From Growth Machine to Ideas Machine: the new politics of local economic development in the high-skilled city

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Introduction

One of the more interesting questions to emerge from the new research on the competitive city in the knowledge economy is how economic and occupational change in the new economy is transforming local economic development politics. Who are the new actors and what are the implications for the politics of place? Urban political economists are well-positioned to answer these questions as they have been thinking about the political economy of place for decades.

In this paper, I review the literature on the political economy of place with particular attention paid to how the politics of local economic development has shifted over the years, especially within the context of an increasing knowledge-intensive urban economy and society. The aspect that interests me the most is the new emphasis on talent attraction and retention (especially highly-skilled knowledge-intensive talent) and its role in making a city-region successful. Recent research has shown that knowledge-workers' pursuit of employment in the new economy hinges less on the qualities of a firm and more on the qualities of a place (Florida, 2002, 2005a; Glaeser, 2004, 2005). Workers seek places that offer deep labour markets with many employment opportunities and quality of life amenities like housing supply, education, culture and lifestyle options.

They are less inclined to relocate with a particular firm if that firm is located in what they perceive to be an unappealing location. This shift in loyalties from firm to place raises new research questions (1) What are the implications for local economic development politics? (2) Does a potential exist for new occupational and institutional actors to play a role in local economic development? (3) What are the implications for both our policies and theories of urban political economy? To answer these questions, I draw upon insights from a current SSHRC-funded larger research project entitled, "Governing the Quality of Life City in the New Economy: growth politics in Toronto and Boston".

I argue that economic and occupational change in the new economy is having an impact on local economic development politics. Most notable has been a shift in the politics from a 'growth machine'-type of politics to what I am calling an 'ideas machine' one. In this ideas machine, the university and medical sectors are playing a more active role in the strategic direction of the economics and governance of a city. This enhanced role has implications for how we traditionally think about our theories of urban political economy and also has implications for the kinds of policies we privilege in the planning of our cities. Before turning to the findings, however, I will review the key literature and briefly discuss my research questions and methodology.

Literature review

Over the years, perhaps one of the most significant and incisive works on the theme of the political economy of place has been Logan and Molotch's (1987) growth machine thesis. In this thesis, the authors argue that certain actors in the city – who have

seemingly disparate interests – team up over the shared need to promote and enhance growth in their city. Real estate developers, financiers, real estate agents, business leaders, sport team- and local newspaper-owners all join forces in a political machine to promote growth largely through enhancing the exchange value of land. This is because revenue-enhancing land-development projects are still the best way to raise revenue for the city given the recurrent dependence by local area jurisdictions on the property tax. Conflicts arise, however, when other stakeholders place a different 'value' on land. For example, environmentalists, heritage preservation activist or poverty activists see land from a different perspective. For the environmentalist, land is to be ecologically protected, for the heritage activists it could have historical significance and for the poverty activist the way land is developed has implications for accomplishing larger public goods such as affordable housing availability. All these actors can emerge to challenge the growth machine's use value of lands in their jurisdiction. As such, understanding the politics of place is fundamentally linked to this conflict over the 'exchange' versus 'use' value of land.

Since Logan and Molotch's thesis, a rich body of literature has developed around the theme of the city as a place for property-led growth machines. Cox and Mair (1988) explore the role of dependent versus footloose capital in the political economy of property-led growth. In particular, they highlight the key role played by dependent capital in the civic leadership of a city. Locally-owned banks, manufacturing firms and other 'rooted' firms drive much of the economics and economic leadership of these places, with the locally-elected officials facilitating its economic governance. Jonas and Wilson (1999), in an edited collection a few years ago, revisited and revised the growth machine

thesis to take into account contemporary economic and social change. This included the role that broader globalization and nation-state restructuring was having on the politics of places (Peck, Tickell and Jessop (1999), the effect that 'new social movements' were having in steering certain development directions of a city (Pickvance, 2003), and the ways in which these latter movements could also shape political regimes of places (Lauria, 1996).

This work touched on an array of themes, but the starting point was always about the city as a place for property-led growth machines. A significant shift in the literature, however, has arrived in the last seven years as more research has begun to explore the role that skilled and creative workers play in the growth and development of a city (Florida, 2002, 2005a, 2005b); Glaeser, 2000; Markusen, 2004; Feser, 2003). Perhaps the most influential work to emerge from this research has been Richard Florida's *Rise of the Creative Class* and his subsequent books, *Cities and Creative Class* and the *Flight of the Creative Class* (Sawicki, 2003; Lang and Florida, 2005). Florida essentially argues that talent is the critical factor of production in the new economy. The worker who generates the ideas, creativity and imagination for knowledge-intensive production and innovation is a key component of a high-wage, high value-added economy. His research also supports the hypothesis that this skilled worker is also highly mobile and attracted to places that offer certain employment and 'quality of life' amenities and lifestyle options.

