Testimony of
Branko J. Gerovac, a Resident of Massachusetts
Before
Chairman Senator Thomas McGee, and Chairman Representative Cheryl Coakley-Rivera, and Members of the Joint Committee on Labor and Workforce Development
In Support of Eliminating Employee Non-Compete Agreements to the Fullest Extent in Massachusetts

Good Morning. Thank you for providing this opportunity to address the Committee.

My name is Branko J. Gerovac. I am a resident of Lexington, Massachusetts. For over 30 years in Massachusetts, I have led developments at the forefront of technology, product, and market advances across the interplay of computing, communications, and media technology.

I have held senior executive positions, providing leadership in technology development, business planning, product development, and customer and partner relations. While based in Massachusetts, I have worked extensively with companies and individuals across the United States and internationally. My current and previous positions include: Founder and CEO, Video in the Cloud; Chief Strategy Officer and Founding CEO, Blackwave Inc.; Vice President of Research and Chief Technology Officer, SeaChange Inc.; Associate Director, MIT Research Program on Communications Policy; Visiting Scientist, MIT Media Lab; Member, FCC Advisory Committee on Advanced Television Service (ACATS); Consulting Engineer, Corporate Research, Digital Equipment Corporation.

I provide this testimony because of a deep concern about the diminishing job options for the technology professional in Massachusetts, deep concern about the faltering environment for innovation in Massachusetts, and deep concern about the retarding effects on jobs and innovation that result from non-compete agreements.

My testimony provides objective data and personal experiences to support a recommendation that the Massachusetts Legislature act to serve the greatest public good and welfare of the Commonwealth by eliminating non-compete agreements.

Summary Testimony

The data presented here is a brief snapshot of my ongoing analysis of how technology companies compare in several metropolitan regions.

Greater Boston and greater Silicon Valley have roughly the same size population. Both have a heritage of innovation, and a vibrant leading-edge research and development community.

Despite these similarities, Massachusetts, by every measure, substantially trails Silicon Valley in growing companies and creating jobs in the technology sector.

Table 1 summarizes the key findings of my recent analysis comparing the emergence of new companies in the technology sector across several metropolitan areas. Table 1 focuses on comparing the greater Boston area, including all of Massachusetts, with the Silicon Valley area of San Francisco and San Jose. Further detail and graphical descriptions of this comparison are provided below in expanded testimony and on my personal website www.empiricalreality.com.

Table 1

	Boston Cambridge	San Francisco San Jose
Total Population (U.S. Census MSA 2008 est.)	4,522,858	4,274,531 (SF) 1,819,198 (SJ)
	Massachusetts	**Northern California**
NASDAQ-100 Companies (87 in U.S.)	6	26
S&P-1500 Technology Companies (256 in U.S.)	19	69
S&P-1500 Tech Companies Added Since 1989	1	19
Russell-3000 Tech Companies Added Since 1989	25	70
Russell-3000 Tech Cos., Since 1989, Total Market Capitalization	$ 40.5 B	$ 300.2 B
Russell-3000 Tech Cos., Since 1989, Average Market Capitalization	$ 1.6 B	$ 4.3 B

NASDAQ-100 listed companies reflect new economy business sectors. There are 50 NASDAQ-100 companies in the Technology sector: 6 in Massachusetts, which is roughly 1/4 of the 26 in Silicon Valley. The names of the companies are listed in an attachment below.

The broader based S&P-1500 contains 256 companies in the technology sector: 19 in Massachusetts, less than 1/3 of the 69 in Silicon Valley.

However, when looking at the dates that these companies were founded, Massachusetts produced only 1 company, since 1989, while Silicon Valley produced 19 companies listed in S&P-1500 Technology list. This is an amazingly poor showing for Massachusetts!

The Russell-3000 is the broadest commonly used index of public companies. It contains 521 companies in the technology sector. Since 1989, Massachusetts produced 25 companies, while Silicon Valley produced 70 companies listed in the Russell-3000 Technology list.

Notably, the total market capitalization of Russell-3000 Technology companies founded since 1989 in Massachusetts is $40.5B, which is roughly 1/8th of Silicon Valley's $300.2B. And Massachusetts companies are on average smaller at $1.6B capitalization compared to Silicon Valley companies with $4.3B average market capitalization.

This data is of extreme concern, because the past 20 years saw the broad adoption of the Internet economy, broadband to the home, mobile communications, digital media, personal computing, social media, and other significant new markets. Much of the innovation, thinking, and technology basis for these new markets were rooted in Massachusetts. However, without growth and evolution of technology sector companies, Massachusetts did not benefit. In essence, it is easier for the ideas and individuals to move to California or some other center of innovation than to deal with the constraints to innovation that exists in Massachusetts.

