A Framework for Action:

The State Regional Economic Development Strategy

January 29, 2009

Northeast Regional Profile

Partnership

Reform

Results

Deval Patrick
Governor

Tim Murray
Lt. Governor

Daniel O'Connell
Secretary

Executive Office of Housing & Economic Development
COMMONWEALTH OF MASSACHUSETTS

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A Framework for Action is the product of an extensive review of plans and analyses prepared by public agencies and academic and private institutes along with interviews and meetings with municipal officials and staff, regional planning agencies, economic development experts, and business and academic leaders from throughout Massachusetts. The project team worked in close collaboration with state officials from throughout the Patrick-Murray Administration, particularly the Governor's Office and the Development Cabinet secretariats of Labor and Workforce Development, Energy and Environmental Affairs, Administration and Finance, and Transportation and Public Works.

Purpose of the Regional Economic Development Strategy

"I will ask municipalities to enter into a new partnership with state government, so that we can work together to reduce their operating costs, to better plan across regions, and to rebuild city and town centers into stronger economic cores."

Governor Deval Patrick, Inaugural Address, Boston, January 4, 2007

"[W]e … need to stop seeing our cities as the problem and start seeing them as the solution. Because strong cities are the building blocks of strong regions, and strong regions are essential for a strong America. That is the new metropolitan reality and we need a new strategy that reflects it."

President Barack Obama, as candidate, speaking to the U.S. Conference of Mayors, Miami, June 21, 2008

MISSION

To develop a **framework** for state programs and investments in partnership with local and regional leaders that leads to **sustained economic growth** and **shared prosperity** throughout the Commonwealth.

TASKS

Identify assets, initiatives and investments that lead to realistic near-term and long-term economic growth throughout the Commonwealth.

Communicate a straightforward framework for the Patrick Administration's economic development priorities.

Prioritize state investments and initiatives and promote meaningful collaboration with community, civic, business, municipal, and legislative leaders throughout the Commonwealth.

Massachusetts, A tradition of reinvention & renewal

A National Leader

Massachusetts is a dynamic and diverse state with a hardworking, entrepreneurial culture and a rich legacy of natural resources, educational excellence, civic leadership and historic contributions to the nation and the world. Today, Massachusetts is a leading exporter in the areas of the life sciences, advanced manufacturing, higher education, research & development, financial services and the creative arts. Massachusetts is home to one of the highest median household incomes in the United States and boasts some of the best public schools in the nation.

Massachusetts is a 21st Century success story. The evidence of our state's competitive strengths' grows each day. Recent studies by nationally renowned institutes regularly rank Massachusetts as a leading center of innovation, entrepreneurship and home to one of the most talented populations in the world.

Our state's unique capacity for reinvention and renewal has helped spawn new industries, as well as new movements in the arts and social advocacy. Massachusetts is proud to be a leader, whether in education reform, new technologies, or the acknowledgment of basic human rights. Massachusetts residents balance a profound respect for our historic heritage and traditions with the acknowledgement that we must adapt to new challenges and re-think how we grow shared prosperity in our communities and provide for services and infrastructure in the 21st Century. For nearly 400 years, the people of Massachusetts have reinvented our economy and re-imagined our common purpose many times and our state is profoundly enriched by the contributions that each generation makes during its moment of leadership.

Massachusetts, A tradition of reinvention & renewal

Economic Transitions, Regional Challenges

Massachusetts has a very strong and diverse economy, however, statewide numbers do not tell a complete story. A snapshot of the state's economy at any time from World War II to 1970 would have shown job opportunities with good incomes throughout Massachusetts. Regions like the Berkshires were major centers of manufacturing while the Cape and Islands were far more rural than today and had lower incomes. At its postwar height, Massachusetts was a thriving center for manufacturing, in traditional fields like textiles and furniture as well as new, knowledge-based sectors like information technology.

Nearly 40 years later, Greater Boston, including the metro-west region from Route 128 to Interstate 495, and high-tech centers in northeast Massachusetts, are major international centers of research & development, production and exports. The Cape and Islands have transformed into a comparatively prosperous region due to the growth of retirees and second-homeowners there. The decline of traditional manufacturing and the rise of the knowledge economy have disconnected many of the state's regions and their cities from the export-income and investment that is the life-blood of a thriving economy. The stark result has been lower incomes, less job growth and fewer opportunities in many of the state's regions compared to Greater Boston.

Today's challenge is to leverage our state's advantages and assets to bring prosperity to every region. Unlike many states, Massachusetts has a strong competitive advantage in its leading industries and unparalleled workforce. Massachusetts regions each have their own unique qualities and historic contributions to the state's economy and quality of life. The key to rebuilding a strong statewide economy is strategically and effectively leveraging all of the state's assets in a framework for regional reinvention and renewal. The Framework for Action is a strategy for regional prosperity.

Organization of Strategy

A FRAMEWORK FOR ACTION: The State Regional Economic Development Strategy

The State Regional Economic Development Strategy is laid out in three sections: the framework for regional development; the framework for action; and in-depth economic profiles of the Commonwealth and each region. While each region has its own peculiar trends, assets, and challenges, there are many common issues. The first two sections allow the state to apply a common framework for regional development and a common framework for action to each region in order to build sustainable and shared regional prosperity across the Commonwealth.

Section One: Framework for Regional Development

This section provides a theoretically-grounded, practical guide to the state's approach to regional development. The Framework for Regional Development is an empirically-grounded model for targeting state attention and investment to create regional prosperity.

Section Two: Framework for Action

This section explains the approach to executing an action agenda. The Patrick-Murray Administration is committed to a **Partnership** approach to economic development that works with local, regional, and civic stakeholders and leverages federal and private resources and institutions to address the needs in each region. The state has and will continue to identify and execute **Reform** through this stakeholder partnership. And, finally, the Patrick-Murray Administration is committed to executing reforms, programs and investments that bring **Results**. This section will identify specific items for action to will build the foundations for new economic growth and prosperity across the Commonwealth.

Appendices: State and Regional Profiles & The State of the Massachusetts Housing Market

The Framework for Action is based on in-depth economic analysis of the state and its regions. The appendices include in-depth economic and housing market profiles of the Commonwealth and each of the seven MassBenchmark regions across the state. The profiles include maps of economic trends, important regional industrial sectors and key housing market conditions. The State of the Massachusetts Housing Market report is available at www.mass.gov/eohed.

Benchmark Regions and sub-regions

Principle Economic Regions in Massachusetts

Source: MassGIS, UMass Donahue Institute

Berkshire
- North
- Central
- South

Boston Metro
- Boston
- MetroWest

Cape & Islands
- Upper Cape
- Lower Cape
- Islands

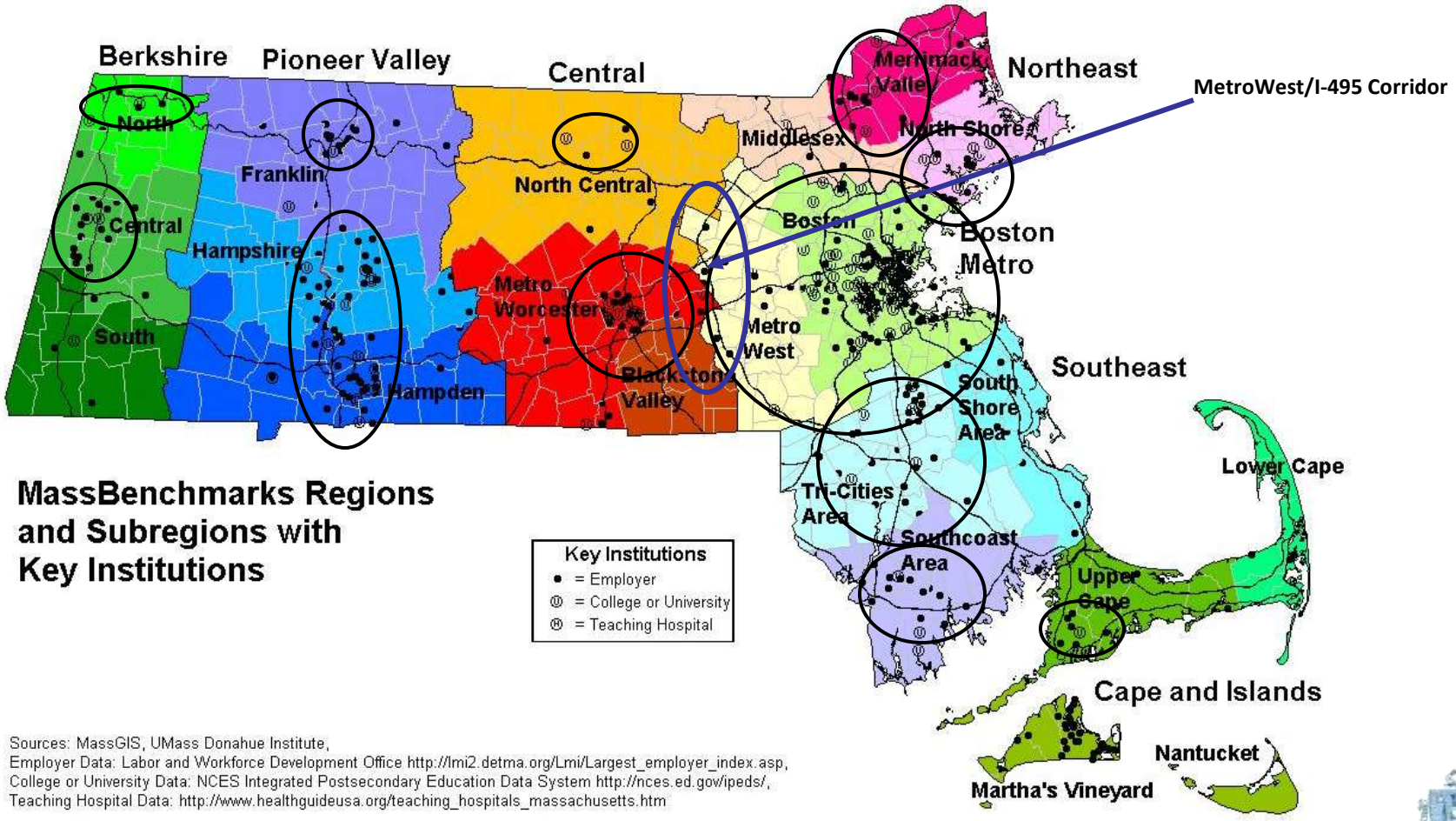
Central
- North Central
- Metro Worcester
- Blackstone Valley

Northeast
- Middlesex
- Merrimack Valley
- North Shore

Pioneer Valley
- Franklin
- Hampshire
- Hampden

Southeast
- South Shore Area
- Tri-Cities Area
- Southcoast Area

Representative Key Institutions, showing geographic concentrations



Sources: MassGIS, UMass Donahue Institute,
Employer Data: Labor and Workforce Development Office http://lmi2.detma.org/Lmi/Largest_employer_index.asp,
College or University Data: NCES Integrated Postsecondary Education Data System http://nces.ed.gov/ipeds/,
Teaching Hospital Data: http://www.healthguideusa.org/teaching_hospitals_massachusetts.htm

Framework for Regional Development

REGIONS MATTER

In the 21st Century, people live, work and recreate across town and often state borders. Regions are the scale in which housing, labor and job markets intersect, and improving the health of our regional economies is critical for individual opportunity and community development. Empirical research carried out over the past 10 years demonstrates that the prosperity of suburban communities is tied to the prosperity of their urban core, necessitating a regional approach to developing economic prosperity. The economic health of regions is tied to the economic health of their urban centers. Where cities are distressed, they will be an anchor to growing regional prosperity. Where they do well, they will lead regional economic growth.

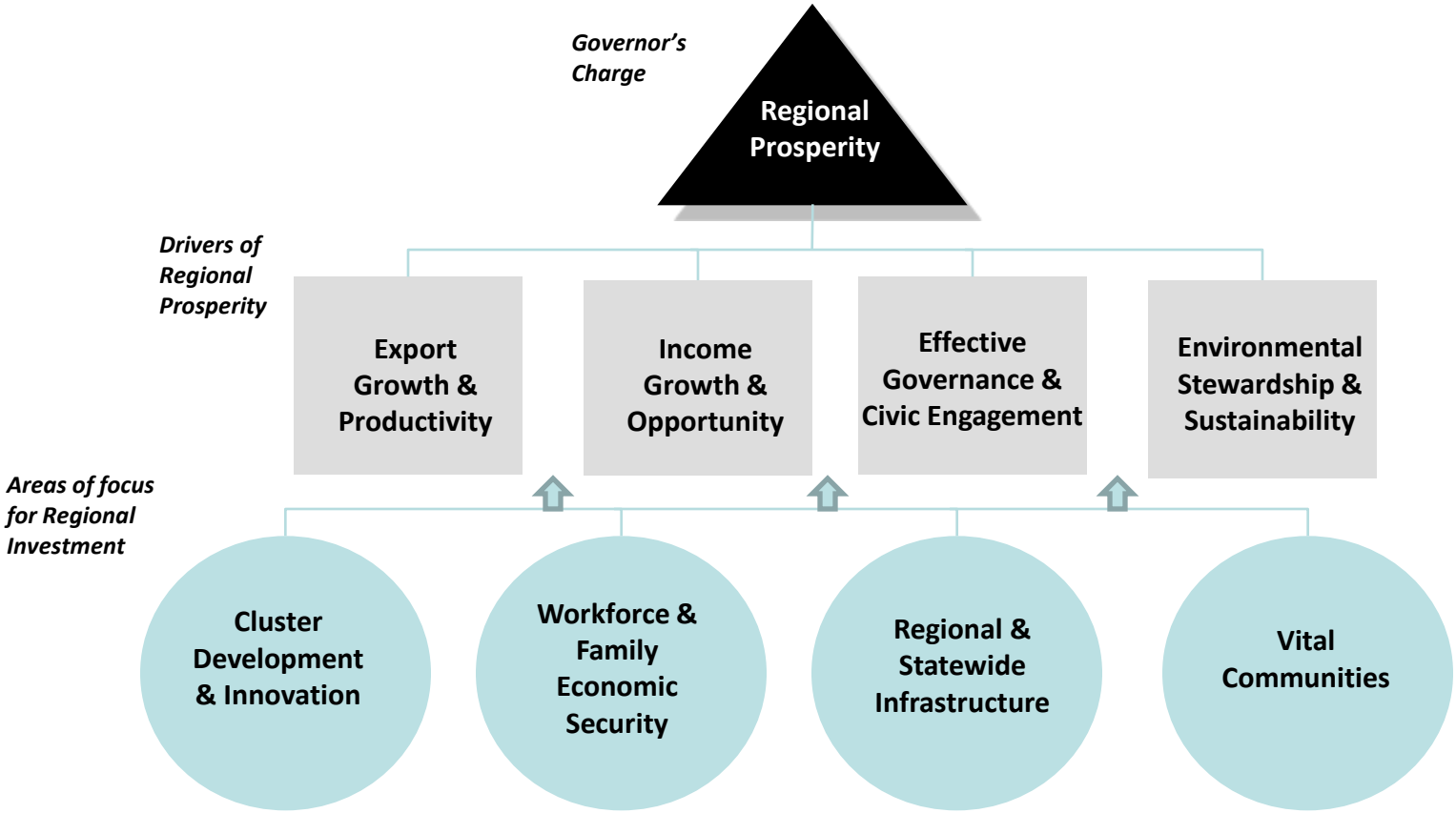
FRAMEWORK FOR REGIONAL DEVELOPMENT

There are four foundational elements that are "drivers" for creating regional prosperity: Export growth and productivity; Income growth and opportunity; Effective governance and civic engagement; and Environmental stewardship and sustainability. Successful regions with sustained prosperity show evidence of these elements. The economic analysis conducted for this report, as well as the input of state and regional experts, led to clear conclusions regarding the main areas for the state to focus attention and investment to support regional prosperity: cluster development and innovation; workforce and family economic security; regional and statewide infrastructure; and vital communities. The chart on the following pages illustrates the Framework for Regional Development.

METHODOLOGICAL APPROACH

The Executive Office of Housing and Economic Development was charged by the Governor with developing a regional approach for shared prosperity. The project team reviewed regional plans and economic development documents & reports and analyzed the most recently available data on the state's regional economic trends and conditions. This empirical approach was developed alongside (1) an overview of the theoretical literature that attempts to explain how regions grow and prosper and (2) interviews with local, regional and state officials in the seven MassBenchmarks regions throughout the Commonwealth. These different approaches – which neatly complemented each other – resulted in the Framework for Regional Development.

Framework for Regional Development



Adapted from "Dimensions of American Prosperity" Brookings Institution

Framework for Regional Development

Drivers of Regional Development

EXPORT GROWTH & PRODUCTIVITY

Regional prosperity primarily depends upon local production of competitive goods and services that bring net income into the region through exports. Exports can be manufactured goods, services, licensed intellectual property or income generating activities such as national and international tourism or education. Productivity gains lead to increases in net income and are necessary to maintain the sustainability of regional growth.

INCOME GROWTH & OPPORTUNITY

Dynamic regions offer opportunities for individual creativity, initiative and personal welfare. The sustainability of regional growth depends upon an expanding middle class and personal and professional mobility. Equity and opportunity are intrinsic public goods and they are also a catalyst for innovation, entrepreneurship, civic leadership and a labor market that is responsive to changes in employment needs.

EFFECTIVE GOVERNANCE & CIVIC ENGAGEMENT

The conditions for economic growth and investment are directly related to the capacity and credibility of governance institutions. Efficient, accessible and responsive public institutions build a sustainable platform for public confidence, civic participation and create effective vehicles for public/private partnerships.

ENVIRONMENTAL STEWARDSHIP & SUSTAINABILITY

Fostering proper environmental stewardship reflects the Commonwealth's values and history and provides essential quality-of-life amenities that attract and retain a workforce and economic activity. The sustainable use of resources and infrastructure affects long-term development capacity, the environment and the state's fiscal balance.

Areas of Focus for Regional Investment

CLUSTER DEVELOPMENT & INNOVATION

The Patrick-Murray Administration's policies and public/private initiatives are based on the identification of business and economic conditions, and the state's leading export clusters, particularly in high-growth, knowledge-sectors. Structural and institutional initiatives are developed in a collaborative fashion to sustain or build the long-term connection of high growth clusters within regions to state, national and global markets. Massachusetts' regional economies have a mixture of traditional industries, such as manufacturing, and emerging sectors, typically connected with Greater Boston's export strengths centered in the knowledge economy.

PATRICK-MURRAY ADMINISTRATION CLUSTER DEVELOPMENT INITIATIVES (Examples)

The Patrick-Murray Administration, in partnership with the Legislature, launched a 10 year, one billion dollar initiative through the Massachusetts Life Sciences Center (MLSC) to promote the life sciences within the Commonwealth of Massachusetts. The MLSC is tasked with investing in life sciences research and promoting economic development across the state and in hard to develop sub-sectors such as bio-manufacturing. MLSC initiatives include financial investments in public and private institutions growing life sciences research, development and commercialization as well as building ties between sectors of the Massachusetts life sciences community.

The Patrick-Murray Administration, through the Executive Office of Housing and Economic Development's Department of Business Development (DBD), supports the creation and retention of businesses in traditional and emerging business clusters. DBD is engaged in a range of activities, from outreach to business leaders through regular industry roundtables and events, to daily work at the Massachusetts Office of Business Development connects companies with state programs and incentives.