For example, Florida (2002) conducted empirical research with young, mostly under 30 year old knowledge-workers in high-technology sectors across a number of cities in the United States during the heyday of the technology boom in the late 1990s. He found that it was economic opportunity, broadly defined, that caused these high-skilled

workers (which he referred to as the “creative class”) to choose locations, not just an opportunity to work at a single job or a single company. Given the volatility of the high-technology sector and the frequency with which people change jobs, the places that can offer a variety of good job opportunities will be favoured over others (cf. Markusen, 2004). A deep labour market is also important for spouses or partners of high-technology and skilled workers (Donald, 2001).

Another major finding advanced by Florida (2000) is that knowledge-workers in technology-intensive sectors want to live in places with an abundance of lifestyle amenities such as appealing natural environments and vibrant neighbourhoods. Florida’s empirical research also found that cultural diversity is one of the most important amenities desired by young knowledge workers (cf Black et al., 2002).

What then are the implications of this research for local economic development politics and policy? To compete in the age of talent, argues Florida (2002) and Markusen (2004), regions must promote ‘quality of life’ and amenities characteristics that appeal to talented and creative workers. Typically included in his definition are elements like good public transit, fine public schools, universities and colleges, parks and places for jogging and cycling, culture and the arts, like music and theatre. The policy implications that derive from notions of, and policies towards, culture and the arts, for example, are not how we have typically thought about culture, however. Florida argues that vibrant and interesting street-scapes and city life, with cafés and restaurants, thriving music, art, literature, and design and fashion scenes, have high appeal to the talent class. Many of these policies centre around urban land use development and the use of city space along the lines of new urbanism planning as planners know well.

Florida's work has not gone without criticisms, however. Much of the theoretical and practical work conflicts quality-of-life – and individualized concept – with quality of place – a concept suggesting a general consensus among inhabitants. The assumption of a consensus tends to favour certain economic development strategies over others. The subtle conceptual shift from 'quality of life' to 'quality of place' has depoliticized the concept (Donald, 2001 see also Navarez, 2002). Furthermore, Navarez (2002) questions how a worker's quality of life preferences are incorporated by the processes leading to corporate relocations (cf. Castells 1989; Malecki 1997).

Also critical is Fainsten (2001), who argues that this urban competitiveness and quality of life literature runs contrary to much recent scholarship that has found a contradiction between urban entrepreneurialism and social justice (Harvey, 1973, 1992, 2000; Sayer and Storper, 1997; Merrifield and Swyngedouw, 1996). More recent and directed criticism comes from Sawicki (2003) and Glaeser (2004; 2005) who take issue with Florida's research methods, especially the approaches taken in creating the 'creativity indexes' like the gay and foreign-born indexes. Glaeser (2004, p. 5) ran a few of his own regressions using data provided by Florida (from Florida and Knudsen, 2004) and found "no evidence to suggest that there is anything to this diversity or Bohemianism, once you control for human capital". For both Sawicki and Glaeser the implications for civic leaders is that they are best to focus on the basic infrastructure required for skill attraction (such as the availability of good education and housing) rather than quick-fixes to create a hipster downtown.

Research Questions

This review of the recent literature on the political economy of place– and in particular – the increased importance of the skilled worker to the economic competitiveness of the city—raises new research questions. If indeed research supports the thesis that skilled-workers' pursuit of employment in the new economy hinges less on the qualities of a firm and more on the qualities of a place (Florida, 2002, 2005; Glaeser, 2004, 2005); and if indeed workers seek places that offer deep labour markets with many employment opportunities and quality of life amenities like housing supply, education, culture and lifestyle options; and if they are less inclined to relocate with a particular firm if that firm is located in what they perceive to be an unappealing location; then this shift in loyalties from firm to place raises new research questions (1) What are the implications for local economic development politics? (2) Does a potential exist for new occupational and institutional actors to play a role in local economic development? (3) And what are the implications in both practice and theory?

Methodology

To answer these questions, I draw upon insights from a larger Social Science and Humanities Research Council –Initiative for the New Economy (SSHRC-INE) funded project entitled, "Governing the 'Quality of Life' City in the New Economy: growth politics in Boston and Toronto".[1] This project is examining how economic and occupational change in the new economy is transforming local economic development politics in the cities of Boston and Toronto. Toronto and Boston were chosen as case

[1] SSHRC Grant # 501-02-0119.

study cites because they are two of North America's most dynamic and important knowledge-intensive city-regions. Also, these cities have similar pasts. Both are largely industrial centres with considerable regional importance. Both have been education centres within their respective nations, and both are characterized by traditional social and political cultures. The project runs from March 2004 through to March 2007. The Boston portion part of the research is currently being conducted and as such this paper will report on my findings to date in that city-region.

