HEEDING THE WARNING SIGNS:

What Massachusetts must do to remain competitive

August 2022



PREPARED BY



MASSACHUSETTS
TAXPAYERS FOUNDATION

333 Washington Street Suite 853 Boston, MA 02108

CA	1	EXECUTIVE SUMMARY
	1	HIGH COST STRUCTURE IMPACTS BUSINESSES
	2	HIGH COST OF LIVING ALTERS RESIDENTIAL LOCATION CHOICES
	3	RESULTANT WORKFORCE SHORTAGES THREATEN ECONOMIC PROSPERITY
	3	POLICYMAKERS MUST TAKE ACTION
	4	I. INTRODUCTION
	5	A. THE PRE-PANDEMIC MASSACHUSETTS ECONOMY WAS A POWERHOUSE
	5	B. BUT WARNING SIGNS WERE THERE
	5	II. COST STRUCTURE
	5	A. MASSACHUSETTS IS AN EXPENSIVE PLACE TO OPERATE A BUSINESS
	7	WAGES AND SALARIES
	9	HEALTH INSURANCE
	10	UNEMPLOYMENT INSURANCE
	12	PAID FAMILY AND MEDICAL LEAVE
	13	ELECTRICITY
	15	CORPORATE TAXES
	16	PROPERTY TAXES
	16	WHY BUSINESS COSTS MATTER
	17	B. MASSACHUSETTS IS ALSO AN EXPENSIVE PLACE TO LIVE
	19	HOUSING
	21	CONGESTION
	22	CHILD CARE
	22	INDIVIDUAL TAXES
	25	WHY COSTS OF LIVING MATTER
	26	III. DISQUIETING TRENDS
	26	COSTS OF LIVING AND REMOTE WORK CHANGE LOCATION CHOICES
	26	IT AND FINANCIAL SERVICES EMPLOYMENT – A BELLWETHER?
	27	DOMESTIC MIGRATION ACCELERATES
	27	THE MASSACHUSETTS DEMOGRAPHIC DATA ARE ALARMING
	30	WEALTHIER RESIDENTS ARE LEAVING

	30	WORKFORCE SHORTAGES IMPEDE GROWTH
	30	QUITS SURGE
	31	JOB OPENINGS SPIKE
	32	INTERNATIONAL MIGRATION DOWNTURN CONSTRAINS WORKFORCE
Z	32	RETIREMENTS JUMP AS BOOMERS EXIT
ш	33	IV. TACKLE EXCESSIVE COSTS AND
		WORKFORCE SHORTAGES
	34	CONTAIN EXCESSIVE COSTS
	34	RECOGNIZE THE INTERCONNECTEDNESS OF HOUSING, CONGESTION AND A WELL-FUNCTIONING MBTA
	34	CHILD CARE AVAILABILITY
	34	UNEMPLOYMENT INSURANCE
	35	ELECTRICITY AND THE GRID
4	35	THE ESTATE TAX
	35	THE FAIR SHARE AMENDMENT
	36	EXPAND THE SIZE AND SKILLS OF THE WORKFORCE
	36	RETHINKING JOB QUALIFICATIONS
	36	COORDINATE TRAINING PROGRAMS
	36	ATTRACT TALENT
	36	INCENT LABOR FORCE PARTICIPATION
	27	CONCLUSION

HEEDING THE WARNING SIGNS:

WHAT MASSACHUSETTS MUST DO TO REMAIN COMPETITIVE

EXECUTIVE SUMMARY

Massachusetts is facing a perfect storm of circumstances which, if not addressed, threaten to undermine the state's historic advantage in attracting and retaining both businesses and talent, and could ultimately jeopardize our economic edge over other states.

Simply put: the next Governor and legislature must heed the warning signs outlined in this report – some of which have been building over many years, such as the astronomically high cost of living and doing business in this state, and some that are the direct result of a global pandemic which has created a new work paradigm, enabling people and employers to relocate elsewhere.

This report provides irrefutable evidence that Massachusetts lawmakers, with input from the business community, must develop a new blueprint for managing business and living costs to expand the state's skilled workforce in order to grow the economy and reverse many worrying trends.

HIGH COST STRUCTURE IMPACTS BUSINESSES

Businesses have long faced financial headwinds in Massachusetts which is among the most expensive states in the country to do business – even before COVID. Now it's even worse. Massachusetts ranks sixth in the average cost of family health insurance and first in unemployment insurance (UI) per employee – costs that disproportionately impact small businesses, low-margin industry sectors and different regions of the state.

Commercial and industrial electricity rates in Massachusetts were 60 and 125 percent respectively above the national average in 2021, and electricity prices are headed higher still in 2022 with no signs of abatement.

Record high resignations and job openings have fueled wage inflation, driving up labor costs. The number of quits is projected to increase by 20 percent in 2022, suggesting that labor shortages and their associated costs will continue to plague companies.