Framework for Regional Development

Areas of Focus for Regional Investment

WORKFORCE & FAMILY ECONOMIC SECURITY

Regional growth requires a sustained influx of workers, entrepreneurs and civic leaders to support the growth of industries and the supportive infrastructure that make regions function. Massachusetts' export growth industries are based in the knowledge economy: education and workforce training are the cornerstone of regional competitiveness. Residents of all ages need to prepare for life's costs – shelter, medical expenses, retirement – and chart a path for their ambitions and goals. Economic security, access to financial services and support, and educational and career opportunities are essential to participate in economic and civic life and they are integral to regional revitalization.

PATRICK-MURRAY ADMINISTRATION WORKFORCE INITIATIVES (Examples)

In 1993, the state embarked on an ambitious and largely successful program of education reform. In the fifteen years since, suburban schools have seen improvement, but many urban schools continue to struggle. The Patrick-Murray Administration has established the Readiness Project to fill in existing gaps from education reform and to address the serious needs of our urban schools.

The Executive Office of Labor and Workforce Development has developed the Regional Workforce Strategies Initiative, a statewide effort to build regional pipelines to prepare Massachusetts workers for high demand jobs. This initiative brings leaders in business, education, government, and workforce development together to develop concrete plans and partnerships to fill jobs that are in-demand in each region of the state.

Under the leadership of the Legislature and the Patrick-Murray Administration, the Asset Development Commission is preparing recommendations to reform existing regulations and expand programs and technical assistance to improve financial planning, economic security and asset-building for Massachusetts residents.

Areas of Focus for Regional Investment

REGIONAL & STATEWIDE INFRASTRUCTURE

Regional economies function through the transaction and movement of ideas, goods, services and people within and between regions. Economies rely upon predictable and sufficient goods and services to function at the level of the household, community and firm. The state shapes investment patterns and development through the provision of real infrastructure goods that improve productivity, connectivity and capacity. State and federal law similarly shape investment, land use and development decision-making through legal means and intermediary institutions.

PATRICK-MURRAY ADMINISTRATION INFRASTRUCTURE INITIATIVES (Examples)

The South Coast Rail project is a proposed rail connection from Boston to New Bedford and Fall River that would create significant mobility improvements and better link employment centers and residential locations. The project is foundational to regional economic development efforts in the Southeast region: efforts to improve educational outcomes, urban regeneration and export-oriented cluster development are the other elements that will make the rail investments worthwhile.

Broadband connectivity is the single most important economic development priority for Berkshire County, and many other towns in the Pioneer Valley, Cape Cod, Central Massachusetts and elsewhere. Akin to electricity, in-door plumbing and the telephone, it is impossible to understate the competitive disadvantage that people, businesses and municipalities confront in the absence of broadband internet service.
Today, thanks to the Massachusetts Legislature and the leadership of Governor Patrick, the state has the new Massachusetts Broadband Institute, capitalized with $40 million in bond-financed funds in its Broadband Incentive Fund.

Areas of Focus for Regional Investment

VITAL COMMUNITIES

Within the regional economies of Massachusetts, municipalities are at the heart of development decision-making, educational services and community and regional visioning. The Commonwealth's regions confront significant housing market and economic development challenges, with a scarcity of truly development-ready sites for business growth or housing that meets the demand of workers and residents. Cities and towns wrestle with a host of fiscal, environmental, transportation and other very real demands. The revitalization of regional economies in Massachusetts is dependent on a state-local partnership that provides capability and technical assistance to communities in exchange for reasonable efficiencies and support of regional priorities that are most likely to lead to sustainable regional prosperity.

PATRICK-MURRAY ADMINISTRATION VITAL COMMUNITIES INITIATIVES (Examples)

EOHED's Department of Housing and Community Development recently completed the Commonwealth's first statewide housing market assessment in over 20 years. The regional analysis and significant public input from municipalities and housing experts will form the basis of strategies tailored to the housing needs, across incomes, in each region of the state.

The Executive Office of Housing and Economic Development has created the Growth Districts Initiative to provide communities with technical assistance for significant new growth. Within identified growth districts, EOHED works with the community and property owners to make the district truly "development ready" with respect to local permitting, state permitting, site preparation (including brownfields remediation), infrastructure improvements, and marketing. The objective is to create a level of "development readiness" within each of these growth districts comparable to that now available at Devens, a location proven to be highly attractive to new development and to be truly competitive at a national and international level.

Guiding Principles of the Framework for Action

BUILD UPON EXISTING ASSETS

Vibrant, healthy regional economies connect institutions and assets in a strategic manner that leverages resources and shapes community visions into measurable actions. Strategic planning and investments that are likely to lead to sustainable growth are based on an understanding of key assets, institutions and capabilities – state and local – and the strategic cross-institutional collaborations and partnerships that foster a sustainable growth climate for industries and communities.

FOCUS ON THE FUNDAMENTALS

The critical challenge for Massachusetts is to rebuild the foundations for growth in the state's regions. The innovative and productive capabilities of Massachusetts' people and firms are best unleashed when their public partners focus on the fundamental components of healthy communities, regions and markets: vital communities; sufficient and reliable infrastructure; workforce and family economic security; and industry and innovation.

PLAN AHEAD

The goals of the strategy will be best achieved where local, regional and state partners make and implement long-term plans that promote these goals and address the needs of the community. The Administration coordinates economic investments and policies through the Development Cabinet and the state's quasi-public corporations. Whether at the state, regional or local level, the goal is to plan ahead together and execute plans together.

PARTNERSHIP, REFORM, RESULTS

The Patrick-Murray Administration is committed to a Partnership approach to economic development that works with local, regional, and civic stakeholders and leverages federal and private resources and institutions to address the needs in each region. The state is leading initiatives that will incorporate long-needed reforms at the state-level and incent the adoption of best-practices locally. The Patrick-Murray Administration is committed to achieving meaningful, timely results that build the foundation for economic growth and prosperity across the Commonwealth.

Cluster Development & Innovation

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

Regional prosperity is fundamentally-based on the income and opportunity for meaningful careers that is created through vital export-oriented industries. Massachusetts boasts competitive companies and world-class institutions in every region of the Commonwealth. The growth of globally-dominant export clusters in Massachusetts is highly-concentrated in eastern Massachusetts, from Andover to Metro-West to Boston. Still, examples of outstanding research, manufacturing, creativity and innovation exist in every corner of the state. The challenge for the Patrick-Murray Administration and its many partners in the private sector, higher education, municipal government and regional institutions is to continue the sustain and nurture the growth of important regional sectors, expand the global competitiveness of the state's dominant industries, and to ensure that the distribution of high-growth sectors is more evenly-distributed across the state.

Expanding the statewide reach of the Life Sciences Super Cluster, Information Technology sector, Creative Economy, Clean Energy Cluster, Financial Services and other leading sectors will benefit greatly from key investments identified elsewhere in the strategy: education and workforce development, community vitality and regional development capacity, enhanced mobility and investments in broadband and other infrastructure. In addition, the state's regional economies will benefit from targeted initiatives that are attuned to the specific barriers to development and opportunities for growth in the state's leading state and regional export industries.

The Patrick-Murray Administration is committed to partnering with the state's businesses, state and federal legislative leadership, regional leaders and leading institutions to enhance the state's competitiveness. Fortunately, through the far-sighted leadership of Massachusetts Legislature, civic and business leaders, the Patrick-Murray Administration and past Administrations, the state already has many of the tools it needs in place to succeed.

Cluster Development & Innovation

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

In 2008, the Legislature passed, in partnership with the Patrick-Murray Administration, the Life Sciences Act, Green Communities and Green Jobs Acts, and the state's Broadband Bill. Past Legislatures approved the state's expedited permitting act, Chapter 43D, created a state permitting ombudsman, and created industry and business support teams within the Massachusetts Office of Business Development to support the retention and creation of jobs.

As critically, past legislatures created and funded the development of the John Adams Innovation Institute (JAII) within the Massachusetts Technology Collaborative, and the Massachusetts Technology Transfer Center (MTTC) hosted by the University of Massachusetts. JAII and MTTC join the newly-expanded Massachusetts Life Sciences Center (MLSC) as essential intermediary institutions that build local capacity and seed cluster-development within Massachusetts' regional economies. The quasi-public institutions provide expertise that is attuned to best practices within industry and academia and has the capacity to respond to economic opportunities within Massachusetts regions at a pace that government often lacks.

The partnership of the state's leading state and regional economic development agencies, the Patrick-Murray Administration, and leading businesses and institutions throughout the state will lead to the identification of the most effective strategies to support and catalyze local development.

Cluster Development & Innovation Action Steps

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

Action Steps:

Near-term

Develop key initiatives and implementation strategies to support targeted clusters in the Life Sciences, Creative Economy, Information Technology, Manufacturing, Clean Energy and Financial Services sectors.

Develop specific action strategies to expand targeted industries, at the appropriate scale, to regions throughout the state. The MLSC's regional technology centers and other state centers of excellence should be a key component of the strategies. EOHED and MOBD can provide substantial support connecting businesses and other key stakeholders to the quasi-public corporations.

Improve coordination and alignment of resources at the state's quasi-public corporations.

Support recapitalization of the John Adams Innovation Institute and Massachusetts Technology Transfer Center.

Key Initiatives: Life Sciences, Clean Energy, Manufacturing, IT and Creative Economy.

Long-term

Support institution-building at the local level through mission-driven strategic planning and investments, supported by the state's industry and quasi-public corporations.

Work with the University of Massachusetts to support regionally-based development strategies that are aligned with research strengths and local industry.

Workforce & Family Economic Security

EDUCATION & WORKFORCE DEVELOPMENT

Massachusetts regional economies and some urban areas within Greater Boston have education and skill levels well-below the state average. Private investment and growth in the regional economies are dependent upon improvements in educational attainment, improved connections between growing sectors and occupations and workforce development programs, and more robust efforts to connect students and workers with employment opportunities through co-ops, internships and incentives for regional retention. Massachusetts' education and workforce challenges are most acute in the state's regional cities and concentrated attention must be paid to improving educational outcomes in these communities.

Action Steps:

1. EOHED will partner with the Executive Office of Education through the Governor's Readiness Cabinet to support efforts to improve educational attainment at the elementary and secondary education levels, particularly in urban areas. Education and training are and will be a centerpiece of the state's regional cities initiative;

2. EOHED will partner with the Executive Office of Labor and Workforce Development to improve connections between workforce development programs and businesses, and collaborate on targeted clusters, such as the Life Sciences, Manufacturing and Clean Energy to link state programs and incentives to high growth occupations;

3. EOHED will work with leaders from EOE, EOLWD, the Massachusetts Life Sciences Center and business and academic stakeholders to improve efforts to retain workers through co-ops, internships and regional marketing.

Workforce & Family Economic Security

FAMILY ECONOMIC SECURITY

Massachusetts residents of all ages need to prepare for life's costs – shelter, medical expenses, retirement – and chart a path for their ambitions and goals. The foreclosure crisis is an immediate challenge that requires the urgent response of the Patrick-Murray Administration, state and local partners and the state's leaders in Washington, DC. The crisis emphasizes the need for focused federal-state public/private partnerships to respond to needs for financial planning and services to support retirement planning, educational costs and other critical life needs. The state's recently completed Housing Market Assessment documented that the state greatly needs to expand housing opportunities for extremely-low-income residents.

Action Steps:

1. EOHED will continue taking steps to respond to the foreclosure crisis. Steps include statewide workshops, technical assistance and advocacy designed to keep people in their homes. The Office of Consumer Affairs and Business Regulation has strengthened rules to prevent mortgage fraud and worked with lenders to expand loan restructuring. The Department of Housing and Community Development has received substantial federal and state funding to implement the neighborhood stabilization program to acquire foreclosed properties;

2. EOHED will work with Legislative leaders and its partners in the private, nonprofit and philanthropic sectors to implement the forthcoming recommendations of the Asset Development Commission. The objectives of the Commission are to reform existing programs and regulation and launch new initiatives designed to improve financial planning and asset development for the state's residents;

3. The Patrick-Murray Administration will partner with academic leaders and financial experts to analyze and respond to the challenges Massachusetts residents confront financing educational costs and funding their retirements.

State & Regional Infrastructure

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

The first responsibility of the Commonwealth of Massachusetts is to ensure the safety and reliability of the state's transportation and public works. The daily commute from home to office along any of the state's most-congested highways provides a good example of how individual decisions about where to live, work or invest can collide to diminish quality of life and economic efficiency.

Massachusetts' network of roads, rail, ports and air facilities link markets for employment, goods and services, creating a backbone for commerce and civic connectivity between the regions of the state. Efficient, reliable and safe transportation infrastructure is essential for people, communities and businesses to connect to opportunities of all kinds.

Over the past 20 years, economic growth in the Commonwealth has been concentrated in areas highlighted by: a skilled workforce; strong companies and institutions based in emerging industries and technologies; excellent linkages to national and international markets; and developable land with sufficient transportation infrastructure. Overwhelmingly, economic development and household income growth has occurred along and inside the arc of Interstate 495, which includes Greater Boston and parts of Central, Southeastern and Northeastern Massachusetts. Though only one part of the story, the construction of major roadways, mass transit and airport improvements within eastern Massachusetts over the past 30 years has accelerated both land development (sprawl) and economic growth. The regions farthest from Metropolitan Boston have suffered the greatest declines in job growth and incomes.

State & Regional Infrastructure

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

Today, the challenge for Massachusetts is to maintain and improve the mobility and connectivity of people and businesses in the densely-developed communities of eastern Massachusetts, while making the kind of foundational investments in other regions that will improve intra-state mobility and link markets to national and international customers and investment partners. Balanced state growth – and the key investments that make that possible – is not merely a matter of equity: improving the efficiency and reliability of transportation networks throughout the state will improve the competitiveness of the state's businesses and people by expanding access to housing markets, workforce talent and investment opportunities.

The state's transportation finances and multiple administrative agencies are complex and the subject of a substantial reform effort by the Patrick-Murray Administration. The goal of the Framework for Action is to identify the primacy of transportation planning and investments to state and regional economic development. Each region of the state has unique challenges to improve intra-regional mobility while incorporating the principles of efficient, sustainable development. The state's regions also confront large-scale challenges to better link the region's businesses and populace to Northeast and New England, national and international markets. Enhanced air and rail connections are often promoted for their benefits for individual lifestyles or commuting options. In fact, these investments are far more critical to stimulate business-to-business transactions and direct investment.

The largest and most complex regional transportation needs, such as expanded regional and interstate passenger rail service, may require both patience and enhanced resources from the Federal Government. Inter-regional transportation planning efforts, such as the current corridor planning initiatives along Routes 128 and Interstate 290, require strategic focus, good analyses, and the cooperation of multiple stakeholders from nearby communities and the state. The state's transportation and mobility issues are challenging, but their steady resolution is a fundamental task of the state's regional economic development strategy.

State & Regional Infrastructure Action Steps

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

Action Steps:

The Executive Office of Housing and Economic Development will continue to work closely with the Executive Office of Transportation and Public Works on its state transportation plans for passenger and freight traffic. EOHED will provide input to the key economic development implications of transportation investments. Key opportunities include:

Intra-regional

1. Focus on corridor-planning initiatives in hot-spots, improve transportation demand mitigation efforts and shape development opportunities to alleviate congestion (Route 128, I-495, Route 7, Route 28, etc.);
2. Support economic development by implementing the Central Artery-Third Harbor Tunnel mitigations (Somerville extension, Fairmont Line);
3. Expand/improve public transit to reinforce development densities in existing job centers .

Inter-regional

1. Implement major inter-regional transportation improvements, including: South Coast Rail; Fitchburg Line improvements; Worcester Line improvements; CT/MA Commuter Line expansion to Springfield;
2. Support expanded Federal funding for inter-city high-speed passenger rail, including upgrades to the Acela service and evaluation of Boston-Worcester-Springfield High Speed Train;
3. Development of freight-related opportunities at inland and coastal ports;
4. Improve air connections to Westover Airport, reintroduced international service to Bradley Airport in Connecticut, and new direct-flight service to Logan Airport.

State & Regional Infrastructure

INFRASTRUCTURE: STATEWIDE INFRASTRUCTURE FOR THE NEXT 25 YEARS

In addition to transportation infrastructure or local infrastructure needs, the state's regions are critically affected by two major challenges that also hold the potential for great economic opportunity: broadband connectivity and the development of clean and reliable energy. Both challenges are the subject of major Patrick-Murray Administration initiatives and deserve the concerted effort and attention of state and regional stakeholders.

Broadband

Broadband connectivity is the single most important economic development priority for Berkshire County, and many other towns in the Pioneer Valley, Cape Cod, Central Massachusetts and elsewhere. Akin to electricity, in-door plumbing and the telephone, it is impossible to understate the competitive disadvantage that people, businesses and municipalities confront in the absence of broadband internet service.

Today, thanks to the Massachusetts Legislature and the leadership of Governor Patrick, the state has the new Massachusetts Broadband Institute, capitalized with $40 million in bond-financed funds in its Broadband Incentive Fund. As stated by the Massachusetts Technology Collaborative, which is home to the MBI:

"The goal is to bridge the digital divide by investing in the construction of fiber, wireless towers and other critical and long-lived broadband infrastructure. Targeted state investments will attract and complement private sector investment, making it more cost effective for private providers to deliver complete solutions for customers in regions without broadband coverage."

The Patrick-Murray Administration has the expressed goal of extending broadband service to every un-served community in the Commonwealth by 2010.

State & Regional Infrastructure

INFRASTRUCTURE: STATEWIDE INFRASTRUCTURE FOR THE NEXT 25 YEARS

Energy

The development of green jobs and industries addresses state, national and international challenges of global warming, environmental degradation, increased energy costs and unreliable energy supply. Clean energy industries are predicted to be a high-growth sector in the coming decades, with significant demand for occupations across skill and income-levels. As home to many of the world's leading research institutions, engineers and scientist, Massachusetts is well-positioned to be a leader in clean energy research, products and services.

Akin to life sciences, clean energy discoveries are not only critical to the state's economy, they are essential to the economic health and functioning of the state itself. The Patrick-Murray Administration, through the leadership of Massachusetts Legislature and its Executive Office of Environmental Affairs, is implementing key initiatives to support the development and adoption of conservation measures and clean energy technologies.

- EOHED will partner with the Executive Office of Energy and Environmental Affairs and the Clean Energy Center to develop regionally-based cluster development strategies in clean energy sectors. The strategies will be based on local institutional-research and business strengths and reinforce collaboration statewide.

Though the state is making great strides in improving the reliability of energy supply and the predictability of pricing, many households and businesses confront significant challenges with increased energy costs, particularly in winter.

- EOHED will continue to advocate, with the Massachusetts Congressional Delegation, for increased funding for the Low-Income Heating Energy Assistance Program (LIHEAP) and to partner with the Executive Office of Energy and Environmental Affairs to support conservation efforts for businesses, municipalities and households. EOHED's Department of Housing and Community Development will advance 'best-in-nation' standards for sustainability in the state's public housing.

Vital Communities

CREATE VITAL COMMUNITIES AND REGIONS THROUGHOUT MASSACHUSETTS

Across Massachusetts, the state's regions and municipalities face common challenges: barriers to private sector investment development; sprawl that consumes natural resources and taxes infrastructure; a mismatch between available housing stock and household needs; strained municipal budgets; and a lack of tools and incentives to confront regional challenges at the appropriate scale. Reshaping planning and development practices in a manner that allows the public to address longstanding statewide needs while protecting community desires will be a challenge for all the institutions and stakeholders involved in making and implementing state and local laws. However, the sustainable growth of private investment and jobs, housing opportunities and the reduction in the state's carbon footprint, among other worthy objectives, requires a fundamental change in how we think about Massachusetts' regions and their needs.