At the time of writing this paper, I have interviewed over 30 people in Boston. This includes local economic development planners, academics, business leaders, members of marketing boards, CEOs of major companies and directors of business lobby groups, media, students, members of local non-profit organizations and management consultants who work on local economy issues. The design of the interviews is semi-structured and content focussed (Hay 2000). This approach supports inductive rather than deductive reasoning. Like Schoenberger (1991), I believe that in periods of great economic and social change, this approach is more suitable to hypothesis-building rather than hypothesis-testing. The interviews usually last about 30 minutes, although in several cases the interviews have been for as long as 3 hours. As one informant stated, "Boston is an education town and as such every one wants to sit down with you and give you a lesson about how Boston works". This certainly has been my experience and has made the research that much more enjoyable.

Results

In many respects, the Greater Boston Region is the quintessential new economy knowledge-intensive case study. Its history of economic development has been one of 400 years of innovation and reinvention. Most recently, the changing economic conditions have also precipitated a major change in its economic leadership. Barry Bluestone, the Director of the Centre for Urban and Regional Research at Northeastern University in Boston describes this changing context and what it has meant for Boston – and indeed – other knowledge cities in North America,

"Whether we like it or not, businesses play a critical role in the growth of cities. In a day and an age when you had businesses that put down roots and stayed their forever…Heinz in Pittsburgh, General Motors in Detroit, Sears in Chicago…Those and the banks played a key role in the private sector leadership of the city...they drove the economics of these cities. What has happened in city after city is those corporations either leave or have been taken over. For example, Canada owns John Hancock who owns Manulife and Bank of America in North Carolina owns [a local Boston] Bank and Gillette has just been bought out by Procter and Gamble of Cincinnati. So the argument is that if you lose your industries and other industries are taken over by foreign leaders, who now leads economic development in the city?" (Interview with author, October, 2005)

Bluestone continues on,

"So people are saying because of the changing dynamics of global capitalism, it is those institutions that have deep roots, are large employers and aren't easy take over targets…they are going to have to play a more senior role.

In other words, 'the Eds and Meds.'"

This was a theme that came up time and time again in my interviews with key informants: that the education and medical sectors now play a key role in the economic development and political future of the Greater Boston region. Before returning to the Boston context, however, let's first examine the broader context of innovation and in particular the ascendance of the education and medical sectors as key actors in local economic development. This next section will briefly examine the Canadian context given that this paper targets a mostly Canadian audience.

The education and medical sectors: from ambassadors to 'inside actors'

The education and medical sectors certainly seem to be playing a much more leading role in the economic development of Canadian cities. Canada, like other industrialized nations over the last ten years, has placed a greater policy emphasis on the importance of innovation, education and knowledge. After the recession and global restructuring era of the mid 1990s, the Canadian federal government began recognizing that urgent action was necessary to ensure Canada's long-term economic health and viability. As such, the federal government in 1997 initiated a plan to invest in Canada's research and

development landscape. The plan consisted of two main policy objectives that positioned the university sector at the forefront: the first was to produce a highly educated personal for all sectors and the second was to conduct research across all disciplines. To build skills and research capacity, the federal government introduced substantial new R&D funding mechanisms including such things as increasing the support for the direct cost of research, funding a proportion of the indirect cost of research, purchasing and operating world-class research infrastructure, and attracting and retaining research talent. Between 1997 and 2001 various new mechanisms were introduced into the federal budget to build research capacity. These included such initiatives as the Canadian Foundation for Innovation, The Canadian Institutes of Health Research, The Canada Research Chairs Program, the Indirect Costs Program, and increasing federal granting agencies' base budgets.

These and other programs since 1997 have substantially improved the R&D landscape in Canada. The three largest research actors are the private sector, the federal government and universities (including their medical schools and associative teaching and research hospitals). However as shown in Table 1, the university is the only sector that has witnessed its share and value of research substantially increase between 1989 and 2004. In 1989, universities accounted for 29.9% of the total share and value of research performed in Canada. By 2004, this figure had increased to 38.1%. The university sector is also the only sector that performs research for all other sectors. Since 1997, all external funders have increased their investments in university research. The growing cost and complexity of research requires increasing inter-sector collaboration and universities are

able to perform a unique and important role (Association of Universities and Colleges of Canada, 2005).

So while Canada is just beginning to reinvest in its research and development landscape, Boston, as a region, has been known for decades as the recipient of federal and state research and development programs.