A significant difference between the environment in Massachusetts and California is the burden of non-compete agreements in Massachusetts compared to the complete absence of non-compete agreements in California.

Non-compete agreements are now anachronistic. The world has moved to new models for business development, innovation, and job growth. The data here clearly shows that non-compete agreements are not needed to create and grow great companies. Indeed, to the contrary, the data indicates that non-compete agreements curtail economic development and job opportunity.

The current draft proposed legislation on non-competition agreements does not fix the problem. All it does is codify the disproportionate power that a former employer can exert against an individual, and also codify that the individual is presumed without proof to compete with their former employer. The draft proposal does nothing to remove the threats that are primarily how non-competes are used. The draft proposal does nothing to protect the expertise an individual develops during the course of his or her career. The draft proposal does not adequately compensate an individual for lost salary and lost skills that result from being removed from the workforce.

If non-compete agreements were beneficial to the public good, then Massachusetts would compare more favorably to California in the data here. But the reverse is true.

The greater good to individuals, to the public, to economic growth and innovation, and to the Commonwealth will be achieved by fully eliminating non-compete agreements in Massachusetts.

Thank you to the Committee for providing the opportunity to present this data and my testimony. I would be happy to speak further with you or your staff about the material presented here or the interactive material on my website, www.empiricalreality.com.

And, thank you to the Committee and to Representatives William N. Brownsberger and Lori Ehrlich for your attention to the matter of eliminating employee non-compete agreements, which are so important to regenerating the environment of innovation and job creation in Massachusetts.

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Expanded Written Testimony

How do Massachusetts Technology Companies Compare to Companies in California and Other Regions of Technology Innovation?

To answer this question, I analyze and compare the metropolitan locations of public technology companies.

The first set of maps shows the locations of companies currently listed on the **NASDAQ-100** in five metropolitan areas: Boston, San Jose and San Francisco (aka Silicon Valley), Seattle, New York, and Los Angeles and San Diego.

The online interactive versions of these and subsequent maps, which are available on my website, allow you can navigate and zoom around the country and around the world. When you select a pushpin, a popup balloon will show company information. Larger versions of the maps are available as well. Links are listed in an attachment.

The following descriptions focus on comparing Massachusetts and Northern California. Respectively, Boston and Silicon Valley are where the technology sector companies concentrate, and are used synonymously with their broader area.

The NASDAQ-100 includes the 100 worldwide companies with the greatest market capitalization that are listed on the NASDAQ stock exchange, excluding financial sector companies. For historical reasons, NASDAQ listed companies tend to reflect new economy business sectors, in contrast to companies listed on other stock exchanges. Within the NASDAQ-100, 87 companies are located in the U.S, and 50 companies are in the Technology sector.

The differences in the number of NASDAQ-100 companies in Massachusetts compared to Northern California are striking. Massachusetts has 6 companies in the NASDAQ-100, and Northern California has 26 companies. The names of the companies are listed in an attachment.

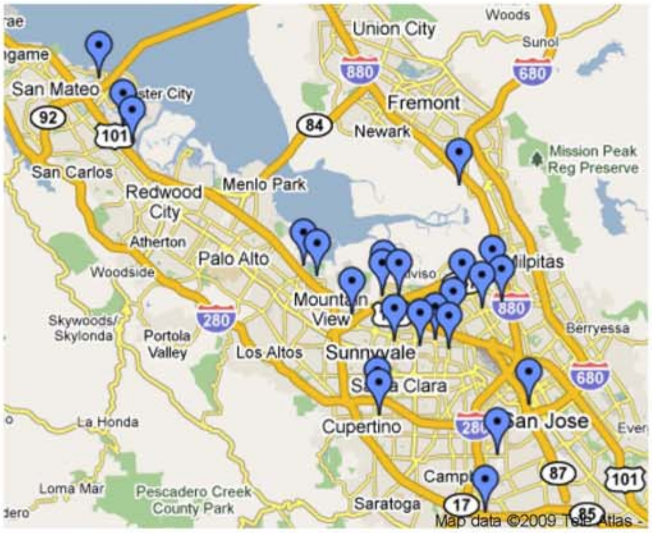
The next set of maps shows the locations of **S&P-1500 Technology** companies. The S&P-1500 includes the 1500 largest public companies, across all stock exchanges, that are located in the U.S.; the S&P-500 companies are included in the S&P-1500. There are 256 technology sector companies included in the S&P-1500 Tech list of companies. The maps shows the same viewing area as the previous maps. Some of the referenced companies are outside of the particular maps, but can be seen in the interactive maps.

Again the differences between Massachusetts and Northern California are striking. Massachusetts has 19 companies in the S&P-1500 Tech, and Northern California has 69 companies. The names of the companies are listed in an attachment below.