For example, Massachusetts is generally recognized to have the most outdated and arcane zoning laws in the country, which provide serious obstacles to both efficient development and effective community planning. The result is too few housing units and too few appropriate places for businesses to grow. Another challenge is the outmoded and inefficient distribution of local services, particularly in the state's rural regions and fastest growing communities. Yet another challenge is matching the desire for private sector investment and growth with the appropriate – and genuinely development ready – sites that are well-attuned to regional advantages. None of these challenges can be solved overnight. None of these challenges can be solved by the state, municipalities or the private sector working alone.

Vital Communities

CREATE VITAL COMMUNITIES AND REGIONS THROUGHOUT MASSACHUSETTS

Agencies across state government support key investments in school facilities, cultural institutions, sidewalk and streetscapes, environmental protection and preservation and utilization of water and other essential resources. The state's sustainability principles and the Patrick-Murray Administration's understanding of local needs help to guide state actions on infrastructure and related development investments. Development decisions are coordinated at the agency-level and through the Governor's Development Cabinet, which brings together the Secretariats for Transportation, Labor and Workforce Development, Administration and Finance, Energy and Environmental Affairs, and Housing and Economic Development.

The sum of each region's infrastructure investments will greatly affect the pattern of economic growth and development in our regions and across the state. The municipalities and other leading regional institutions of the state should be encouraged to "think regionally" as they plan locally. The regional planning agencies and economic development councils of Massachusetts play a critical role, along with public officials and civic leadership, in helping regions to organize and plan effectively. As the state works in partnership with business, civic and municipal leaders across the state to enhance community vitality and 'development-readiness,' there must also be a strong commitment to communicate to the world the advantages of living, working and investing in Massachusetts.

Vital Communities Action Steps

REFORM STATE AND LOCAL POLICIES TO SUPPORT VITAL COMMUNITIES AND REGIONS

Action Steps:

1. Expand the use of inter-municipal agreements, regional infrastructure investments and other tools designed to create efficiencies and opportunities for cost-savings at the municipal and regional level;

2. Reform Chapter 40A to modernize the state's land use and zoning code to create new tools to facilitate greater local control of growth and greater consistency between local planning and regional and state needs;

3. Facilitate development-ready sites in places that desire growth through focused and strategic implementation of the Growth District Initiative, Chapter 43D streamlined permitting and pre-development support from MassDevelopment and MassHousing;

4. Improved coordination at the state level between the MPRO, MOBD, DHCD and other agencies as necessary to facilitate the focused implementation of planning and development initiatives by region, including adoption and use of the state's wide range of development tools. The Quasi-Public Corporation and Public Purpose Agency Council should be a forum for communicating and driving state and regional objectives;

5. The Patrick-Murray Administration will expand efforts to preserve affordable housing, rehabilitate existing units and expand future production;

6. Expand regional market-analysis & marketing with a public-private partnership through the state's "It's All Here" program.

Vital Communities

REVITALIZE AND RECONNECT OUR REGIONAL URBAN CENTERS

The fortunes of the Commonwealth are linked to the health and vitality of the regional cities as places to live, work and create. The state's regional cities are home to over 1.5 million residents of the Commonwealth and contain most of the state's colleges and universities, cultural institutions and large employers. After years of decline, the regional cities continue to be regional job centers and often the focus of a region's identity. The rebirth of the state's regional cities is essential if Massachusetts is to have vital regions with sufficient locations to grow, people to work and places to live.

Many of the state's regional cities are already engaged in local efforts to strengthen connections to the state's leading export industries: manufacturing firms have retooled; major life sciences facilities are planned for Lowell, Worcester, Springfield & Dartmouth; private investment is leading change in Haverhill & Lawrence; strategic planning and adoption of new state tools like 40R Smart Growth Districts and 43D Expedited Permitting sites are shaping potential development in New Bedford, Pittsfield, Holyoke and Fitchburg, and Brockton. The challenges of the regional cities are multiple and require coordination and partnerships in the areas of public safety, education, workforce development, planning and development, housing and best practices in municipal management. Long-term improvements in the regional cities will require the sustained commitment of a range of stakeholders – public and private – that firmly believe that regional prosperity – Massachusetts' welfare – is linked to opportunity and growth in our cities.

Vital Communities Action Steps

REVITALIZE AND RECONNECT OUR REGIONAL URBAN CENTERS

Action Steps:

1. Support strategic planning & neighborhood planning through the Gateway Action Grants, support from MassDevelopment, and coordination of EOHED staff in the economic regions;
2. Launch best practices initiative in urban redevelopment and city governance with Gateway Compact of Mayors, MassDevelopment, the UMass Boston Collins Institute and Administration personnel. The initiative should provide models for best practices in the use of DIF, EDIP, tax-title property programs and related redevelopment planning activities;
3. Reform the state's Economic Development Incentive Program by tightening approved uses and eligibility and more closely tying tax incentives to redevelopment/economic development objectives;
4. Emphasize workforce development and urban education initiatives in the Readiness Project, EOLWD's Regional Workforce Initiatives and work to link these high priority areas to cluster initiatives in EOHED;
5. Develop a program for market-rate housing and development incentives to be utilized within redevelopment areas: the financing tools should include enhanced capacity to utilize existing tools such as DIF, and new mechanisms, such as redevelopment tax credits;
6. Focus strategic partnerships with the Massachusetts Life Sciences Center, Clean Energy Center, John Adams Innovation Institute, the Massachusetts Cultural Council and UMass to create working strategies to seed near and long-term growth in identified emerging clusters by region and regional city. Particular opportunities should be focused on the Life Sciences, Clean Energy, Creative Economy and Manufacturing.

State and Regional Profiles

Principle Economic Regions in Massachusetts

Source: MassGIS, UMass Donahue Institute

Berkshire
- North
- Central
- South

Boston Metro
- Boston
- MetroWest

Cape & Islands
- Upper Cape
- Lower Cape
- Islands

Central
- North Central
- Metro Worcester
- Blackstone Valley

Northeast
- Middlesex
- Merrimack Valley
- North Shore

Pioneer Valley
- Franklin
- Hampshire
- Hampden

Southeast
- South Shore Area
- Tri-Cities Area
- Southcoast Area

Snapshot for Massachusetts

ANALYSIS, State Economy

Massachusetts has a strong and diverse economy. Recen growth in knowledge-intensive sectors has been strong, but overall employment growth is modest. Export and high value-added industries grew between 2004 and 2007, with notable job gains in Education, Healthcare and Professional and Technical Services, which include the Life Sciences. Despite notable export-oriented growth, the greatest employment growth between 2001 and 2007 was related to construction, real estate and retail activity – which is not part of the export economy and has been affected by the recent housing and financial downturn. The biggest job losses over the past six years occurred in the period between 2001 and 2004. Since 2004 employment has generally rebounded, and some industries have grown noticeably between 2006 and 2007. As will be shown in the regional profiles, employment growth is unevenly distributed across the Commonwealth, negatively impacting incomes and job opportunities.

Principle Economic Regions in Massachusetts

Source: MassGIS, UMass Donahue Institute

Snapshot for Massachusetts

LARGEST EMPLOYMENT SECTORS, 2007

•Healthcare, representing 15% of state employment.
•Professional & Technical Services, representing 11% of state employment.
•Retail, representing 11% of state employment.
•Education, representing just under 10% of state employment.

EMPLOYMENT TRENDS, 2001-2007

Most sectors saw decline between 2001 and 2004, but began recovering between 2004 and 2006, with additional growth in 2007.

Trends in Export-oriented Industries:

•Healthcare shows the strongest growth at nearly 14%.

•Manufacturing is generally in decline, losing over 24%.

•IT declined almost as strongly as Manufacturing, but unlike Manufacturing it has grown between 2006 and 2007.

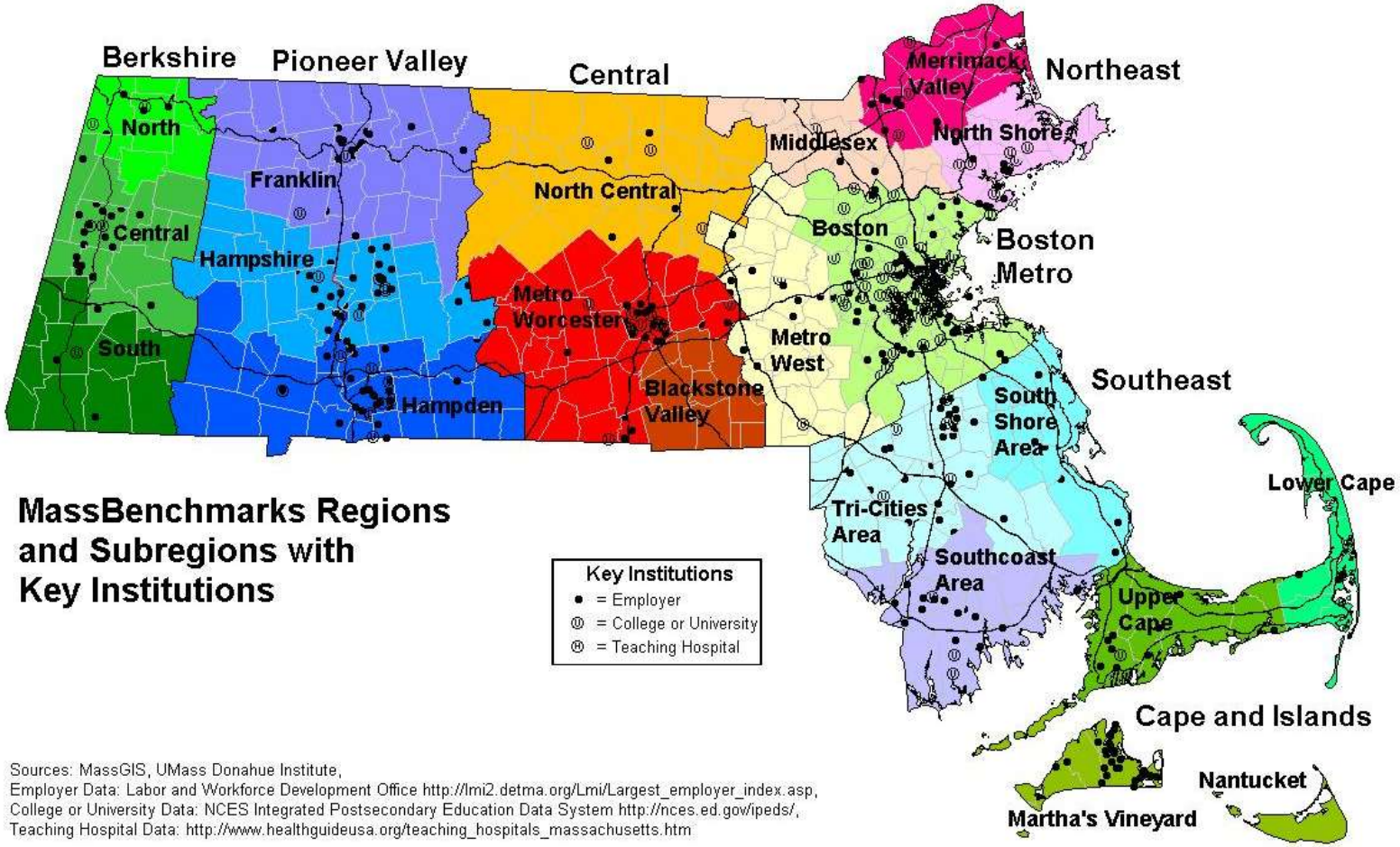
Trends in Locally-serving Industries:

•Healthcare grew at 14%

•Construction grew at just over 2%, but slowed from 2006 to 2007

•Some sectors that grew between 2001 and 2004, such as Real Estate, declined between 2004 and 2007.

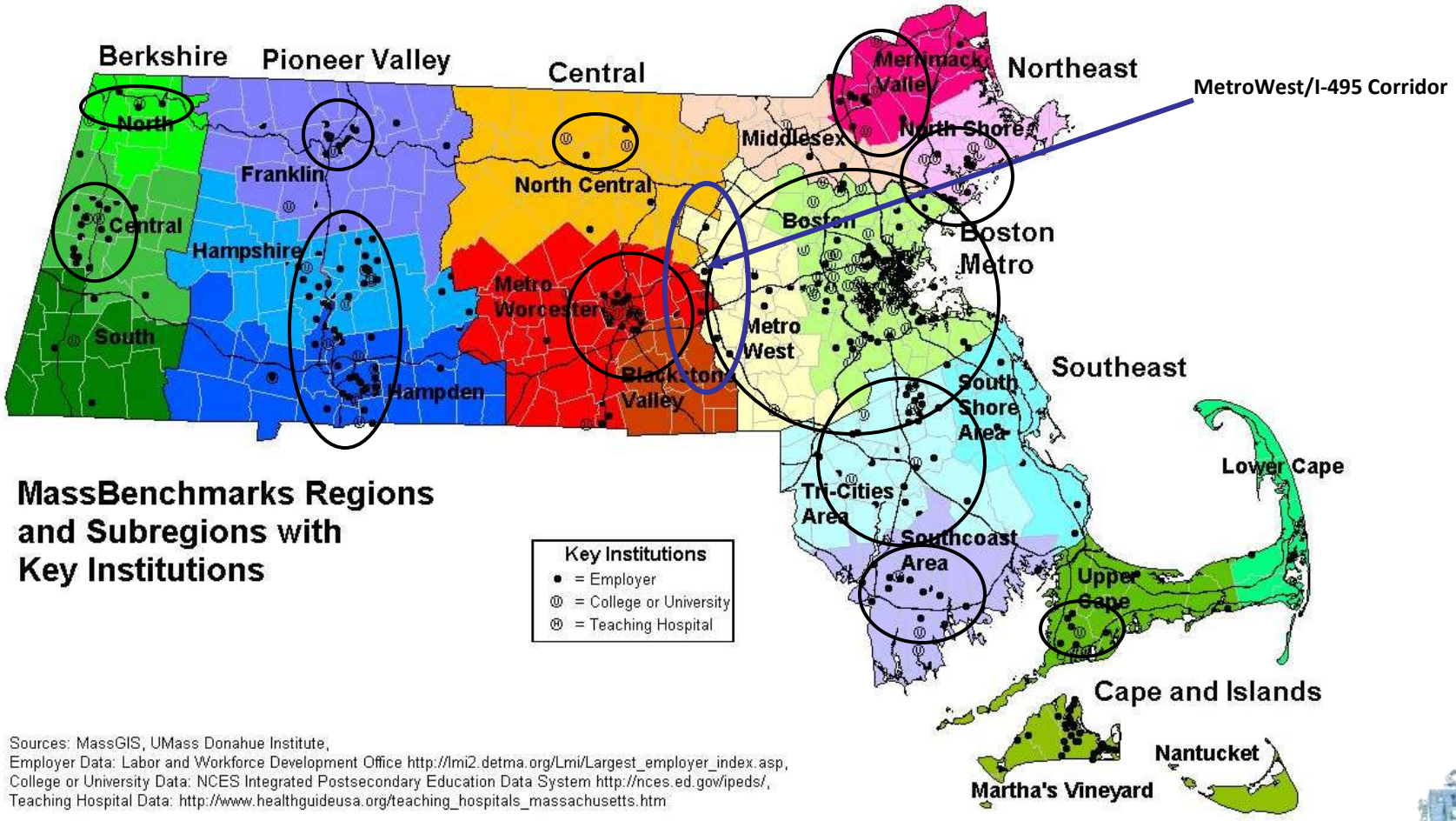
Representative Key Institutions



MassBenchmarks Regions and Subregions with Key Institutions

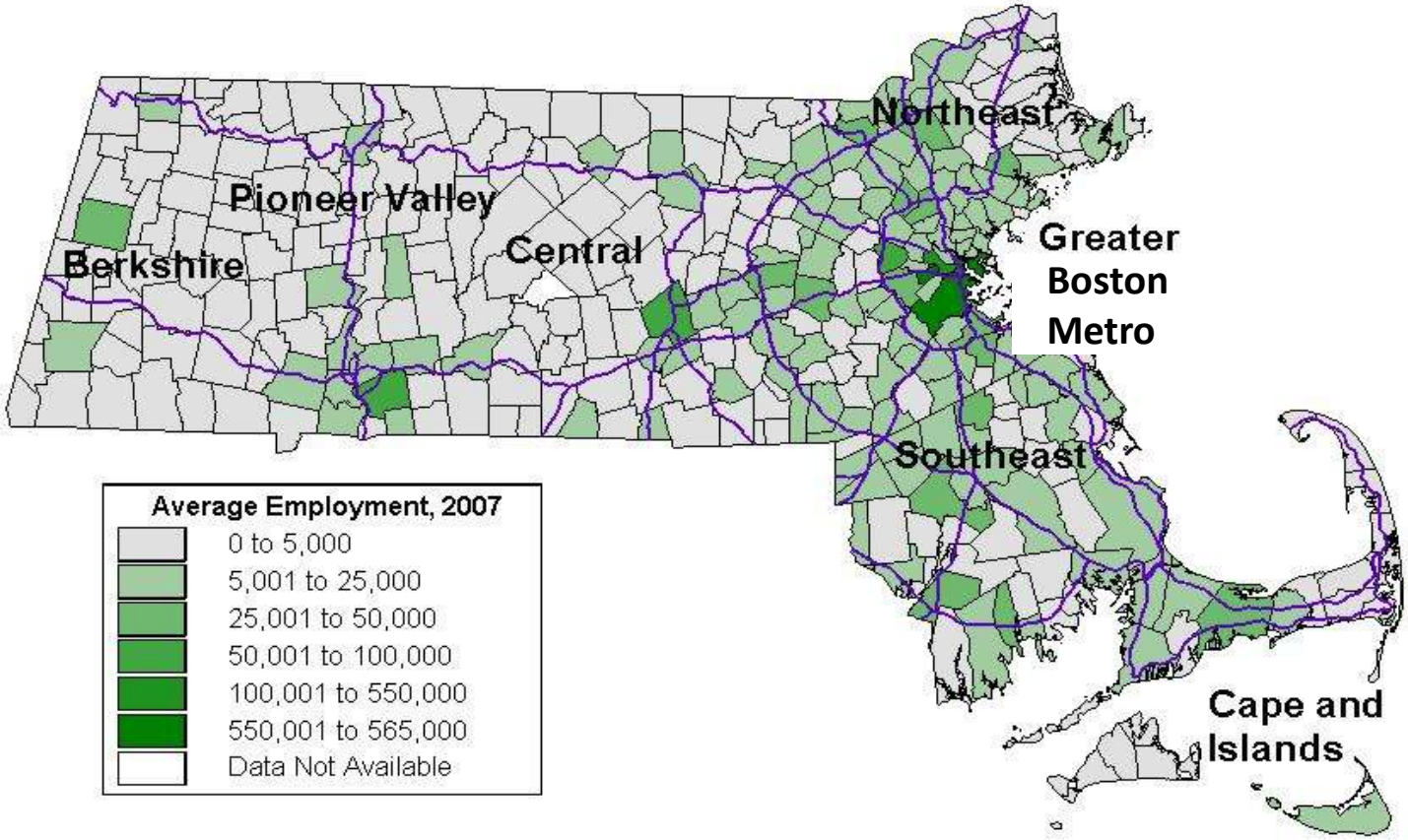
Sources: MassGIS, UMass Donahue Institute,
Employer Data: Labor and Workforce Development Office http://lmi2.detma.org/Lmi/Largest_employer_index.asp,
College or University Data: NCES Integrated Postsecondary Education Data System http://nces.ed.gov/ipeds/,
Teaching Hospital Data: http://www.healthguideusa.org/teaching_hospitals_massachusetts.htm

Representative Key Institutions, are concentrated along major transportation corridors and in traditional urban centers