And businesses will need to hire more job recruiters to identify and vet candidates and build worker redundancies to manage high turnover. Recruitment beyond state borders will be required to attract the talent necessary to maintain and expand business.



MASSACHUSETTS IS FACING A PERFECT STORM OF CIRCUMSTANCES WHICH, IF NOT ADDRESSED, THREATEN TO UNDERMINE THE STATE'S HISTORIC ADVANTAGE IN ATTRACTING AND RETAINING BOTH BUSINESSES AND TALENT, AND COULD ULTIMATELY JEOPARDIZE OUR ECONOMIC EDGE OVER OTHER STATES.



HIGH COST OF LIVING ALTERS RESIDENTIAL LOCATION CHOICES

The cost of living in Massachusetts, among the highest in the U.S., simply makes it more difficult to attract talent. We rank highest among all states in child care costs, second highest in housing costs and fourth highest in congestion. Employees considering staying here after college or relocating from another state experience sticker shock at the exorbitant housing costs. The option to live outside of the urban core loses appeal due to the state's resurgent traffic congestion and dysfunctional public transit system. And for those employees already living here, many are opting out of, or cashing in on, their current residences for lower cost locations and/or shorter commutes in other states.

People are leaving Massachusetts, with no signs of slowing down. We have experienced net outmigration of 750,000 people over the past three decades, reflecting a trend made even starker by the pandemic. In 2021, Massachusetts ranked fourth behind only high-cost states New York, California, and Illinois, with 46,000 people leaving the Commonwealth. Regions like Greater Boston that have high living costs with a concentration of white-collar jobs that can be performed remotely are experiencing the largest outmigration.

And Massachusetts has the most onerous estate tax in the country. Should the Fair Share Amendment pass this November, adding a 4 percent surtax on income in excess of \$1 million, these two tax policies will exacerbate the long-standing outmigration of residents to lower tax states.

WORKFORCE SHORTAGES THREATEN ECONOMIC PROSPERITY

The effects of COVID on the workplace, in combination with the already-high cost of living and doing business in the state, make it extremely challenging to recruit and maintain the skilled workforce that is essential to growth. As a result, the long-held belief that Massachusetts' talent base would always anchor our economy is breaking down, and the concentration of high-skilled jobs that tethered our highly educated workforce to Massachusetts has begun to fray.

The number of people in Massachusetts who quit their jobs in 2021, 938,000, is up 56 percent from an annual average of 600,000 for the previous decade (2011 - 2020). Quits are expected to rise significantly over 2021, causing even higher turnover and increased job openings in 2022. Over 1 million people left the Massachusetts labor force due to retirement in 2021, representing a 20 percent jump from 2019. Massachusetts has a higher than average labor participation rate; however, in May 2022, there were 338,000 job openings and 146,000 unemployed, or 2.3 available jobs for every unemployed person in the state. This means Massachusetts will have to look outside of our borders to backfill and/or expand our workforce, but the state's high cost structure makes it increasingly difficult to convince workers to locate here.



MASSACHUSETTS CAN NO LONGER AFFORD TO BE COMPLACENT.

POLICYMAKERS MUST TAKE ACTION

Massachusetts can no longer afford to be complacent. Policy choices, use of resources, and the efficacy of actions taken in the next few years will dictate whether the state's economy can continue to thrive. This report includes specific recommendations to contain excessive costs, specifically around housing, child care availability, unemployment insurance, electricity, the estate tax, and the Fair Share Amendment, and to expand the size and skills of the workforce, such as rethinking job qualifications, coordinating training programs, attracting talent and incentivizing labor force participation. The ideas set forth here should spur additional discussion for policymakers, particularly heading into a new year, a new legislative session, and a new gubernatorial Administration.

Policymakers have never faced the numerous challenges confronting the state; they cannot ignore these emergent changes nor rely on past bromides to address them. Rather, they must make policy choices now and direct exceedingly valuable and one-time resources at once to make Massachusetts a more attractive place to live and work – decisions which could very well mean the difference between a sinking or thriving economy, and have a lasting impact on residents, employers and the broader economy for generations to come.



I. INTRODUCTION

This report examines several key issues for policymakers to consider. First, it updates the 2015 MTF report, **Stalled Progress**, by analyzing recent changes in business costs with comparisons to competitor states. In addition, it examines the cost of living for residents in 2022 compared to other states. The report then shifts to consider the profound effect recent changes in work patterns are already having on Massachusetts and why our cost structure matters more than ever before.