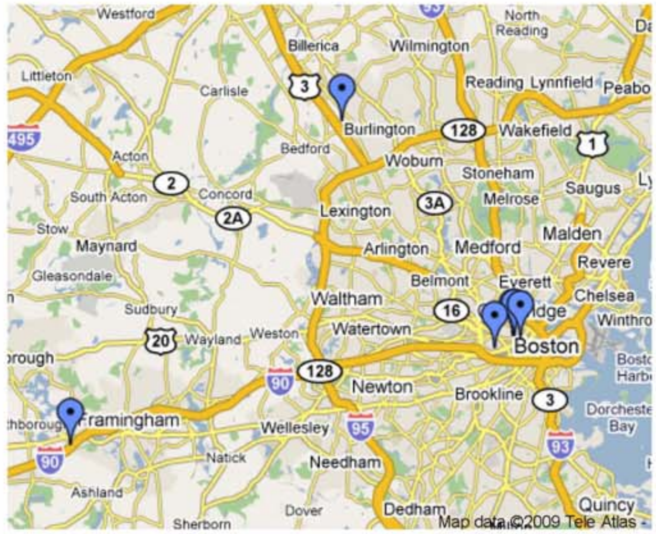
When comparing the list of companies, one notices that most of companies on the Massachusetts list were founded before the 1990s.