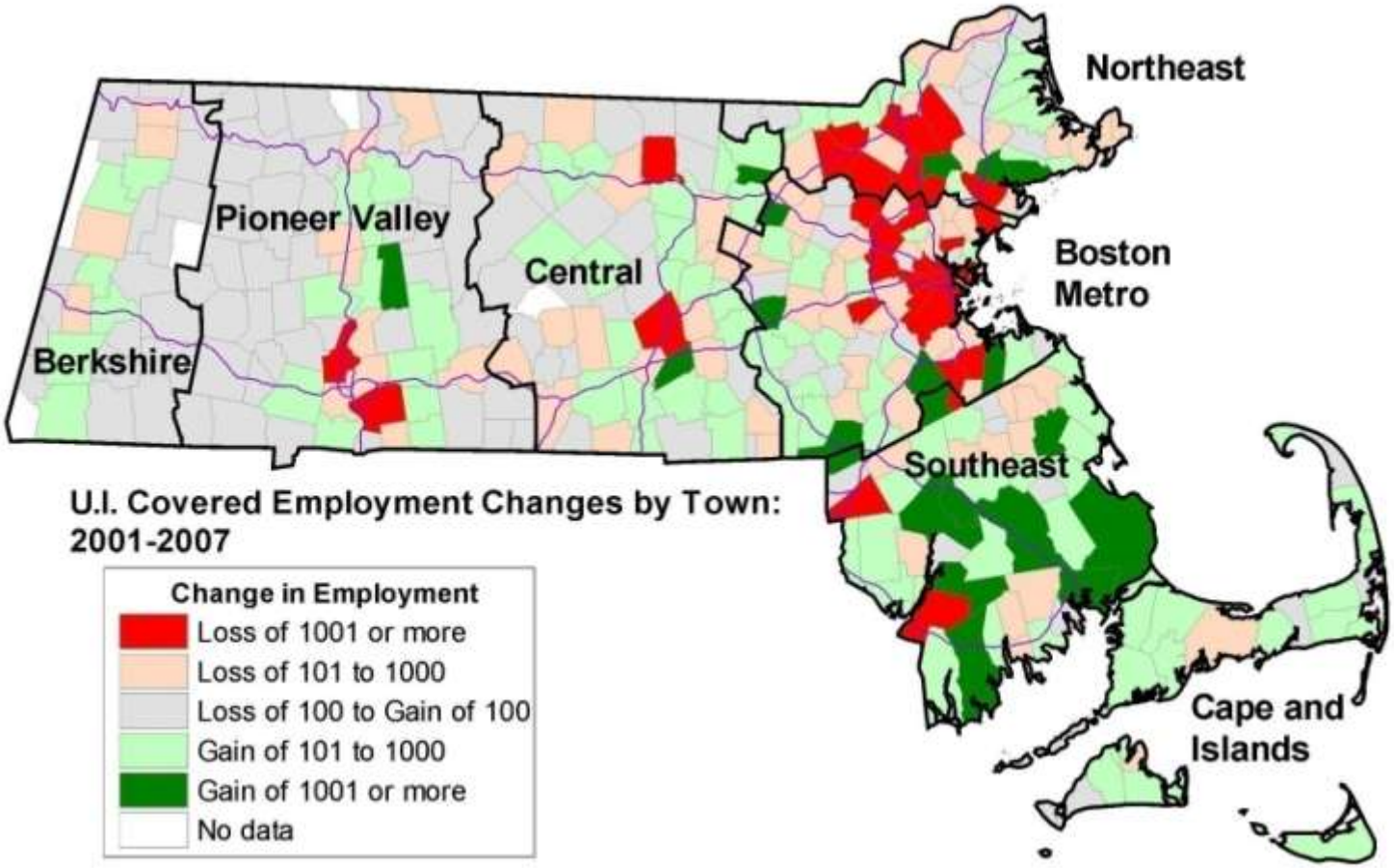


Sources: MassGIS, UMass Donahue Institute,
Employer Data: Labor and Workforce Development Office http://lmi2.detma.org/Lmi/Largest_employer_index.asp,
College or University Data: NCES Integrated Postsecondary Education Data System http://nces.ed.gov/ipeds/,
Teaching Hospital Data: http://www.healthguideusa.org/teaching_hospitals_massachusetts.htm

Employment is concentrated in traditional job centers in the cities and suburban communities.

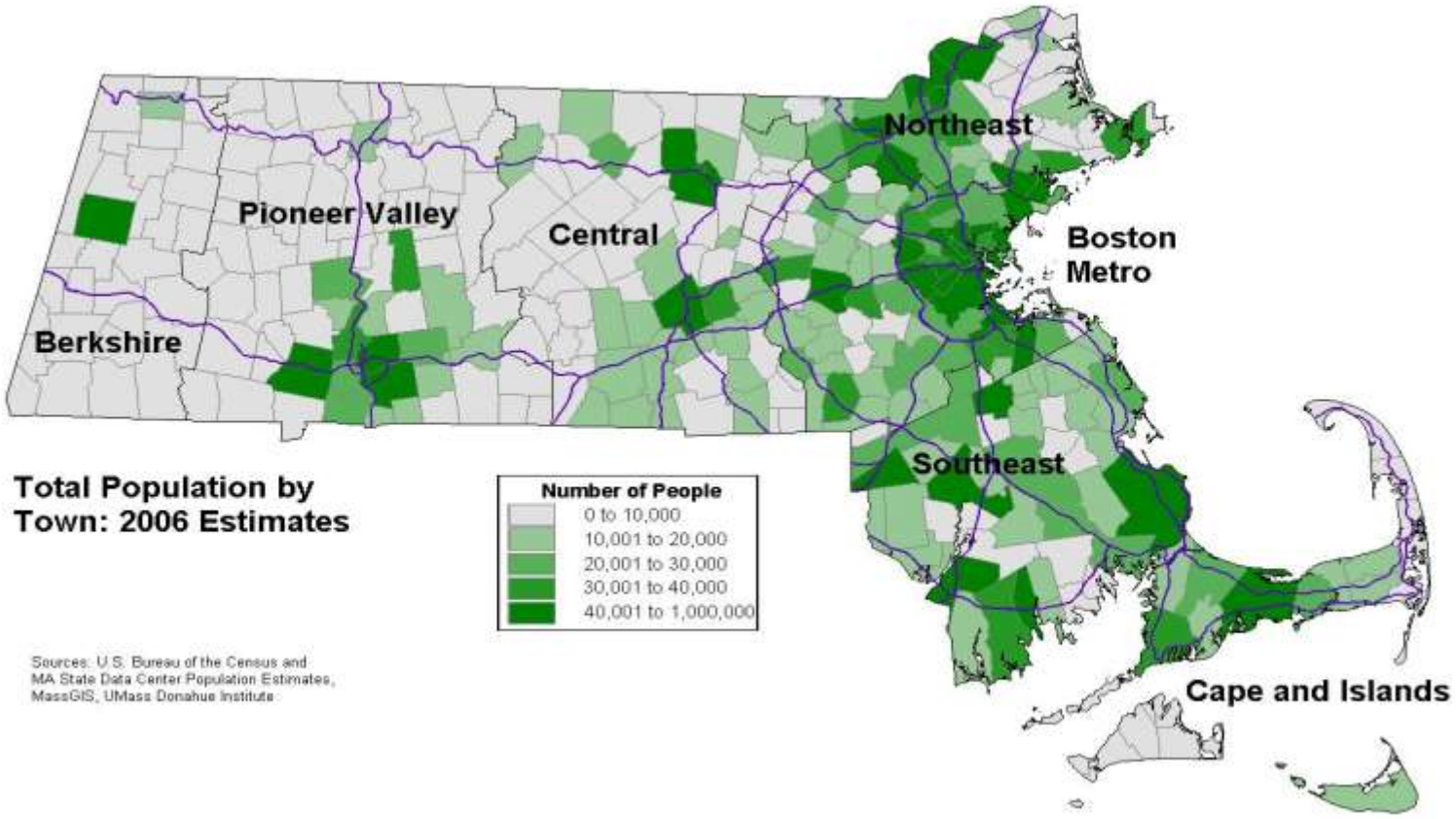


Employment growth in the 2000s has concentrated in suburban and rural areas with fast growing populations.

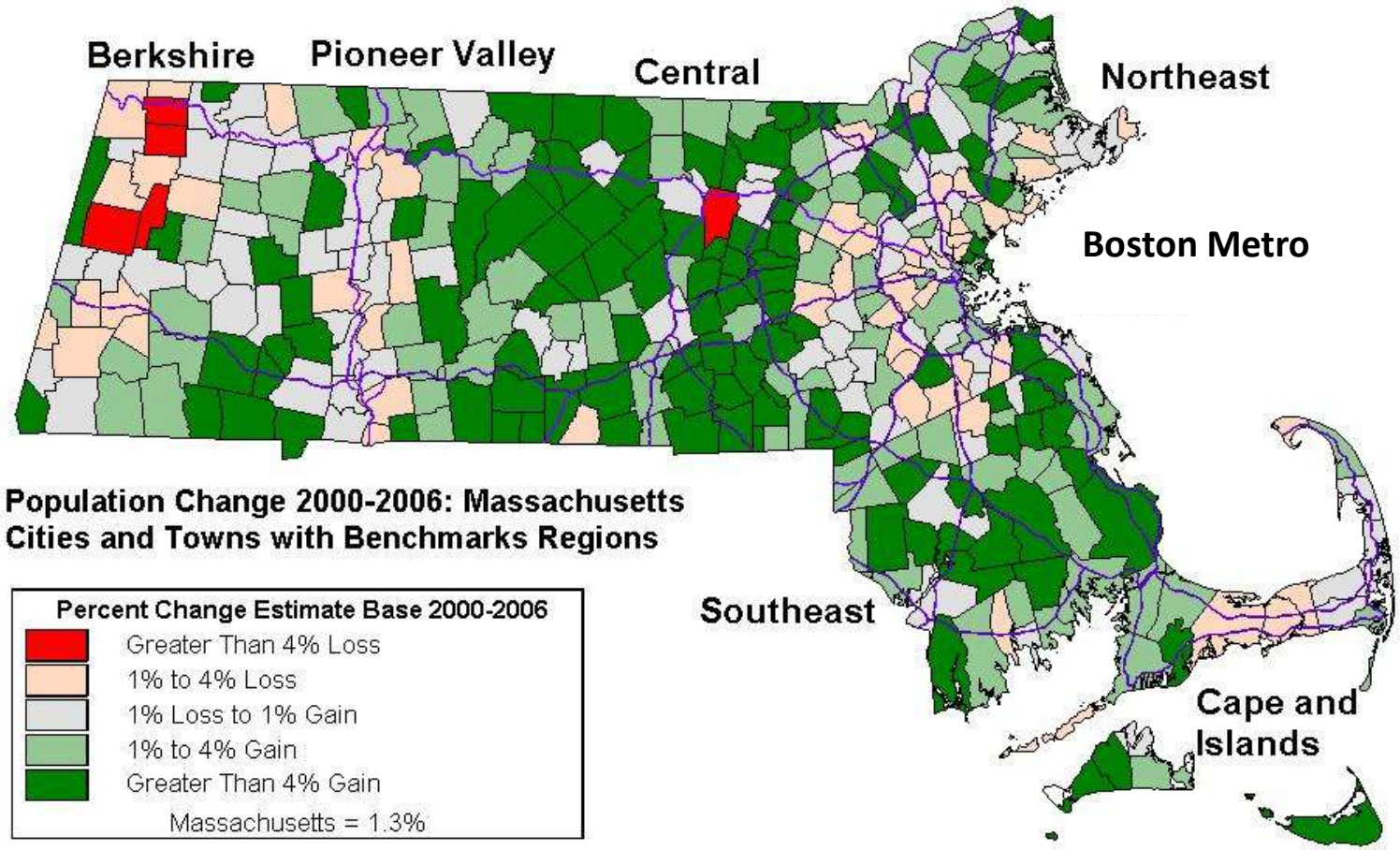


Sources: Massachusetts Executive Office of Labor and Workforce Development ES-202 Data: 2001-2007; MassGIS; UMass Donahue Institute

Population in Massachusetts is concentrated in traditional urban centers and suburban communities with good transportation access.



Population growth in the 2000s was concentrated in lower cost towns within commuting distance to major employment centers.



Population Change 2000-2006: Massachusetts Cities and Towns with Benchmarks Regions

Housing Affordability remains a major challenge for Massachusetts despite the recent decline in housing prices and sales.

HOUSING TRENDS, 2000-2006

Massachusetts has 2,448,878 households in 2006, which represents a 0.2% increase from 2000.

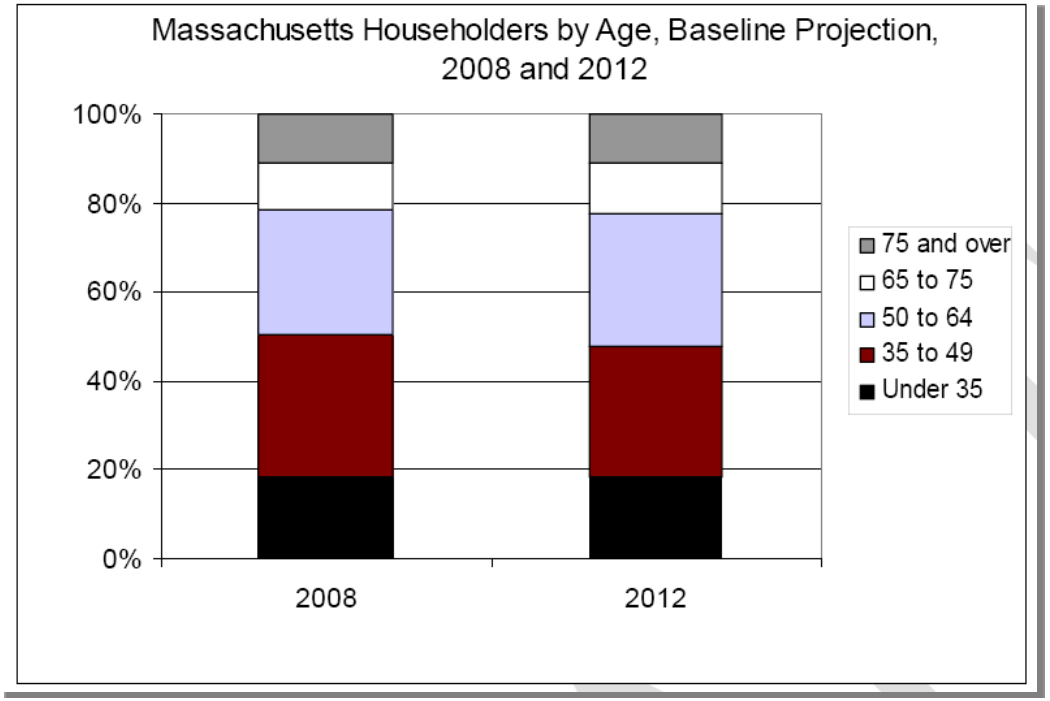
Massachusetts had a homeownership rate of 64% in 2005/2006

There was a 4.6% increase in homeownership and a 6.8% decline in renters.

Family Households – 32.4% of all households in 2005/2006, a 0.2% increase since 2000.

Foreclosures petitions rose from 8,372 in 2003 to 29,859 in 2007.

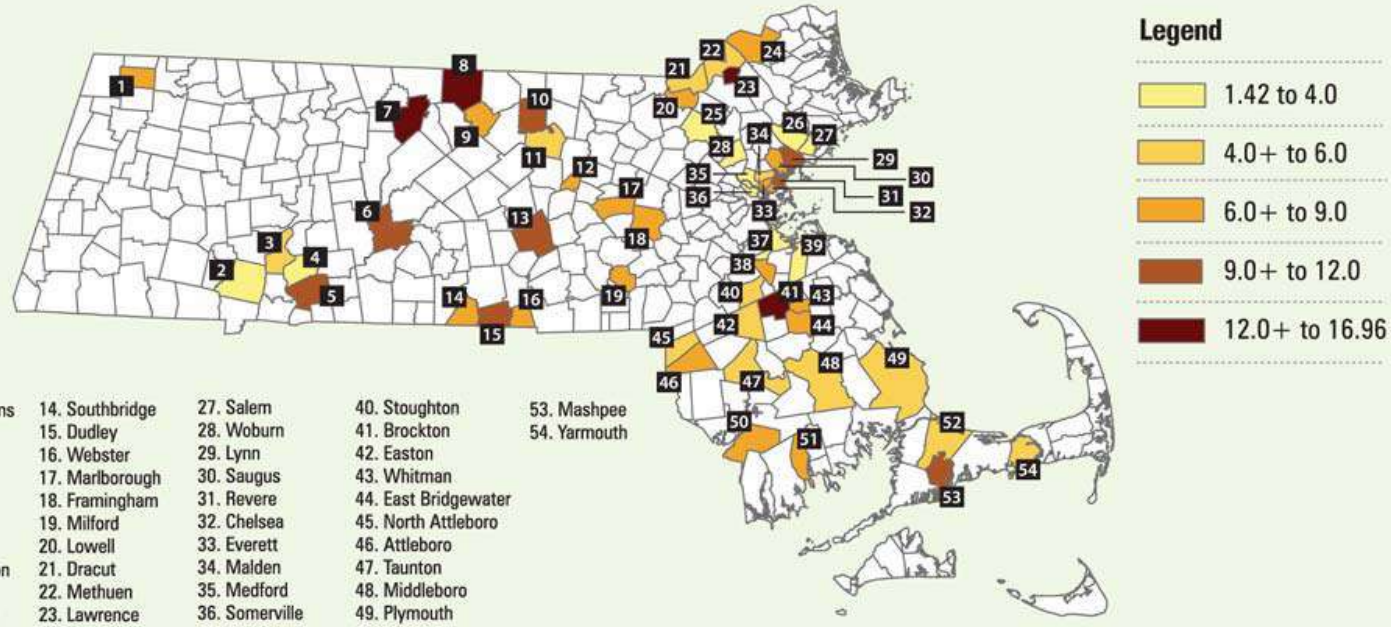
Share of Massachusetts Householders by Age, 2008 and 2012



Source: New England Economic Partnership; U.S. Census. Chart created by UMass Donahue Institute.

Foreclosures remain a serious problem for households and communities throughout Massachusetts.

Figure 8. Number of Foreclosures per 10,000 Population, January - March 2008



1. North Adams
2. Westfield
3. Holyoke
4. Chicopee
5. Springfield
6. Ware
7. Athol
8. Winchendon
9. Gardner
10. Fitchburg
11. Leominster
12. Clinton
13. Worcester
14. Southbridge
15. Dudley
16. Webster
17. Marlborough
18. Framingham
19. Milford
20. Lowell
21. Dracut
22. Methuen
23. Lawrence
24. Haverhill
25. Billerica
26. Peabody
27. Salem
28. Woburn
29. Lynn
30. Saugus
31. Revere
32. Chelsea
33. Everett
34. Malden
35. Medford
36. Somerville
37. Quincy
38. Randolph
39. Weymouth
40. Stoughton
41. Brockton
42. Easton
43. Whitman
44. East Bridgewater
45. North Attleboro
46. Attleboro
47. Taunton
48. Middleboro
49. Plymouth
50. Fall River
51. New Bedford
52. Sandwich
53. Mashpee
54. Yarmouth

Source: MassBenchmarks, vol.8, issue 2, 2008.

Common Trends across Regions

Trends and Analysis

- Healthcare and Education are bedrock sectors for Massachusetts that have been more resistant than other sectors to business cycles. Those sectors and Information Technology have all grown since 2006.

- Manufacturing suffered serious decline nearly everywhere, yet remained a major employment sector across the state. The overall decline in Manufacturing masks some bright spots within competitive sub-sectors, such as precision manufacturing. A challenge for the state is finding ways to support competitive sub-sectors and extending high-technology manufacturing within growth clusters, such as the Life Sciences and Clean Energy.