After decades of growth, Massachusetts is at a pivotal point. The Massachusetts economy, as measured by gross state product, surged 50 percent from 1982 – 1988 and again during the years 1993 - 2001, as a powerful mix of venture capital, innovation, and tech talent brought the state to the global stage. Since then, the state's economy has thrived due to its reputation as a leader in health care, higher education, biotechnology, life sciences, advanced manufacturing and venture funding. This brandished the state's reputation as a place of innovation, attracting the highest levels of talent from around the world. Our economy thrived as a result.

Along the way, Massachusetts also became an increasingly costly place to run a business. In fact, it is one of the most expensive among the 50 states. Business costs, driven by higher levels of compensation and benefits, have been the requisite price to recruit and maintain the talent so essential to economic growth. The cost of living in Massachusetts has kept pace with business costs and also ranks among the highest in the nation.

COVID has fundamentally altered the value proposition for Massachusetts employers and their employees by changing the work paradigm. Put succinctly, Massachusetts is at a crossroads. Employers and employees are reassessing the costs of staying in Massachusetts as they think through their increasingly flexible work options. The principal challenge to policymakers seeking to ensure the state's future economic success is to expand the size and skill set of our aging and shrinking labor force while tackling our current cost structure that impedes workforce expansion.

Policy choices, use of resources, and the efficacy of actions taken in the next few years will dictate whether the state's economy can continue to thrive.

Policymakers can neither ignore these emergent changes nor rely on past bromides to address them.

Rather, they must make policy choices and direct exceedingly valuable and one-time resources to make Massachusetts a more attractive place to live and work.



PUT SUCCINCTLY, MASSACHUSETTS IS AT A CROSSROAD.

POLICY CHOICES, USE OF RESOURCES, AND THE EFFICACY

OF ACTIONS TAKEN IN THE NEXT FEW YEARS WILL

DICTATE WHETHER THE STATE'S ECONOMY CAN

CONTINUE TO THRIVE.





A. THE PRE-PANDEMIC MASSACHUSETTS ECONOMY WAS A POWERHOUSE

Some may question why our cost structure matters. After all, despite having a high-cost structure for decades, Massachusetts has grown into an economic powerhouse as measured by any number of indicators:

- IT RANKS NEAR THE TOP IN EDUCATION, HEALTH CARE, INNOVATION, AND ACCESS TO CAPITAL.
- IT HAS ELITE INSTITUTIONS IN LIFE SCIENCES, EDUCATION AND HEALTH CARE THAT COMPETE GLOBALLY.
- ITS \$650 BILLION GROSS STATE PRODUCT IN 2021 RANKS IT AMONG THE TOP 25 COUNTRIES IN THE WORLD.
- ITS WORKFORCE IS THE ENVY OF THE NATION, SECOND ONLY TO WASHINGTON D.C. IN EDUCATION ATTAINMENT.
- ITS DIVERSE ECONOMY PROVIDES AN ECO-SYSTEM OF INNOVATION SUPPORTED BY A
 TALENT PIPELINE FED BY OVER 100 COLLEGES, UNIVERSITIES AND RESEARCH
 INSTITUTIONS.
- BOSTON HOSPITALS AND MEDICAL SCHOOLS PLACED SECOND IN GRANT FUNDING RECEIVED FROM THE NATIONAL INSTITUTE OF HEALTH FOR THE PAST TWO YEARS AFTER FINISHING FIRST THE PREVIOUS 24 YEARS.
- FOR DECADES, MASSACHUSETTS HAS CONSISTENTLY RANKED AS ONE OF THE TOP TWO INNOVATIVE STATES IN THE COUNTRY. 1
- MASSACHUSETTS IS A TOP 20 TOURIST DESTINATION IN THE U.S. TRAVEL BROCHURES WRITE THEMSELVES.

The Commonwealth's sound financial position is attractive to both businesses and individuals who appreciate a stable fiscal and tax climate. State tax revenues soared by 15 percent in FY 2021 and continue to outperform forecasts this year. Massachusetts added 610,000 jobs since April 2020, driving the unemployment rate down from 16.4 percent to 4.1 percent in April 2022. The real gross state product grew by 7.8 percent in Q4 2021 following a Q3 increase of 3.7 percent. ² The state's economy appears resurgent.

B. BUT WARNING SIGNS WERE THERE

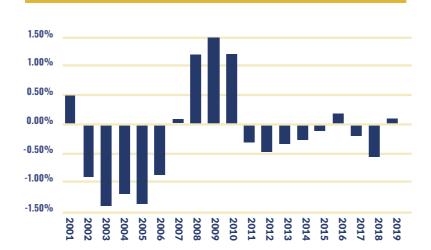
Unfortunately, these statistics are only part of the story. Aside from its high cost structure, Massachusetts faced an array of bottlenecks to growth before the pandemic. These included: an aging workforce, one of the lowest birth rates in the nation, stringent international immigration policies, a flood of residents moving to other states, income and wealth disparities, geographic inequities, and some of the worst traffic congestion in the world.