Boston's 'Ideas" Machine

There is no question that the Greater Boston region is home to one of the world's greatest concentration of educational institutions, knowledge-transfer and innovative activity. The Boston region is home to 48 universities and colleges, top ranked medical centres and an outstanding collection of technology transfer institutions. It has seven research intensive universities – Boston College, Boston University, Brandeis, Harvard, MIT, Northeastern, Tufts, and University of Massachusetts-Boston – who have had a profound impact on the growth and development of industry and society. Research from these universities has helped to define industries like computing, information technology, medical devices, biotechnology and genetics. Moreover, university research has had a deep impact on key social and economic policies ranging from Nobel Prize-winning theories of economic growth to long-term monitoring of social security programs. In addition to this research capacity, the region also attracts the highly skilled and highly talented.

The Innovators

These highly skilled people include people like MIT mechanical engineering graduate student Nevan Hanumara who was part of a team of young researchers awarded the MIT Ideas Competition for their work on high-tech medical device called Robopsy, a robotic surgical aid for doctors performing biopsies that could make the procedure safer and more accurate. Like many bright young students, Nevan was attracted to Boston because of the world-class reputation of MIT and the ability to engage with what he described as "an unusual community" of researchers and institutions.[2]

> [In Boston you have] lots of Ph.D.s who are doctors, so you have an "unusual community". I found them making meringues in the microwave the other day as they were trying to system small spherical particles that they were going to image and they needed something transparent so that they could suspend them so they were actually making meringues. Then they moved on to using spray bomb from Home Depot….[Mechanical engineer students] walking through the hospital with a turkey and a bunch of wires under their arm does happen in many places in the country." (October 2005)

These networks and open communities of learning are what enable the Boston region to attract the best and the brightest from all over the world, but it also leads to some challenges when trying to retain them. Like many young 'stars' of their generation,

[2] His team consisted of two other students, James Conner Walsh from MIT and Steven Barrett from Cambridge University. The team is advised by Professor Alex Slocum from the mechanical engineering department at MIT and Dr Rajiv Gupta from the radiology department at Mass General Hospital. Technology transfer institutions are also supporting the project.

Nevan feels the ‘cash burn’ of Boston, even though “coming from the North East [he] is used to high costs”.

While there is plenty of research to show a direct correlation between economic opportunity and high cost of living, the question becomes - at what point does the scale tip and the high cost of living become a problem? According to Bluestone and others, the high costs are now contributing to Boston’s challenges. Figures 1 and 2 show a population and employment decline since 2001. Figure 3 shows a loss of young people between the ages of 25 and 34 between 2001 and 2003 in the State of Massachusetts and Figure 4 a loss of young people between the ages of 20 and 34 between 2001 and 2003 in the Greater Boston region. According to Bluestone’s research, Boston has the highest cost of living in the United States. A family of four needs $64,656 to pay for the costs of housing, transportation, day care, health care, and other basic necessities. This is more than $3,000 higher than in Washington, D.C; $6,000 higher than in New York City; and $7,000 more than in San Francisco. The monthly housing costs are 40% higher than in Austin, Chicago, and Miami and 63% higher than in Raleigh-Durham-Chapel Hill. So while job loss is a major problem, the high cost of living (especially housing is contributing to this problem).

The ideas machine and implications for the politics of place

So along with education, high quality and affordable housing[3] seem to be at the top of many leaders' list as the key policy challenge facing the region. Another major factor appears to be conflicts over local land use regulation and the persistent problem of neighbourhood – or NIMBY[4] – interests over broader regional interests in the planning for the region. It is this point over conflicts over land use that I wish to explore further in this paper as I think it has implications for how we think about place politics in the new knowledge-intensive economy.

One of the interesting debates that emerged in my interviews was the question as to whether or not local neighbourhood voices were somehow hindering economic development progress in the region. On the one hand, I heard the story about how NIMBYISM in the Boston region had a long and deep history in the politics of development. As one economic development expert explained to me:

"Globalization may have made our city more polarized, but our city is also poorer by design because of the ideological rigidity of local neighborhood associations….they block all development and impede progress" (October, 2005)

Here he was referring to the long tradition in Boston of active housing groups that get involved in fighting for affordable housing projects and in turn fight against any housing that would be deemed "not affordable". In many instances, these "not affordable"

[3] Entire papers could be written on the complex housing and education issues facing the region. For more information, please refer to recent reports published through the Rappaport Institute for Greater Boston and the Center for Urban and Regional Policy (CURP) at Northeastern University.
[4] NIMBY - Not In My Back Yard

housing projects are worker or middle-class housing that may have the effect of keeping working or middle-class residents living in the city. My informants' own personal experiences working with both developers and local neighbourhood associations seemed to have coloured his view that neighborhood associations were making the city "poorer by design". By contrast, I heard from many activists, policy thinkers and some academics that this view was exactly the kind of "politics" that was making Boston less political democratic and engaged. As one key informant put it, **"**This is where I disagree…don't neighborhood groups have the right to have their voices heard?" In this context he was referring to the recent controversy over the citing of the BIO4 safety lab in the South End of Boston.

