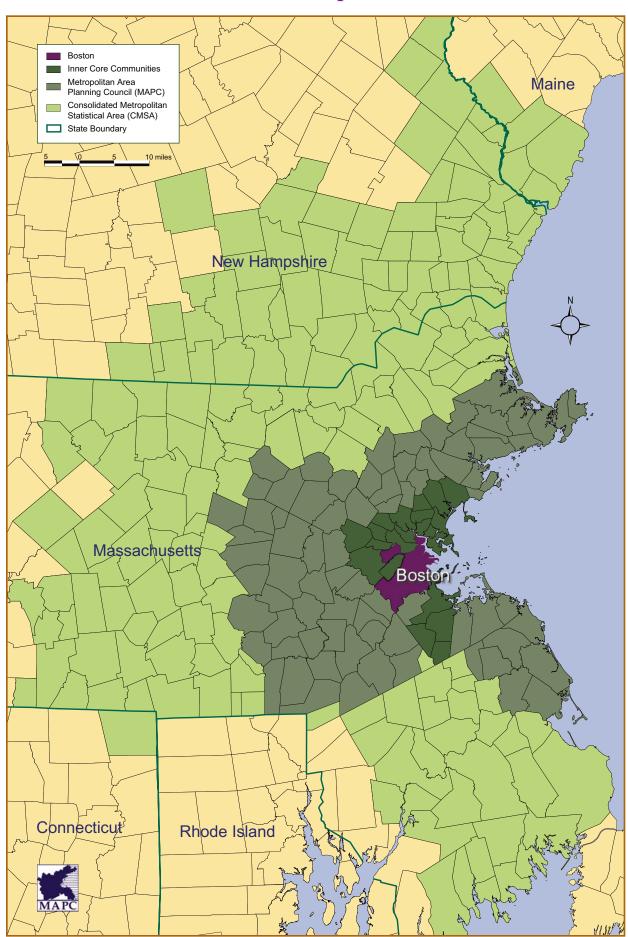
Thinking Globally/Acting Locally A Regional Wake-Up Call



A Summary of the Boston Indicators Report 2002 – 2004

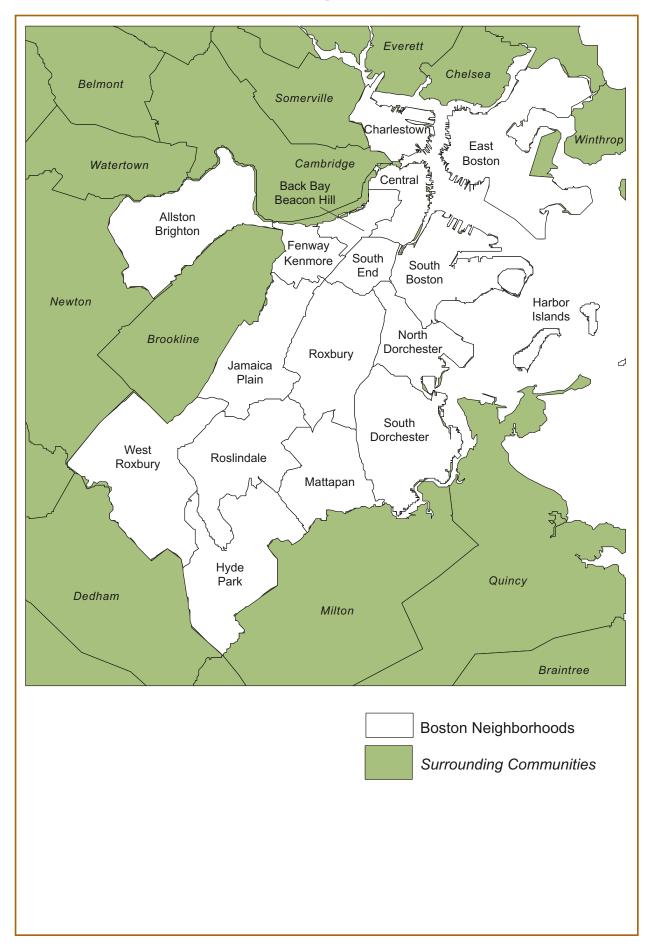
www.bostonindicators.org

Boston Consolidated Metropolitan Statistical Area



Source: Metropolitan Area Planning Council

Boston Neighborhoods



Thinking Globally/Acting Locally A Regional Wake-Up Call

A Summary of the Boston Indicators Report 2002 – 2004

A PROJECT OF THE BOSTON FOUNDATION AND BOSTON'S CIVIC COMMUNITY

Co-sponsored by

The City of Boston/Boston Redevelopment Authority

The Metropolitan Area Planning Council

In Cooperation With Many Public Agencies, Civic and Educational Institutions, and Community-Based Organizations

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CITY OF BOSTON • MASSACHUSETTS

OFFICE OF THE MAYOR

Dear Friends:

Boston stands as a city of great talent and opportunity. Today more than ever, we are making strides in seizing both. Our workforce is one of the most educated in the country and our diverse economic base lays a broad foundation upon which we continue to build success. And build we have.

Our reputation as a world-renowned center for academic and medical research continues to advance, bolstered by an emerging life sciences industry that is taking full advantage of Boston's greatest benefit—its workforce. On that score, Boston is also gaining ground as we continue to attract and retain young professionals, an ever-important segment of any city's population. By engaging these young people in the life of the city, we cultivate a powerful resource and ready a new generation of leadership.

With all of this positive evidence of our city pressing forward, we are increasingly mindful of the significant challenges we face—as a city and as a region. Housing is a prime example of an issue that poses a significant hurdle for the city and the region. To that end, my Administration has taken important and creative steps to address the crisis. Now in its second phase, our Leading the Way housing strategy builds upon our initial success, aiming to create 10,000 new units in four years.

We well know that our city's efforts alone cannot solve all the challenges the region faces. We look to our partners in government and civic life throughout the city of Boston and the region as a whole to help us address these challenges thoughtfully and comprehensively.

The Indicators Report is a significant voice among many in our civic dialogue. The progress it charts and the challenges it identifies encourage us to consider and to cultivate Boston's Civic Agenda. We look to the Report as an opportunity to delve deeper into the complex issues that affect the city and the region.

In recent years, change has embraced our city. What results is a more dynamic and diverse Boston than ever. We look forward to building upon these extraordinary assets and working with our partners, the Boston Foundation, the Metropolitan Area Planning Council and the other stakeholders in our common cause to keep pace with these changes and collaboratively address the challenges they pose.

Sincerely,

Thomas M. Menino Mayor of Boston



Dear Members of the Greater Boston Community:

Fifty years ago, at the first Boston Citizens Seminar, Bostonians came together to create a shared vision for the future and then went about the work of accomplishing that vision. Then, Boston was a city in decline, with no major construction for decades and few planned improvements, partially because of century-old divisions in civic leadership. The momentum created by that first seminar, convened by Boston College, seeded a renaissance that boldly reshaped the city's physical infrastructure.

To be sure, times are different. Mayor Thomas M. Menino has presided over a remarkable period of city building and civic transformation, and Boston today is one of the most beautiful and vibrant cities in the world. Boston's achievements since the release of the last Boston Indicators Report in early 2003 are all the more remarkable because they have played out against a statewide economic downturn. Boston Harbor sparkles, the Rose Fitzgerald Kennedy Greenway will soon house new cultural institutions and amenities, new theaters enliven Boston's cultural sector, "green" buildings promise greater environmental health, and the neighborhoods are filled with thriving businesses, new housing, and revitalized parks and playgrounds.

Yet today, the region faces challenges that were unimagined and unimaginable only a few years ago. Globalization is creating a new and more competitive environment, driving job loss and corporate consolidation, and transforming Greater Boston's economic and civic landscape. It is time to begin a new conversation about the future, this time on a regional scale, and to wake up to the fact that all municipalities in the region share the same essential challenge: the need to create a livable, affordable, prosperous and environmentally sound "citistate" that can successfully compete for workers and industry clusters with aggressive counterparts in the nation and around the world.

To succeed, we will have to strengthen the region's most important asset—its people. We will need to value and nurture all those who were born here and to build relationships with all newcomers. We will have to intensify our commitment to education and training, and create cutting-edge new industries. Most importantly, we will have to create a new, more inclusive and dynamic civic culture that encourages innovation and rewards collaboration—reinventing Greater Boston as a powerful source of solutions to national and global challenges as well a springboard to greater economic opportunity for all.

I'm optimistic about our prospects. In partnership with the City of Boston and the Metropolitan Area Planning Council, I invite you to use the 2002-2004 Indicators Report to consider ways to work together to build a future which, though presenting its tests and challenges, will continue to be very bright.

Sincerely.

Paul S. Grogan

President

The Boston Foundation



About the Boston Foundation and the Boston Indicators Project

stablished in 1915, the Boston Foundation is Greater Boston's community foundation—a major grantmaker, partner in philanthropy, key convener, and civic leader. The Foundation coordinates the Boston Indicators Project in partnership with the City of Boston/Boston Redevelopment Authority and the Metropolitan Area Planning Council. It relies on the expertise of hundreds of stakeholders, gathered in multiple convenings, to frame its conclusions, and draws data from the wealth of information and research generated by the region's excellent public agencies, civic institutions, think tanks and community-based organizations. The Boston Foundation will release a biennial report with regular supplemental updates and outreach through the year 2030, Boston's 400th anniversary.

Guided by a diverse and cross-sectoral Leadership Group, the Boston Indicators Project offers new ways to understand Boston and its neighborhoods in a regional context. It aims to democratize access to information, foster civic discourse, and track goals and measures of progress across 10 sectors: Civic Health, Cultural Life and the Arts, the Economy, Education, the Environment, Housing, Public Health, Public Safety, Technology, and Transportation.

Through its ongoing interactions with the broad civic community, the Project also works to develop a shared Civic Agenda, which reflects convenings involving thousands of participants over the life of the project—from school children and engaged residents to academic and community-based experts and policymakers. It is expressed for the first time in this year's report. The Project also sponsors seminars to bring people together across the city and the region for dialogue on key challenges and opportunities.

The Boston Indicators Project released its first report, *The Wisdom of Our Choices*, at a Boston College Citizens Seminar in 2000. The second report, *Creativity and Innovation: A Bridge to the Future*, was released in early 2003, again at a Boston Citizens Seminar. This report, *Thinking Globally/Acting Locally: A Regional Wake-Up Call*, is the third in the biennial series. It also marks the 50th anniversary of the first Boston College Citizens Seminar.

All Boston Indicators Reports are available online as part of the Project's interactive website, www.bostonindicators.org. The website provides data behind the charts and graphs included in the report, as well as exciting new features such as a Hub of Innovation, a data portal and a cultural resources survey, and includes links to other data-rich sites. It also posts new research on a regular basis. The website is a winner of an International Tech Museum Award for innovations that further equality.

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Introduction









y almost any measure, Boston has never been healthier or more dynamic. It has a reservoir of talent and knowledge, growing ethnic diversity and cultural vitality, and a dense network of relationships across and within economic sectors in which the seeds of future prosperity are being planted. But technological and demographic changes are accelerating rapidly, profoundly affecting not only Boston and the region it anchors, but cities and regions throughout the world. These changes, and their implications for Boston and the region, are the focus of the third Boston Indicators Report, *Thinking Globally/Acting Locally:* A Regional Wake-Up Call.

The first Boston Indicators Report was released in 2000, a year that stands out as an economic pinnacle in Boston's history and a moment when Boston's booming economy was pulling almost everyone—even teenagers with little work history—into the workforce. The 2002 report documented a period of economic contraction following the first high tech bust of the decade. Highlighting Boston's resilience, it described the city's competitive advantage as a three-legged stool: a strong institutional and physical infrastructure; a culture and practice of innovation; and a well-educated, skilled and diverse workforce. It noted that while the first two legs were holding firm, the third was weakening somewhat in comparison with competitor regions.

Among other major cities and regions, the City of Boston enjoys one of the highest percentages of young adults in its population, with more than 260,000 students enrolled in local colleges and universities annually. But during the booming high tech economy of the 1990's, the number of young adults in Boston fell slightly while the region lost an even greater percentage, reflecting a troubling statewide demographic trend. This decline in the number of young adults was highlighted in the 2002 report as a wake-up call to address regional factors weighing on young people's decision to stay or go—from high housing costs to a civic culture with little "room at the top."

This report—the third biennial Boston Indicators Report—covers the years 2003 and 2004, a remarkable period of city building and civic accomplishment in which Boston bucked the full weight of a continuing economic downturn. In the long span of Boston's history, there have been few two-year periods that can compare in the scope of accomplishments. But the world is changing fast, and as a result, this report moves quickly from a retrospective focus on the city over

the last two years to discuss current and future conditions affecting not just Boston but the city in a regional context.

It draws attention to competitive pressures that are intensifying, sending Boston and the region it anchors a powerful new message that "our" workers, "our" jobs, and "our" industry sectors are more mobile than we knew and, to a large extent, up for grabs. This external competition also throws into sharp relief a set of regional challenges that reside not just with the city, but also primarily within the state's policy-making jurisdiction. Some were unimaginable only a few years ago; others have been festering for decades. But in contrast to states and regions that are facing many of the same external forces and mobilizing their civic, business and elected leadership to respond, Greater Boston has yet to agree on a vision for the future or to align resources to advance shared goals. This lack of a collaborative vision and shared strategies reflects the greatest competitive disadvantage of all.

The success of this next phase in Boston's evolution lies with a generation born between 1946 and 1964, during the post-war period of economic expansion and optimism. These are the Baby Boomers—the largest generation in the history of the United States. The eldest will reach retirement age in 2010, the youngest in 2030—Boston's 400th anniversary.

