for a fee may be eligible for a refundable tax credit of 35% of qualifying labor costs and expenditures in connection with the production of an eligible digital media product.*

*For a game developer to be eligible for the Ontario Tax Credit they must be a Canadian corporation that files an Ontario corporate tax return and develops an eligible video game out of a permanent office*

located in Ontario. To be an eligible digital media product, all or substantially all of a video game must have been developed in Ontario by an eligible corporation. For purposes of calculating the amount of the tax credit, qualifying labor expenditures include only wages and compensation paid to Ontario residents for labor directly attributable to game development (defined to include all stages of production from concept development through distribution). Qualifying expenditures for marketing and distribution include only those expenses for advertising or promoting the video game or distributing it to customers.

Tax credits however, are not the only benefits offered by the Ontario Media Development Corporation (“OMDC”) to assist video game developers. The Ontario Interactive Digital Media Fund (“Ontario Media Fund”) offers video game creators a non-refundable monetary contribution of up to 50% of the developers’ qualifying Ontario expenditures to produce a marketable video game product. The monetary contribution from the Ontario Media Fund is capped at \$150,000.

The eligibility requirements for the Ontario Media Fund overlap to a certain extent with those of the Ontario Tax Credit, with a few notable program-specific differences. Chief among these are the requirements for applying developers to demonstrate the necessary skill and expertise in the industry to take up the specific production stage for which they are receiving a contribution. Because the goal of these monetary incentives is not only to promote the development of video games in Ontario but also to protect Ontario developers from having to trade away control over their project and intellectual property in exchange for financing, these programs also require that the content of the game be proprietary to the game developer and that the developer be the originator of the project, with the ability to control the project both creatively and financially.

Other programs available to Ontario video game developers for post-release and general industry support include the OMDC Export Fund for the Interactive Digital Media Industry (“Ontario Export Fund”) and the Ontario Entertainment and Creative Cluster Partnership Fund (“Ontario Partnership Fund”). The Ontario Export Fund will cover as much as 50% of a game development company’s expenses (up to a maximum of \$12,000 per year) incurred through export development activities outside of Canada, including travel, registration, booth fees, and accommodations for attendance at industry events and sales trips to meet with identified export leads. The Ontario Partnership Fund on the other hand, provides funding for eligible events and projects directed at capacity-building, business innovation, skills development or marketing in creative content industries put together by partnerships between organizations involved with video games and other types of media. Funding under the Ontario Partnership Fund is capped at 70% of the total budget for an event or project, with a \$25,000 minimum for any funding requests made in an application for this program.

### **Prince Edward Island**

The interactive technologies sector was singled out in Prince Edward Island’s Progressive Tax Rebate Program as one of only a handful of fields in which corporations would be eligible for the province’s Innovation and Development Tax Credit. Including video game development within the definition of “interactive technologies,” the Prince Edward Island Innovation and Development Tax Credit (“PEI Tax Credit”) consists of a refundable tax credit equal to 35% of one and a half times the total of eligible salaries and wages paid over the first two years of an interactive technologies project. To receive the PEI Tax Credit an eligible corporation should apply for a preliminary certification from either Prince Edward Island Business Development or Technology PEI prior to beginning work on a project and then apply for a

*final certification on the earlier of either the actual completion date of the project or the completion date listed on the preliminary certificate.*

*For a project to qualify for the PEI Tax Credit it must be taken up by a corporation with a permanent establishment on Prince Edward Island and contribute to the development or commercialization of a new product, service or process in interactive technology for production or commercial sale primarily outside of the province. While projects are not required to include new intellectual property to qualify, projects which include new and unique intellectual property automatically meet the innovation requirement. For purposes of calculating the amount of the allowance offered under the PEI Tax Credit, eligible salaries and wages include all compensation paid to PEI residents spending at least 26 hours per week on work, supervision or direct support of an interactive technologies project. While there is no limit on salaries or wages paid to employees who deal at arm's length with the corporation, eligible wages or salaries earned by non-arm's length employees (also known as "related parties" and including controlling shareholders and their familial relatives) are only eligible up to \$40,000 per year.*