The Bio4Safety Lab controversy

Boston University has proposed to build a national biocontainment laboratory at Boston University Medical Centre in an area known as BioSquare, between Albany Street and Massachusetts Avenue Connector, east of Massachusetts, where the South End and Roxbury meet. More than 25,000 people live within one mile of the location and more than one million live within ten miles. The project, which is expected to bring more than $1.6 billion in grants and other funding to the city, has generated intense community opposition in the three years since Boston Medical Center won a fierce national competition through the National Institutes of Health to site the lab contract in Boston. The lab contract permits Boston University to set up a Bio-Safety Level 4 (BSL-4) lab in Boston after the University obtains environmental and land-use permits from local, state,

and national agencies. BSL-4 is the level of security required for research on this most dangerous and exotic category of infection diseases (with BSL – 1 being the least dangerous and BSL 4 the most).

There are currently only 4 of these level 4 labs in the United States and they are highly controversial because they allegedly study some of the world's most lethal germs like anthrax, Ebola and other deadly pathogens. What makes this project particularly controversial is that of the four that are located around the United States (the others are in remote parts of San Antonio, Atlanta, and Frederick, MD), this is the only Bio4Safety lab that is located in a highly populated, dense, urban centre. Moreover, the revelation last year that a laboratory slip-up led three Boston University scientists to become infected with tularemia, a flu-like disease sometimes referred to as "rabbit fever," has fueled further criticism of this plan to build this state-of-the-art research lab in the primarily low-income Black neighbourhood of Roxbury in downtown Boston.

Particularly vocal are local resident's associations and the organization, Alternatives for Community & Environment (ACE), a neighborhood group, which fights against environmental injustices. According to Ms. Allen, an organizer for ACE, this lab would be yet another burden on this low-income community. "What would possess anybody to put this type of facility in the heart of Boston?" asks Ms. Allen, fearing that it will invite "accidents and terrorism" (Field, 2004). Intense neighborhood opposition is now a hurdle for Boston University, although University leaders are optimistic that they will receive the permits as they are considering no other site. They also maintain that Boston – with its dynamic biotechnology industry – is the perfect place to study infectious diseases such as these. "Bioterrorism 'may be the biggest biomedical

challenge in the coming decade' says Richard J. Towle, the university's vice president. 'And Boston, as a biomedical-research center, ought to be involved" (Field, 2004). Boston University estimates that the project would create 1300 construction jobs and 660 permanent jobs. The lab has the support of Mayor Thomas M. Menino, Boston's mayor and most of the local union leaders, who argue that it fills the voice left by the decline of manufacturing and shipbuilding industries (Field, 2004).

At the time of this writing, all the environmental and land-use permits from all levels of government have yet to be finalized, but there is a growing scale of opposition to the proposed project. A recently released film "*Boston, biological weapons and the new arms race*" by Brollfilms and a growing coalition of activists, scientists and university professors are challenging the project on all fronts and at all levels of government. The politics of the project around exchange versus use value have a deep scalar dimension and certainly raise some profound questions about the politics of the knowledge economy in the competitive city. Let's now turn to some of this discussion.

Conclusion and Implications

So how does the Boston example inform our thinking about the competitive city in the knowledge-intensive economy? First, the research confirms that recent economic and occupational change in the new economy is forcing a rethink of traditional urban political theories like growth machine and elite. Most important, universities and medical centres, once considered only to be "auxiliary" players in the politics of local economic development could now be considered 'inside actors' and 'real players'. Their rise in

statute must also be seen within the context of the changing dynamics of global capitalism and in particular the loss by many cities of their traditional industrial base and rooted business leaders. Corporate buyouts and take-over bids have meant that cities must now turn to those institutions that have deep roots, are large employers and aren't easy take-over targets. Most notable is the role that universities and medical sectors are now playing and expected to play in local economic development.

Boston, of course, has always had a strong education and medical sector economy. However, like many cities in North America, the explicit role of universities and medical institutions in economic development is only now being realized. In particular, Boston's research-intensive institutions are central pillars in the future growth and direction of the knowledge-intensive economy, especially in fields like medical devices, biotechnology and genetics. Up until recently, there has been very little written on the local politics that this kind of economic development generates. On the surface, this kind of high-quality, high-value-added knowledge-intensive activity appears to have only positive benefits to a community. However, my research in Boston points to some very real challenges, especially around housing and local land use. On the land use front, through the example of Boston Universities' 'biosafety' laboratory, we see the relevance of Logan and Molotch's growth machine thesis. The politics between the use versus exchange value of land are still relevant, but arguably more complex with more intense 'socio-spatial' and 'scalar politics'. The question of NOT building the lab in this location isn't only about the loss of alleged local construction and permanent research jobs – or about addressing equity and justice issues in its citing. The debate also becomes an

intense political debate over the global war on terrorism and in particular on the public health security and preparedness of the nation and beyond.