Baby Boomers will guide change in Boston and the region for at least the next decade. Much more diverse than previous generations of Bostonians—about one-fourth African American and one-third foreign born—they are also more educated than predecessor generations of leaders. A close look at Boston's demographics reveals that this large and diverse cohort, attracted to Boston's vitality, is continuing to grow. And while members of this large generation now hold most of the leadership positions in Greater Boston's public agencies, corporations, civic and higher education institutions, and community-based organizations, many of them have just arrived in those positions of power and are as yet untested as civic leaders.

In this complex new century of radical technological and demographic and economic change, the Baby Boom generation now stands at the crossroads of the next half-century of Boston's history. Fifty years ago, Boston's leadership rose to the challenge of strengthening the city's physical infrastructure. Today's stewards are faced with a less tangible, but equally urgent, challenge—that of developing and nurturing the human capital this region will need in order to succeed in a competitive, global environment that values knowledge and ideas above everything else. In facing this challenge, it is crucial that today's leaders find ways to tap the experience and the skills of everyone—young and old—so that all of the people of this city and region can meet the demands of the 21st century together.

BOSTON'S STRENGTHS

Rooted Institutions:

The hub of a region of more than 74 institutions of higher education, Boston alone houses 35 colleges and universities and 22 hospitals, as well as world class and smaller museums and cultural institutions. A 2003 Appleseed study showed that Greater Boston's eight research universities alone contributed \$7.4 billion to the regional economy in 2000, providing work to 48,750 university employees and 37,000 other workers.

Physical Infrastructure:

Boston is a beautiful, walkable city with a newly-cleaned harbor edged by a publicly accessible Harborwalk, a growing network of parks, open spaces and urban wilds, historic neighborhoods of vibrant main streets, and new buildings that include the convention center, residential and office towers and cultural facilities.

A Culture and Practice of Innovation: Innovative people and institutions mean that Metro Boston captures more than its share of federal research funding for universities and hospitals, venture capital for start-ups, leading edge technology companies and groundbreaking nonprofit organizations.

Human Capital: Boston has one of the highest percentages of young people in the nation, and Greater Boston and Massachusetts have among the nation's highest educational attainment rates. Boston's young, diverse and well-educated population provides highly-skilled entrants for the innovation economy.

REINVENTION AND RENEWAL: THE PACE OF CHANGE





Boston has reinvented itself so often that it is easy to forget it was the commitment and action of many individuals and institutions that shaped what became "the future." Over half a century, successive generations of Bostonians transformed a rusty industrial city with a glorious past into a knowledge economy powerhouse.

In the 1950s, Boston's port was dying and its major industries—shoes and textiles—had literally gone South. Young families, Gl-bill-subsidized mortgages in hand, were fleeing in droves in search of new suburban homes and taking the city's tax base with them. Boston's future looked bleak. In 1954, Greater Bostonians came together at the first Boston Citizens Seminar under the aegis of Boston College and a new progressive mayor to create a vision for what they called the "New Boston." Working together, the region's mutually distrustful Yankee Brahmins and Irish leaders envisioned a modern city of high rise buildings, new industries, redeveloped neighborhoods, and expanded roads, highways and public transportation linking city jobs to the growing metropolitan region.

A half century later, despite severe setbacks along the way, Boston is both one of America's most beautiful cities and one of its most successful, and the New Boston is in full and glorious bloom. Boston in 2004 is younger, more vibrant and much more diverse than the Boston of 1954. With only five percent people of color in 1950, Boston officially became a "majority minority" city in 2000, with tremendous ethnic variety within each major racial group, and New Bostonians are adding their own traditions and aspirations to Boston's rich tapestry of neighborhood and civic life. While some streets and neighborhoods are simply more cosmopolitan than they were 50 years ago, others are entirely transformed. Reminding ourselves just how much Boston has changed over the past 50 years is one way to imagine what the city and region could become by 2030—the city's 400th anniversary.

1954: 50 years ago

In a long period of stagnation, Boston continues to lose manufacturing jobs to the South and people to the suburbs. Mayor John B. Hynes gives the keynote address at the first Boston Citizens Seminar for civic, political and business leaders convened by Boston College to rally civic leaders around the huge challenges facing the city. A vision for a "New Boston" emerges, which leads to early urban renewal plans, including the highly controversial demolition of the old West End in 1959 to make way for Government Center and Charles River Park. The vision is for a new economy based on financial services and research—largely in defense—reinforces Boston's role as a financial and transportation hub. Boston's population, about 800,000, is 95% white; most Bostonians of color are African American.

1964: 40 years ago

The Prudential Tower is completed—the first new high rise in Boston since construction of the "old" Hancock Building of 1947. Along with the extension of the Massachusetts Turnpike into the heart of the city, the "Pru" stands as a symbol of the shift away from the old industrial economy toward new sectors such as insurance and financial services. Boston demographics are beginning to change, with Puerto Ricans arriving in large numbers.

1974: 30 years ago

Early in Mayor Kevin H. White's four-term administration—and commitment to revitalizing Boston—the city explodes, as school desegregation begins, and high school students from Roxbury are bused to South Boston High. The events set off a wave of racial violence, white flight, and neighborhood disinvestment that will tarnish the city's reputation for a quarter century. At the same time, Governor Francis W. Sargent's historic 1972 moratorium on new highway construction spurs new plans for Boston's inner-city neighborhoods. Urban Edge community development corporation and other new nonprofit organizations are founded by people in their 20s who refuse to give up on the city. Boston's population continues to diversify, with a growing African-American population and new immigrants from the Caribbean, Latin America and Asia.

1984: 20 years ago

After near-bankruptcy in 1980, the loss of more than 220,000 Boston residents since 1950, and a decade of white flight, arson and disinvestment, the city is disfigured by more than 20,000 vacant house lots—and the Boston Housing Authority is in receivership. But signs of incipient revitalization are everywhere, with health centers, community development corporations and other neighborhood groups gaining traction and investment during Mayor Raymond L. Flynn's first term. The Dudley Street Neighborhood Initiative is founded and gains unprecedented eminent domain rights from the Boston Redevelopment Authority. The Conservation Law Foundation files a successful lawsuit to force the Commonwealth to clean up Boston Harbor, the most polluted in the nation, which ultimately leads to the creation of the Massachusetts Water Resources Authority, the first new regional government agency in a generation. New Bostonians continue to arrive from Central and Latin America, Africa, Asia and Europe.

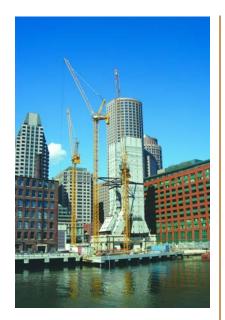
1994: 10 years ago

Mayor Thomas M. Menino is sworn in as Boston's first Italian-American mayor, committing his administration to community safety, progress in education, and technology access. Boston begins implementing the statewide K-12 education reform legislation enacted the previous year. With youth violence at near-historic highs, the "Boston Strategy" brings together an alliance of police, street workers, clergy and neighborhood organizations to implement a comprehensive approach focused on identifying and dealing with incorrigibly violent youth, while offering alternatives and opportunities for the majority of the city's law-abiding youth. Immigrants account for a still-greater share of Boston's population.

1999: 5 years ago

Boston's economy booms, driven by the exploding high tech and financial services sectors. Crime, unemployment and office vacancy rates reach historic lows as most of Boston's workers are pulled into the tight labor market. The US Census, taken this year, will show Boston to have become a highly diverse "majority minority" city in which roughly half of all Bostonians are people of color, with about one-fourth foreign born.

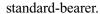
Boston 2002-2004



ven in the context of Boston's impressive history, the two years covered by this report, 2003 and 2004, stand as an extraordinary period of city building and civic transformation. Despite a sharp economic downturn, the sudden sale of iconic companies, a high-stakes Presidential election, and global instability that sent residents to war and oil prices to near-historic highs, Boston more than held its own, once again fulfilling its core identity as "a city upon a hill, with the eyes of all people upon us."

CELEBRATION

For one glorious week in July 2004, the attention of the world turned to Boston, the host city of the Democratic National Convention. The convention introduced 35,000 delegates and journalists to the New Boston and its vibrant neighborhoods while nominating a favorite son and Massachusetts Senator as the party's





The Boston Red Sox won the World Series for the first time in 86 years, ending decades of heartache and breaking the Curse of the Bambino. Three million-plus celebrants poured into the city from throughout New England and beyond for a joyous and peaceful "rolling rally" to celebrate the historic occasion. Equally joyous celebrations were held to mark the New England Patriots' Super Bowl victories two years in a row.

Bostonians celebrated the historic election victories of two politicians of color who broke through the glass ceiling of local politics to win hotly contested races by wide margins.

Felix Arroyo became the first person of color to win election as an at-large City Council member in a stunning second-of-five victory in November 2003. In September 2004, Andrea Cabral, a black woman, won the Suffolk County Sheriff's primary race by a 60-40 landslide, reinforcing a fast-changing political landscape and reflecting the changing demographics of the city and region.



New commercial developments opened in Boston's neighborhoods and downtown, with the state-of-the-art Boston Convention and Exhibition Center opening in the South Boston Seaport District and a new hotel /office complex in the Crosstown Industrial Park. The Convention Center debut culminated a multi-year collaboration among the City of Boston,

the Boston Redevelopment Authority, the Commonwealth of Massachusetts and the Massachusetts Convention Center Authority. The new hotel and office complex creates a major gateway to Roxbury and is designed to anchor years of development in the Seaport District and the surrounding neighborhood.

Boston celebrated the opening of new and renovated cultural facilities in the Theater District near Boston Common and throughout the city. The first new theater complex built in Boston in more than 75 years, the Stanford Calderwood Pavilion, opened in 2004, its two South End theaters the result of collaboration between the Boston Center for the Arts and the Huntington Theatre Company. The long-dormant downtown Opera House, an architectural jewel, was restored. Other celebrations marked the groundbreaking for a new Institute of Contemporary Art on Fan Pier, the opening of Artists for Humanity's EpiCenter in Fort Port Channel, the renovation of the Center for Latino Arts, and the planned Roxbury Center for Arts, Culture and Trade in Dudley Square.

Mayor Menino established a new "green" building code, while many developers of office, hotel and residential space in Greater Boston embraced the concept of "green" buildings that conserve energy, water and building materials. Genzyme's new headquarters in Cambridge is one of the greenest buildings in the world, but is just one of several in Greater Boston, ranging from Artist for Humanity's EpiCenter to Mass Audubon's Boston Nature Center in Mattapan to Manulife's new office building in the Seaport District. On the recommendation of Mayor Menino's Green Building Task Force, city approvals for major new developments will now require compliance with new "green" building codes.

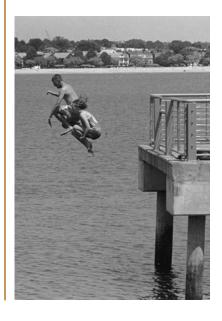
Reflecting newfound collaboration in the region, innovative statewide legislation addressed long-standing challenges in housing and education. The Commonwealth Housing Task Force, convened by the Boston Foundation, pulled together a wide range of housing stakeholders, who together developed legislation enacted in 2004 as Chapter 40R to encourage "smart-growth" housing production in city and town centers and near transit nodes throughout the state. And the cause of universal access to early education for all 3-, 4-, and 5-year-olds in the Commonwealth moved forward with passage of legislation establishing a Department of Early Education and Care.

TRANSFORMATION

Boston continued to lose locally-headquartered companies, eroding the pool of traditional civic leaders. In the past two years, Boston lost two of its oldest and most iconic local companies. In 2003, the Charlotte, NC-based Bank of America purchased Fleet Bank, the successor to the Boston-based first bank in America. Similarly, Canadian insurance company Manulife purchased the John Hancock Insurance Company, including its signature Back Bay highrise. And plans for Gillette's subsequent sale were underway. All three











purchases led to the retirement of key local business leaders and fears of a loss of civic leadership and philanthropy, as corporate leadership moves out of Boston.

Massachusetts became the first state to legalize gay marriage, and thousands of couples celebrated the legal recognition of their relationships. The State Supreme Court's historic decision was rooted in the state's constitution, which is the oldest in the world still in use.

The Big Dig finally opened to traffic, allowing for the demolition of the Central Artery, an elevated steel fixture since the mid-1900s. Sunlight fell on land shaded for decades, revealing surprising new vistas and a broad swath of land running through the old city on which parks and civic amenities will eventually appear. The Rose Fitzgerald Kennedy Greenway was dedicated, and a Conservancy established to oversee the creation of a "common ground" of new parks and public spaces. Dispiriting reports of Big Dig leakage notwithstanding, this was the beginning of a new era, in which Boston downtown was reconnected to its Waterfront.

Boston's Catholic Archdiocese changed the map of the city and saddened many parishioners as it began to close 82 of its 357 parishes in Greater Boston, including many of the parish churches that had defined the city's largely Catholic neighborhoods for more than a century. Boston became the center of gravity in a deepening worldwide sexual abuse scandal brought to light by the Boston Globe Spotlight team.

People of color and others in historically low-voting city wards and precincts registered and voted in growing numbers. Aggressive voter registration and turnout efforts launched in 2002 produced real results. Voter turnout grew more than 9% between the 2000 and 2004 Presidential elections, with double-digit increases in turnout in neighborhoods of color in Dorchester, Mattapan and Jamaica Plain. Asians, African Americans and Latinos voted at a much higher rate than in 2000.