As well as we think the Massachusetts economy has prospered over the years, the state has lagged the rest of the country in job growth for most of the past two decades.

The two previous recessions – in 2002 and 2008 – demonstrate the divergence of the state's economy from the U.S. From 2002 to 2006, Massachusetts' job growth suffered a steeper loss and a longer recovery from the "dot com" bubble crash due to job growth fueled by venture funding and tech startups both of which were particularly hard-hit. In contrast, the fiscal crisis in 2009 adversely affected many southern and western states that overbuilt speculative housing which left Massachusetts relatively better off.

However, looking back over the past decade during a prolonged nationwide economic recovery (and before the impacts of COVID), Massachusetts trailed the U.S. in private sector job growth in seven of the past nine years (Figure 1). This weakness undoubtedly had many contributing factors, but chief among them was certainly the high costs of operating a business.

Figure 1 - Percentage by Which Massachusetts Private Sector Job Growth Differed from U.S., 2001-2019





Massachusetts trailed the U.S. in private-sector job growth in seven of the past nine years.

More recently, the state's post-pandemic recovery lags in comparison to the rest of the country. Halfway through 2022, Massachusetts ranks 43rd among the 50 states in its recovery, in front of Vermont, California, New Mexico, Oregon, Illinois, Hawaii and New York according to the **Back-to-Normal Index** created by Moody's Analytics and CNN Business.

II. COST STRUCTURE

A. MASSACHUSETTS IS AN EXPENSIVE PLACE TO OPERATE A BUSINESS

MTF has periodically issued reports to compare the Massachusetts cost structure in terms of absolute growth year-over-year and its growth relative to other states. Our 2015 report, **Stalled Progress**, documented that Massachusetts was one of the most expensive places in the country to run a business. The following sections update the absolute and relative data contained in that report.

Absolute cost growth since 2015 shows that Massachusetts continues to be among the highest cost states in which to conduct business. In the past, that would not be particularly noteworthy.

Today, however, as the world begins to emerge from two years of COVID, comparative analyses become a salient factor as employers who are no longer bound to a particular location actively explore options to curtail costs. Unsurprisingly, Massachusetts fares poorly relative to other states on a number of axes upon which people and businesses make location decisions.

Areas where Massachusetts business costs rank among the highest in the country include:

- ✓ WAGES AND SALARIES (2)
- ✓ HEALTH INSURANCE (FAMILY PLANS 6, INDIVIDUAL PLANS 10)
- ✓ UNEMPLOYMENT INSURANCE (1)
- ✓ ELECTRICITY COMMERCIAL (4) AND INDUSTRIAL (3)
- OCRPORATE TAX BURDEN CORPORATE INCOME PER CAPITA (4), STATE AND LOCAL PER CAPITA (3)

WAGES AND SALARIES

Massachusetts has had a high wage and salary structure for decades, but the rate of growth has accelerated in recent years.

According to the state's Department of Unemployment Assistance, the average weekly wages of Massachusetts' workers grew from \$1,283 in 2015 to \$1,609 in 2020, an increase of \$326 or 25.4 percent over this five-year period (5.1 percent annually) when inflation was still low. A spike of nearly 11 percent in 2020 was driven largely by two factors: increased compensation for employment at the high end and the massive loss of lower paying jobs (Figure 2).

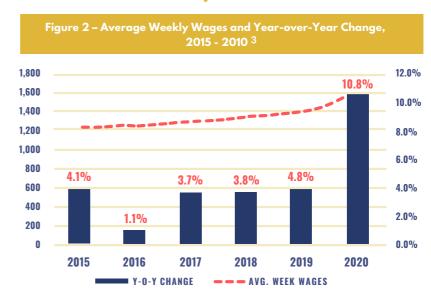


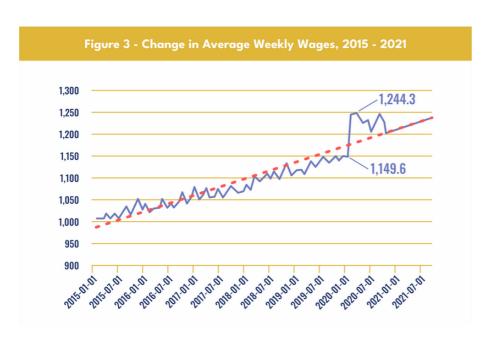
Table 1 - Average Weekly Wages by Industry Sector, 2020 vs. 2015