### **Quebec**

*For those video game developers seeking work, the Québec city of Montreal is home to development offices of several prominent video game publishers, including Eidos, EA and Ubisoft. For development companies with a Québec office, or that might be looking to establish one, Investissement Québec (a Crown corporation) offers a refundable tax credit of up to 30% of qualifying labor expenditures incurred by a developer on eligible production work in the creation of an interactive multimedia title. To be eligible for the Québec multimedia tax credit a corporation needs to be located in Québec and have been certified by Investissement Québec each year of the project as an eligible company that produces interactive multimedia titles, construed broadly to include games and other interactive media produced in an electronic medium either for commercial release or as a commissioned project.*

*Eligible production work is defined very broadly for purposes of the tax credit, including work undertaken anytime in the period beginning with the design phase of a new project, running through the perfection and bug-testing of the title and then extending for up to two years into the marketing of the final game. Qualifying labor expenditures on which the 30% tax credit will be calculated are likewise inclusive, contemplating salaries and wages paid to employees working in Quebec, as well as amounts paid to related subcontractors for work done in Québec, and half of amounts paid to arm's-length contractors for work done in Québec. It should be noted that commissioned projects produced by eligible corporations for third-party companies can only receive a maximum tax credit of 26.25% of eligible expenditures. That said, however, interactive multimedia titles which include French-language versioning and are not produced pursuant to a commission are eligible for an additional 7.5% tax credit, increasing the maximum available tax credit for such projects to 37.5% on eligible Québec labor expenditures.*

### **The Canada Media Fund**

*Mimicking the success that Canadian motion picture incentives have had in convincing filmmakers to locate their productions in Canada in order to lower costs, Canada has remained ahead of the curve by enacting similar benefits, both at the national and provincial levels, to attract developers in the video game industry. The Canada Media Fund was established to support Canadian companies developing interactive content for sale in the international marketplace by increasing the capacity for corporate growth of Canadian businesses and the development of skilled and creative Canadian talent within the interactive content industry. The Canada Media Fund is a public-private partnership between the Canadian*

cable and satellite distributors and the federal government. The Canada Media Fund includes two funding streams: i) the Experimental Stream, which supports the creation of interactive content and software applications; and ii) the Convergent Stream, which supports the creation of television shows and related digital media content.

The Experimental Funding program of the Canada Media Fund offers funding to interactive, digital media and software development companies in the form of an equity investment. An eligible game developer may receive as much as three-quarters of the total eligible costs of an approved video game project up to a maximum of \$1,000,000, whichever is less. To be eligible for the Experimental Fund a Canadian company must own and be involved in the production both significantly and meaningfully. Moreover, at least 75% of the production's eligible costs must be expended in Canada. A developer will be denied access to the Experimental Funding program if the game for which funding is being sought contains excessive violence, sexual violence or exploitation, or elements which are obscene, indecent, libelous, child pornography, or unlawful according to the applicable criminal code.

The Convergent Funding program of the Canada Media Fund offers grant funding for projects involving both a television component and a digital media component. An eligible production may receive funding up to half of the total eligible costs (or 60% if in the French language) and an additional \$200,000 for the television component, and half of the total eligible costs and up to an additional \$50,000 for the digital media component. To be eligible for the Convergent Fund the productions must be by a Canadian company and not contain excessive violence, sexual violence or exploitation, or elements which are obscene, indecent, libelous, child pornography, or unlawful according to the applicable criminal code. Moreover, at least 75% of the production's eligible costs must be expended in Canada.

#### **Bell Broadcast and New Media Fund**

Canadian game developers producing certain types of games may also be eligible for grants offered by the Bell Broadcast and New Media Fund ("Bell Fund"). The Bell Fund is a non-government, not-for-profit organization which is sponsored by several large contributors from the Canadian broadcasting industry and charged with the mission of advancing the Canadian broadcast system. In furtherance of this purpose, the Bell Fund offers grants that support the creation and deployment of new media projects (including online games) associated with television programs. The Bell Fund offers grants covering up to 75% of the costs associated with the development and production of new media projects associated with Canadian television programs. Grants from the Bell Fund for the development and design of new media projects are capped at \$50,000 and grants for the production of said projects are capped at \$250,000.