- Construction and industries related to homebuilding or remodeling were the fastest growing employers between 2000 and 2006. Since 2006, construction employment has declined substantially due to the housing market crisis.

- Food Services & Drinking Places and Amusements grew in most regions of the state, providing supportive services to growing residential populations; the decline in consumption related to the economic slump has significantly reduced employment in this sector.

Innovative Capacity in Massachusetts is concentrated in Boston Metro, followed by the Northeast and Central regions.

SBIR FUNDING, 2006

	Phase 1			Phase 2		
Region	**Number of Awards**	**Value of Awards**	**% of MA Value**	**Number of Awards**	**Value of Awards**	**% of MA Value**
Berkshire	0	0	0.00%	1	$747,209	0.40%
Boston Metro	343	$35,744,640	68.21%	170	$132,532,488	70.13%
Cape & Islands	2	$199,671	0.38%	4	$2,380,504	1.26%
Central	25	$5,261,574	10.04%	16	$18,877,681	9.99%
Northeast	93	$10,491,149	20.02%	43	$31,126,932	16.47%
Pioneer Valley	3	$264,989	0.51%	2	$1,037,275	0.55%
Southeast	5	$439,242	0.84%	3	$2,290,870	1.21%
MA Total	471	$52,401,265	100.00%	239	$188,992,958	100.00%

Source: SBIR Past Awards Database, Massachusetts 2006.

Venture Capital Investment is concentrated in Boston Metro, followed by the Northeast and Central regions.

Region	Amount	% of State Total	Largest Industries	% of Region Total
All MA	$3,608,152,200	100.00%	Biotech	25.64%
			Software	22.31%
Berkshire	$8,100,000	0.22%	Software	100.00%
			--	--
Boston Metro	$2,870,786,400	79.56%	Biotech	31.10%
			Software	23.00%
Cape & Islands *	--	0.00%	--	--
			--	--
Central	$130,596,300	3.62%	Software	60.00%
			Electronics/Instrumentation	28.71%
Northeast	$524,025,700	14.52%	Medical Devices and Equipment	22.72%
			Semiconductors	15.21%
Pioneer Valley	$4,000,000	0.11%	Software	100.00%
			--	--
Southeast	$70,643,800	1.96%	Medical Devices and Equipment	55.87%
			Retailing/Distribution	33.97%

Source: PriceWaterhouseCoopers MoneyTree Survey; Calculations by UMass Donahue Institute, 2008.

NIH Funding is overwhelmingly concentrated in Boston Metro, with nationally competitive levels of awards to the Central region.

Benchmark Region	Awards	Total Value of Awards	Organizations	Top Organization (by Award Value)	Award Value of Top Organization
MA	5208	$2,204,284,140	191	Massachusetts General Hospital	$293,259,960
Berkshires	3	$393,387	1	Williams College	$393,387
Boston Metro	4715	$2,030,334,063	149	Massachusetts General Hospital	$293,259,960
Cape & Islands	25	$6,716,688	4	Marine Biological Laboratory	$5,721,833
Central	340	$123,679,697	14	UMass Medical School	$107,859,776
Northeast	39	$22,512,905	16	Agencourt Bioscience Corporation	$11,528,372
Pioneer Valley	82	$19,692,026	4	University of Massachusetts Amherst	$17,914,891
Southeast	4	$955,374	3	Bock to the Future, Inc.	$487,714

Source: NIH Awards Database, 2006; compiled by Donahue Institute, 2008.

UMass R&D Expenditures are concentrated in Worcester and Amherst, with impressive growth in Dartmouth.

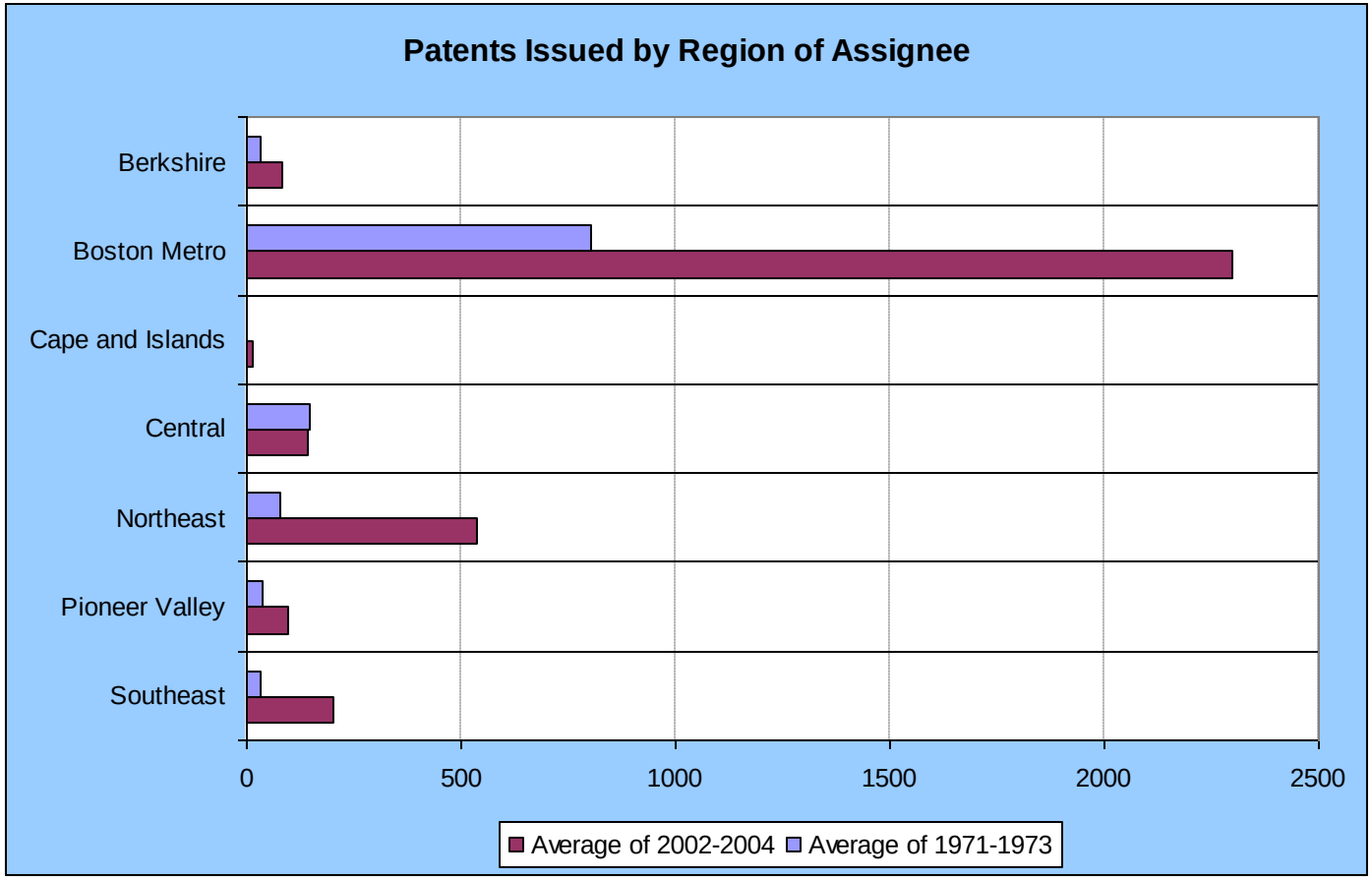
Campus	Region	2000	2001	2002	2003	2004	2005	Growth 00-05
ALL	Statewide	$232,791,000	$251,013,000	$293,039,000	$317,387,000	$345,575,000	$365,288,000	56.92%
Worcester	Central	**$97,587,000**	**$111,221,000**	**$132,729,000**	**$148,823,000**	**$169,090,000**	**$176,349,000**	80.71%
Amherst	Pioneer Valley	$96,907,000	$97,976,000	$109,332,000	$113,512,000	$120,788,000	$127,487,000	31.56%
Lowell	Northeast	$19,334,000	$20,656,000	$22,827,000	$22,783,000	$22,163,000	$23,852,000	**23.37%**
Dartmouth	Southeast	**$6,905,000**	**$9,488,000**	$15,030,000	$16,746,000	$18,074,000	$19,452,000	**181.71%**
Boston	Boston Metro	$12,058,000	$11,672,000	**$13,121,000**	**$15,793,000**	**$15,460,000**	**$18,148,000**	50.51%

Note: Bolded black denotes highest value in the category. **Bolded red** denotes lowest value in the category.

Source: University of Massachusetts Annual R&D Expenditures FY 2006.

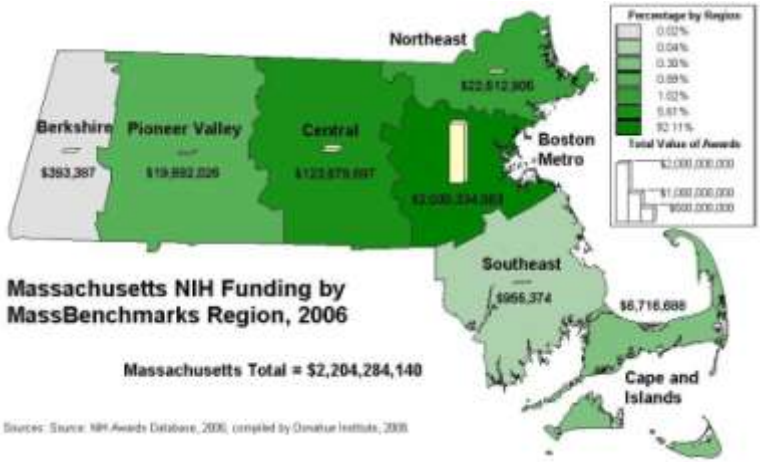
Innovative Capacity as reflected in patent awards is overwhelmingly concentrated in Boston Metro and Northeast.

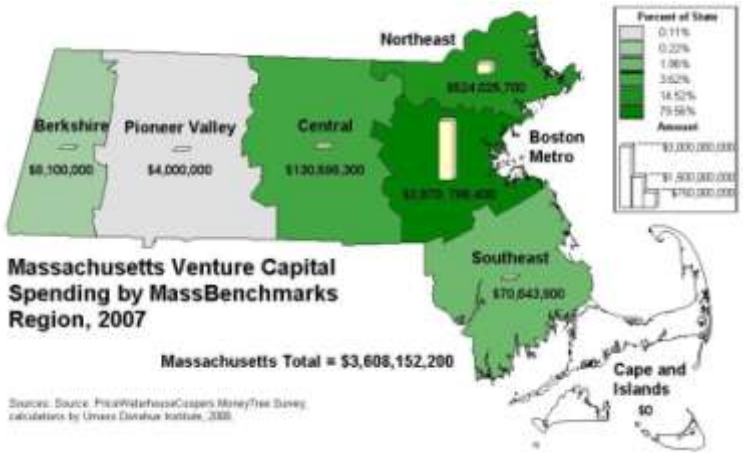
PATENTS, 1973-2004

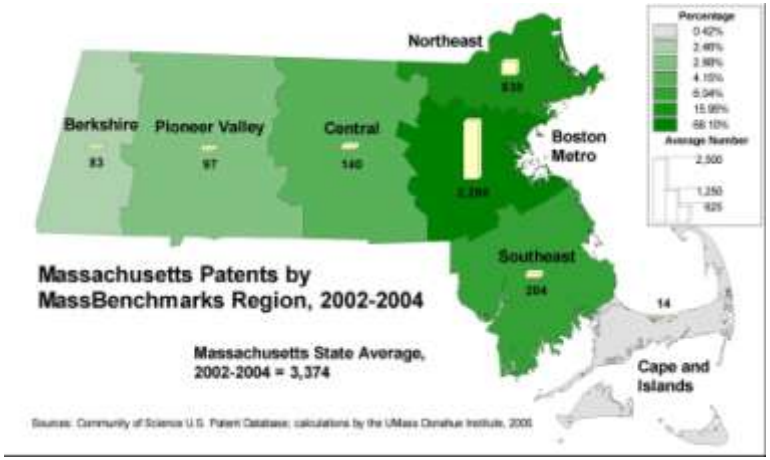


Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.

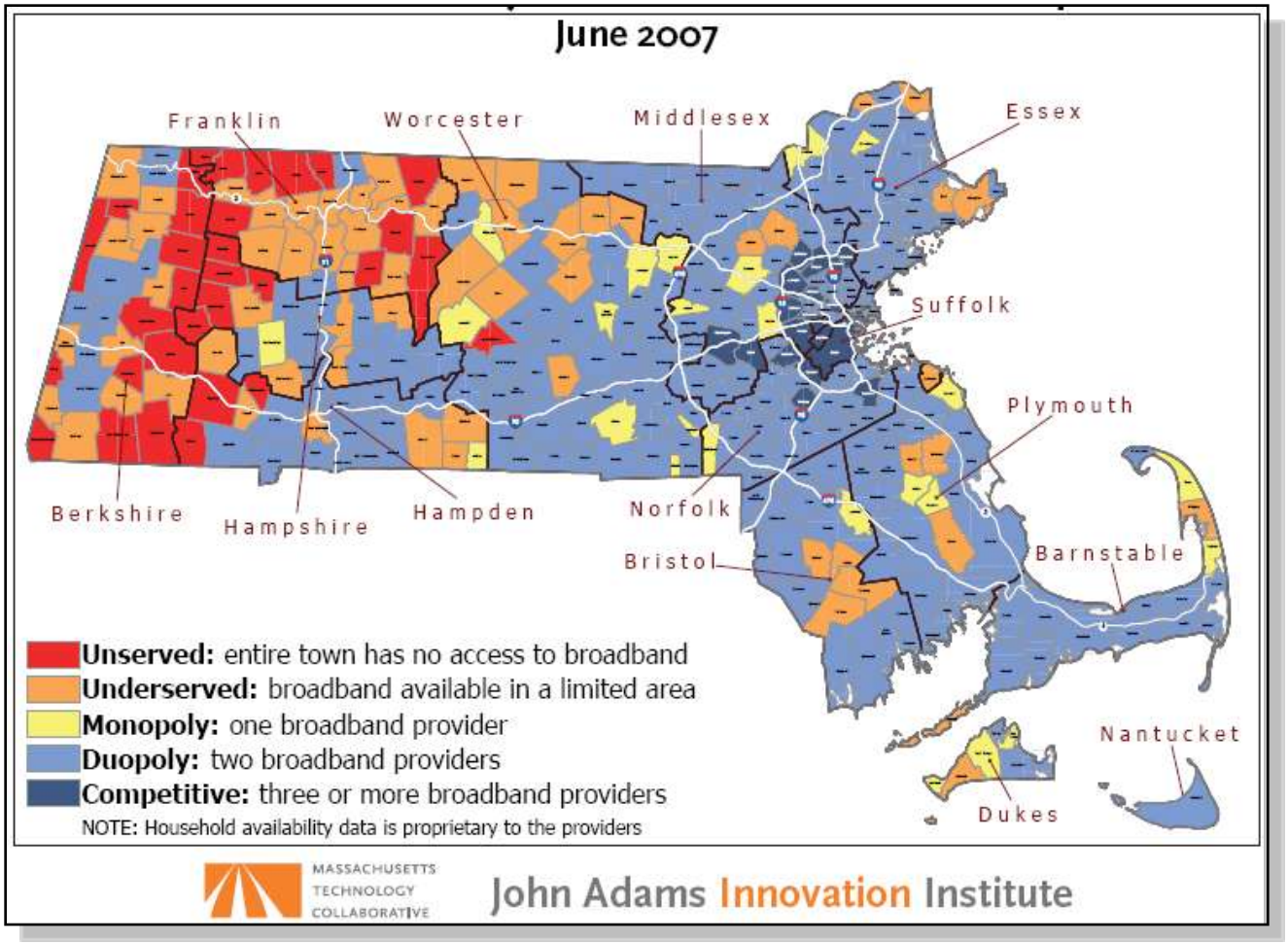
Innovative Capacity is concentrated in Boston Metro and drives employment and population growth in the state.





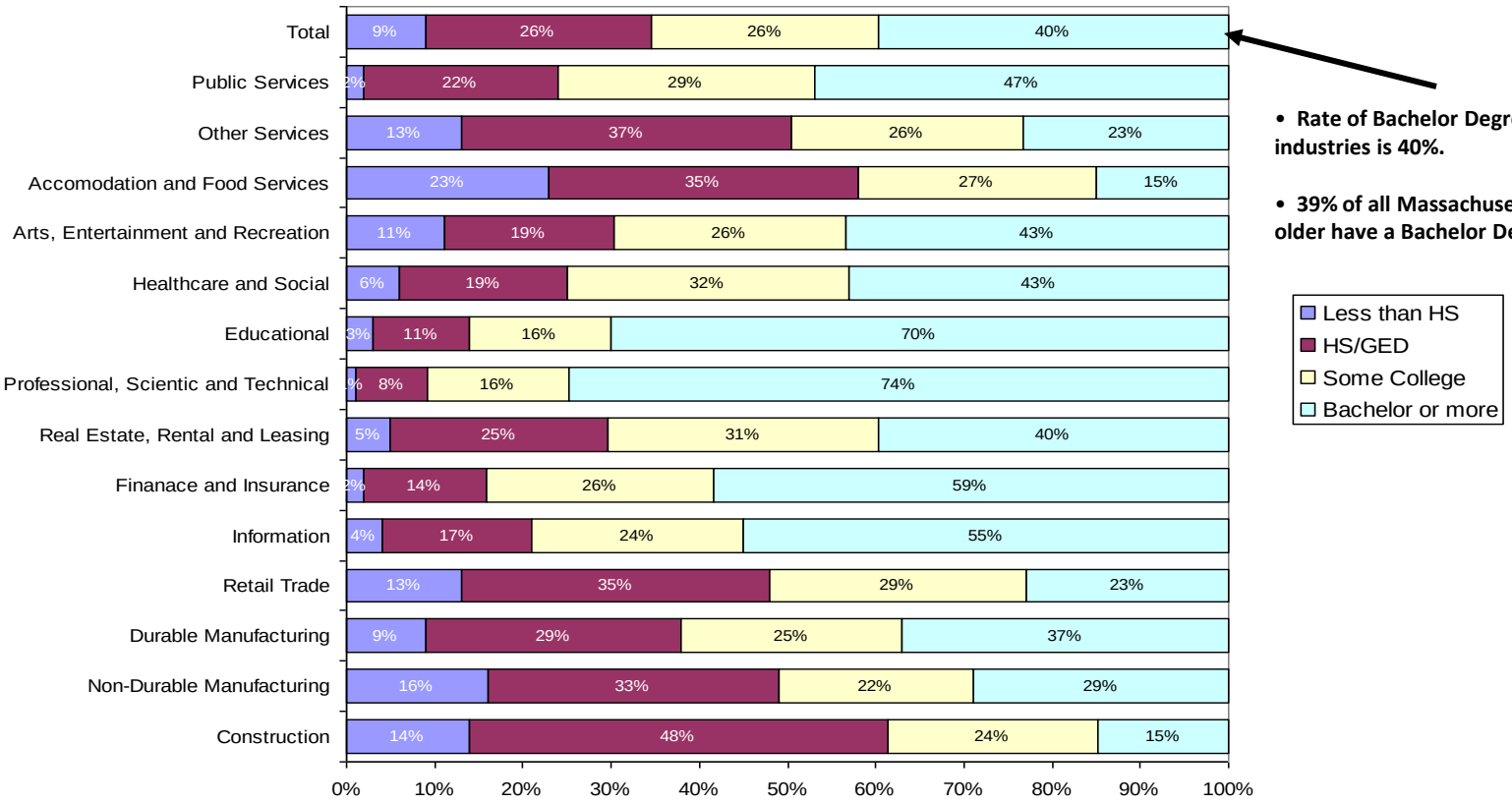


Broadband access is critical for economic development, especially in Western Massachusetts & the Cape and Islands.