Average Weekly Wages	2015	2020	Change \$	Change %
Total, All Industries	\$1,283	\$1,609	\$326	25.4%
Construction	\$1,361	\$1,624	\$263	19.3%
Manufacturing	\$1,657	\$1,848	\$191	11.5%
Durable Goods Manufacturing	\$1,786	\$2,031	\$245	13.7%
Non-Durable Goods Manufacturing	\$1,420	\$1,502	\$82	5.8%
Utilities	\$1,944	\$2,404	\$460	23.7%
Wholesale Trade	\$1,762	\$2,126	\$364	20.7%
Retail Trade	\$603	\$793	\$190	31.5%
Transportation and Warehousing	\$1,012	\$1,181	\$169	16.7%
Information	\$1,990	\$2,703	\$713	35.8%
Financial Activities	\$2,511	\$3,058	\$547	21.8%
Professional and Business Services	\$1,860	\$2,390	\$530	28.5%
Professional and Technical Services	\$2,279	\$2,934	\$655	28.7%
Management of Companies and Enterprises	\$2,696	\$2,809	\$113	4.2%
Administrative and Waste Services	\$853	\$1,087	\$234	27.4%
Educational Services	\$1,129	\$1,346	\$217	19.2%
Health Care and Social Assistance	\$1,040	\$1,198	\$158	15.2%
Ambulatory Health Care Services	\$1,242	\$1,429	\$187	15.1%
Hospitals	\$1,369	\$1,544	\$175	12.8%
Nursing and Residential Care Facilities	\$675	\$855	\$180	26.7%
Social Assistance	\$1,040	\$1,198	\$158	15.2%
Leisure and Hospitality	\$477	\$588	\$111	23.3%
Other Services, Except Public Administration	\$682	\$889	\$207	30.4%
Public Administration	\$1,406	\$1,603	\$197	14.0%

For Example, high-wage sectors such as information, financial activities, and professional and technical services experienced wage growth of 15 percent, 7 percent, and 8 percent respectively in 2020 (Table 1).



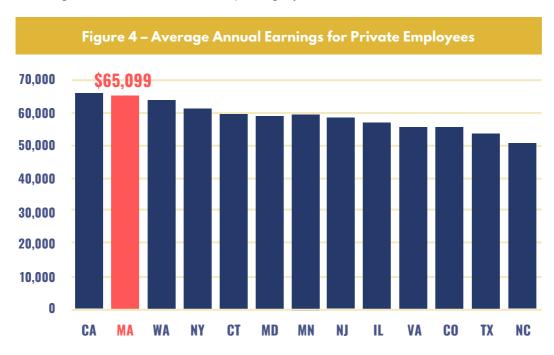
In contrast, the state lost 660,000 jobs in April 2020, mostly in leisure and hospitality, and retail, as many of these establishments closed their doors. Two-thirds of jobs lost were from sectors paying less than \$40,000 on average. The effect of this job loss is evident from the \$95 wage jump in one month – April 2020 – as the proportion of those who remained employed shifted to higher paying jobs (Figure 3).



2nd

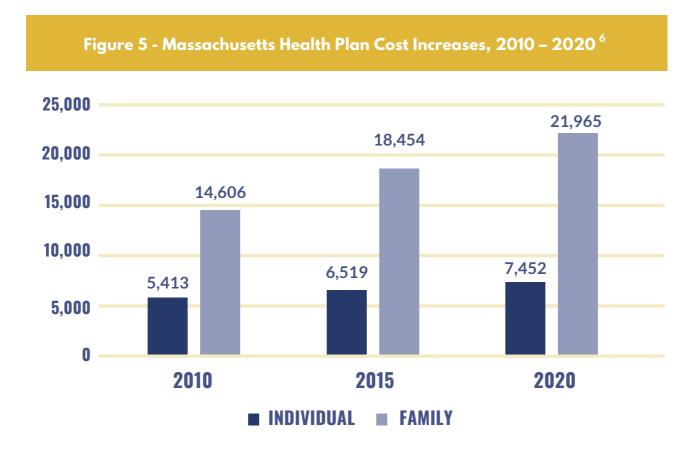
In comparison to other states, Massachusetts ranked second in average annual earnings for people working for private employers in 2021, trailing only California....

and displacing the financial hubs of New York and Connecticut (Figure 4). This is due in part to the Commonwealth's concentration of technology companies, the sector's robust growth and salary inflation from the rising demand for IT skills over the past eight years that have driven tech workers' salaries to record highs.



HEALTH INSURANCE

From 2015 to 2020, the cost of the average family health plan in Massachusetts increased by \$3,511 from \$18,454 to \$21,965, a 19% increase. Individual health plans increased at a slower pace, rising \$933 from \$6,519 to \$7,452, a 14.3 percent growth (Figure 5). ⁵



In recent years, the year-over-year price increases have moderated, with annual growth from 2015 to 2020 averaging 3.8 percent for family plans and 2.9 percent for individual plans; however this slower growth rate doesn't account for the full burden borne by purchasers. For some, particularly those in small businesses and self-employed individuals, the cost of health insurance rose less steeply, but the benefit package was reduced in order to make the overall price affordable.