## Appendix J: List of Filed Digital Games-related Legislation in Massachusetts

### Text of Representative Vincent A. Pedone's Bill

Accessed at: <http://www.malegislature.gov/Bills/187/House/H03301>

Section 1. Chapter 63 of the General Laws is hereby amended by striking out section 38X and inserting in place thereof the following section: Section 38X. (a) As used in this section the following words shall, unless the context clearly requires otherwise, have the following meanings:- "Commissioner", the commissioner of revenue. "Motion picture", a feature-length film, a video, a digital media project, a television series defined as a season not to exceed 27 episodes, or a commercial made in the commonwealth, in whole or in part, for theatrical or television viewing or as a television pilot. The term "motion picture" shall not include a production featuring news, current events, weather and financial market reports, talk show, game show, sporting events, awards show or other gala event, a production whose sole purpose is fundraising, a long-form production that primarily markets a product or service, a production containing obscene material or performances. "Motion picture production company", a company including its subsidiaries engaged in the business of producing motion pictures, videos, television series, or commercials intended for a theatrical release or for television viewing. The term "motion picture production company" shall not mean or include any company which is more than 25 per cent owned, affiliated, or controlled, by any company or person which is in default on a loan made or guaranteed by the commonwealth. "Massachusetts production expense", a production expense for the motion picture, video game or interactive digital media clearly and demonstrably incurred in the commonwealth. "Principal photography", the phase of production during which the motion picture is actually filmed. The term shall not include preproduction or postproduction. "Production expense" or "production cost", preproduction, production and postproduction expenditures directly incurred in the production of a motion picture, video game or interactive digital media. The term shall include wages and salaries paid to individuals employed in the production of the motion picture, video game or interactive digital media; the costs of set construction and operation, editing and related services, photography, sound synchronization, lighting, wardrobe, make-up and accessories; film processing, transfer, sound mixing, special and visual effects; music; location fees and the cost of purchase or rental of facilities and equipment or any other production expense as may be determined by the department of revenue to be an eligible production expense. The term shall not include costs incurred in marketing or advertising a motion picture, video game or interactive digital media, any costs related to the transfer of tax credits or any amounts paid to persons or businesses as a result of their participation in profits from the exploitation of the production. "Secretary", the secretary of economic development. "Video game" or "interactive digital media", interactive software that: (i) is produced for distribution on or accessed via electronic media, including without limitation software that may be accessed via or downloaded from the Internet or mobile networks and software that are distributed on optical media or embedded in or downloadable to electronic devices, including without limitation mobile phones, portable game systems and personal digital assistants (PDA) or other handheld electronic devices; (ii) users may interact with via an electronic device, which may include without limitation a computer, a game system, a mobile phone, a PDA or other handheld electronic devices, in order to achieve a goal or set of goals; and (iii) include an appreciable quantity of text, sound, fixed images, animated images, or 3-D geometry. "Video game studio" or "interactive digital media studio", a permanent facility within the commonwealth used primarily for the design, production or development of video games or interactive digital media products. (b) A taxpayer engaged in the making of a motion picture, video game or interactive digital media shall be allowed a credit against the taxes imposed by this chapter for the employment of persons within the commonwealth in connection with the filming or production of 1 or more motion pictures, video games or interactive digital media in the commonwealth within any consecutive 12 month period. The credit shall be equal to 25 per cent of the total aggregate payroll paid by a

motion picture, video game or interactive digital media production company that constitutes Massachusetts source income, when total production costs incurred in the commonwealth equal or exceed \$50,000 during the taxable year. For purposes of this subsection, the term “total aggregate payroll” shall not include the salary of any employee whose salary is equal to or greater than \$1,000,000. (c) A taxpayer shall be allowed an additional credit against the taxes imposed by this chapter equal to 25 per cent of all Massachusetts production expenses, not including the payroll expenses used to claim a credit pursuant to subsection (b), where the motion picture, video game or interactive digital media is also eligible for a credit pursuant to subsection (b) and either Massachusetts production expenses exceed 50 per cent of the total production expenses for a motion picture or at least 50 per cent of the total principal photography days of the film or the production of the video game or interactive digital media take place in the commonwealth. (d) A taxpayer shall be allowed an additional credit against the taxes imposed by this chapter equal to 5 per cent of all Massachusetts production expenses under this section if video game studio or interactive digital media studio is located in a gateway municipality, as defined by section 3A of chapter 23A; provided, that the value of such credit shall not exceed \$500,000 per year. (e) A taxpayer shall be allowed an additional credit against the taxes imposed by this chapter equal to 2.5 per cent of all Massachusetts production expenses under this section if video game production company producing video games or interactive digital media places within such game or interactive media a promotional logo of the commonwealth of Massachusetts, as approved by the secretary; provided, that the value of such credit shall not exceed \$75,000 per game or media per year. (f) The tax credit shall be taken against the taxes imposed under this chapter and shall, at the election of the taxpayer, be refundable to the extent provided for in section 32E. Any amount of the tax credit that exceeds the tax due for a taxable year may be carried forward by the taxpayer to any of the 5 subsequent taxable years. (g)(1) All or any portion of tax credits issued in accordance with the provisions of this section may be transferred, sold or assigned to other taxpayers with tax liabilities under this chapter or chapter 62. Any tax credit that is transferred, sold or assigned and taken against taxes imposed by this chapter. Any amount of the tax credit that exceeds the tax due for a taxable year may be carried forward by the transferee, buyer or assignee to any of the 5 subsequent taxable years from which a certificate is initially issued by the department of revenue. (2) An owner, transferee or assignee desiring to make a transfer, sale or assignment shall submit to the commissioner a statement which describes the amount of tax credit for which the transfer, sale or assignment of tax credit is eligible. The owner, transferee or assignee shall provide to the commissioner such information as the commissioner may require for the proper allocation of the credit. The commissioner shall provide to the taxpayer a certificate of eligibility to transfer, sell or assign the tax credits. The commissioner shall not issue a certificate to a taxpayer that has an outstanding tax obligation with the commonwealth in connection with any motion picture, video game or interactive digital media for any prior taxable year. A tax credit shall not be transferred, sold or assigned without a certificate. (h) The commissioner, in consultation with the secretary, shall promulgate regulations necessary for the administration of this subsection.