Higher Educational Attainments are required in export oriented growth sectors in Massachusetts.

STATE-WIDE DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

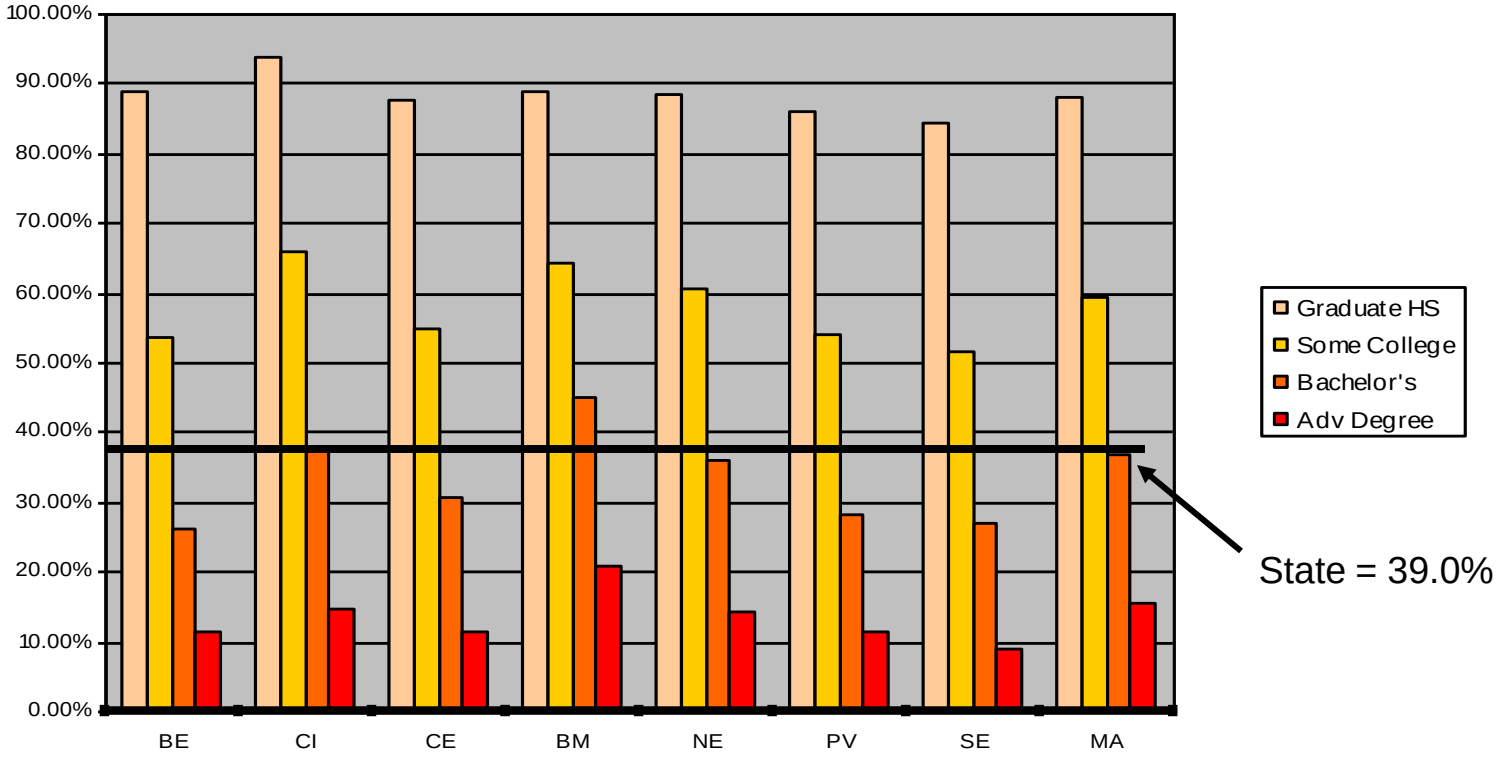


- **Rate of Bachelor Degree or Above for all industries is 40%.**
- **39% of all Massachusetts residents 25 years and older have a Bachelor Degree of Above.**

Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.

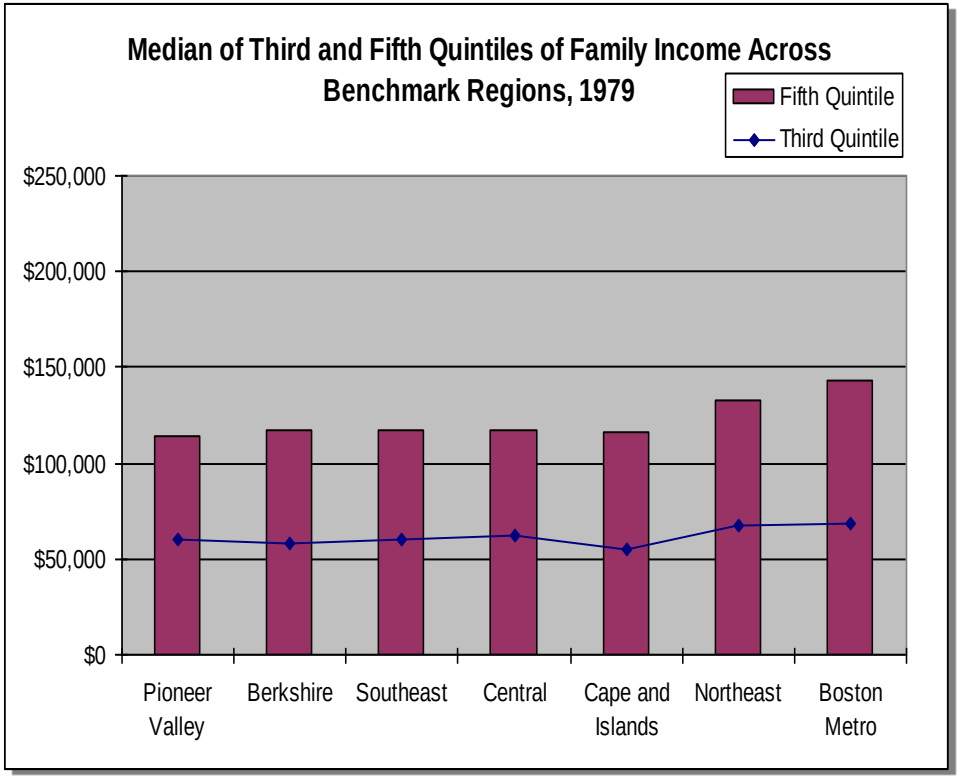
Educational Attainment varies considerably by region and in many regions does not match the skills requirements of high growth sectors.

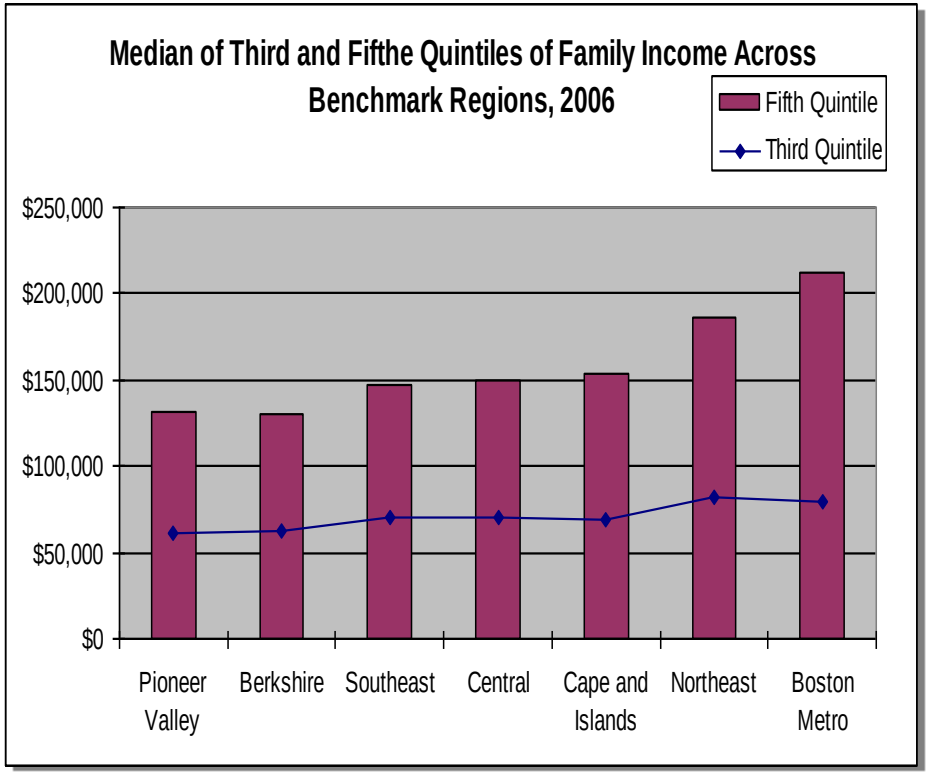
EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Census 2006 American Community Survey, PUMS.

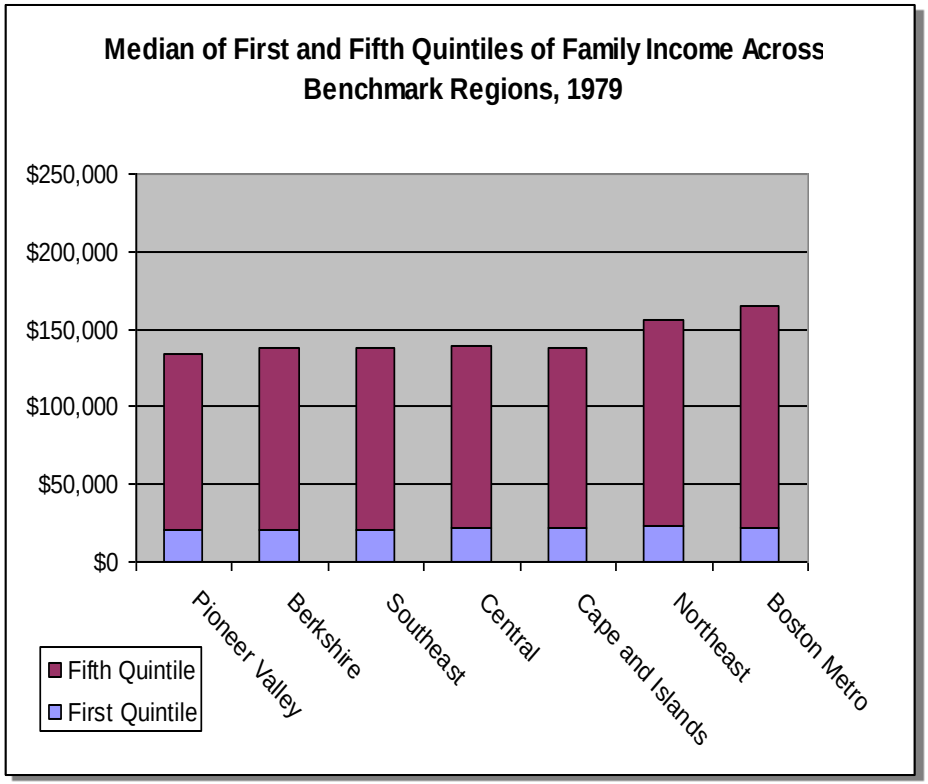
Growing Inequality: in 1979 incomes were far more equal across Massachusetts regions.

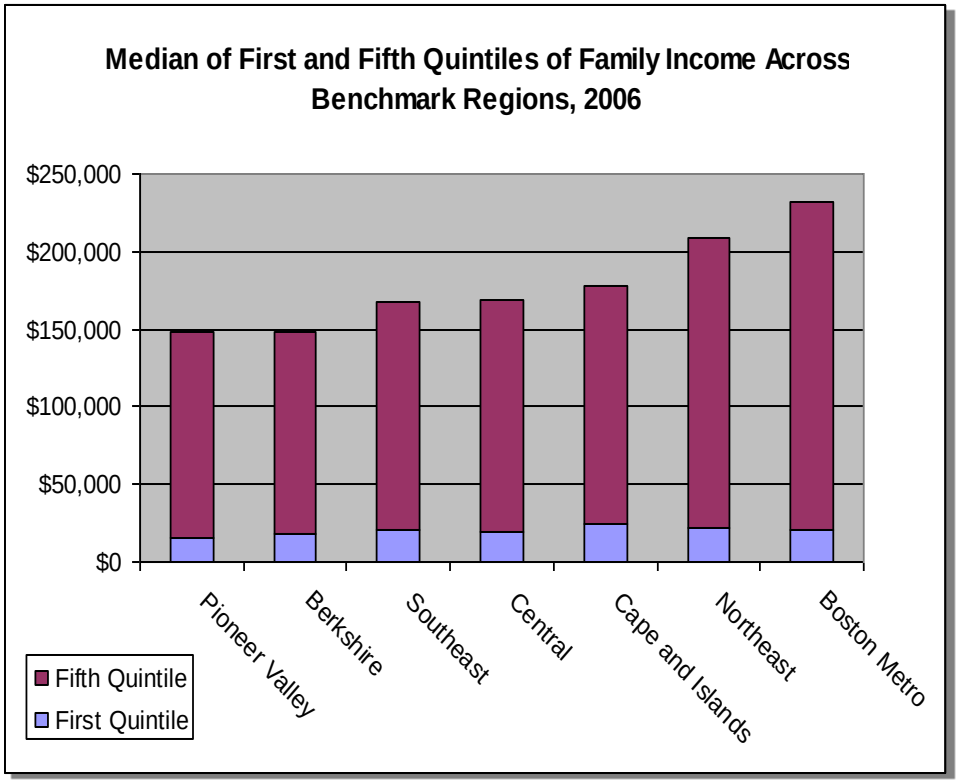




Sources: Decennial Censuses in 1980, 1990, and 2000, and American Community Surveys in 2005 and 2006. Figures are in 2006 Dollars.

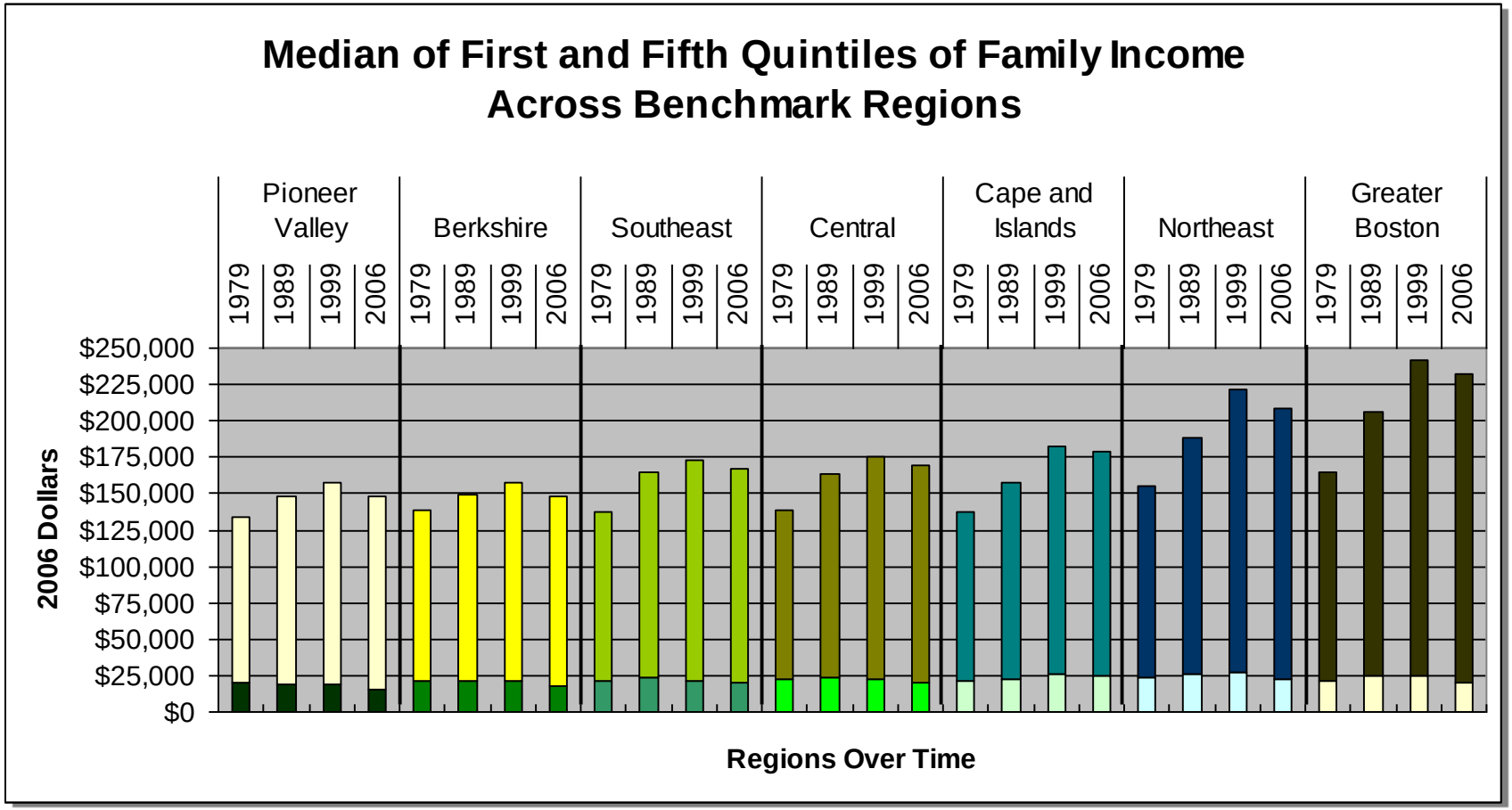
Growing Inequality: income gaps have grown among households within regions as well as across regions.





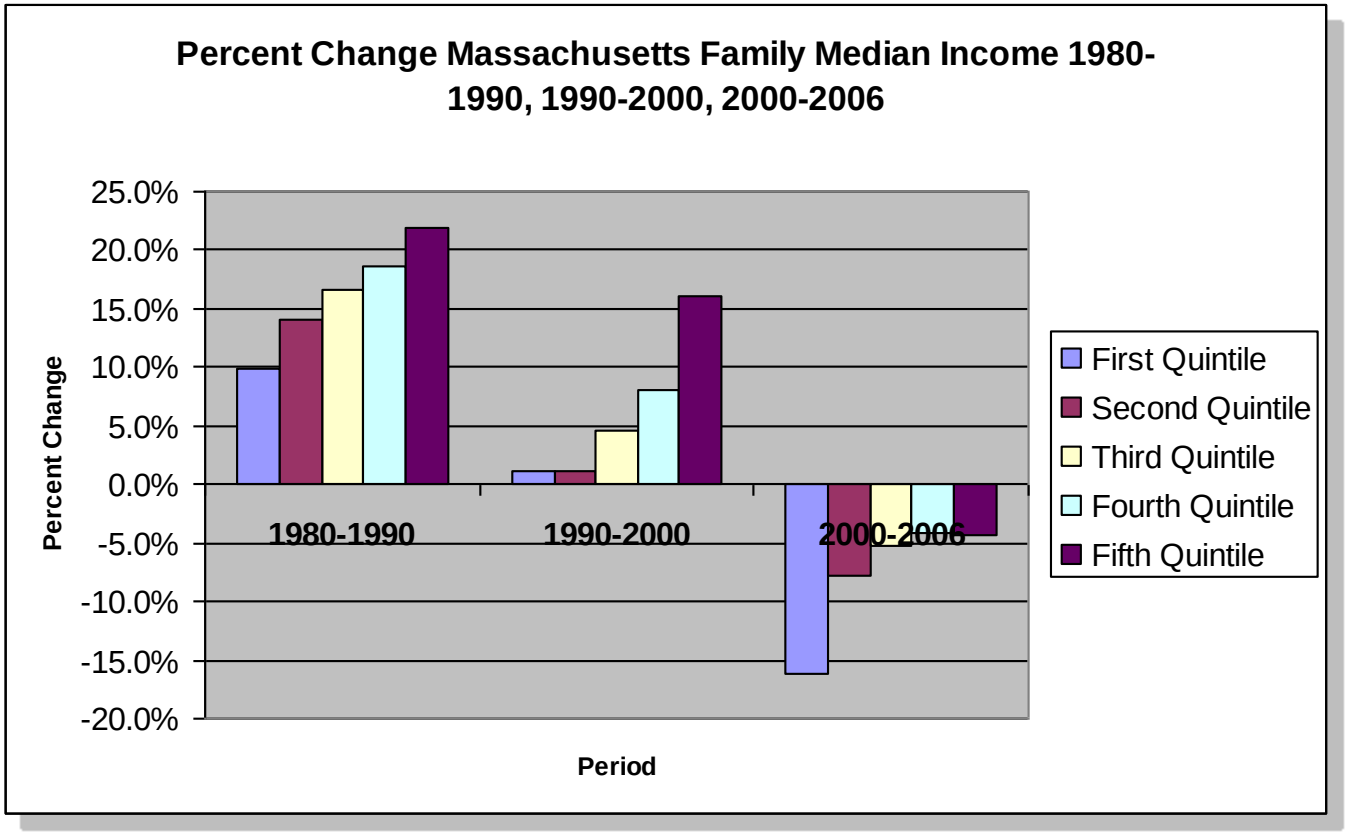
Sources: U.S. Decennial Censuses in 1980, 1990, and 2000, and American Community Surveys in 2005 and 2006. Figures are in 2006 Dollars.