On a relative basis, Massachusetts has fared better. It moved from 4th most expensive in both individual and family health plans in 2015 to 10th in the cost of individual plans and 6th in family plans in 2020 (Table 2).

Table 2 - Massachusetts Rankings for Cost of Employer-Sponsored Health Insurance						
Type of Coverage	1993 Rank	1995 Rank	2003 Rank	2010 Rank	2015 Rank	2020 Rank
Individual	1	1	11	5	4	10
Family	1	1	5	8	4	6

As shown in Tables 3 and 4, New England states account for four of the top ten premium costs for family coverage (NH, VT, MA and CT) and five of the top ten for individual coverage (NH, VT, CT, MA and ME). Other top ten entrants include high-cost states such as Alaska, New York, Illinois, and New Jersey.

Table 3 - Total Health Insurance Premiums Employer-Sponsored Family Coverage, 2020

Table 4 - Total Health Insurance Premiums Employer-Sponsored Individual Coverage, 2020

State	2020 Total Premium	Rank
New Hampshire	\$23,654	1
New York	\$23,381	2
New Jersey	\$23,042	3
West Virginia	\$22,341	4
Vermont	\$22,288	5
Massachusetts	\$21,965	6
Connecticut	\$21,952	7
Alaska	\$21,809	8
Illinois	\$21,775	9
Delaware	\$21,565	10
U.S. Average	\$20,578	

State	2020 Total Premium	Rank
Alaska	\$8,635	1
New York	\$8,177	2
New Hampshire	\$7,991	3
Vermont	\$7,868	4
Wyoming	\$7,743	5
Nebraska	\$7,611	6
South Carolina	\$7,516	7
Connecticut	\$7,501	8
Maine	\$7,469	9
Massachusetts	\$7,452	10
U.S. Average	\$7,149	

UNEMPLOYMENT INSURANCE

Inflated unemployment costs have plagued Massachusetts for years due to the state's high weekly benefit amount, generous benefit duration and expansive eligibility standards. As noted in Stalled Progress, Massachusetts had the 5th highest UI costs in the nation in 2014. By enacting temporary measures that year, the state was able to moderate UI costs for a brief period ⁷ however, they spiked again in 2019 just prior to the pandemic and reached unprecedented levels as a result of program expansion during the pandemic. Massachusetts now ranks highest of the 50 states in UI costs according to the most recent Tax Foundation report (Table 5).8

Ta	Table 5 - Massachusetts Rankings for Unemployment Insurance							
2014 Rank	2015 Rank	2016 Rank	2017 Rank	2018 Rank	2019 Rank	2020 Rank		
5	10	9	7	8	1	1		

In 2021, the Department of Unemployment Assistance (DUA) paid \$12.2 billion in benefits to 1.7 million claimants and projected average unemployment costs per employee would reach \$692 in 2021 (Figure 6).9 While the final data are not yet available, given the unprecedented nature of the pandemic, these trends will not likely be long-lasting.

More generally, there are several factors that determine an employer's unemployment insurance (UI)





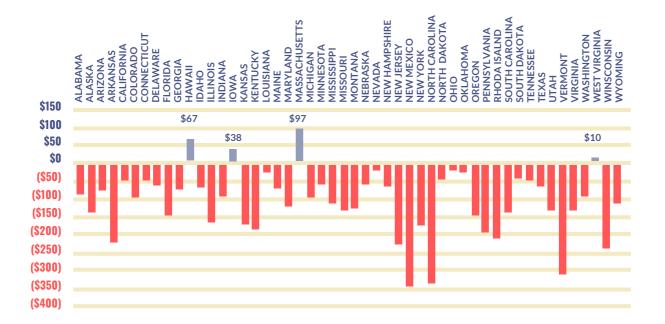
costs, including the total amount of wages paid, the taxable wage base, the tax rate, total claims, and an employer's experience rating. Massachusetts has one of the most generous UI programs in the nation. The state pays the highest weekly benefit, for the longest period of time, to the largest group of claimants. ¹¹

Comparisons with other states, the majority of which have enacted measures to reduce the UI burden for employees, are startling.

MASSACHUSETTS IS A CLEAR OUTLIER IN CONTROLLING UI COSTS.

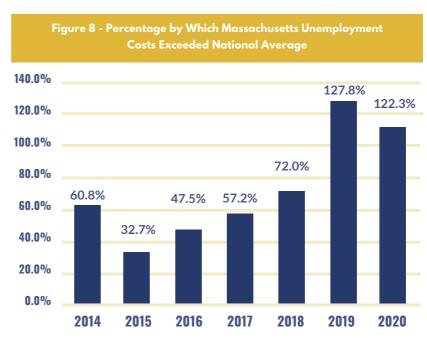
Massachusetts is a clear outlier in controlling UI costs. From 2015 - 2020, the U.S. average cost of UI declined \$93 from \$370 to \$277, while Massachusetts saw a \$97 increase. In fact, 46 states experienced reduced average UI costs and only four saw increases (Figure 7).