Maps of NASDAQ-100 Companies

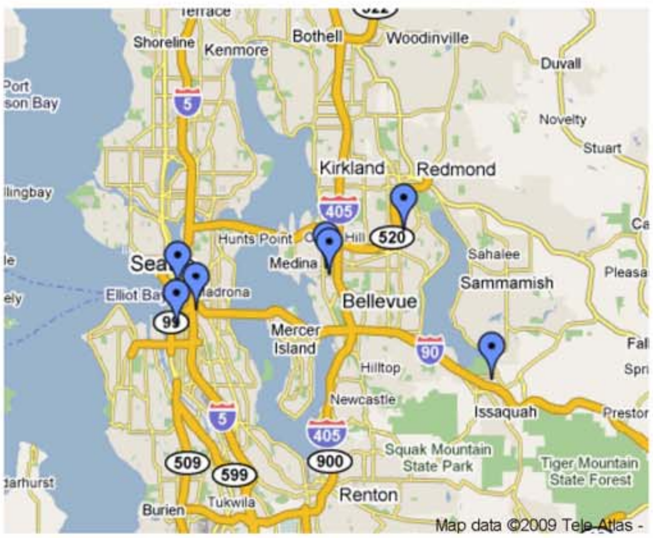
Silicon Valley



Boston

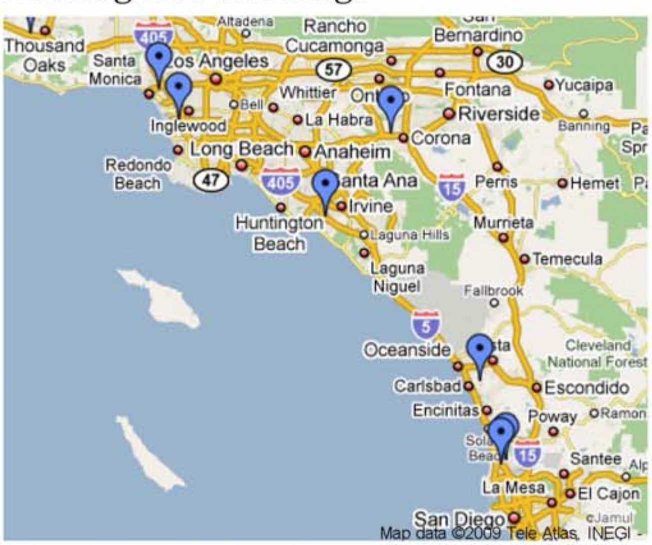


Seattle



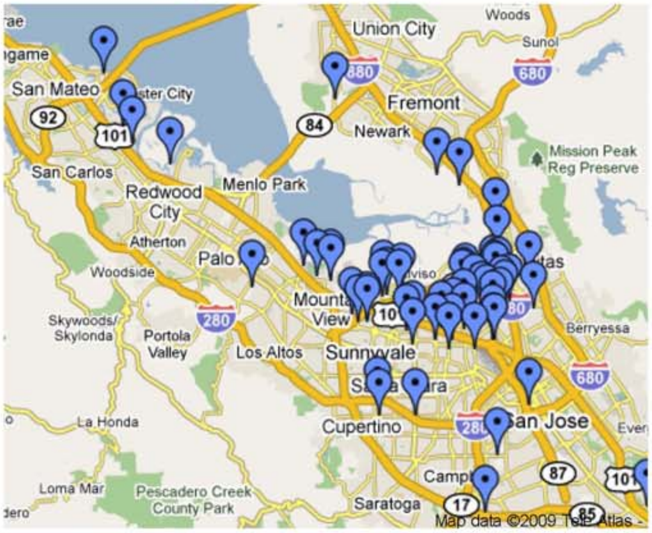
New York City

Los Angeles / San Diego

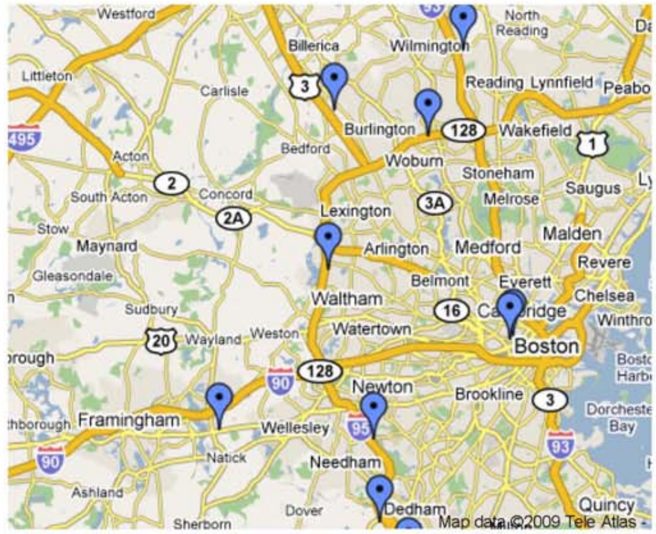


Maps of S&P-1500 Technology Companies

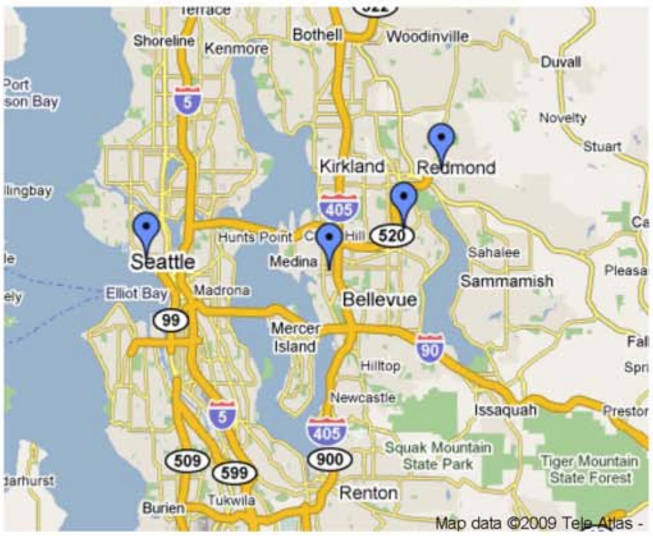
Silicon Valley



Boston



Seattle



New York City

Los Angeles / San Diego

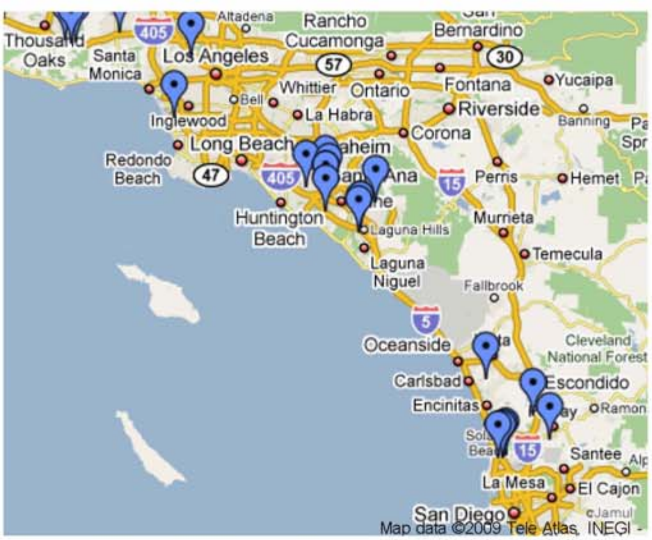
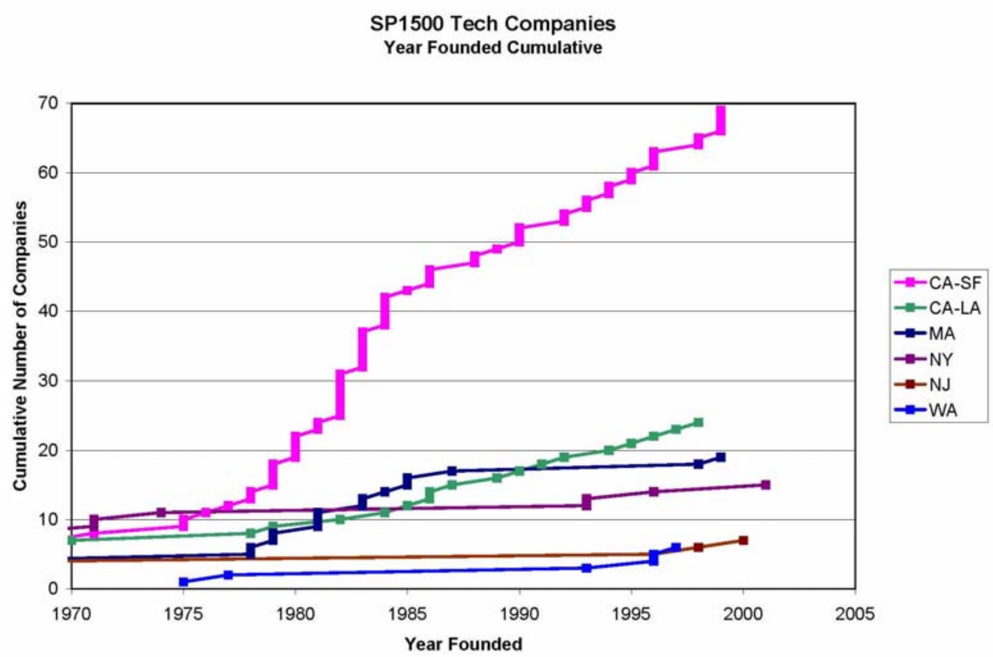


Chart 1 plots when each of the companies for each region in the S&P-1500 Tech was founded. Each line represents a