The Massachusetts State Legislature, long a bastion of the Irish and Yankee Brahmins, moved into Italian-American hands.

Robert Travaligni became Senate President in 2003, and Salvatore DiMasi took over as House Speaker in September 2004. They joined Thomas M. Menino, the first Italian-American mayor of Boston.

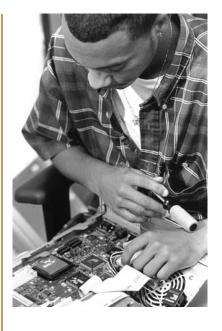
High-rise, high-end luxury condominiums opened and were snapped up by empty nesters and other Baby Boomers looking to live in walkable, culturally vibrant Boston—and more are in the planning stages. From Millennium Partner's hotel and condos on Tremont Street overlooking the Boston Common to the South End's Atelier, city living—often complete with the services of adjacent, full-service hotels—proved an irresistible lure for many upscale former suburbanites.

The "City on a Hill" in a "Flat and Wired" World

he spine of high rises running through the heart of Boston's downtown evoke its transition over the second half of the 20th century from a manufacturing city to a world class center of the knowledge economy. Over the years, some of these buildings came to be accepted as defining landmarks—guideposts—in the civic mind and on the street: Fleet's sturdy "pregnant building," the Hancock building's sunrise and sunset reflections. But with the sale of these major corporations along with the manufacturing giant Gillette, the buildings take on new meaning as symbols of the growing competitive challenge facing Boston in a period of accelerating change.

The same technological advances that catalyzed Greater Boston's success in the 1990s continued to evolve even after the tech bust, knitting together cities, regions and nations around the world into a single high-speed global economy. Today, economic space and time are defined as much by cyberspace as by geography, and the business value of connection to a particular place and its people—its rootedness—is eroding. Workers and suppliers can be anywhere in the world, with operations and capital quickly moved to maximize efficiency. Workers "go to work" in cyberspace, while local prices and wages are negotiated against a global backdrop. And mega-multinational companies are being built to compete in this new global economy through industry consolidation, merger, and purchase. Communities throughout the world are being forced to adapt. In Boston, businesses that once seemed like permanent fixtures on the civic landscape are being swallowed up or hollowed out.

The years 2003 and 2004 covered by this report were a remarkable period of local achievement, but the city's three-legged stool of competitive advantage also was shaken hard. The first leg—its enviable institutional and physical assets—was strengthened by the completion of the Big Dig, the new convention center, cultural facilities and housing development, but was undermined by this loss of corporations and the assimilation of signature law firms. The second leg—the culture and practice of innovation—was bolstered by new investment in bioscience and nanotechnology, but also challenged by an unexpected 4% loss of jobs between 2002 and 2003 in the state's "innovation economy" clusters. And the third leg—that of the region's precious human capital—showed further signs of weakness in the continuing loss of native residents and young talent statewide, combined with a decline in foreign immigration, the latter being the primary source of population growth on which the state has relied for several decades. In fact, in late 2004, Massachusetts was declared by the US Census Bureau to be the only state in the nation to have lost population in that year.





Thinking Globally—and Regionally



n this newly mobile world economy, Boston—with its cold winters, without its own source of oil, and with fewer fish in its ocean and fewer corporate headquarters in its downtown—must strengthen its hold on good 21st-century jobs and firmly root its primary competitive advantage: a skilled, educated, hard working, diverse and creative workforce. But it cannot do this alone. After a half-century of committed civic inspiration and economic investment, the City of Boston has addressed most of its purely local challenges. Today, its primary hurdles are not local but regional in nature, and in the absence of regional political jurisdictions, the capacity to remedy these challenges moves quickly to the state's jurisdiction. Boston's greatest leverage in the new global economy, however, comes from its role as the economic hub of a region that extends north to Nashua, NH; west to Worcester, and south to Providence, RI. This region, encompassing more than five million inhabitants, or well over a third of New England's population, is defined by the US Census Bureau as one economy: The Boston Consolidated Metropolitan Statistical Area.

Municipalities within this regional economy, as well as those within Massachusetts, share challenges that were unimaginable only a few years ago, such as the prospect of losing even more local companies to external purchasers. Other shared concerns—such as housing, transportation, educational quality, and disparities by race and household income—are longstanding, and have been festering for decades.

It is said that the Chinese phrase for crisis is composed of the characters for danger and opportunity. Potentially, each one of Boston's challenges represents both a danger and an opportunity for civic, political, business and community leaders to come together across historic divisions to build a more resilient and more equitable economy, one rooted in the region's extraordinary assets and in Boston's proven capacity for reinvention.

In his address at the first Boston Citizens Seminar, organized by Boston College in 1954, Mayor John B. Hynes asked a question, "Boston, Wither Goest Thou?" that many had posed to themselves in the decades when the predominant shoe and textile industries were moving south and the city was losing its tax base. Fifty years later, many are beginning to wonder whether the region could be entering a similar period of economic stagnation. While a decline of similar proportions seems unlikely given the city and region's permanent assets, the pace with which the region is changing is unsettling and demands collective reflection. The first step is to explore the increasingly competitive environment in which the residents of Boston and municipalities throughout the region find themselves today.

Rankings

Rankings used to gauge competitiveness in the knowledge economy continue to place Boston and Massachusetts at or near the top nationally, but there has been slippage over the past two years. A sober look at recent trends calls into question the region's sustainable prosperity. With the realization that things are changing fast, a consensus is building that these competitive pressures—if left unaddressed—will further weaken prospects for those already falling behind and challenge the region's very capacity to succeed in this new century.

Rankings: Where do Boston, Metro Boston and the Commmonwealth Stand?

Category	Index/Report	Year	Geography/Ranking
Innovation	Index of the Innovation Economy Mass. Technology Collaborative (MTC)	2004	Massachusetts is one of the Leading Technology States

MTC's *Index of the Massachusetts Innovation Economy* measures the pace of innovation, comparing seven leading technology states (LTS): California, Colorado, Connecticut, Massachusetts, Minnesota, New Jersey, and New York. Jobs in nine key industry clusters declined by about 4% between 2002 and 2003 in Massachusetts, the largest decline among the LTS. Massachusetts continues to attract more venture capital and federal R&D funds than all LTS except California and has the highest percentage of scientists and engineers in the workforce. However, the state is less competitive than most LTS in housing and public higher education, and lags in population growth.

Science State Science and Technology Index and Technology Milken Institute 2004 Massachusetts 1st among 50 states

The Milken Institute index encapsulates a comprehensive inventory of technology and science assets and provides states with benchmarks of technology progress to leverage and promote economic development with five equally-weighted indices: research and development assets; risk capital and entrepreneurial assets; human capital capacity; technology and science workforce; and technology concentration and dynamism. Massachusetts ranked first in three of these components, no lower than third in the other two, and first overall.

Overall	Metro Area and State Competitiveness	2004	Massachusetts ranks 1st,
Competitiveness	Beacon Hill Institute		Metro Boston ranks 4th,
_			falling from 3rd

This report combines more than three dozen measures to create a "competitiveness index" for the nation's states and largest metro areas in six areas: human resources; technology; openness to commerce, crime prevention; government and fiscal policy; infrastructure and environmental policy. Competitiveness is defined as "the policies and conditions that ensure and sustain a higher level of per capita income and its continued growth." Boston ranks 1st in technology and 4th overall, behind Seattle, San Francisco and Raleigh. Boston's lowest rankings were in government and infrastructure.

Economic	Best Places For Business	2004	Metro Boston ranks in the top 5
Climate	Forbes Magazine		for income growth, culture, and
			education, low in other measures

Forbes Magazine annually ranks 150 places by factors that affect the business climate. These include educational attainment, the cost of business, the cost of living, the crime rate, culture and leisure, income and job growth, and net migration. Boston ranks at the top in educational attainment, culture, crime rate, and income growth, but among the bottom in the cost of living and business and among the bottom two-thirds in job growth and net migration, based on five-year averages.

Economic Best Cities for Entrepreneurs 2003 Metro Boston moved from Climate Entrepreneur and Dun & Bradstreet 35th to 23rd among 61

Dun & Bradstreet, with *Entrepreneur* Magazine, publishes an annual list of "Best Cities for Entrepreneurs" that includes larger and smaller metro areas. The criteria used to rank metropolitan areas: Entrepreneurial activity (the number of businesses 5 years old or younger); small-business growth (the number of businesses with fewer than 20 employees and significant employment growth from January 2002 to January 2003); job growth (change in job growth over a three-year period through January 2003); and risk (bankruptcy rates). Metro Boston ranked 23rd overall and 4th among Eastern metro areas.

Quality of Life Worldwide Quality of Life City Rankings Mercer Consulting 2004 Boston ranks 41st Tied for 9th among US cities

A global study that provides detailed assessments of 39 quality-of-life determinants: consumer goods; economic environment; housing; medical and health considerations; natural environment; political and social environment; public services and transportation; recreation; schools and education; socio-cultural environment.

Challenges from the Outside

urce: Massachusetts Technology Collaborative, 2004 Index of the sachusetts Innovation Economy,

using data from economy.com

Key Industries in Massachusetts

NEW COMPETITIVE PRESSURES

Foreign Economies

The global economy today is "flat and wired," in the words of *New York Times* columnist Thomas Friedman. Whereas only a few years ago the United States stood out as the world's clearly dominant power in economic and military terms, there are now several new kids on the economic block—"developing nations" that have suddenly emerged as blockbuster economies—and the US trade deficit is swelling in their favor every year. India has become a center for telecommunications services and software development; China specializes in manufacturing of an increasingly sophisticated nature and is now attracting more foreign investment than the United States. Brazil is the world's largest food exporter. And the European Union, now with a larger population than the United States, is the world's largest total exporter.

Consider these recent trends:

- China and India are educating hundreds of thousands of highly skilled, low-wage computer scientists and engineers. Many of these skilled workers, whose salaries are a fraction of those in the US, are fully able to perform the jobs that until recently the residents of Greater Boston assumed would be a stable engine of our own economic growth.
- The US National Intelligence Council estimates that by 2020, India and China will be vying with the United States for global economic supremacy.
- According to the *Boston Globe*, venture capitalists in Greater Boston are asking local start-ups what their "India Strategy" is before investing, reinforcing local fears that Massachusetts' high level of intellectual capital in the form of patents per capita has become as mobile as financial capital—and that new jobs may no longer flow from local invention.
- With opportunities opening up in their own nations, foreign students and highly skilled 'knowledge workers' are staying home, driving down their numbers in the US. This is particularly true in math and science where the US—and Massachusetts—fall far short.



-6,000

-8.000

-10,000

-12,000

-14,000

Competitor States

A high-stakes race is underway around the nation as states try to stay at the cutting edge of these global trends. This is translating especially into fierce and growing competition for research, investment, and highly skilled and specialized workers.

For example:

- The Massachusetts Technology Collaborative's *Index of the Massachusetts Innovation Economy* compares the leading technology states of California, Colorado, Connecticut, Massachusetts, Minnesota, New Jersey, and New York in nine industry clusters: software and communications services; innovation services; post-secondary education; diversified industrial support; financial services; healthcare technology; textiles and apparel; computer and communications hardware; and defense. The 2004 Index showed that while Massachusetts had the highest percentage of scientists and engineers, and attracted more venture capital and federal R&D funds than all of the states except California, the Commonwealth generated fewer jobs, with a decline in innovation economy sectors of about 4% between 2002 and 2003—the largest among the leading technology states.
- Upping the ante considerably, in November 2004, California voters passed a \$3 billion bond bill to invest in stem cell research at the rate of \$300 million each year for 10 years, with the clear intent of attracting the best and the brightest in bioscience, Greater Boston's premier new industry cluster. This adds to California's already significant capacity in bioscience research and innovation at public institutions, such as the University of California San Diego, one of Greater Boston's major competitors in this field. Wisconsin, Illinois, New Jersey and Maryland have similar bills in the works, while other competitor states have announced a commitment to compete for this emerging sector.
- North Carolina uses its high quality community colleges to drive economic development throughout the state. In contrast, Massachusetts has reduced funding for its statewide system of 15 community colleges. The Commonwealth now ranks 49th out of 50 states in tax appropriations for higher education overall per \$1,000 of income, and 47th in appropriations per capita.
- While Massachusetts debates how to implement early education for all 3-, 4-, and 5-year-olds, other states have taken the lead. Georgia and Oklahoma already offer universal preschool to all 4 year olds. New York and West Virginia have been phasing in universal preschool access, New York since 1997, beginning with 3- and 4-year-olds at high risk. Florida is on the verge of offering universal access to preschool.

THE SUCCESSFUL "BOSTON FORMULA"

The successful "Boston Formula" used by other "citistates" to attract businesses, jobs and workers includes:

Excellent higher education institutions with large student populations, including foreign students skilled in math and science

Highly educated young workers and families

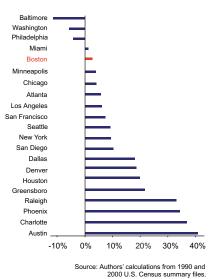
Access to private venture capital and public research funding

Culturally vibrant, walkable neighborhoods

City and town centers near public transit

Nearby recreational and natural areas

Percent Change in Population Boston & Selected Cities: 1990 to 2000



Share of Population with a B.A. Metropolitan Statistical Areas: 2000



Source: 2000 U.S. Census http://factfinder.census.gov.

Competitor Regions

Competitor regions and the Census Bureau's new "micropolitan" areas—regions centered on small cities—are busy replicating the "Boston Formula" for success in the 1990s in an effort to woo "our" knowledge workers and "our" jobs. The key ingredients of the "Boston Formula" are walkable, livable, high-density communities close to public transit stations, with nearby research institutes, educational institutions, cultural facilities, natural resources and new industry clusters.