Section 2. Said chapter 63 of the general laws is hereby further amended by adding the following three sections:-

Section 82. (a) As used in this section and in section 83, the following terms shall have the following meaning: “Eligible labor expenditures”, compensation and benefits paid to employees working on the development, creation, production, maintenance, and distribution of video games or interactive digital media as defined in section 38X, as well as employees supporting technical or production infrastructure, including but not limited to, computer support staff. “Video game production company”, a company including its subsidiaries engaged in the business of producing video games or interactive digital media as defined in section 38X. The term “video game production company” shall not mean or include any company which is more than 25 per cent owned, affiliated, or controlled, by any company or person which is in default on a loan made by the commonwealth or a loan guaranteed by the commonwealth. (b) A taxpayer engaged in the making of a video game or interactive digital media shall be allowed a credit against the taxes imposed by this chapter for the employment of persons within

the commonwealth in connection with the filming or production of 1 or more video games or interactive digital media in the commonwealth within any consecutive 12 month period. The credit shall be equal to 35 per cent of the eligible labor expenditures paid by a video game or interactive digital media production company that constitutes Massachusetts source income, when eligible labor expenditures incurred in the commonwealth equal or exceed \$50,000 during the taxable year. (c) A taxpayer engaged in the making of a video game or interactive digital media shall be allowed an additional workforce credit against the taxes imposed by this chapter for eligible labor expenditures within the commonwealth. The credit shall be equal to the following: (1) if the sum of the average of the video game production company for the 5 year period is greater than or equal to 100 per cent but less than 105 per cent of the count of full-time equivalent employees during the year the credit in section 38X was earned, the workforce tax credit shall be 10 per cent of the tax credit allowed in subsection (b); (2) if the sum of the average of the video game production company for the 5 year period is greater than or equal to 105 per cent but less than 110 per cent of the count of full-time equivalent employees during the year the credit in section 38X was earned, the workforce tax credit shall be 20 per cent of the tax credit allowed in subsection (b); (3) if the sum of the average of the video game production company for the 5 year period is greater than or equal to 110 per cent but less than 115 per cent of the count of full-time equivalent employees during the year the credit in section 38X was earned, the workforce tax credit shall be 30 per cent of the tax credit allowed in subsection (b); (4) if the sum of the average of the video game production company for the 5 year period is greater than or equal to 115 per cent but less than 120 per cent of the count of full-time equivalent employees during the year the credit in section 38X was earned, the workforce tax credit shall be 40 per cent of the tax credit allowed in subsection (b); and (5) if the sum of the average of the video game production company for the 5 year period is greater than or equal to 120 per cent of the count of full-time equivalent employees during the year the credit in section 38X was earned, the workforce tax credit shall be 50 per cent of the tax credit allowed in subsection (b). (d) A taxpayer shall be allowed an additional credit against the taxes imposed by this chapter equal to 5 per cent of either the credit allowed in subsections (b) and (c) of section 38X or the credit allowed in subsections (b) and (c) of this section if a video game production company is located in a gateway municipality, as defined by section 3A of chapter 23A; provided, that the value of such credit shall not exceed \$500,000 per year. (e) A taxpayer shall be allowed an additional credit against the taxes imposed by this chapter equal to 2.5 per cent of either the credit allowed in subsections (b) and (c) of section 38X or the credit allowed in subsections (b) and (c) of this section if a video game production company producing video games or interactive digital media places within such game or interactive media a promotional logo of the commonwealth of Massachusetts as approved by the secretary; provided, that the value of such credit shall not exceed \$75,000 per game or media per year. (f) The tax credit shall be taken against the taxes imposed under this chapter and shall, at the election of the taxpayer, be refundable to the extent provided for in section 32E. Any amount of the tax credit that exceeds the tax due for a taxable year may be carried forward by the taxpayer to any of the 5 subsequent taxable years. (g)(1) All or any portion of tax credits issued in accordance with the provisions of this section may be transferred, sold or assigned to other taxpayers with tax liabilities under this chapter or chapter 62. Any tax credit that is transferred, sold or assigned and taken against taxes imposed by this chapter or said chapter 62 shall not be refundable. Any amount of the tax credit that exceeds the tax due for a taxable year may be carried forward by the transferee, buyer or assignee to any of the 5 subsequent taxable years from which a certificate is initially issued by the department of revenue. (2) An owner, transferee or assignee desiring to make a transfer, sale or assignment shall submit to the commissioner a statement which describes the amount of tax credit for which the transfer, sale or assignment of tax credit is eligible. The owner, transferee or assignee shall provide to the commissioner such information as the commissioner may require for the proper allocation of the credit. The commissioner shall provide to the taxpayer a certificate of eligibility to transfer, sell or assign the tax credits. The commissioner shall not issue a certificate to a taxpayer that has an outstanding tax obligation with the commonwealth in connection with any motion picture for any prior taxable year. A tax credit shall not be transferred, sold or assigned without a certificate. (h) A taxpayer