different metropolitan region; a marker on the line indicates the founding of a company. The x axis is the year the company was founded. The y axis is the cumulative number of companies founded.

Chart 1



The fuchsia line represents the San Jose and San Francisco area companies. The dark blue line represents Boston area and Massachusetts companies.

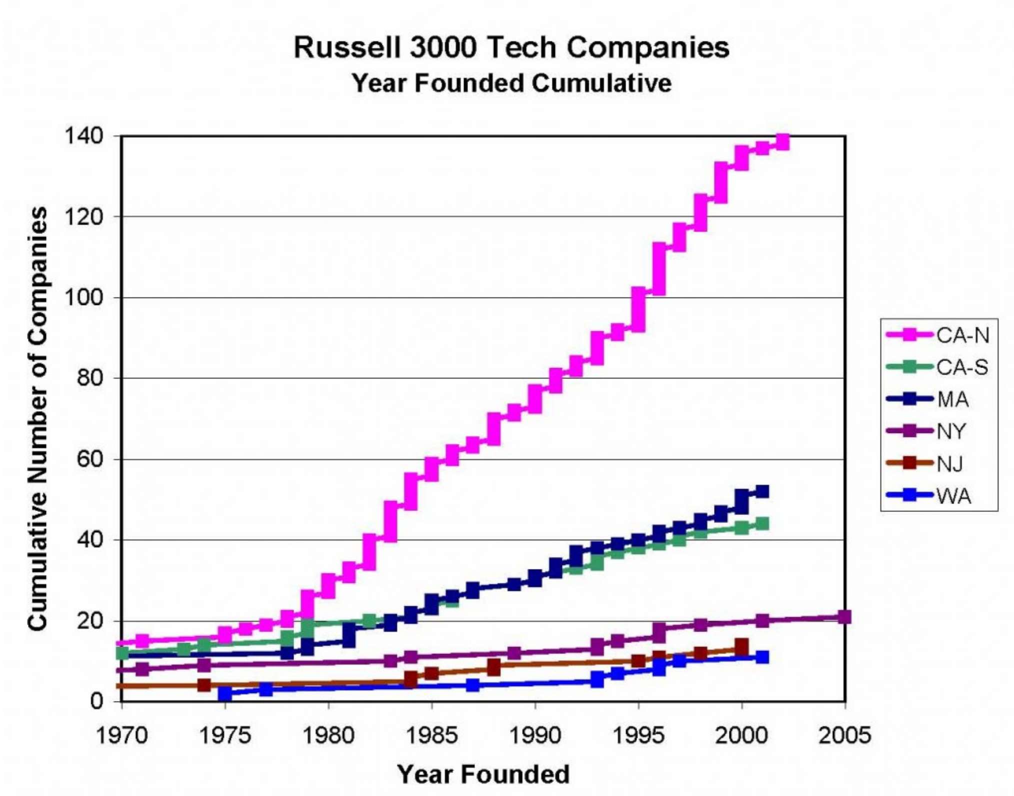
Note that the last marker on the Massachusetts line does not represent a true founding date of the company, but is a re-listing of a company, Varian Semiconductor Equipment Assoc., that traces its founding back to 1971, as Extrion Corp.