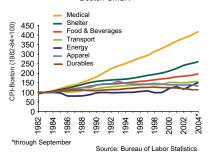
A few examples:

- North Carolina's Piedmont District advertises industry clusters and amenities that sound very like our own—except for the warmer weather, shorter commutes and greater supply of affordable housing.
- The metropolitan regions of Los Angeles, Portland, OR; Miami, Salt Lake City, Arlington, VA; and San Diego all plan to build housing and commercial development at transit nodes as a way to revitalize their older neighborhoods and attract singles, Baby Boomers and young families to convenient, healthy and welcoming new communities in the years ahead.
- In November 2004, the six-county region surrounding Denver passed a bond bill to create a comprehensive rail transit system to accommodate an anticipated 900,000 new residents in transit-oriented, high-density new villages and revitalized older parts of the city and counties, with pedestrian promenades and open space systems. When fully built out, Denver's transit system will be second only to New York's in its scale and capacity.

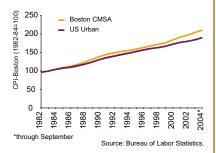
Challenge	Countervailing Trend
An aging workforce	Rising health care costs and cuts in proven public health programs
Loss of critical young workers and families due to housing costs	Cuts in housing programs, resistance to new family housing in the suburbs
The need for educated workers to sustain regional economic growth	Cuts in public higher education and continuing educational disparities by race and income
Dependence on immigrants for future workforce skills	Waiting lists for ESOL; barriers to H-1B Visas; public higher education and health care
Reliance on high tech sciences to drive ocal economic growth and opportunity	Off-shoring local high tech and R&D jobs to India, China, Eastern Europe
Competition from US "citistates" chat are creating walkable, cransit-accessible neighborhoods	Stagnant investment in public transit; diffuse development, long commutes
mportance of tourism to the regional economy	Loss of New England's natural character to sprawl and congestion; reduced public support of the arts and culture
Dependence on vulnerable pil supplies, volatile prices	Increasing regional energy consumption
Need for risk-taking, collaborative eadership and innovation	A civic culture of complacency, exclusion and fragmentation

Challenges from Within

Consumer Price Index By Component Boston CMSA



Consumer Price Index Metro Boston and U.S. Average



Taxachusetts No More

In 1981, Massachusetts ranked 6th in the nation in local and state taxes and fees as a percentage of personal income. The Massachusetts Taxpayers Foundation analyzed 2002 Census data and found that Massachusetts ranked 47th among all states, with local and state taxes and fees per \$1,000 of personal income falling 13% below the national average. With a modest 2002 tax increase, the Massachusetts Taxpayers Foundation now estimates the Commonwealth at 46th.

In addition to these external competitive forces, Boston and other municipalities in the region face an array of internal challenges that cause competitive disadvantages in comparison to other regions and figure mightily on residents' decisions to stay or go.

CONFRONTING THE HIGH COST OF LIVING

A Rising Consumer Price Index

Metro Boston's Consumer Price Index has risen faster than the national urban average in each year between 1997 and 2003. Rising costs across the spectrum of necessities on the index—from housing to health care to staple foods to transportation and home heating oil—have made Greater Boston one of the most expensive regions in the US, putting additional stress on families and households already living through an economic downturn and jobless recovery. Massachusetts also has among the highest tuition and health care costs in the country. According to the think tank MassINC, a 2003 survey published as *The Pursuit of Happiness* revealed that, "One quarter of Massachusetts residents polled said that they would move out of state if they had the opportunity, with 49 % rating the state's quality of life as either 'fair' or 'poor.' Personal finances and the high cost of living were dominant concerns. The number one reason for wanting to leave was to go somewhere with a lower cost of living or lower taxes."

The Stubbornly High Cost—and Short Supply—of Housing

The high cost of housing in Greater Boston remains the single most vexing issue for many state residents, newcomers and those interested in moving to the region. A University of Massachusetts poll found that in 1999, 11% of state residents have considered leaving the state due to high housing costs. By December 2004, 46% of Massachusetts' residents said that they or members of their immediate families had considered leaving the state because of the high cost of housing. Employers also cite housing costs as their number one concern when it comes to attracting and retaining a qualified workforce.

The City of Boston—with 22% subsidized housing units—contains almost twice the percentage of affordable housing as the few suburban municipalities that meet the state's 10% affordability goal. Greater Boston's housing prices are among the priciest in the nation. Since 1997, median sales prices have soared 81% in the state and 109% in Boston. While median asking rents in the city are down 18% from their 2001 peak, most of the decrease is in the top end of

the rental market, while lower rents continue to climb. Overall, rents in Boston are 50% higher than in 1995.

Throughout the 1970s and 1980s, new housing starts more or less kept pace with population growth, but the rate of housing production dropped in the 1990s, and since then has not kept up with growth rates in population or with the increase in single-person households. The Center for Urban and Regional Studies at Northeastern University estimates that over the next 10 years, the region will need to add at least 30,000 new housing units over and above current production levels in order to bring housing supply into line with housing demand. A new state law passed in 2004, Chapter 40R, encourages production of "smart growth" housing through the use of zoning overlay districts in city and town centers and at transit nodes. But until municipalities start taking advantage of the new law, production will continue to fall short.

Housing issues divide residents of the region into multiple factions: the overcrowded or homeless versus those living large; renters versus owners; homeowners who bought low versus those who bought high; urban versus suburban residents; and municipalities that welcome children versus those wishing to keep them out. Without concerted and sustained action, housing issues will continue to fracture the region's political will and to stall economic growth.

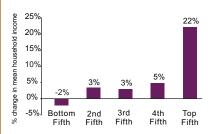
ADDRESSING GROWING INEQUALITY

A Widening Earnings Gap

In 2000, Massachusetts ranked among the least egalitarian states in the nation with respect to income distribution, according to the Center for Labor Market Studies at Northeastern University, largely because gains from the knowledge economy in the 1990s were not as widely shared in Boston or the Commonwealth as they had been in the 1980s. The Center found that between the 1990 and 2000 census, full-time male workers in Massachusetts in the bottom 40th percentile lost ground; those in the middle made modest gains; but those at the top enjoyed dramatic increases, with a 25% gain for the top 1%. In Boston and the Commonwealth, these dramatic differences in earnings closely track educational attainment levels. Between 1990 and 2000 in Boston, those with less than a bachelors degree saw very modest gains, or even losses, in income, while those with a bachelors degree or higher saw their incomes rise by more than 20%. And because people tend to choose spouses with similar educational backgrounds, two-earner households in the Commonwealth compounded the rate of return from educational attainment—compounding income inequality as well. This widening income gap creates very different realities for those with good educations, who are fast pulling ahead, and those with less education, who are falling further behind.

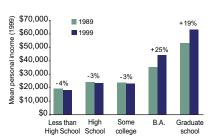


Change in Household Income by Quintile City of Boston: 1989-1999



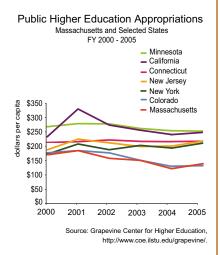
Source: Authors' calculations from 1990 and 200 U.S. Census public use microdata

Income by Educational Attainment City of Boston: 1989 and 1999



Source: Authors' calculations from 1990 and 2000 U.S. Census public use microdata adjusted to 1999 dollars using CPI-U

10th Grade MCAS Math Proficiency by Race/Ethnicity Boston Public Schools: 1998 - 2004 Asian 100 % scoring Proficient or Advanced Black 90 Hispanio 80 70 60 50 40 30 20 10 1999 2000 2001 2002 2003 Source: Boston Public Schools MCAS results by race, 1998-200 http://boston.k12.ma.us/ga





Uneven Educational Quality and Access

With educational attainment as the key predictor of lifetime success in the knowledge economy, educational opportunity has become a civil rights issue. It is generally acknowledged among national education experts that Boston now leads the nation among large urban school districts on progress in education reform. Boston's schoolchildren in nearly all grades are improving in proficiency of the MCAS tests faster than the statewide average. However, Boston and other urban districts with disproportionately large low-income and immigrant populations have far fewer students who are achieving "proficient" or "advanced" test scores when compared with higher income and more homogeneous suburban school districts.

Children's school performance also often reflects their parents' educational attainment levels. MassINC estimated in 2000 that about a third of Massachusetts' workers lack adequate training and the literacy skills to compete for jobs in the new economy. A large percentage of those with less educational attainment are immigrants and others at historic disadvantage. Despite the critical importance of workforce training and literacy, the state's workforce development and adult basic education systems have been fragmented and underfunded, and those without literacy skills cannot easily gain access to adult basic education and English as a Second Language classes.

And perhaps because of an historic reliance on private universities to supply the region's educated workforce, the budget for the Commonwealth's public higher education system has been sharply cut, while fees and tuition costs have risen. According to the Massachusetts Budget and Policy Center, funding for public higher education in the Commonwealth has declined by \$275 million, or 23%, since 2001, even taking into account the slight increase of 4% this fiscal year.

The good news is that a number of remedies are on the table: early education for all; an increase in the length of the school day; charter schools and more school choice; support for failing schools; more teacher training; improved math and science instruction; increases in the state's higher education budget; and more coherent workforce training. However, rather than being seen as essential components of a seamless system of educational excellence for all, each initiative is forced to compete with others for available resources.

CREATING NEW POLICIES FOR A NEW ERA

Too Many Eggs in Too Few Baskets?

Between January 2001 and March 2004, Massachusetts lost more than 6 % of its jobs, the biggest drop of any state in the nation, with about half of them in high tech sectors. Although about 20,000 new jobs were created during that time—most in health care and education—altogether about 195,000 jobs have disappeared since 2001. Thinking ahead, many point optimistically to projected job growth

in industry sectors such as life sciences, which currently accounts for less than 2 % of jobs in the state, and nanotechnology, an area in which Greater Boston is shaping up to become a major center. But these sectors, while essential to future growth, will require and draw highly educated specialists from elsewhere. These sectors also may prove to be as mobile and subject to "off-shoring" or consolidation as other high tech sectors are proving to be. To broaden the prospects for job creation and economic competitiveness, the think tank Mass Insight is calling for investment in the Commonwealth's public universities to spur innovation and create rooted partnerships with private universities and local industries.

Trading Manufacturing for Service Jobs

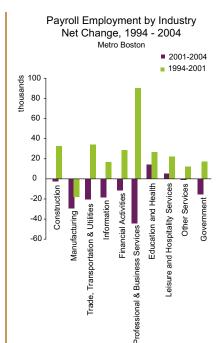
The Center for Labor Market Studies and others predict that the largest number of future jobs in the Commonwealth may lie in both high and low-paid service sectors. Manufacturing jobs—which have been decreasing in the Commonwealth for decades—further shrank from about 408,000 in 2000 to approximately 323,000 in 2004. Along with the jobs went skill sets vital to a broadly prosperous economy. To counteract that trend, the Center proposes strategic investment in technical education and workforce training. Likewise, the City of Boston has identified what it calls "Back Streets" employers in the manufacturing, wholesale, commercial services, logistics, food processing and building/contracting sectors that are critical to its economic base. Boston currently has more 4,000 "Back Streets" businesses, which generating 100,000 jobs—many with salaries two to three times higher than service jobs. Retaining these jobs will be a challenge, since 13% have left the city over the past decade.

Congestion in "Generica"

Automobile ownership and vehicle miles traveled in Boston and the region alike have far outstripped population growth, reflecting a mismatch between jobs and people, and resulting in more congested roadways. Throughout the region, high land and housing costs are pushing development to the region's edge, bypassing older industrial cities and neighborhoods. Commutes are longer; creative and family time becoming rare; and vehicular greenhouse gas emissions increasing. At the same time, development is consuming productive agricultural land and distinctive natural landscapes at a rate of about 40 acres a day. The stakes are high and rising. Competitor regions are developing the kind of healthy, livable communities we appear eager to lose. The authors of last year's *Boston Unbound* report for the Boston Foundation ask the essential question: "If the Boston region starts to look like Anywhere USA, combined with an extraordinary cost of living, why pick it?"

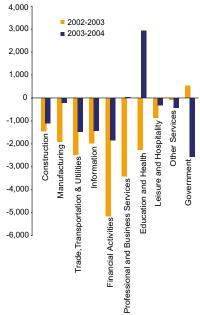
Growing Dependence on Imported Fossil Fuels

While a number of regions are investing in renewable energy research and production, New England has become one of the least self-reliant



Source: U.S. Bureau of Labor Statistics, State and Area Employment. Data for Boston CMSA.





Source: Massachusetts Department of Unemployment ES-202 Data for second guarter of each year



areas in the world. California has signed an agreement with nine other Western states to increase renewable energy supply and drive innovation. While Massachusetts has adopted a law requiring the percent of energy generated from renewable sources to increase from 1% in 2003 to 5% in 2010, the European Union is committed to a goal of 20% of energy from renewable sources by 2020, and China has committed to obtaining 10% of its power from renewable sources by 2010. Japan is already using solar energy to fulfill some of its energy needs. Boston *is* leading the way within the region, with a new "green" building code as of 2004 and signed agreements with regional partners to reduce energy consumption.