Regional Inequality: as traditional industries have declined and the knowledge economy in eastern Massachusetts has expanded.



Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.

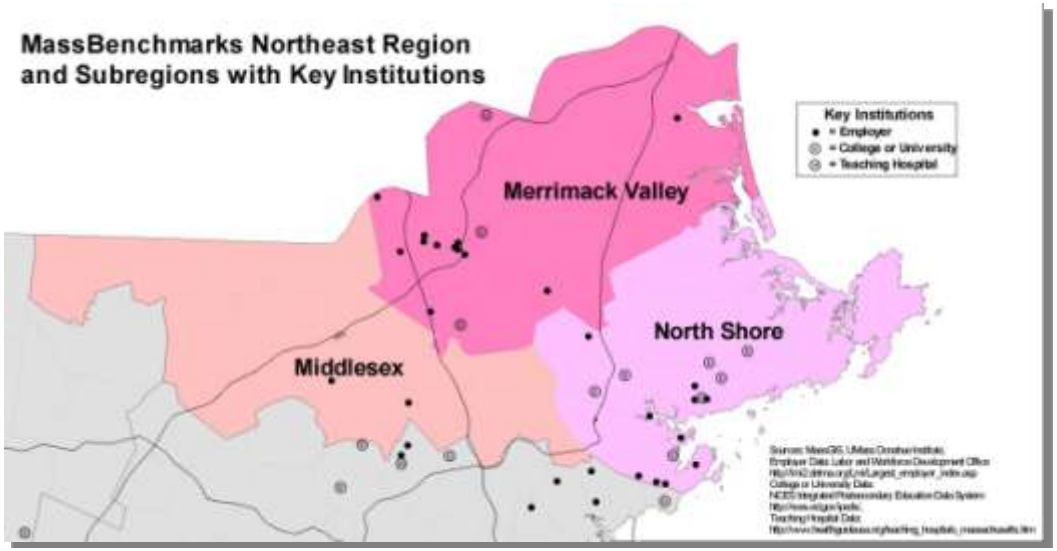
Income Inequality, has been a growing problem for nearly twenty years and an crisis for the past eight years – nationally as well as in the state.



Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.

Analysis - Declining incomes are a national problem that is also affecting people in Massachusetts. The state has undergone a transformation from healthy and equitable income growth across quintiles in the 1980s to starkly inequitable and declining income since 1999. In this decade, households across all quintiles have declined, as measured before the recent economic downturn.

Regional Profile Northeast Region



REGIONAL MUNICIPALITIES BY RPA

Northern Middlesex Council of Governments: Billerica, Chelmsford, Dracut, Dunstable, Lowell, Pepperell, Tewksbury, Tyngsborough, Westford

Merrimack Valley Planning Council: Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimack, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, West Newbury

Metropolitan Area Planning Council: Beverly, Danvers, Essex, Gloucester, Hamilton, Ipswich, Lynnfield, Manchester, Marblehead, Middleton, North Reading, Reading, Rockport, Salem, Topsfield, Wakefield, Wenham, Wilmington

Representative Key Institutions and Employers
North Shore Community College
Northern Essex Community College
Salem State College
University of Massachusetts-Lowell
Alcatel-Lucent
Analog Devices Inc
Anna Jaques Hospital
Bay State Gas Co
Caritas Holy Family Hospital
Changepoint Inc
Idearc Media
Lawrence General Hospital
Marblehead Ace Hardware
North Shore Medical Center
Northeast Health Systems Inc
Polartec LLC
Raytheon Integrated Defense
Seacoast Lock & Safe Co Inc

Regional Snapshot for Northeast

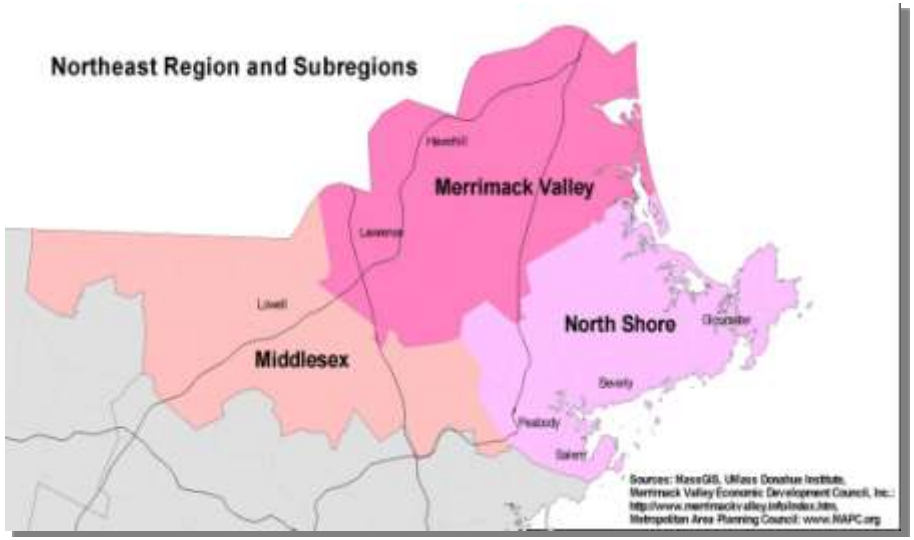
ANALYSIS, Regional Economy

The regional economy is fairly diverse with much smaller differences in regional share of employment among sectors than in most other regions. Although Manufacturing is the single largest sector in the Northeast, it has declined faster than most other regions. There were small-to-modest gains in four Manufacturing industries – including Food Manufacturing, which has been noted as a targeted industry for economic development by regional experts – but this did not mitigate losses elsewhere.

Education and Healthcare both grew strongly since 2001. However, job growth in knowledge creation sectors was not uniform. Information Technology lost just under a quarter of its workforce between 2001 and 2007. Unlike trends in some other regions, this decline has been consistent from 2001-2004 and 2004-2006.

The region experienced a very small decline in households between 2000 and 2006. Despite this there was growth in some Retail industries associated with residential construction between 2001 and 2007. However, there was an overall decline in the Retail sector of over five percent.

The region ranks second behind Boston Metro among indicators of innovative capacity. Regional firms collected over half a billion dollars in venture capital funding in 2006. NIH funding for the region was over $22 million, with half of that going to the Agencourt Bioscience Corporation.



Key Implications for Northeast

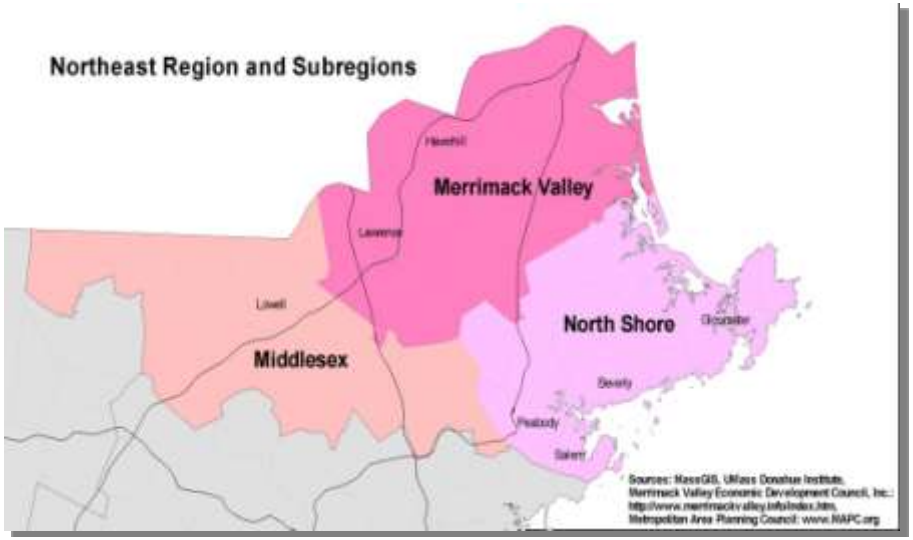
Cross-Cutting Issues

Scale of Programs – Smaller communities expressed concern that state programs require a level of staff capacity that they are unable to maintain. This concern was echoed in Haverhill, a larger community.

Workforce Development – This is a primary issue for cities, especially Lawrence, where up to a quarter of households are linguistically isolated.

Educational Attainment – As elsewhere in the state, suburban communities have education issues, whereas urban areas confront a serious challenge, with drop-out rates a problem in Lawrence and to some extent Lowell.

Youth Retention – This is not as pressing an issue as in other regions that are facing an absolute decline in the working age population, though the retention of "knowledge workers" is a critical issue for the region's employers in growth sectors. The challenge to the region is not growing its youth population, it is expanding the number of educated and skilled youth in the region's cities.



Key Implications for Northeast

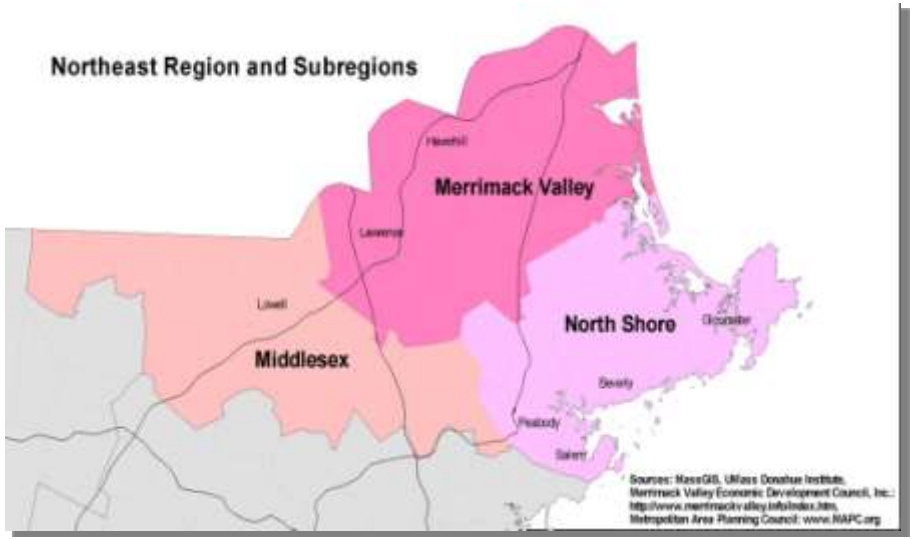
Region-specific Issues

Emerging Creative Economy – Both the North Shore and Lowell have invested in significant efforts to grow their creative economies.

Pockets of Distress – Within the urban populations of the Northeast are particularly challenged "pockets of distress." The immigrant populations in particular have a hard-go. Language and educational attainment are big barriers of entry to the workforce.

Downtown Development Strategies – Each of the three river cities plus Gloucester and Salem are engaged at various stages in a residentially-driven strategy to revitalize their downtowns. The catalyst is to encourage urban residential development in converted mill space through zoning relief and urban amenities, which should create a market for retail/commercial development once the customers/workers are in place. *Structured Parking* was a reoccurring theme in discussions about downtown developments. While the cities had plenty of surface lots, they all made a case for structured parking to support transit, retail, and residential uses in the downtown.

Housing Stock – While there appears to be sufficient affordable housing in the urban areas, its quality is unclear. One informant suggested that "sick houses" were contributing to school/work absenteeism. Rehabilitation of older homes is a major need, especially in the inventory of vacant, foreclosed and tax-title properties.



Key Implications for Northeast

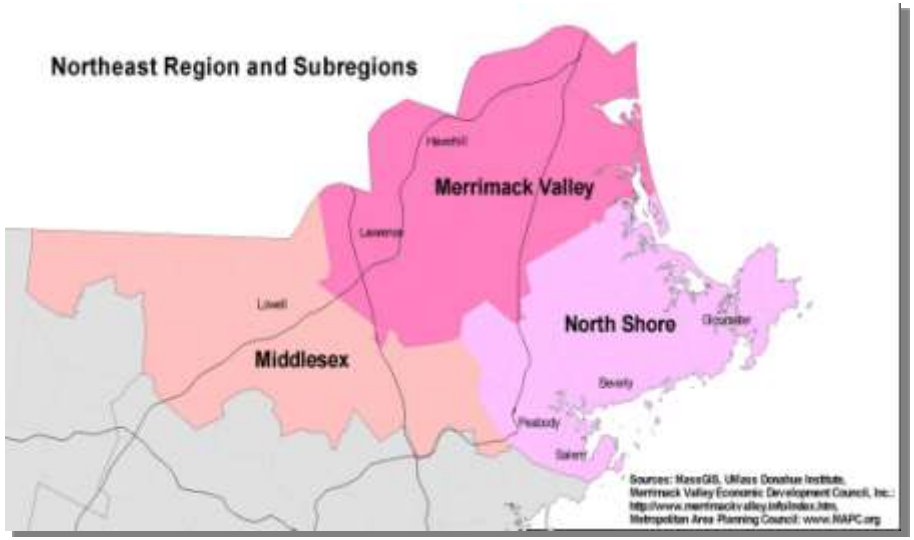
Region-specific Issues

Foreclosures – The first problem is effectively assisting homeowners who are faced with delinquencies on their mortgages or are in foreclosure. The second problem is the impact of specific vacant properties on neighborhood stability – state and federal resources need to be effectively deployed to acquire and redevelop strategic properties. Multiple strategies are currently in use by the state to improve homeowner and new-homebuyer education and put in place protections and services.

Aging Infrastructure – Bridges are a major issue in the region, both in maintaining the current stock (12 structurally deficient, 38 functionally obsolete in the NMCOG sub-region) and need for additional capacity. In the NMCOG sub-region, we heard that sewer capacity for the communities surrounding Lowell was maxed out—limiting their ability to host industry.

Transit – There are significant regional transportation bottlenecks and problems with service to between communities to regional job centers.

Lack of Regionalism – Regional and municipal leaders primarily identify themselves in relationship to a north-south corridor connecting back to Boston Metro or to the more suburban job centers (Andover, Billerica). They do not readily accept the common definitions of the region used by the regional planning agencies and regional collaboration is minimal, with some notable and growing exceptions, as with the region's colleges and UMass Lowell, for example.



Key Actions for Northeast

Priority Projects of Regional Significance

- Double-tracking the rail to Haverhill and adding cars during peak times.
- Lowell Junction interchange
- Hamilton Canal in Lowell
- Lowell NPS trolley extension as a lynch-pin to their downtown strategy.
- Expansion of Commuter Rail to Manchester (NH) Airport
- North Andover and Lawrence' development of the Airport Industrial Park
- Golden Triangle Industrial Park in Amesbury and Salisbury
- Lawrence Gateway Project
- Groveland Downtown Revitalization
- Haverhill Downtown Revitalization
- Amesbury Downtown Revitalization
- Rte. 3 expansion and bridge improvements

Regional Snapshot for Northeast

LEADING INDUSTRIES, 2007

Manufacturing, representing 16.4% of regional employment
Healthcare, representing 14.0% of regional employment
Retail, representing 10.7% of regional employment

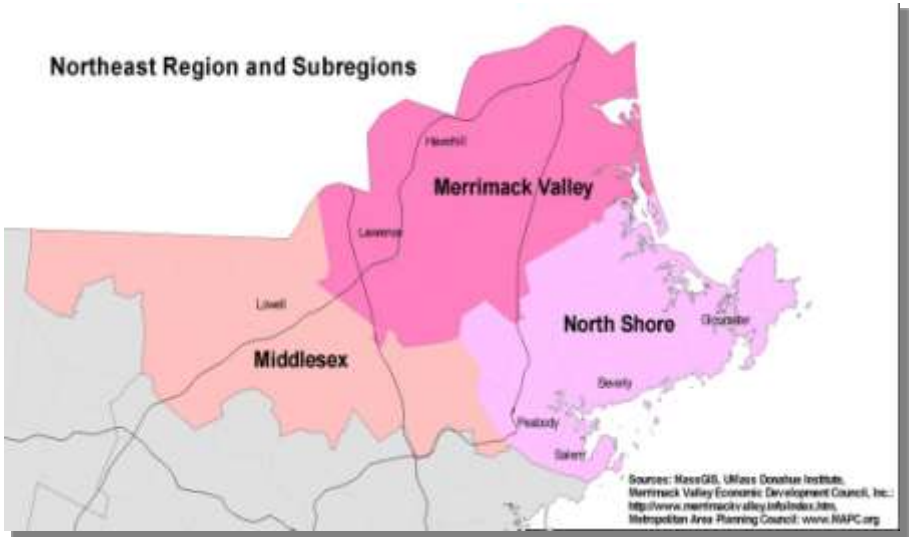
EMPLOYMENT TRENDS, 2001-2007

Trends in Export-oriented Industries:

- Growth in Knowledge Creation sectors
- Manufacturing is in decline, losing more than 25%
- IT is also in decline, losing just under 25% of the workforce. Unlike trends in some other regions, this decline has been consistent from 2001-2004 and 2004-2006.

Trends in Locally-serving Industries:

- Retail growth associated with residential construction, but otherwise a decline of over five percent in this sector.



HOUSING TRENDS, 2000-2006

- The region had 14.0% of all households in 2006, representing a decline of 0.2% since 2000.
- There was a 3.8% increase in homeownership and a 8.2% decline in renters.
- Family households declined by 0.2%.