shall be allowed either the credits under this section or section 38X. (i) The commissioner, in consultation with the secretary, shall promulgate regulations necessary for the administration of this section. Section 83. A taxpayer engaged in the making of a video game or interactive digital media shall be allowed a workforce training credit against the taxes imposed by this chapter for eligible 2 year on-the-job training wages within the commonwealth. The credit shall be equal to 25 per cent of on-the-job wages as determined by the commissioner. Section 84. (a) If a taxpayer, engaged in the making of a video game or interactive digital media receiving a tax credit under section 82, discontinues operations in the commonwealth during the first 2 and one-half years of applying for such credit, the taxpayer shall forfeit all credits taken by the taxpayer during such 2 and one-half year period. In the event of the forfeiture of such credits, the department shall initiate proceedings against the taxpayer to recover wrongfully exempted state income taxes and the taxpayer shall promptly repay to the department any wrongfully exempted state income taxes. The forfeited amount of credits shall be deemed assessed on the date the department initiates proceedings against such recipient and the recipient shall promptly repay to the department any wrongfully exempted state income taxes. The secretary of economic development may elect to waive enforcement of any such forfeiture based on a finding that the waiver is necessary to avert an imminent and demonstrable hardship to the recipient. If a waiver is granted, the recipient shall agree to contractual recapture provisions. The existence of any waiver granted under this section, the date of the granting of such waiver, and a brief summary of the reasons supporting the granting of such waiver shall be disclosed consistent with the provisions of this section. (b) Beginning June 1, 2011 the department shall annually compile a report on the outcomes and effectiveness of the recapture provisions of this section, including but not limited to: (1) the total number of taxpayers engaged in the making of a video game or interactive digital media receiving a tax credit under sections 38X, 82 or 83; (2) the total number of recipients in violation of this section; (3) the total number of completed recapture efforts; (4) the total number of recapture efforts initiated; and (5) the number of waivers granted. Such report shall be a public record under clause Twenty-sixth of section 7 of chapter 4 and chapter 66. (c) The commissioner, in consultation with the secretary, shall promulgate regulations necessary for the administration of this section.