Figure 7 – Change in Average Employment Costs per Covered Employee, 2015 - 2020



The degree to which Massachusetts has diverged from the other states in recent years is noteworthy. In 2014, when the state's UI costs ranked as the fifth most expensive among all states, Massachusetts was approximately 60 percent higher than the national average (Figure 8). In 2019 and 2020, not only did costs increase to the point where the state ranks as the most expensive, but Massachusetts' UI costs are now more than double the national average.

These statistics, as noteworthy as they are, do not capture more recent actions by several states to reduce the UI burden facing employers as a result of the pandemic-induced economic shutdown and the unprecedented use of unemployment benefits. Many states have opted to use federal monies from the American Rescue Plan Act (ARPA) to fully replenish UI Trust fund balances to allay the cost to businesses. Massachusetts has appropriated \$500 million to be used for this purpose, but employers will be required to shoulder \$2.7 billion that the state will borrow to repay federal advances and restore the UI Trust Fund balance to recommended levels.



PAID FAMILY AND MEDICAL LEAVE

Massachusetts enacted a comprehensive Paid Family and Medical Leave program in 2018 that requires contributions from both employers and employees. Only six other states and the District of Columbia have implemented such a program to date, with two additional states creating programs still to be implemented. 12 The Massachusetts program is by far the most expansive of these nine programs. 13

The program has collected \$2.3 billion from employers and employees through January 2022 and spent \$662 million on benefit payments and administrative expenses (Table 6).

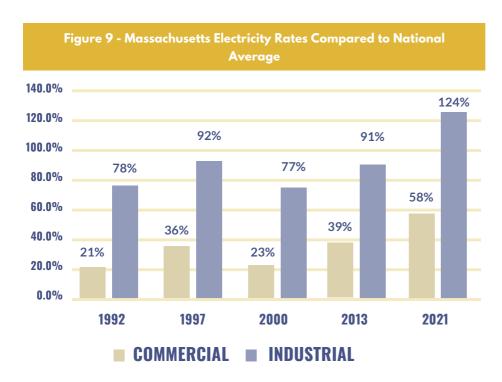
Table 6 - Massachusetts Paid Family and Medical Leave Fund, 2020-January 2022 (\$ millions)

PFML	Collected	Benefit Payments	Admin Expenses
FY 20	656	N/A	11
FY 21	953	168	51
Jan FY 22	680	402	30
Total	2,289	570	92

These costs are not exhaustive, as they do not reflect the compliance and administrative burdens associated with this program for employers. For example, they also do not include the costs to hire temporary workers, pay overtime to cover the shifts of those on leave, or address lost productivity.

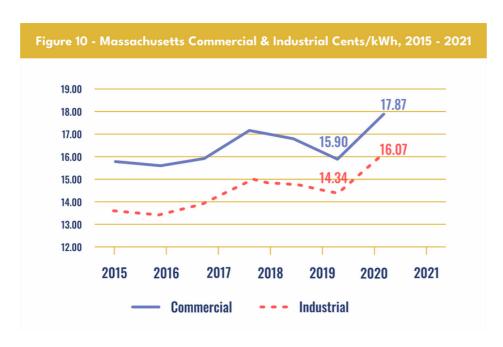
ELECTRICITY

Massachusetts consistently ranks as one of the most expensive energy markets in the U.S. for commercial and industrial customers. In 2021, commercial rates were the fourth most expensive in the country and nearly 60 percent above the national average, while industrial customers faced the third highest costs - 124 percent higher than the rest of the nation (Figure 9).



This is not surprising. Massachusetts consumes approximately 15 times more energy than it produces. We are also heavily reliant on natural gas, which accounts for more than two-thirds of electricity generation. ¹⁴ Since the state has no reserves or production, we import all of our natural gas, subjecting the state's energy costs to supply limitations and market forces.

Commercial electricity rates were 15.90 cents/kWh in December 2020, an increase of only 0.11 cents or 0.7 percent from 2015. Industrial rates grew slightly faster to 14.34 cents/kWh in 2020 from 13.54 in 2015, representing a 5.9 percent increase over the five-year period (Figure 10). Without concerted efforts to become more energy efficient which have helped to suppress demand, those rates would have likely increased even more.