Competing Infrastructure Demands

The Big Dig notwithstanding, the Commonwealth lags other regions in its attention to its roads and bridges. The American Society of Civil Engineers reports that 61% of Massachusetts' roads are in poor or mediocre condition, and 51% of bridges in the state are rated structurally deficient or obsolete. The state may also be in legal violation of agreements to extend public transit to inner core communities. Older industrial cities throughout the region are requesting new or more frequent commuter rail service to create connections to the mainstream economy. A group of six Boston-area communities have joined together to call for investment in a circumferential Urban Ring that would link its residents to jobs throughout the inner core communities and provide opportunities for new smart growth housing and mixed-use development. However, the MBTA is challenged to keep its plant and equipment in a state of good repair, its debt service consumes one-third of the operating budget, and there is fiscal pressure for even more fare increases.

DEVELOPING THE "COLLABORATIVE GENE"

A Fractious and Exclusionary Civic Culture

Greater Boston's civic culture arguably poses the greatest challenge of all because it leaves the region ill equipped to handle all of the other challenges. According to most external observers, Greater Boston's civic traditions and structures are badly out of sync with the times. In their 2004 report *Boston Unbound*, nationally recognized journalists Neal Peirce and Curtis Johnson suggest that Greater Boston lacks sufficient civic structures for cross-sectoral, inclusive deliberation and decision-making. While most competitor "citistates" have mechanisms in place to allow leaders to come to consensus and to execute quickly on shared strategies, the authors described Greater Boston as "lacking the collaborative gene." They call for greater engagement in the life of the city and region by the heads of the area's large and well-resourced institutions of higher education and medical care, as well as for more openness to new, more diverse voices, innovative thinking, and a regional approach to shared problems.

The High Cost of Inaction

ortheastern University labor economist Paul Harrington calls New England the "Europe of America" because it closely mirrors Europe's slow labor market growth and aging population. At the same time, however, the regional economies of New England—particularly the Boston metropolitan region—depend on young and well-educated workers to seed their knowledge economies. The region's future success depends on reversing the preventable loss and waste of talent—nurturing and rooting homegrown talent, while also continuing to attract immigrants, students and other mobile groups.

Here are some demographic snapshots to be concerned about:

[Out]-Migrating Massachusetts Residents

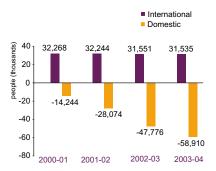
Between 2000 and 2004, 170,000 Massachusetts residents left for other parts of the US. However, those individuals were not replaced by an equal number of US residents migrating into the Commonwealth. Rather, newcomers to the state were primarily foreign immigrants. Between 2003 and 2004, even foreign immigration slowed, leaving Massachusetts with a net decline of about 3,800 residents. In 2004, Massachusetts was the only state in the nation with a net loss in population, a truly disturbing low-water mark.

MassINC's 2003 report *Mass.Migration* noted that between 1990 and 2003, more than 213,000 native and long-time Massachusetts residents left for elsewhere in the US. That was in contrast to a slight net gain of about 14,000 people moving to the Commonwealth from other leading technology states, a net gain overall due only to foreign immigration. The destinations of those leaving Massachusetts were other leading technology states, as well as low-cost, warm-weather states aspiring to high-tech status such as Arizona, Florida and Georgia, and the environs of other New England states, such as to Maine, Vermont, Rhode Island, and New Hampshire.

Children and Youth Unprepared to Compete

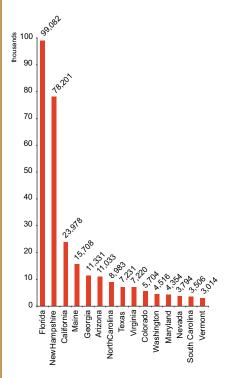
In Greater Boston and the Commonwealth, as in the US, students are falling behind their international counterparts in math and science. And overall, children in large urban school districts in the Commonwealth score well behind their wealthier suburban counterparts in MCAS proficiency. Because of these disparities, and with the regional economy increasingly reliant on a highly educated workforce, Mass Insight and a coalition of educators, businesses and civic leaders initiated the Great Schools Campaign. Targeting the state's 114 failing schools, teacher training, longer school days, and math and science instruction, the initiative aims at high rates of proficient

Massachusetts Net Migration 2000 to 2004



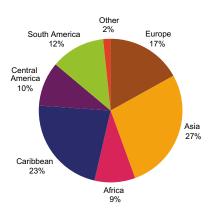
Source: U.S. Census Bureau, State Population Estimates, Components of Population Change http://www.census.gov/popest/states.

Net Migration from Massachusetts to Other States: 1990 - 2002



Source: Nakosteen et al., Mass.Migration MassINC, 2003., based on IRS tax return data

New Immigrants to City of Boston by Region of Origin: 2000



Note: Year of entry of immigrants was 1990 to 2000. Source: Authors' calculations from 2000 U.S. Census public use microdata

Net Domestic Migration Young, Single,& College-Educated 20 Largest Metro Regions: 1995-2000



Note: ages 25 to 39.

Source: R.S. Franklin, Migration of the Young, Single and College Educated: 1995 to 2000, U.S. Census Bureau.

and advanced performance across all school districts. Likewise, the Early Education for All Campaign seeks to prepare all children for success by making high quality preschool universally available. Without such intervention, and if current trends persist, the region could lose the edge in its primary competitive advantage and leave many children and youth at permanent disadvantage.

Undervalued—and Underemployed— Immigrants

The only force offsetting Massachusetts' low birthrates and outmigration patterns has been a constant flow of foreign immigration. Newcomer immigrants have added diversity and cultural vitality to urban neighborhoods and communities throughout the Commonwealth, contributing both highly specialized professional skills and workers willing to take essential, but low-paid service jobs. A case in point: Nearly 74,000 immigrants chose Boston as their home in the 1990s, and in 2000, one in four Bostonians was foreign born, the highest percentage since the 1930s. Without these newcomers, Boston's population would have declined by about 59,000 people. Statewide policy, however, does little to acknowledge this important source of population growth. Massachusetts immigrants face long waits for English classes and difficulties in receiving health care and in-state tuition rates at public institutions of higher education. And there is also little effort to translate professional credentials achieved in countries of origin into local equivalents.

Mobile Young Adults Voting with Their Feet

Greater Boston's steady influx and annual aggregate enrollment of more than 260,000 students has helped it to defy larger population trends over the years and to weather boom and bust economies. But the city, region and state ended the decade of the 1990s with fewer young people aged 20 to 34, while a number of competitor cities and states gained this valuable harbinger cohort. This was a key finding in the 2002 Boston Indicators Report. Metro Boston also lost in the competition among comparable regions for single young adults with bachelor's degrees between 1995 and 2000, according to Mass Insight's 2004 *Technology Road Map*. And since 2000, the Census Bureau estimates a continuing loss in young adults in Boston and the region. Nevertheless, about one in three Bostonians is between the ages of 20 and 34, one of the highest percentages overall in the nation, and according to a 2003 survey by the Greater Boston Chamber of Commerce and the Boston Foundation, the City retains about 50% of the students who come to the area for their studies for at least two years. However, young adults in Boston are the best educated and highest paid age cohort—mobile and seeking what they perceive to be their best opportunities.

Fewer Foreign Students

With expanding foreign economies, post 9/11 visa hurdles and increasing anti-American sentiment abroad, more foreign students are staying home to study at new and expanding colleges and universities in China or India or looking more closely at universities in Europe and Australia. The *Open Doors* 2004 report by the Institute of International Education found that enrollment of foreign students, has dropped 2.4% between 2003 and 2004, with a drop off twice as steep in Massachusetts during that time. The UMass Boston campus has seen a dramatic decline in the number of international students, dropping by almost half in the three years since 2001, while graduate student enrollments fell by one-third. As noted by a recent Associated Press report: "American universities are highly dependent on foreign students for teaching and research help, particularly in the sciences and engineering, a field in which foreigners comprise 50 % of graduate students."

A Retiring Workforce

The Bay State is the 12th oldest state in the nation, with 13.5% of its population over the age of 65, according to MassINC's *The Graying of Massachusetts* report in 2004, and New England as a whole is the "oldest" region. The report projected that by 2025, the population over 65 in Massachusetts will jump to 18%, similar to the percentage in Florida today. The most rapid increase in the number and share of people over 65 will take place between 2010 and 2030, the years during which all of the Commonwealth's 1.87 million Baby Boom generation—almost 30% of the state's population—will reach retirement age. The retirement decisions of this large cohort will have a major impact on the local housing market and workforce. MassINC projects that Massachusetts could face labor shortages "as the number of people under 55 is projected to decline in absolute terms between 2010 and 2025, and older workers will become a growing portion of the labor force."

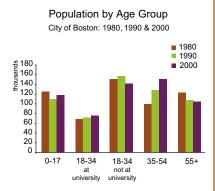
Incarcerated Potential Personnel

While Massachusetts' rate of incarceration is lower than that of many states, with between about 9,000 and 10,000 inmates at any one time since 1999, the number of former inmates grows each year, resulting over time in a significant number of residents who are challenged by their criminal records to reenter the workforce and their communities. While African Americans make up 5% of the Commonwealth's population overall, they represent 27% of those incarcerated. Latinos make up 7% of the population, but 27% of the incarcerated population. The potential contribution of these members of the community can either be squandered or captured.

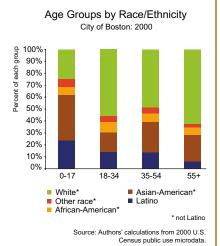




Looking Ahead: A Generational Power Shift



Source: Authors' calculations from 1980, 1990, and 2000 U.S. Census public use microdata.



Immigrants by Age Group City of Boston: 2000 35% 33% 29% 30% 28% 26% 25% 20% 15% 11% 10% 5% 0% 55+ 0-17 18-34 18-34 35-54 university university

Source: Authors' tabulations from

2000 Census public use microdata

he election of Thomas M. Menino as Boston's mayor and William Weld as Massachusetts' governor in the early 1990s signaled a generational power shift, as an older group of leaders began to leave the public stage. Since then, members of the large Baby Boom generation have gradually stepped into most of the region's highest positions, and by 2004, the transition was nearly complete. Baby Boomers now lead most of Greater Boston's public agencies, corporations, civic institutions, colleges and universities, and community-based organizations.

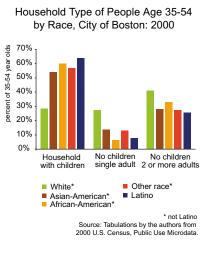
Headlines about Boston's growing racial diversity have obscured a quieter story of demographic change. Boston is no longer a city of families with children. Only about 23% of households have children under 18, while single-person households have increased. Indeed, Boston's modest population growth of 26,000 between 1980 and 2000 reflects fewer people in each major age group except those 36 to 54. These are Baby Boomers—one-third of them African American and one-third foreign-born. Born from 1946 to 1964, this cohort is the largest in US history. Many have chosen Boston as their home, and continue to do so. Between 2000 and 2003, younger Baby Boomers are estimated to have increased by about 5%, and older boomers by about 9%, perhaps reflecting the growing number of empty nesters moving into the city as well as immigration.

Many members of this large cohort have already demonstrated a deep commitment to the city and region, contributing enormously to Boston's transformation over the last 30 years. More cosmopolitan and much more ethnically diverse than predecessor generations in Boston, they are also less burdened with the old baggage of Boston's civic life, with new arrivals bringing new ways of thinking and working. But no matter how long they have lived and worked here, all Baby Boomers are reaching the stage in life when their choices and decisions affect the well being of those both older and younger. And, whether they yet realize it or not, Boston's Baby Boomers have become the de facto stewards of the region's future.

In this complex new century of radical technological, demographic and economic change, it is the Baby Boom generation that now stands at the crossroads of the next half-century of Boston's history. Like their predecessors of 50 years ago, they face the challenge of once again reinventing a city and a region in the face of unfamiliar as well as longstanding challenges. With their hands on the levers of power in Greater Boston for the next decade or so, Baby Boomers can choose to take a step back—into private interests and concerns—or forward—into active civic and community engagement.

If boomers can mobilize to transform Greater Boston's outdated civic culture—healing their own internal divisions across class, race and political ideology and looking beyond their own narrow interests to engage others as well—they can facilitate the critical shift to a more deeply rooted and broadly beneficial economy, and create sustainable growth and opportunity.

But they cannot do it alone. This generation of leaders must determine ways to make their own contributions while gaining from the considerable experience of previous generations and opening opportunities for greater civic engagement on the part of "prime timers"—those already out of the workforce. They must also engage the skills and ideas of the younger, even better educated and more mobile Gens X and Y—groups that are already making their presence felt in electoral, nonprofit and business leadership, but that are acutely feeling the presence of a "glass ceiling."



BOSTON'S BABY BOOMERS IN CONTEXT

Born between 1946 and 1964, this age cohort is the largest in the history of the US. Baby Boomers make up about 77 million of the US population of 285 million. They also comprise about 60% of the US workforce between the ages of 25 and 64. Their presence in the national economy is so powerful that the US Bureau of Labor Statistics estimates that by 2010, the year that the first Baby Boomers begin to retire en masse, the US will face a skilled worker shortage of about 10 million. The Baby Boom generation was spurred by the return of soldiers from World War II, during a period of optimism and economic expansion that resulted in a tendency to large families. This "demographic bulge," as it swept through childhood, youth, young adulthood, and middle age, changed conventional wisdom and often the rules, at every stage reshaping the nation's cultural and physical landscape.

In 2010, the oldest of this generation will reach retirement age, signaling the beginning of a 20-year transition until the youngest reach 65 in 2030. According to MassINC, more than 1.8 million Baby Boomers—out of a total state population of 6.4 million—are preparing to retire over the next two decades, beginning in 2010, just five years from now. The Baby Boom was followed by a "Baby Bust," as wages stagnated and women entered the workforce, producing the much smaller Gen X. The children of the Baby Boomers, however, constitute a "Baby Echo" generation, with a return to large numbers.