### **Text of Representative John J. Binienda's Bill**

Accessed at: <http://www.malegislature.gov/Bills/187/House/H00751>

Section 1. Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(1) by adding at line 428 the following two paragraphs: "Video games" means interactive software that (a) is produced for distribution on or accessed via electronic media, including without limitation software that may be accessed via or downloaded from the Internet or mobile networks and software that is distributed on optical media, or embedded in, or downloadable to electronic devices, including without limitation mobile phones, portable game systems and personal digital assistants (PDAs); (b) users may interact with via an electronic device, which may include without limitation a computer, a game system, a mobile phone, and a personal digital assistant (PDA), in order to achieve a goal or set of goals; and (c) include an appreciable quantity of text, sound, fixed images, animated images, and/or 3-D geometry. Permissible examples of video games are massive multiplayer online games, casual games, console games, virtual worlds, computer games, and mobile games. "Video games" shall not include products intended to facilitate gambling in any direct or indirect manner, including without limitation Internet gambling websites, video slot machines and video poker machines. "Video game production company" means a company including its subsidiaries engaged in the business of producing video games. The term "video game production company" shall not mean or include any company which is more than 25 per cent owned, affiliated, or controlled, by any company or person which is in default on a loan made by the Commonwealth or a loan guaranteed by the Commonwealth.

Section 2: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(1) by adding at line 429 after “motion picture” the following term: “, or video games,” .

Section 3: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(1) by adding at line 431 after “motion picture” the following term: “, or video game,” .

Section 4: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(1) by adding at line 436 after “motion picture” the following term: “, or video game,” .

Section 5: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(1) by adding at line 444 after “motion picture” the following term: “, or video game,” .

Section 6: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(2) by adding at line 449 after “motion picture” the following term: “, or video games,” .

Section 7: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(2) by adding at line 452 after “motion picture” the following term: “, or video games,” .

Section 8: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(2) by adding at line 455 after “motion picture production company” the following term: “, or video game production company,” .

Section 9: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(3) by adding at line 463 after “motion picture” the following term: “, or video games,” .

Section 10: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (l)(3) by adding at line 466 after “motion picture” the following term: “, or video games,” .

Section 11: Section 6 of Chapter 62 of the General Laws, as appearing in the 2008 Official Edition, is further amended in section (5)(ii) by adding at line 491 after “motion picture” the following term: “, or video games,” .

Section 12: Section 38X as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 21 the following two paragraphs: "Video games" means interactive software that (a) is produced for distribution on or accessed via electronic media, including without limitation software that may be accessed via or downloaded from the Internet or mobile networks and software that is distributed on optical media, or embedded in, or downloadable to electronic devices, including without limitation mobile phones, portable game systems and personal digital assistants (PDAs); (b) users may interact with via an electronic device, which may include without limitation a computer, a game system, a mobile phone, and a personal digital assistant (PDA), in order to achieve a goal or set of goals; and (c) include an appreciable quantity of text, sound, fixed images, animated images, and/or 3-D geometry. Permissible examples of video games are massive multiplayer online games, casual games, console games, virtual worlds, computer games, and mobile games. "Video games" shall not include products intended to facilitate gambling in any direct or indirect manner, including without limitation Internet gambling websites, video slot machines and video poker machines. "Video Game Production Company", a company including its subsidiaries engaged in the business of producing video games. The term "video game production company" shall not mean or include any company which is more than 25 per cent owned, affiliated, or controlled, by any company or person which is in default on a loan made by the Commonwealth or a loan guaranteed by the Commonwealth.

Section 13: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 23 after “motion picture” the following term: “, or video games,” .

Section 14: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 25 after “motion picture” the following term: “, or video game,” .

Section 15: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 29 after “motion picture” the following term: “, or video games,” .

Section 16: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 30 after “motion picture” the following term: “, or video games,” .

Section 17: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (a) by adding at line 37 after “motion picture” the following term: “, or video games,” .

Section 18: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official

Edition, is further amended in subsection (b) by adding at line 42 after “motion picture” the following term: “, or video games,” . Section 19: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (b) by adding at line 45 after “motion picture” the following term: “, or video games,” . Section 20: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (b) by adding at line 47 after “motion picture production company” the following term: “, or video game production company,” . Section 21: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (c) by adding at line 56 after “motion picture” the following term: “, or video games,” . Section 22: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (c) by adding at line 59 after “motion picture” the following term: “, or video games,” . Section 23: Section 38X of Chapter 63 of the General Laws, as appearing in the 2008 Official Edition, is further amended in subsection (e)(2) by adding at line 84 after “motion picture” the following term: “, or video games,” .

## **Appendix K: Contact Information**

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