Astonishingly, since 1989, 20 years ago, Massachusetts has produced only one company, Akamai, founded in 1998, that is in the S&P-1500 Tech list of companies, while the San Jose and San Francisco area added 19 companies at a steady pace throughout the 20 years.

This is especially of concern, since the past 20 years saw the broad adoption of the Internet economy, broadband to the home, mobile communications, digital media, personal computing, social media, and other significant new markets. Much of the innovation, thinking, and technology basis for these market transitions began in Massachusetts.

Chart 2 broadens the comparison of company founding dates to the 521 technology sector companies that are part of the Russell-3000 index, which is a broadly based index with the lowest market capitalization below $100M. The Russell-3000 is updated quarterly. The data here is from the June 29 2009 list, minus several companies have been delisted.

Chart 2



The fuchsia line represents the San Jose and San Francisco area companies (aka CA-N). The dark blue line represents Massachusetts area companies. The green line represents Los Angeles and San Diego area companies (aka CA-S). These are statewide numbers, but the companies are highly concentrated around the state's primary metropolitan area.

Chart 2 shows steady founding of companies in Massachusetts, However, these do not appear in Chart 1, because these companies have a lower market capitalization.

Table 2 compares each of the metropolitan areas, showing the number of companies founded prior to 1989 and since 1989, with the respective current total market capitalization and average market capitalization.

Table 2

		CA-N	CA-S	MA	WA	NJ	NY
Prior to 1989	Number	70	28	28	3	9	11
	Total $B	801.5	119.3	89.7	228.1	22.6	284.2
	Average $B	11.4	4.3	3.2	76.0	2.5	25.8
Since 1989	Number	70	17	25	9	6	11
	Total $B	300.2	51.6	40.5	21.1	18.3	7.4
	Average $B	4.3	3.0	1.6	2.3	3.1	0.7

Massachusetts creates significantly fewer public technology companies, roughly 1/3rd compared to Silicon Valley.

Current Massachusetts public companies have approximately 1/8th of the total market capitalization compared to Silicon Valley.

An average Massachusetts technology company generates one third of the market capitalization.

There is no apparent fundamental reason that this should be the case. The greater Boston and San Francisco metropolitan regions have roughly the same population size. Massachusetts has long had a vibrant and leading edge research and development community. Many of the fundamental technological advances that enabled the advances of the past 20 years, such as the Internet economy and digital media, were rooted in developments in Massachusetts.

Massachusetts companies are not participating in sustainable growth and evolution of the technology sector. Technology jobs are not being created in Massachusetts.

Further, the technology professional is experiencing diminishing job opportunity in Massachusetts.

The Effects of Non-Competes on Constraining Fairness, Job Opportunity and Innovation

A significant difference between Massachusetts and California is the use of non-compete agreements in Massachusetts and the complete lack of non-compete agreements in California.

Non-compete agreements have become anachronistic. They are not needed to create and grow great companies. Indeed, the above data indicates that non-compete agreements curtail company development and job opportunity.

Non-compete agreements overly hinder an individual's job mobility, which is a critical factor to creating opportunity.

Here are a few observations from personal experience of how non-compete agreements are misused often egregiously and inappropriately.

Non-compete agreements afford disproportionate power to the company at the expense of fairness and due process to the individual.

A former employer simply has to assert the non-compete agreement without proof, without a hearing, without any indication that a particular situation is in fact competitive and harming to the former employer. The individual simply pursuing his or her career is presumed to be competitive. In many situations, all the former employer has to do is hint the threat of litigation, which is sufficient to thwart a job offer or curtail an individual's job search.

The former employer can apply the threat without hesitation even in situations that are clearly not competitive -- situations where the former employer's market, customers, and products are different from a prospective new employer's market, customers, and products.

A prospective new employer, especially one that is an early stage company or a small company, will not have the financial and management resources to survive threatened litigation. Thus, the potential new employer will forego hiring a good candidate unless the new employer can be assured that the former employer won't threaten litigate -- such assurances are virtually nonexistent.

Early stage companies are hurt by such casual use of non-compete agreements, and as a result, can't create the environment for innovation and growth of new companies as evidenced by the above data.

The individual has no effective recourse. The only thing to do is to suspend relevant work until the term of the non-compete agreement expires. Most individuals are not in a financial position to afford not working for the term of the non-compete. And, being out of the market for the term is a major liability to the individual's career and future development.