Metro Boston, with its high concentration of colleges and universities, benefited greatly from the wave of Baby Boomers, who were more likely than their parents to head for college and professional jobs. Well-educated Baby Boomers fueled the Massachusetts miracle of the 1980s and catalyzed the high tech expansion of the 1990s. Foreign immigration also spurred the growth in population in the city, region and state in the 80s and 90s, and indeed, more than 30% of Boston's Baby Boomers are foreign born. The city's Boomers of color, along with recent immigrants, are disproportionately the parents of Boston's school-age children.

THE BIG PICTURE: LONG-TERM TRENDS AFFECTING BOSTON

DEMOGRAPHIC CHANGE

The Earth's population increased from one to six billion inhabitants from 1900 to 2000. Global population is projected to peak at between eight and nine billion in 2050, with already youthful developing nations projected to grow rapidly in contrast to the populations of developed nations. European nations are nearly stagnant now; Japan and Italy are in negative growth. The US, with high rates of immigration, is projected to gain population moderately, largely in the West, Southwest and South, while New England is projected to grow very slowly. Americans of color are projected to become a majority by 2050.

EXPANDING FOREIGN ECONOMIES

Major economic realignments are underway from Europe to Latin America to Asia, with new regional markets in a global economy. A shift from Western bases of manufacturing and sophisticated research and development to China, India, and other nations with highly-educated, low-wage workers is transforming global trade—resulting in fewer high-skilled foreign students and specialists in the US. Greater change can also be expected as these expanding economies, already with high rates of venture capital investment, create solutions to global challenges such as increasing demands on the world's energy supplies.

ENERGY, GLOBAL WARMING AND ECOLOGICAL LIMITS

Oil price spikes and rising greenhouse gas emissions are putting a premium on clean energy and energy independence. Global energy demand is projected to increase 50% by 2030. The Pew Center on Global Climate Change cites "strong evidence that global climate change has begun to affect ecosystems and wildlife around the world." The Kyoto Protocol, ratified by 128 total nations including the EU, Japan, and Russia, requires reductions in greenhouse gas emissions to 1990 levels. While the US has not ratified the treaty, California leads the way in the US with strict gasoline emission standards. Depletion of ocean fisheries and toxins in breast milk and food fish also bring the limits of current practices into sharp relief.

TECHNOLOGICAL INNOVATION

The World Wide Web transformed business and daily life in little more than a decade, leveling the global economic playing field through IT empowerment. Global competition will be fierce for the "best and brightest," particularly in math and science, in the race to develop equally important breakthroughs for both the common good and for commercial purposes.

HISTORIC DEFICITS: LOSS OF A FEDERAL PARTNER

With record debt, the federal government is unlikely to perform as a full partner in the challenges facing Boston, nor can it be counted on to invest heavily in university-based research.

TERRORISM FEARS AND REALITIES

Cities in general and Boston—with its deepwater port, international airport, extensive public transit system, automobile tunnels and bridges, and world-renowned universities—are vulnerable to terrorism. A wild card, homeland security will remain a vital issue.

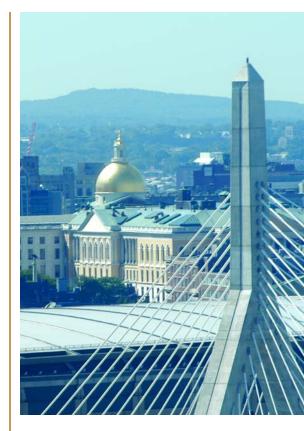
Possible Scenarios for Boston's Future 2005-2030

iven the recent trends affecting Boston—external and internal, economic and demographic—what might Boston's future look like? In 2001, a diverse group of 60 Bostonians came together for a facilitated Scenario Planning Workshop. They identified technological and demographic change and the importance of education in the new knowledge economy as important factors that are unlikely to change any time soon. They listed high housing costs, the lack of both corporate and demographically representative leadership, racial disparities in educational outcomes, and fragmented municipal planning as key challenges that would play a major role in shaping the future of the city and region. Working in small groups, they came up with eight scenarios for the city in 2030. These have been abridged and merged, with details added to reflect recent events. While each one overstates and isolates only a few trends for illustrative purposes, taken together these scenarios can help residents and other stakeholders better grasp the range of future possibilities. None of the following scenarios take into account the wild cards of unknown global, terrorist or catastrophic events that could have a profound impact on any city's future.

Balkanized Boston

TREND: The knowledge economy divides Boston area workers into those with and without advanced degrees, with widening income inequality and racial disparities.

A wave of corporate consolidation in the banking and financial services sectors leads to a net loss in jobs, with an economy based on highly-specialized research and higher education, on one end of the spectrum, and low-wage service jobs on the other. Growing income inequality creates radically different worlds within the same city and region. A wealthy elite of highly educated, racially diverse and mostly childless households cluster in Boston's central and waterfront neighborhoods and nearby upscale communities. Low-income households, many of them newcomer immigrants, create enclaves in struggling older neighborhoods and cities that grow linguistically and culturally distinct. Boston's City Council and the State Legislature become much more demographically representative, but reflect deep divisions and rarely reach consensus, apportioning resources according to rigid formulas. Sharing little in the way of civic spirit or purpose, residents are isolated from one another. Inequality finally gives rise to sharp demands, which are ignored. Civil strife ensues, frightening Boston's wealthier residents, who decamp for







gated communities in the suburbs or other states. Forced to increase taxes on remaining business and homeowners—the last straw for many—Boston loses yet more jobs and residents.

Boutique Boston

TREND: Boston experiences a sharp increase in the number of empty nesters and retirees moving into the city. With its dynamic downtown, great restaurants, public transit, cultural facilities, upscale condos, walkable neighborhoods and excellent hospitals, Boston gains a reputation as a retirement paradise. Empty nesters, back-to-the-city suburbanites, prime timers and retirees drawn to non-car-dependent lifestyles join Boston's already large Baby Boomer and retiree populations, pushing Boston's over-50 population to historic highs. Few of the new residents, however, become civically engaged, and older residents begin to vote their own interests. As a result, little progress is made on school quality or affordable housing options. Housing prices continue to rise, displacing families with children, who are priced out and also out voted. Likewise, students don't stay long after graduation, and corporations and nonprofit institutions find it increasingly difficult to recruit or retain young talent. No longer fueled by innovative young minds, local firms begin to move their operations offshore or to booming "citistates" in the American South and West. Boston's economy is now based on conferences, tourism, higher education, and health, and an aging population that requires an increasing number of service workers, most of whom face long commutes from more affordable areas of the region. Boston becomes known as Boutique City, with great shopping, cultural resources, and intellectual pursuits that also serve an upscale college clientele. As the Baby Boom generation ages in place, appreciative of the city's high quality medical institutions and assisted living developments, Boston's reputation as a mecca of geriatric excellence grows.

Bust and Boom Boston

TREND: Housing prices continue to soar as the city's large Baby Boom generation approaches retirement age. Some Baby Boomers, having purchased homes at low prices during Boston's lean years of the 1970s and 80s, decide to recoup the nest egg losses they experienced during the tech bust by cashing out and buying elsewhere, selling at the market's historic high. As the next wave of retiring boomers put their homes on the market, prices soften, leading to sharp a decline in home prices. Baby Boomers panic, sell for whatever they can get—many losing all of their equity gains—and seek cheaper regions worldwide for retirement. Facing a sudden labor shortage, a number of businesses also relo-

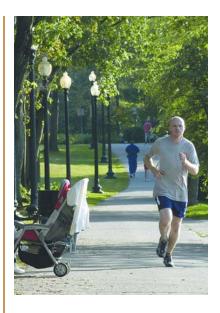
cate, and the economy declines, leading Boston into near bank-ruptcy. But taking stock of Boston's now-low housing prices and excellent institutions and amenities, immigrants, students, and young families—most of them prior renters, as well as newcomers from around the world—"buy Boston." As a result, Boston becomes the youngest, most ethnically diverse and polyglot city in the US, and gradually reclaims and extends the region's reputation for technological innovation. Greater Bostonians create and invest in innovations in energy, transit, education, housing and health care for families and the remaining elders that reduce the cost of living and create a wave of new industries and jobs. The region's "green" buildings, great schools and exciting cultural scene attracts yet more artists, innovators and educators of all ages to the region, dramatically bucking prevailing trends in other cities in the Northeast.

Back-Office Boston

TREND: Boston and the region are hampered by fragmented planning, sprawl, congestion, educational disparities and high housing costs. A gradual loss of high-wage manufacturing and new economy industries to competitor "citistates" and 'off shoring' leaves remaining businesses challenged to survive and local municipalities in competition for tax revenue. Likewise, academic leaders find themselves competing with each other for research funds and students. With little time or inclination for collaboration, the region fails to support proposals for transit-oriented mixed-use development and an improved educational system. The resulting decline in the quality of life affects family and business location decisions, with many exiting the region altogether. With fewer jobs in the city, Boston's population shrinks and a portion of its historic downtown becomes a theme park attracting large numbers of tourists and cruise ship passengers from throughout the nation and the world. Metro Boston's economy supports more dynamic regions through its institutions of higher education and back-office services.

Building a Boston That Works for Everyone

TREND: The Baby Boom generation holds most of the executive leadership positions in Greater Boston. Greater Bostonians realize that the region is challenged by rapid changes in the global economy that are threatening job growth and future opportunity. Stimulated by civic leaders and the media to engage in public deliberation, residents come together to explore cutting-edge and pragmatic solutions to the region's greatest challenges: housing and community economic development, energy, educational excellence, environmental sustainability, multicultural understanding, and economic growth with equity. They begin to develop new high and low-tech industry clusters for the full range of local skills, including a union-owned









manufactured housing factory and a world-renowned marine science center dedicated to restoring the oceans' fisheries. With its "virtuous cycle" of growth and employment based on developing solutions to local challenges, Greater Boston attains employment levels not seen since 2000. To the earlier list of innovation industry clusters—such as bioscience and nanotechnology—are added energy-efficient building materials, distance learning, longevity research, and the use of technology for artistic and therapeutic expression. Nonprofit organizations, universities, and business and civic groups, convene conferences of local, regional and global experts to stimulate creative and pragmatic problem solving and share results. As innovations across the full range of local challenges are applied locally and adapted for global export, new jobs are created in retrofitting and building energy-efficiency housing, regional telecommunications, sustainable marine fisheries, and early childhood education. The region is known for its pre K-16 excellence in math, science, self-expression, and courses at all levels in critical thinking, with curricula grounded in local needs and opportunities as a learning laboratory for the future. With its extraordinary rate of growth in new patents for breakthrough solutions in some of the world's most challenging areas—from health care to energy generation—Boston achieves unprecedented world-class status, attracting students and innovators from around the world, many of whom decide to stay and become a part of this dynamic and diverse community. Greater Boston becomes the hub of a New England-wide model of equitable and sustainable growth and a "talent magnet" for all those interested in creating and applying solutions to the challenges of the 21st century—once again fulfilling its core identity as a "city on a hill."



Acting Locally: An Emerging Civic Agenda

"Progress is not about the headlines.

It's not about the buildings...

It's what we do that's lasting in our society,
the difference we make in people's lives.

In Boston, it's about building a city
that works for everyone."

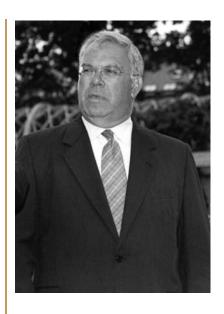
Mayor Menino, Conference on Aging, December 2004

"If the Boston region were to apply sufficient imagination and collaborative leadership to the critical challenges that now face it, it's within its power to become one of the most rewarding places on earth to live, work, learn and prosper in the 21st century."

The Citistates Group, *Boston Unbound*, May 2004

t is a tenet of systems thinking that it takes only one part of a system to transform the whole. In the regional economy it anchors, Boston is already playing that role, taking the lead in a number of areas and creating proven models for other municipalities and regions to explore for themselves. This practice of innovation and the export of new ideas are firmly embedded in Boston's history and the fabric of its civic culture. In fact, Boston cannot cease to innovate and still retain its core identity.

Under the leadership of Mayor Thomas M. Menino, Boston is at the forefront of a number of transformative initiatives. For example, Boston leads among large urban school districts in the success of its school reform initiatives and the exploration of a broad range of school types—from schools within schools to pilot schools. In 2004, Boston enacted new "green" building codes in alignment with its commitment to reduce greenhouse gas emissions and energy consumption. Boston also leads the Commonwealth in addressing the need for more housing, with more than 7,900 new units approved between 2000 and 2003, and the highest percentage—20%—of affordable housing units among all municipalities in the Commonwealth. Going forward, the Mayor has pledged to build 10,000 additional units by 2010, 20% of





WHAT IS A CIVIC AGENDA?

Analysis and interpretation of current trend data to create common ground and shared understanding

Agreement, through dialogue, debate and discourse, on the nature of key challenges, threats, opportunities and goals

Alignment on a long-term goals and short-term targets

Action to leverage assets and achieve impact through collaborative strategies, partnerships, and alliances, public/private initiatives and personal commitment which will be guaranteed affordable. And the Mayor has committed the City of Boston to offering early education to 4-year-olds. Bostonians are also making inroads in diversifying leadership structures, with recent elections of candidates of color and new young faces in positions of leadership in a number of city departments.

However, many of Boston's greatest challenges require something more than the city can do on its own: more strategic and fairer tax policies; a more coherent regional approach to economic development; a comprehensive and complementary approach to transportation and housing; even greater civic commitment to educational excellence for all at all levels; and a focus not only on health care but health.