Innovative Capacity for Northeast

NIH AWARDS, 2006

- 39 Awards to totaling $22,512,905
- 16 institutions received NIH funding
- Agencourt Bioscience Corporation was the largest recipient with $11,528,372

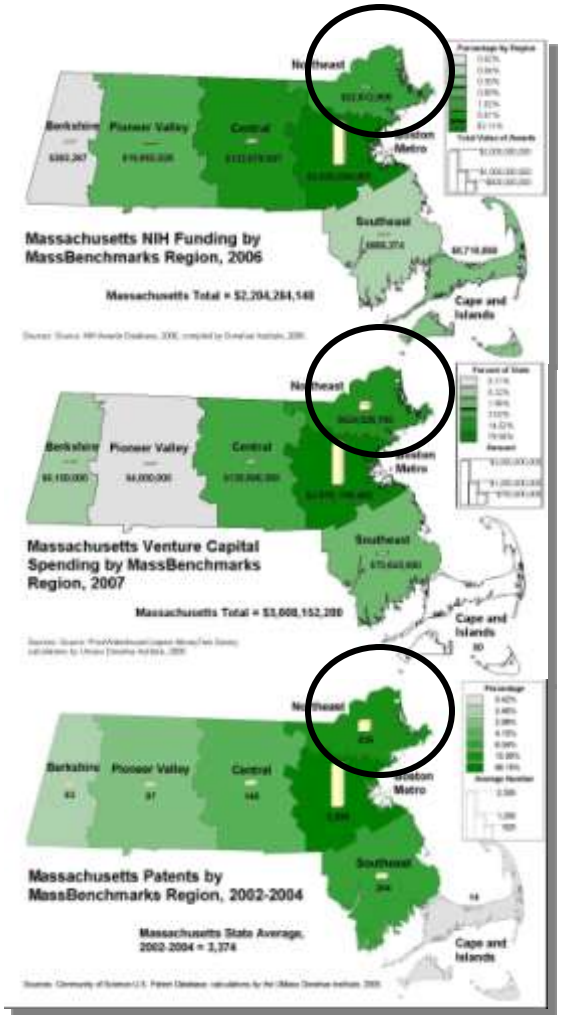
VENTURE CAPITAL FUNDING, 2006

- $524,025,700 or 14.52% of all VC funding in Massachusetts went to firms in this region
- The largest industries receiving VC funding were
  - Medical Devices and Equipment, with 22.72%
  - Semiconductors, with 15.21%

PATENTS, 1973-2004

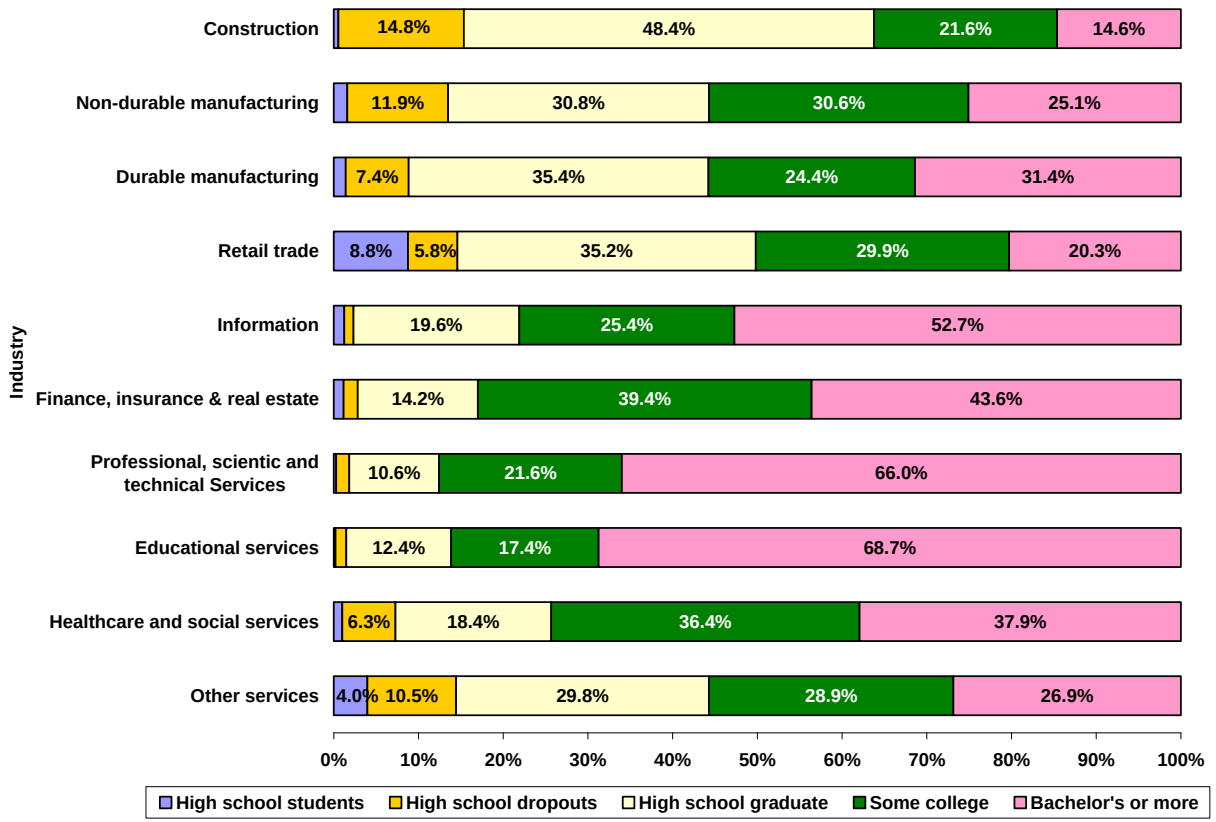
	1971-1973	2002-2004
State Total	1,130	3,374
Northeast	**77**	**538**

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for North Shore WIB

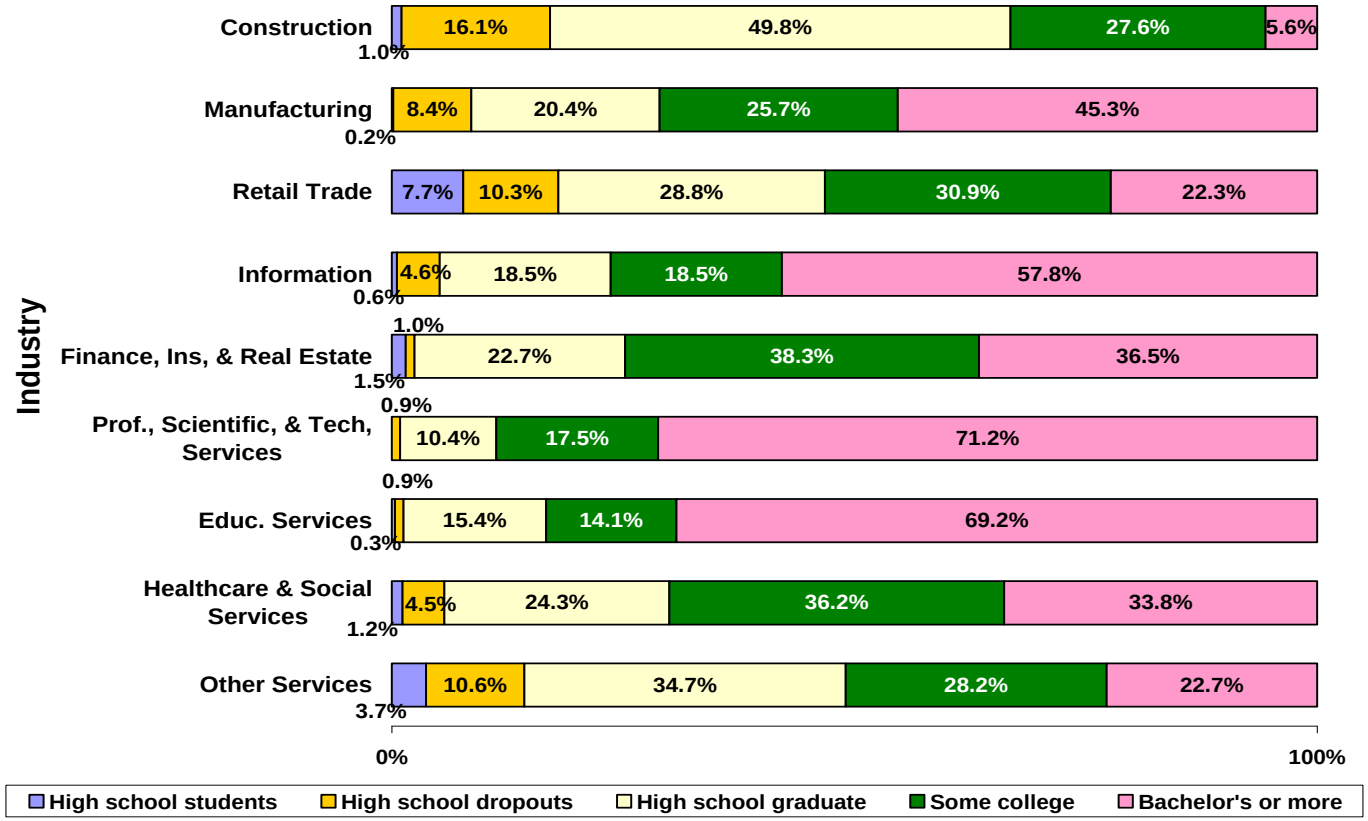
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.

Educational Attainment for Greater Lowell WIB

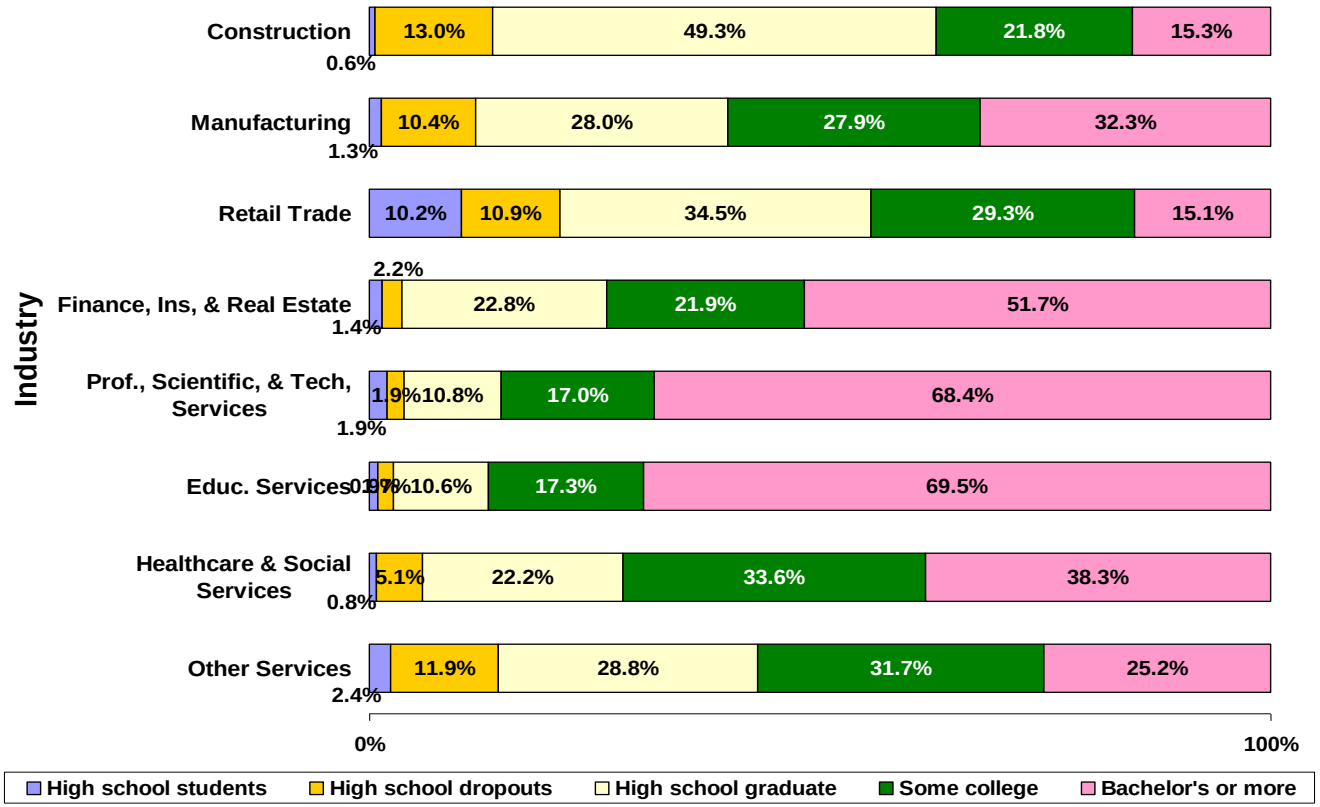
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.

Educational Attainment for Merrimack Valley WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



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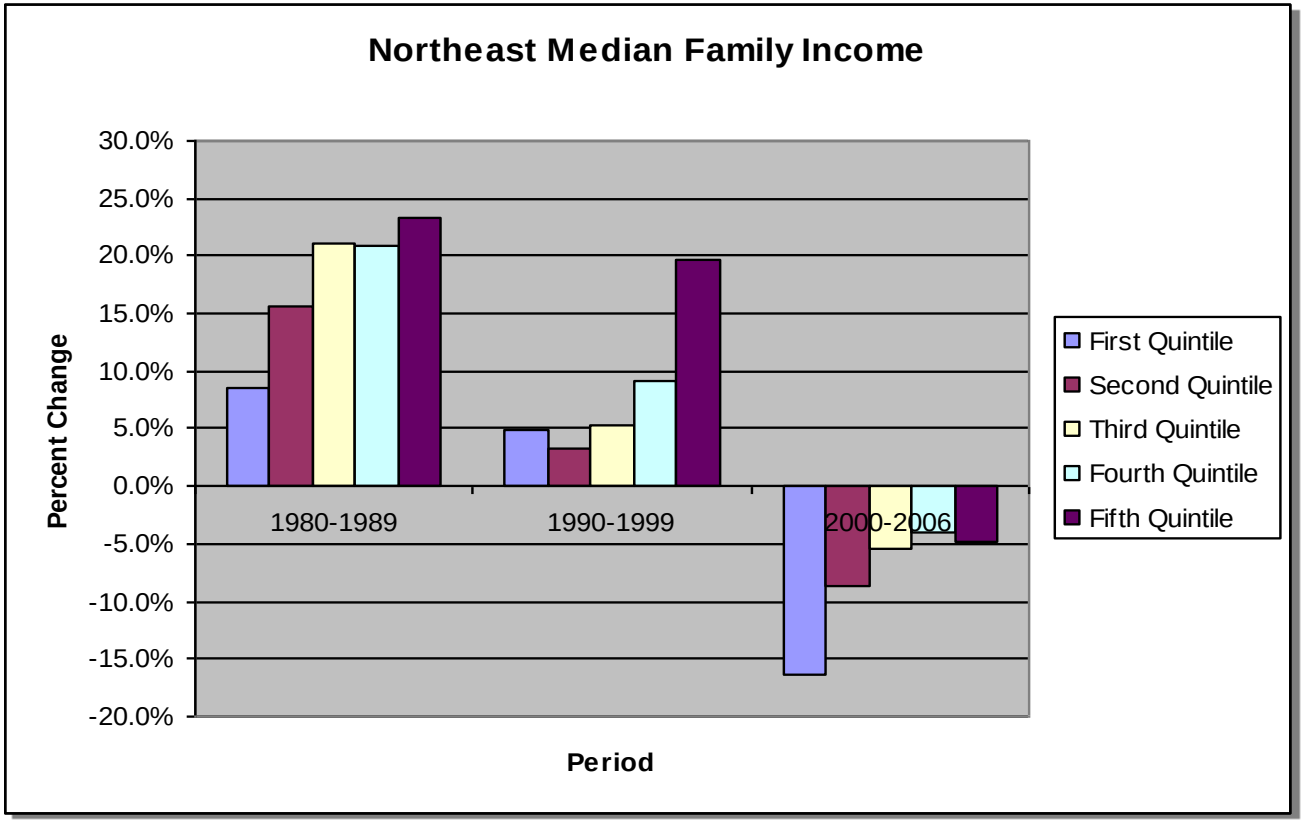
Growing Inequality in the Northeast Region, 1979-2006

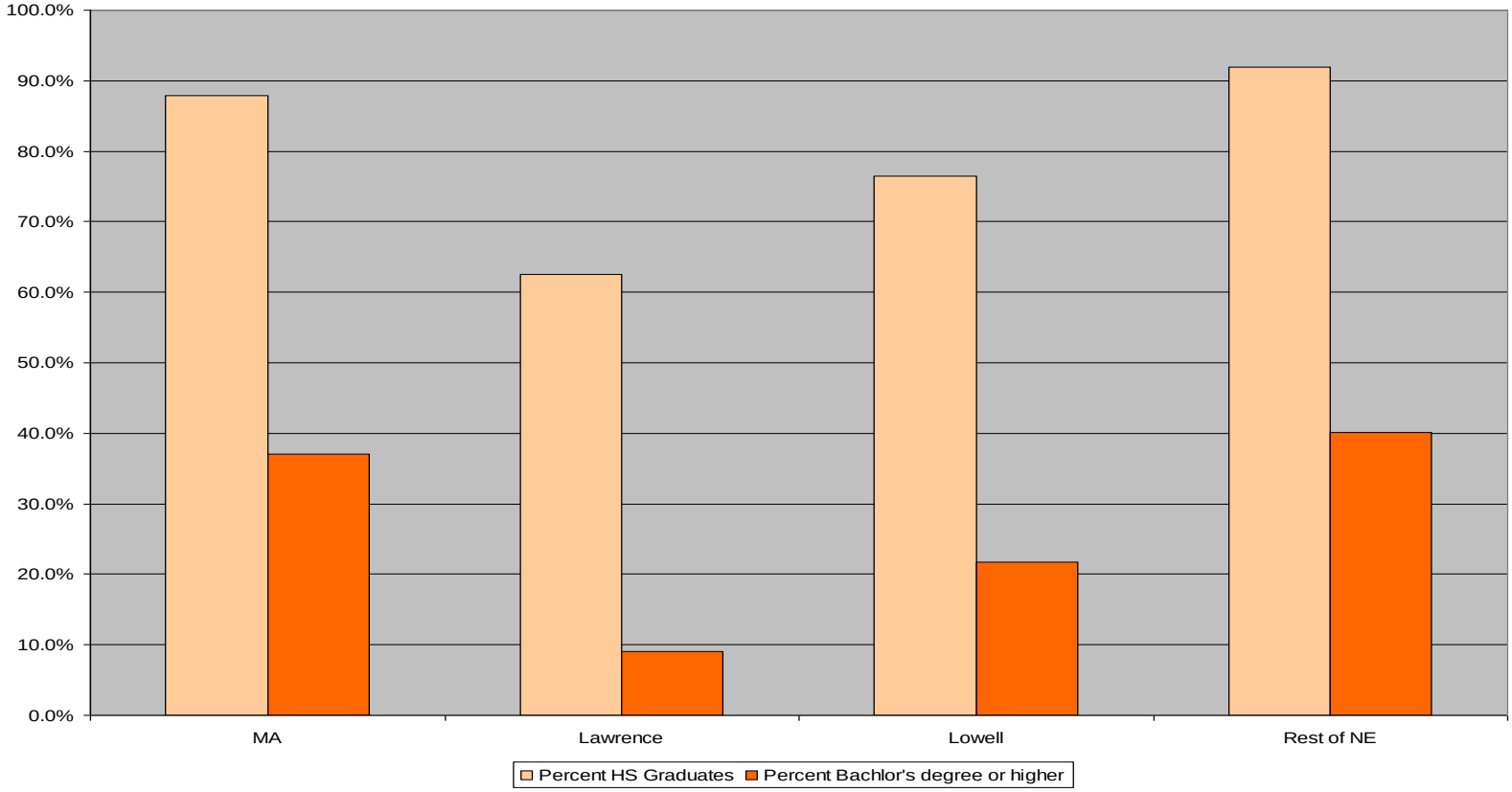


Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.

Analysis - Northeast's income growth picture is similar to that of the state and Boston Metro. Although the top quintile has grown significantly since 1989, it has actually declined – along with all other quintiles – since 1999.

Educational Attainment in Northeast

EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Bureau of the Census, 2006 ACS.