An individual who has 10 or 20 or 30 years of experience and expertise is forced to avoid using their expertise during the term of their non-compete agreement. Full compensation during the term of an individual's non-compete agreement, i.e., a 100% garden leave, would be the minimum cost to a former employer to give the former employer what they say they want and not to punish the individual.

Of course, many companies want to perpetuate non-compete agreements in Massachusetts. Companies that argue to continue the practice of non-competes simply want to maintain their unfair advantage in curtailing their former employees without compensating them and without having to prove anything.

Patents, confidentiality agreements, and trade secrets are more than sufficient to protect legitimate company interests against former employees. Even without non-compete agreements, companies still have a disproportionate ability to litigate against the individual.

If non-compete agreements were beneficial to the public good, then Massachusetts would compare more favorably to California. But the reverse is true.

Non-competes maintain the status quo, at the expense of individual interests, job mobility, jobs creation, and economic development.

The data shows that the status quo has not served the pubic interest and the welfare of the Commonwealth.

The data shows that Massachusetts has lost ground in the past 20 years in the major areas of technology that were key areas of economic growth.

The past 20 years saw the broad adoption of the Internet economy, broadband to the home, mobile communications, digital media, personal computing, social media, and other significant new markets.

Much of the innovation, thinking, and technology basis for these market transitions began in Massachusetts. However, Massachusetts grew just one technology sector company in the S&P-1500 during this period, while Silicon Valley grew 19 companies, and each of the other metro areas shown above grew more than one.

The current draft proposed legislation on non-competition agreements does not fix the problem. All it does is codify the disproportionate power that a former employer can exert against an individual, and it also codifies that the individual is presumed to compete with their former employer. It does nothing to lessen the threats that are primarily how non-competes are used.

Further, the above data indicates that non-compete agreements are not beneficial to the public good, otherwise Massachusetts would compare more favorably to California in the above data, which is not the case.

The greater good to individuals, to the public, to economic growth and innovation, and to the Commonwealth will be achieved by fully eliminating non-compete agreements in Massachusetts.

Thank you to the Committee for providing the opportunity to present this data and my testimony. I would be happy to speak further with you or your staff about the material presented here or the interactive material on my personal website, www.empiricalreality.com.

And, thank you to the Committee and to Representatives William N. Brownsberger and Lori Ehrlich for your attention to the matter of eliminating employee non-compete agreements, which are so important to regenerating the environment of innovation and job creation in Massachusetts.

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Attachment: Links to Online Maps and Related Information

http://www.empiricalreality.com/2009/08/26/nasdaq-100-company-locations/
http://www.empiricalreality.com/2009/08/31/sp-1500-tech-company-locations/
http://www.empiricalreality.com/2009/09/02/sp-1500-technology-company-founding-dates/
http://www.empiricalreality.com/2009/09/25/russell-3000-technology-company-founding-dates/

Attachment: NASDAQ-100 Companies

Boston Area Companies (6):

Akamai Technologies Inc.	Genzyme Corp.	Staples, Inc.
Biogen Idec Inc.	Hologic Inc.	Vertex Pharmaceuticals Inc.

San Francisco / San Jose Area Companies (26):

Adobe Systems Inc.	Google Inc.	NetApp, Inc.
Altera Corp.	Intel Corp.	NVIDIA Corp.
Apple Inc.	Intuit Inc.	Oracle Corp.
Applied Materials Inc.	Intuitive Surgical, Inc.	Ross Stores Inc.
Autodesk, Inc.	Juniper Networks, Inc.	Symantec Corp.
Cisco Systems, Inc.	KLA-Tencor Corp.	VeriSign Inc.
eBay Inc.	Lam Research Corp.	Xilinx Inc.
Electronic Arts Inc.	Linear Technology Corp.	Yahoo! Inc.
Gilead Sciences Inc.	Maxim Integrated Products	

Attachment: S&P-1500 Technology Companies

Boston Area Companies (19) , Founded Before 1989:

3Com Corp.
Analog Devices Inc.
Avid Technology Inc.
Brooks Automation Inc.
Cognex Corp.
EMC Corp.
Forrester Research Inc.
Hittite Microwave Corp.
Kopin Corp.
LoJack Corp.
Mercury Computer Sys. Inc.
MKS Instruments Inc.
Novell Inc.
Parametric Technology Corp.
Progress Software Corp.
Skyworks Solutions Inc.
Teradyne Inc.
Varian Semi. Equip. Assoc.*

Boston Area Companies (1), Founded Since 1989:

Akamai Technologies Inc.