Another important lesson from this research – which is relevant for this forum on Richard Florida's creative class thesis– is that we must remember that Florida's thesis and the public policies that have generated from his work – were derived from empirical research conducted with young, mostly under 30 year old males working in high-technology sectors across a number of cities in the United States during the heyday of the technology boom in the late 1990s. Much has changed since then, including the technology-bust of the early 2000s and the job loss in the computer sector during this time. Boston, for example, was certainly a victim of this economic transition and as a consequence lost jobs and youth, especially youth between the ages of 20 and 34. Research by Bluestone confirms that job loss has been a problem and that the high cost of living in Boston (especially housing) is contributing to this problem. Therefore, like Glaeser and Sawicki, I would argue that civic leaders in Boston (and elsewhere) are best to focus on the basic infrastructure required for skill attraction (such as the availability of good education and housing) rather than quick-fixes to create a hipster downtown.

However, as became evident in the Boston research, even basic infrastructure required for skills attraction is not beyond the politics of place. There are still tremendous tensions and struggles around resources in the city and how these are produced by, and produce differentiated urban space. Much of the research to date on the new politics of the knowledge-intensive city (particularly the work by Florida) implies somehow that the knowledge-intensive city is "beyond politics"; that all innovative activity is somehow positive and productive for the public good. Yet like the cities that have gone before it,

the knowledge-intensive city in the new economy is a site of tensions – in some instances positive and in others negative – which arise from living close to one another in often limited space.

List of Tables and Figures

Table 1: Share and value of research activities by sector, 1989 and 2004; Source: Statistics Canada (2005)

	1989		**2004**	
	% of Total	$ millions	% of total	$ millions
Business	50.2%	4,779	51.2%	12,534
Universities	29.9%	2,845	38.1%	9,319
Federal	16.1%	1,533	9.1%	2,234
Provincial	2.9%	273	1.3%	330
Not-for-Profit	0.9%	89	0.3%	70
TOTAL		9,519		24,487

Figure 1: Greater Boston's Population, 2000-2004; Source: Bluestone (November 2005)

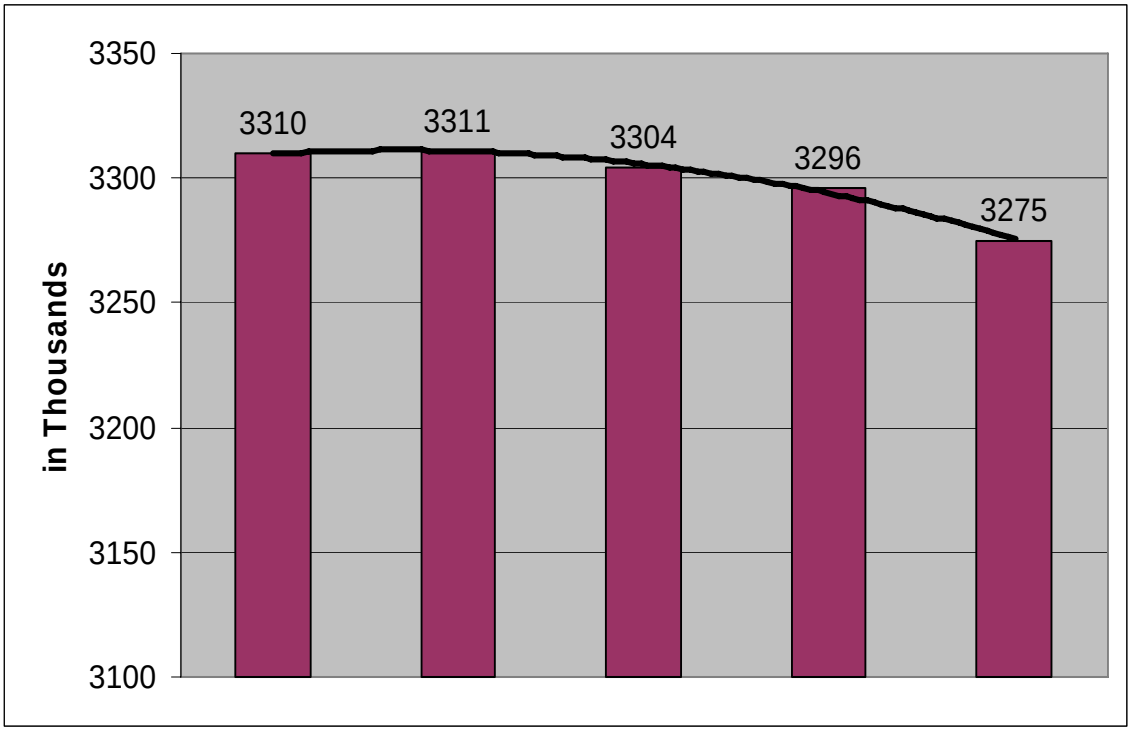


Figure 2: Greater Boston Employment Trend, 2000-2004
Source: Bluestone (November 2005)