Recent trends and events are convincing even the most skeptical of the need for coherent regional strategies, and, in the face of growing nervousness about the future, a broad consensus is beginning to emerge across ideology and partisan politics. Derived from the work of many of the region's most respected and accomplished researchers, think tanks, policy makers and civic leaders, this consensus reflects agreement on the seriousness of the region's challenges, a willingness to align resources on behalf of shared goals, and a nascent commitment to new civic structures to drive progress.

The Boston Indicators Project was created not only to provide data and a set of measures but also to aggregate data and recent research, and, through a process of dialogue and synthesis, craft a shared Civic Agenda to support progress on these identified goals.

To that end, since 1997 the Project has hosted hundreds of convenings with stakeholders and experts within and across sectors. During that time, project participants have offered their visions for the future and suggestions about how best to target and measure progress in pursuit of these goals. The recent consensus among experts, combined with these civic deliberations, has been shaped into an emerging Civic Agenda of long-term goals and short-term targets that address key challenges in the context of shared aspirations for the future and high-leverage interventions in the present.



A Civic Agenda does not create or invent new wheels. Rather, it should reinforce existing wheels to more effectively drive change. The elements of the Civic Agenda presented here reflect shared visions and strategies that leverage change across sectors. And while any number of milestones could be listed under each area, in this first presentation an effort was made to focus on just a few key measures of achievement.

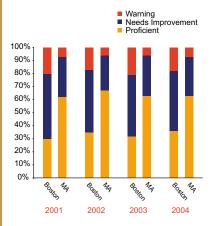
Bostonians can begin to catalyze action on this Civic Agenda today by coming together and aligning their work to support efforts already underway, such as the MetroFuture planning initiative coordinated by the Metropolitan Area Planning Council; Mass Insight's Technology Road Map of strategic alliances between the private sector and key institutions; the Early Education for All and Great Schools campaigns; the Commonwealth Housing Task Force; the Massachusetts Smart Growth Alliance, among many more. And while this Civic Agenda will ultimately require regional collaboration, Bostonians also can lead the way by developing strategies to include more residents and stakeholders in the implementation of the Civic Agenda, and by engaging in regional strategies and initiatives.

The ultimate success of the Civic Agenda will depend especially on the capacity of the members of the Baby Boom generation, now holding most of the positions of leadership throughout the City and Commonwealth, to forge more resilient relationships, to create more inclusive civic structures, and to craft more coherent strategies and policies. These Baby Boom leaders can open the doors of civic participation to all; ensure that children and youth are educated to 21st educational standards; mentor young adults and engage all age cohorts in civic dialogue; and draw on the expertise of older ready to leave the workforce who are seeking new ways to contribute to Greater Boston's vitality.

By 2030, when the youngest of this great Baby Boom cohort reach retirement age, their achievements—or failure to act—will almost certainly have defined the direction of the city and region for the remainder of the 21st century.

What follows are the four components of the emerging Civic Agenda—the major areas that consistently have emerged in the hundreds of convenings that have been held by the Boston Foundation since 1997. They reflect broad agreement and alignment across the 10 sectors tracked by the Boston Indicators Project. Each area contains several milestones – or high leverage points – against which measurable progress can be tracked. While many other goals and milestones were articulated over the course of the convenings, the ones listed here were identified as critical levers of change. Many of these goals and milestones have been articulated elsewhere and reflect strategies identified by many organizations, experts and stakeholders within specific fields. For the first time, they are presented as a coherent and shared high-leverage Civic Agenda.

Third Grade Reading MCAS Scores Boston and Massachusetts: 2001 - 2004



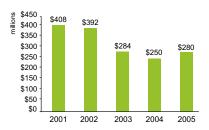
Source: Massachusetts Department of Education, Spring 2004 MCAS Tests: Summary of State Results and Boston Public Schools, MCAS Results of Spring 2004.

Obesity: Massachusetts and US Body Mass Index of 30 or Greater



Source: Centers for Disease Control and Massachusetts Department of Public Health, Behavioral Risk Factors Surveillance Survey.

Annual Public Health Budget Commonwealth of Massachusetts



Source: Massachusetts Public Health Association

SELECTED CIVIC INITIATIVES

The Boston College Citizens Seminar

The Metropolitan Mayors
Coalition

Mayor's Office of New Bostonians

The Boston
Redevelopment Authority's
One in Three Initiative

MetroFuture – Metropolitan Area Planning Council

The Commonwealth Housing Task Force

The Partnership

BostonVOTE

The Commonwealth Civic Roundtable – MassINC

The Goldberg Seminar

The Boston Foundation's Civic Engagement Initiative

NCCJ's LeadBoston

The Emerging Leaders
Program – UMass Boston

The Civic Health Institute – Codman Square Health Center

United Leaders

Project: Think Different

1. A Dynamic and Open Civic Culture

GOAL:

Effective, inclusive, collaborative and strategic civic structures

2030 VISION: Greater Boston's dynamic range of civic structures include an engaged leadership that fully reflects the demographics of the city and the region and fosters informed public discourse, diverse networks of learning and practice, and strategic responses to key challenges and opportunities. These structures involve alliances of public and private institutions of higher education, university-industry-community partnerships, collaborative research, nonprofit alliances, and inclusive business and civic associations. Working together, these alliances align resources in support of shared goals, mentor new generations of leaders, and welcome newcomers to the civic life of the city and region.

STRATEGIC MILESTONE:

New, inclusive civic mechanisms and institutions that work together to develop and execute coherent, collaborative strategies

Why is this important? Competitor "citistates" have created overarching regional organizations, such as the Rhode Island Economic Development Council, Chicago Metropolis 2020, the Bay Area Alliance, Cleveland Tomorrow, and Envision Utah, to advance shared goals. But Greater Boston largely lacks broadbased civic structures and alliances that bridge diverse sets of interests.

How we look today: Greater Boston's current civic structures are badly weakened and reflect a prior era—one that is rapidly changing or already gone. New, more dynamic and inclusive structures have yet to emerge to fill the void.

STRATEGIC MILESTONE:

Leadership that reflects the full diversity of the city and region in the for-profit, nonprofit and public sectors

Why is this important? Challenging times demand a range of perspectives and expertise. More diverse decision-making tables are needed in order to develop the most effective and broad-based strategies and constituencies for implementation.

How we look today: Boston was officially declared to be 50% of color in 2000, and the region has grown in population largely due to the in-migration of foreign newcomers, yet few of Greater Boston's leadership structures reflect the city and region's growing diversity. For example, according to an analysis by The Partnership, more than 90% of Greater Boston's corporate boards are male and more than 95%

are white. Signs of progress include new efforts to recruit candidates of color for major business leadership positions, slow but steady progress in the age, gender and racial/ethnic diversity of the electoral sector, and recent high-profile appointments, such as MIT's new president. Data are not yet available for the nonprofit sector as a whole.

2. World Class Human Resources

GOAL:

Breakthrough models in human development—from world class pre-K-16 education to lifelong learning for everyone to healthy child development and aging—that support a dynamic workforce, a high quality of life, and a shared sense of belonging, safety and well-being

2030 VISION: Greater Boston creates an entirely new, powerful and cost-effective model of human development by aligning health and education in early intervention strategies and public education campaigns, which employ public/private partnerships. With gradually improving health outcomes for all ages, the Commonwealth begins to redirect resources in a virtuous cycle of upstream health promotion and child development, early education, teacher training, K-12 educational excellence, after school enrichment, adult basic education, workforce training and higher education. Meanwhile, health costs in competitor states continue to soar, eclipsing resources for all other sectors. The Commonwealth's breakthrough "upstream" approach to health and education eliminates historic disparities, garnering international recognition and replication. With its highly educated, healthy and flexible workforce, the region attracts a constant stream of research initiatives and new industries.

STRATEGIC MILESTONE:

Educational excellence, as indicated by all third graders reading at the third-level

Why is this important? A key measure of school success is the ability to read at grade level, yet a Carnegie Foundation study estimates that 70% of US students currently enter high school unable to read at grade level. Third grade reading is a critical juncture—a measure of prior preparedness and a predictor of future success, which is why Mayor Thomas M. Menino created ReadBoston. Attaining the goal for all children requires language interaction from birth on, reading aloud, excellent early care and education, grades K-3 instruction, and tutoring for children falling behind.

How we look today: In the spring of 2004, 63% of Massachusetts' third graders were reading at grade level. Large urban school districts face greater than average challenges: In Boston, only 36% of third graders were reading at grade level.

EXAMPLES OF EARLY INTERVENTION

Maternal Health and Prenatal Care

Women, Infants and Children (WIC)

Early Education for All Campaign

Early Learning Centers – City of Boston

ReadBoston – City of Boston

Mayor's Task Force to Eliminate Health Disparities

The Boston Public Health
Department's Boston
STEPS Program

Harvard School of Public Health evidenced-based Curricula: Eat Well and Keep Moving (Grades 4-5); Planet Health (Grades 6-8) in 20% of Boston Schools

Massachusetts Coalition on Obesity Prevention and Education

Boston After School & Beyond/United Way of Massachusetts Bay partnership to reduce childhood obesity

IMPORTANT INITIATIVES ALREADY UNDERWAY

SkillWorks: Partners for a Productive Workforce

The Boston
Redevelopment Authority's
Back Streets and
LifeTech Initiatives

Mass Insight's Science and Technology Initiative

Workforce Solutions Group

Massachusetts Renewable Energy Trust

The Creative Economy
Council

The Women's Union

The New England Healthcare Institute

Initiative for a Competitive Inner City

Massachusetts High Technology Council

Mass Software Council

Massachusetts Biotech Council

STRATEGIC MILESTONE:

Low rates of preventable disease, beginning with a reversal of the upward trend in childhood and adult obesity

Why is this important? Researchers report that as much as 70% of health outcomes reflect living conditions and lifestyle (diet, exercise, and smoking), but that 95% of health resources are spent on medical care. Obesity can be a precursor to many preventable diseases. While Massachusetts' obesity rates are better than most, medical costs in the Commonwealth directly attributable to obesity are running upwards of \$1.8 billion annually. Changes in diet and exercise often can reverse overweight problems, obesity and even Type 2 diabetes, but children, adults and families need access to good information and lifestyle alternatives. A study published in December 2004 in the New England Journal of Medicine found that, "with current trends of increasing overweight and obesity afflicting all age groups, urgent prevention measures are required not only to lessen the burden of disease and disability associated with excess weight, but also to contain future health care costs..."

How we look today: In Massachusetts as of 2002, 55% of adults were overweight, including 18% obese. In Boston in 2003, 14.2% of high school students were overweight or obese, including 14.6% of black youth, 19.7% of Latino youth, 6.1% of Asian youth, and 7.6% of white youth.

3. 21st Century Jobs and Economic Strategies

GOAL:

Innovative and collaborative economic strategies that build on the region's core strengths, tackle its greatest challenges, root good jobs, and broaden economic opportunity

2030 VISION: Greater Boston drives economic growth and opportunity by focusing on its core strengths, while developing solutions to its greatest challenges through incentive policies, public-private partnerships, university-industry-community alliances, and applied innovation. In tackling its own—and the 21st century's—challenges head on, Greater Boston produces a wave of growth and new jobs, retaining its homegrown talent while attracting scientists and innovators from around the world.

STRATEGIC MILESTONE:

Job growth is stimulated by broad-based implementation of Mass Insight's *Technology Road Map*: strategic university/industry alliances; multi-institutional initiatives; and multi-disciplinary collaboration in 10 core technology-based sectors—resulting in new manufacturing jobs as well as new innovation capacity with support for public higher education and the "unfinished" K-12 school reform agenda

How we look today: The total number of payroll jobs in the Commonwealth stood at 3,188,100 as of December 2004, reflecting a net loss of 175,000 since 2001. Boston had 533,666 payroll jobs in the second quarter of 2004. The total number of jobs in the Commonwealth has increased by only 1% since 1988, compared to a 24% gain in jobs nationally over that period, according to the Center for Labor Market Studies at Northeastern University.

STRATEGIC MILESTONE:

Ready access to skills training, beginning with classes in English as a Second Language (ESOL) and Adult Basic Education

Why is this important? In their 2000 report New Skills for a New Economy, MassINC found that one-third of the state's workers lack the skills needed to compete in the 21st century economy, including 667,000 with a high school degree but lacking in skills, 195,000 with severely limited English, and 280,000 without a high school degree. And between 2000 and 2003, an estimated additional 96,000 immigrant newcomers arrived in the Commonwealth. Literacy and fluency in English are the first rungs of the ladder of educational and economic opportunity for many. They open doors to civic engagement, to participation in children's learning, to health and other critical information.

How we look today: There are major gaps in the Commonwealth's adult education programs. Between fiscal years 2001 and 2004, state support for community colleges declined by 15%. Between fiscal years 2001 and 2005, funding for Adult Basic Education declined by 15% in inflation-adjusted dollars, according to the Massachusetts Budget and Policy Center. Almost 19,000 people are on statewide waiting lists for ESOL, with 3,500 in Boston facing waits of six months to two years. About 6,500 training slots in Adult Basic Education were needed as of 2004 to meet demand, according to the Massachusetts Department of Education. However, there has been an increase in workforce development courses offered by the state's 15 community colleges, with enrollment at an eight-year high in 2004.