San Francisco / San Jose Area Companies (50), Founded Before 1989:

Actel Corp.
Adaptec Inc.
Adobe Systems Inc.
Advanced Micro Devices Inc.
Advent Software, Inc.
Agilent Technologies Inc.*
Altera Corp.
Apple Inc.
Applied Materials Inc.
Atmel Corp.
Autodesk, Inc.
Cadence Design Systems Inc.
Cisco Systems, Inc.
Cypress Semiconductor Corp.
DSP Group Inc.
Electronic Arts Inc.
Exar Corp.
Harmonic Inc.
Hewlett-Packard Company
Integrated Device Tech. Inc.
Intel Corp.
Intersil Corp.*
Intuit Inc.
JDS Uniphase Corp.
KLA-Tencor Corp.
Lam Research Corp.
Linear Technology Corp.
LSI Corp.
Micrel Inc.
National Semi. Corp.
Network Equipment Technologies Inc.
Novellus Systems, Inc.
Oracle Corp.
Phoenix Technologies Ltd.
Plantronics Inc.
Rovi Corp.
SanDisk Corp.
Sigma Designs Inc.
Sonic Solutions
Sun Microsystems Inc.
Supertex Inc.
Sybase, Inc.
Symantec Corp.
Symmetricom Inc.
Synaptics Inc.
SYNNEX Corp.
Synopsys Inc.
Trimble Navigation Ltd.
Ultratech Inc.
Xilinx Inc.

San Francisco / San Jose Area Companies (19), Founded Since 1989:

Blue Coat Systems Inc.
CyberSource Corporation
eBay Inc.
Equinix Inc.
Google Inc.
Informatica Corp.
Intevac Inc.
Juniper Networks, Inc.
McAfee, Inc.
NetApp, Inc.
Netgear Inc.
NVIDIA Corporation
Palm, Inc.
Pericom Semiconductor Corp.
Polycom, Inc.
Salesforce.com
Taleo Corp.
VeriSign Inc.
Yahoo! Inc

* Company was a spin-off or re-listed after 1989, but established before 1989.

Attachment: Russell-3000 Technology Companies, Founded Since 1989

Boston Area Companies (25-1):

Acme Packet, Inc.
Airvana, Inc.
Akamai Technologies Inc.
American Tower Corp.
AMICAS Inc.
Art Technology Group Inc.
Bruker Corporation
Double-Take Software, Inc.
Evergreen Solar Inc.
iBasis Inc.
Interactive Data Corporation
InvernessMedical Innovations
IPG Photonics Corporation
Lionbridge Technologies Inc.
MEMSIC, Inc.
Netezza Corporation
Nuance Communications, Inc.
Sapient Corp.
SeaChange International Inc.
Sonus Networks, Inc.
Starent Networks, Corp.
Sycamore Networks Inc.
Unica Corp.
Varian Semi. Equip. Assoc.*
Virtusa Corp.

San Francisco / San Jose Area Companies (70):

3PAR, Inc.
Actuate Corp.
Advanced Analogic Tech Inc,
Affymetrix Inc.
Agilent Technologies Inc.
ArcSight, Inc.
Ariba Inc.
Aruba Networks, Inc.
Atheros Communications Inc.
BigBand Networks, Inc.
Blue Coat Systems Inc.
Brocade Comm. Systems, Inc.
Callidus Software Inc.
Cavium Networks, Inc.
Celera Corp.
Cepheid
CEVA Inc.
DemandTec, Inc.
Equinix Inc.
Extreme Networks Inc.
FormFactor Inc.
Google Inc.
GSI Technology Inc.
iGate Corp.
Immersion Corp.
Infinera Corp.
Informatica Corp.
Intersil Corp.
Intevac Inc.
iPass Inc.
Juniper Networks, Inc.
Keynote Systems Inc.
McAfee, Inc.
Monolithic Power Systems
NetApp, Inc.
Netgear Inc.
NetLogic Microsystems Inc.
NetSuite, Inc.
NVIDIA Corp.
Omnicell Inc.
OmniVision Technologies
OpenTV Corp.
Openwave Systems Inc.
Oplink Communications Inc.
Opnext, Inc.
Palm, Inc.
Pericom Semiconductor Corp.
Polycom, Inc.
RAE Systems Inc.
Rambus Inc.
Riverbed Technology, Inc.
Saba Software Inc.
Salesforce.com
ShoreTel, Inc.
Silicon Image Inc.
Silicon Storage Technology
SonicWALL, Inc.
SuccessFactors, Inc.
Super Micro Computer, Inc.
support.com, Inc.
Taleo Corp.
Techwell, Inc.
Tessera Technologies Inc.
UTStarcom, Inc.
Varian Inc.
VeriSign Inc.
Virage Logic Corp.
VMware, Inc.
Volterra Semiconductor Corp.
Yahoo! Inc.

* Company was a spin-off or re-listed after 1989, but established before 1989.