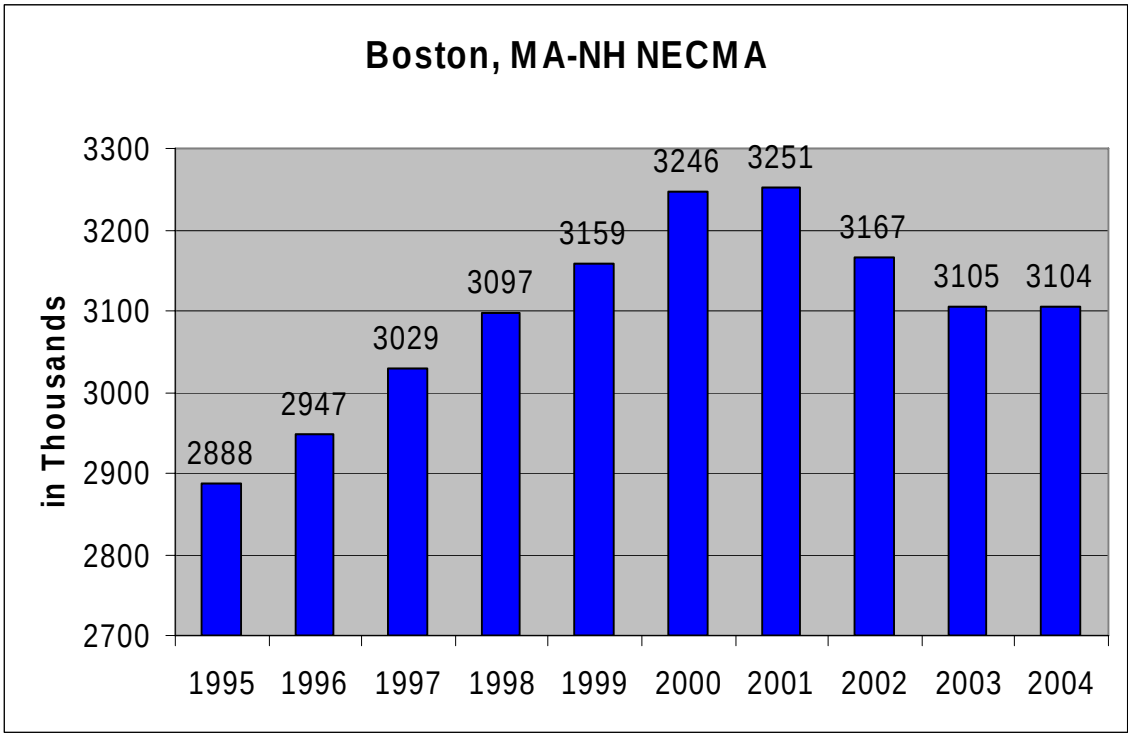


Figure 3: Loss of Young People, Massachusetts versus the United States
Source: Bluestone (November, 2005)