4. 21st Century Infrastructure

GOAL:

Vibrant, healthy communities with high quality housing choices across a range of prices that meet the affordability requirements of all residents, in vibrant, livable communities throughout Metro Boston

2030 VISION A shared commitment to strengthening city and town centers through Chapter 40R "Smart Growth" zoning overlay districts initiates a period of architectural, environmental and

KEY AREAS FOR INNOVATION

Excellence in Education & Lifelong Learning

Universal Health Care

High-Quality, Low-Cost Housing Production

Disease-Related Research

Renewable Energy & Energy Efficiency

Signal Processing in Electronics and Optical Systems

Computer Sciences

Marine Science and Ocean Fisheries Restoration

Robotics

Sensing, Optical and Electro-Mechanical Devices

Genomics and Proteomics

Healthy Child Development, Healthy Aging

Knowledge Management

Broadband Technology WiFi Access

Networks of Learning and Practice

Advanced Materials

Biomedical Device Technologies

Nanotechnology Fabrication

Sustainable Agriculture and Food Security

UN Millennium Development Goals

RECENT INITIATIVES

The Office for Commonwealth Development

MetroFuture – Metropolitan Area Planning Council

Boston's Leading the Way Initiative

The Commonwealth Housing Task Force

The Boston Foundation's Annual Housing Report Card

The Massachusetts Smart Growth Alliance

Center for Urban and Regional Policy, Northeastern University

Massachusetts Association of CDCs

Citizens' Housing and Planning Association

Massachusetts Renewable Energy Trust cultural revival. Public and private investment in transit-oriented, energy-efficient, high tech development increases affordability, reduces sprawl and congestion, and draws hundreds of thousands of new residents to revitalized city and town centers and new live/work/shop centers. Boston's neighborhoods are enlivened by the range of housing styles incorporating universal design for all family types, ages and abilities, with WiFi (wireless technology), cultural facilities, shops and recreation that enhance the quality of life for all. Greater Boston's spectacular natural resources, world-class museums, multiethnic vitality, year-round public markets, nearby marine preserves, and innovative renewable energy strategies serve as a magnet for tourists and conferences from around the world. The region adopts the motto: "Live well, in ways that ensure that future generations can live as well or better."

STRATEGIC MILESTONE:

Construction of at least 14,000 new units annually in Eastern Massachusetts for 10 years, at least half in or near city, town or job centers close to transit in order to meet housing demand, moderate price increases, and create vibrant, livable communities

Why is this important? High housing costs are driving residents from the region, as well as creating obstacles to recruitment and leading to homelessness and overcrowding. A focus on mixed-use development in line with the new Chapter 40R zoning overlay districts will produce economic and environmental multipliers.

How we look today: Housing construction currently lags the target by about 3,000 units per year, with production levels at about 11,000 annually. Measures of transit-oriented residential development are not yet available.

STRATEGIC MILESTONE:

Adoption of a dynamic, collaborative plan for the future of the metropolitan Boston region

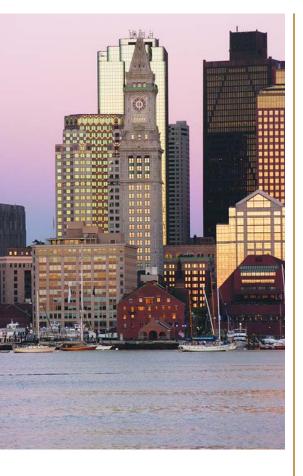
Why is this important? Achieving and sustaining a high quality of life in Greater Boston in the 21st century will require a broadly supported, collaborative plan of action. Through a participatory planning process, the Metropolitan Area Planning Council's MetroFuture planning initiative will offer such a plan to guide the actions of cities and towns as well as the region as a whole over the next decade.

How we look today: MetroFuture is engaging key constituencies in developing a 10-year plan for the region, due for release in 2006.

SIGNS OF PROGRESS: ROOTING THE KNOWLEDGE ECONOMY

Challenge	Opportunity
An aging workforce	Lifelong learning, health promotion
Loss of young skilled workers largely due to high housing costs	Partnerships among architects, building trades, developers, CDCs, cities and towns to build an exciting range of "smart" affordable and market rate housing
Dependence on educated workers to sustain regional economic growth	World class pre-K-16 education and university centers of excellence
Middle-class out-migration largely due to the high cost of living, taxes	A range of housing options, cost savings through better health, energy efficiency, early intervention strategies
Dependence on immigrants for future workforce growth	Streamlined H-1B Visas, ESOL and Adult Basic Education; access to public higher education and health care
Reliance on high tech sciences to drive the next wave of economic opportunity	Broad, coherent economic policies; applied solutions and new technologies
Competition from US "citistates" using the "Boston Formula" (walkable city/town centers)	Investment in public transit, housing, open space to revitalize older industrial cities and promote healthy lifestyles
Growing importance of tourism to the regional economy	Conservation of the NE landscape, investment in cultural facilities to promote vitality
Regional dependence on vulnerable oil supplies, volatile prices	Energy efficiency and innovation to create new jobs in renewable energy production, retrofitting, green buildings
Need for risk-taking, collaborative	A welcoming and dynamic, civic culture of leadership collaboration, innovation, inclusion





n an era of competing agendas, even a broadly supported Civic Agenda may not marshal the resources required to accomplish each of its goals. With competition among the various elements of the agenda for a shrinking public pie, and without an overarching approach to the task, the Civic Agenda may splinter.

To make the best use of available resources, strategies must be developed and implemented to move as many public resources upstream toward more cost-effective, preventive approaches to health, criminal justice, family support and infrastructure maintenance in order to free up "downstream" funds for investment in the future. It may require new revenues, but these should be based on careful and transparent analysis of the costs and benefits involved.

By investing in its greatest competitive advantage—its human resources and capacity for innovation—the Boston "citistate" can become a powerful "human capital" magnet, drawing youth and talent from throughout the United States and the world. Looking ahead, however, our capacity for innovation must be firmly grounded in responses to our own greatest challenges—as well as in technological and scientific advances and commercial success.

These newcomers can join with current residents of all ages, races and incomes to innovate solutions to the region's toughest scientific, social and environmental challenges—rendering moot the issue of how best to attract and retain a skilled workforce and creating a springboard for the next wave of economic growth and opportunity for all.

This is a very tall order.

Success will depend largely on the actions of the members of the Baby Boom generation—who now make up the city and region's current leadership. It will rely on their capacity to overcome past divisions and forge more inclusive civic structures and strategic alliances to address the interests, ideals and needs of all other age groups. It will demand, above all, foresight and commitment.

By 2030, the last of the Baby Boom leaders will reach retirement age. Their ability—or failure—to move the city and region forward into a new, more dynamic, equitable and sustainable economy while they hold the reins of leadership and stewardship will almost certainly determine the fate of the city and region in the 21st century.

Overview 2004 Report: Indicator Sector Highlights

The following brief highlights in the 10 categories tracked by the Boston Indicators Report emphasize change since 2002. Greater detail may be found at www.bostonindicators.org.

CIVIC HEALTH

Boston is officially "majority-minority," and Bostonians of color flexed their political muscle with electoral breakthroughs in city and county-wide elections. The loss of local corporate headquarters eroded the pool of business leaders, but new leadership emerged from universities, hospitals, smaller businesses, and community-based organizations. New collaborations are underway: the Commonwealth Housing Task Force; the Early Education for All and Great Schools campaigns; the SkillWorks collaborative for workforce development; and MetroFuture for regional planning. However, concerns persist that the region's civic culture is closed to new faces, and that it lacks the "collaborative gene."



CULTURAL LIFE AND THE ARTS

Boston's cultural life is undergoing a renaissance, with a newly-consolidated Mayor's Office of Arts, Tourism & Special Events, and more foundations focused on arts funding. Two new theatres opened at the Boston Center for the Arts—the first in 75 years—and the Opera House was restored. The new Institute of Contemporary Art broke ground on the Waterfront, Artists for Humanity opened its "green" EpiCenter, and the Center for Latino Arts in the South End and a new center for the arts in Roxbury's Dudley Square opened. However, a survey found that Massachusetts' nonprofit cultural facilities average 92 years in age, and have at least \$300 million in deferred maintenance.



ECONOMY

Massachusetts lost 195,000 jobs from 2001 to 2004—almost half in high-tech industries. Consumer prices in Metro Boston rose faster than the urban average, contributing to out-migration. The workforce grew only due to foreign immigration. Boston's stable economic base includes hospitals and universities, but the city lost about 25,000 payroll jobs between mid-2002 and mid-2004. Trends improved with the opening of the new convention center, more tourism, new commercial development and hotel rooms, and institutional expansion. Visitors to Greater Boston generated a direct economic impact of \$4.22 billion and nearly 100,000 jobs in 2003, and patents rose by 8.3% between 2002 and 2003, placing Massachusetts first among leading technology states. But off-shoring is leading to fewer local jobs, and income inequality is growing.







A decade of school reform with a focus on higher standards is bearing fruit: MCAS improvement rates in the Boston Public Schools surpassed the state average in nearly every grade in spring 2004, with long-term gains among all racial/ethnic groups despite persistent disparities. The BPS is restructuring its high schools into smaller schools within schools and Pilot and Charter Schools broaden the range of school choice. Gaps in workforce training persist, with 3,500 Bostonians on a waiting list for state-funded English as a Second Language classes. The Commonwealth is on the verge of offering high quality, universal early education following passage of new legislation, and a Great Schools Campaign focuses on failing schools and math and science. The Commonwealth now ranks 49th out of 50 states in tax appropriations for higher education overall per \$1,000 of income, and 47th in appropriations per capita.



ENVIRONMENT

With its "emerald necklace" of parks complemented by the "sapphire necklace" of the Boston Harbor Islands National Park, restored beaches, waterfront parks, community gardens, renovated ball fields and playgrounds, Boston's environmental resources have never been so extensive, nor the constituency as diverse. However, state budget cuts are affecting maintenance, programming and staffing. In 2000, the state ranked 48th in the nation for environmental spending as a percentage of the state budget—even before recent cuts. The region's environmental quality is also threatened as residents "live large" and drive more in less fuel-efficient vehicles. State greenhouse gas emissions were 7% above 1990 levels in 2001 and rising, despite a pledge to reduce them. Boston leads the way, however, through a new "green" building code.



HOUSING

Metro Boston's housing costs are among the highest in the US, Massachusetts is the second least affordable state, and Boston the eighth least affordable city. A new law formulated by the Commonwealth Housing Task Force encourages 40R zoning overlay districts of high-density, "smart growth" housing in city and town centers and at transit nodes. In Boston, Mayor Menino's Leading the Way initiative spurred \$2 billion in public and private investment to produce nearly 8,000 market rate and affordable housing units between 2001 and 2003 in cooperation with CDCs and private developers. Boston's rents have moderated, but are nevertheless 50% higher than in 1995. Housing costs are cited in surveys as a primary reason for leaving the state.

PUBLIC HEALTH

Boston boasts dramatic progress in childhood lead poisoning and success in reducing teenage smoking and infant mortality. But state budget cuts have reduced its capacity to address risk factors for chronic preventable diseases and persistent disparities by race/ethnicity and socio-economic status. While asthma hospitalization

rates among children under 5 declined by 23% between 1994 and 2002, the trend is up, and rates for black and Latino children are four times the rates for whites and nearly twice the rate for Asians. Obesity is now an epidemic. While health care costs soar, funding for preventive public health has declined. Health insurance premiums increased nearly 50% for the average Massachusetts worker between 2000 and 2004.

PUBLIC SAFETY

Violent crime has declined dramatically in Boston, dropping by almost 50% since 1990, in large part because of extensive law enforcement/community collaboration. A demographic spike in young people without an increase in youth activities and employment opportunities led to a resurgence in gang violence and homicides, leaving many Bostonians feeling less safe, and the Boston Police Department initiated Operation Neighborhood Shield in the summer of 2004. A groundbreaking analysis in Grove Hall, Dorchester, found that for a full 80% of suspects, social service intervention would offer greater crime deterrence than law enforcement. Violent crime among women is increasing, and younger girls are involved in prostitution, often linked to early child abuse. Domestic violence is increasing.

TECHNOLOGY

Greater Boston is a world center for technological innovation, but high tech sectors were hit hard in the economic downturn. However, innovation continues in both traditional and emerging areas such as wireless, robotics, nanotechnology, and radio frequency identification. Massachusetts is also emerging as a center of open source software development. Bostonians are bridging the digital divide as local universities advance distance learning, and community technology centers thrive. The Boston Public Schools student-to-computer ratio jumped from 63:1 in 1993 to 6:1 in 2004. Yet concerns are emerging in the implementation of wireless services, which advocates for low-income communities believe is the key to leveling the playing field.

TRANSPORTATION

The Big Dig, facilitating an additional 50,000 vehicles a day through Boston, is reducing travel time to Logan Airport and travel west, north and south, and the new Silver Line's low-emission bus service increased ridership. But planned expansion of public transit has stalled due to the MBTA's precarious financial situation, as debt service now consumes one-third of its operating budget, despite a fare increase. Boston's central areas offer the region's shortest commutes, with fewer than 10% at 45 minutes or more and more than 40% walking, while Mattapan's are the highest in Boston. Overall, commutes are lengthening due to sprawl, growing numbers of vehicles and increasing congestion.









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Editorial Oversight: Mary Jo Meisner, Vice President for Communications, Community Relations

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Data and Graphics: Paul Schimek, Research Associate, The Boston Foundation

Principal Editor: Barbara Hindley, Senior Editor, The Boston Foundation

Boston Indicators Project Staff: Sheri Lapatin, Project Associate

Jennifer Owens, Project Coordinator

Stephanie Pollack, Consultant

Photography: Richard Howard

> Designer: Kate Canfield, Canfield Design

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