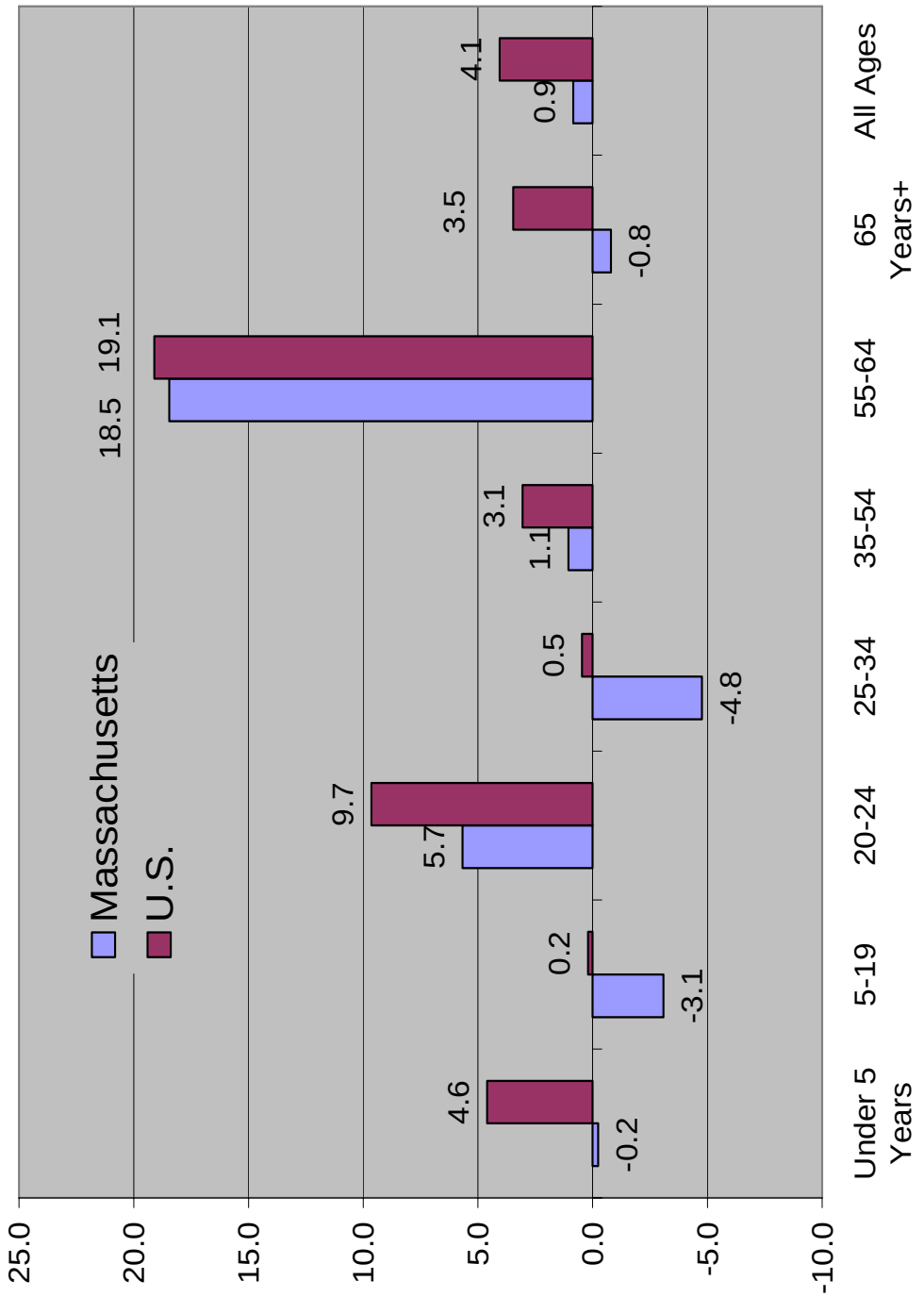
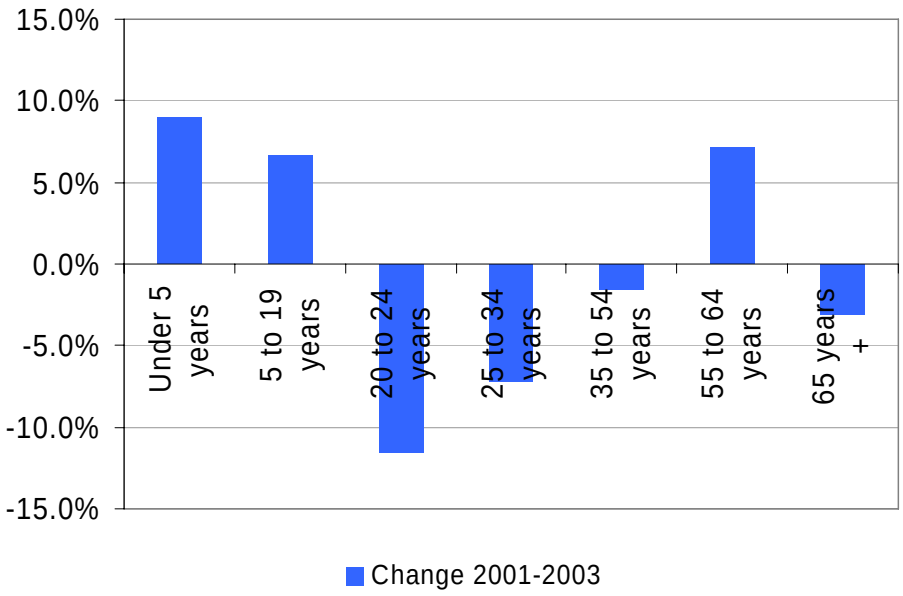


Figure 4: Loss of Young People, Greater Boston Area, 2001-2003; Source (Bluestone, 2005)



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