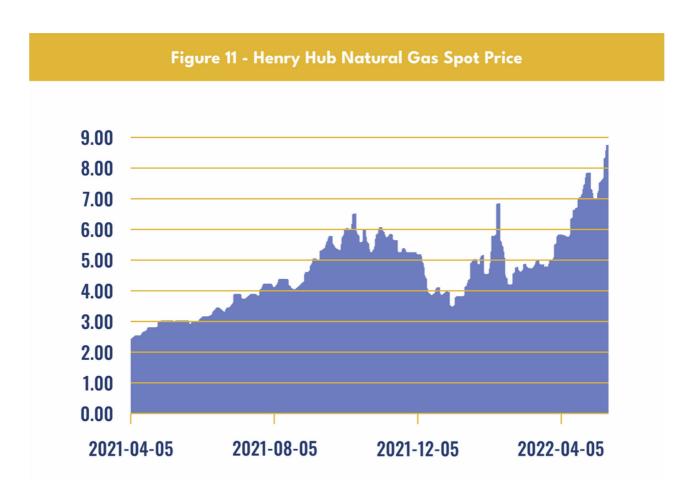
More recently, however, electricity rates saw a 2 cent jump in commercial and 1.75 cents in industrial rates in 2021, pushing costs up for both by approximately 12 percent in one year. Early signs in 2022 indicate that this price escalation will continue.

- NATURAL GAS PRICES HOVERED NEAR \$20 PER METRIC MILLION BRITISH THERMAL UNIT (MMBTU) IN JANUARY, UP FROM \$8.38 IN DECEMBER AND \$4.97 A YEAR AGO. 15
- EVERSOURCE CUSTOMERS WILL FACE A 25 PERCENT PRICE INCREASE ACCORDING TO A FILING WITH STATE REGULATORS. 16 NATIONAL GRID INCREASED ITS RATES BY COMPARABLE AMOUNTS EFFECTIVE NOVEMBER 1.

The natural gas spot price reached \$9.58 per million BTU in June 2022, up from \$2.43 a year ago, nearly a 400 percent increase in one year (Figure 11).

High electricity costs are especially impactful to many of the large sectors in the Massachusetts economy, such as advanced manufacturing, financial services and other 24/7 operations.

Massachusetts faces continued energy challenges for the foreseeable future as it attempts to execute aggressive carbon neutral goals, switch to renewable energy sources, and modernize the grid to support expanded electricity demands. In the meantime, Massachusetts remains captive to global energy markets and volatile prices. While offshore wind technology advancements and other recent developments hold great promise to reduce costs of renewable energy sources over time, employers are making decisions now about where to locate and expand. Therefore, the cost of electricity poses an obstacle to the state's competitiveness, potentially for years to come.



CORPORATE TAXES

Massachusetts has worked hard over the past three decades to shed its high-tax reputation. It has done so with a degree of success. Overall, Massachusetts ranks 36th in business tax climate, below the national average but unchanged since 2015. However, Massachusetts stands alone relative to several additional taxes that other states do not impose, such as paid family and medical leave, an employer medical assistance contribution and other such assessments, that are not included in these state comparisons. It also has a broader tax base than many other states as result of mandatory unitary combined reporting, a non-income measure for the corporate excise, and a three-factor apportionment base for most corporations.

Table 7 - State Corporate Income Tax Collections per Capita, **FY 2019**

State	2020 Total Premium	Rank
New Hampshire	612	1
New Jersey	456	2
Alaska	455	3
Massachusetts	428	4
California	349	5
Minnesota	304	6
Delaware	298	7
Connecticut	253	8
Tennessee	249	9
Illinois	244	10
U.S. Average	147	

These burdens, coupled with a high degree of uncertainty surrounding tax policy, undermines the state's competitive ranking. Perennial proposals to repeal long-established policies, such as single sales factor apportionment for mutual fund services corporations and proposals to impose additional taxes, further threaten the state's hard-earned progress, making for a precarious tax climate.

When measured on a per capita basis, Massachusetts' corporate income tax collections ranked 4th highest in the country in FY 2019 at the state level, up from 5th in FY 2012, and 3rd highest at the state and local level in FY 2018, up from 12th in FY 2013 (Tables 7 & 8).

Table 8 - State & Local Corporate Income Tax Collections per Capita, **FY 2018**

State	2020 Total Premium	Rank
New Hampshire	584	1
New York	532	2
Massachusetts	350	3
California	316	4
Delaware	271	5
Alaska	267	6
New Jersey	252	7
Tennessee	243	8
Minnesota	242	9
Pennsylvania	229	10
U.S. Average	172	

Massachusetts has worked hard over the past three decades to shed its high-tax reputation.

It has done so with a degree of success.

PROPERTY TAXES

According to the Tax Foundation, Massachusetts ranks 45th (1 being the best) in business property taxes, due principally to higher tax rates on commercial and industrial property classes and a levy on several wealth based taxes. 17 Massachusetts has ranked either 44th or 45th every year since 2014.

WHY BUSINESS COSTS **MATTER**

Table 9 – Business Property Taxes

State	Rank	State	Rank
Connecticut	50	Massachusetts	45
Vermont	49	New Jersey	44
Illinois	48	Maryland	43
New York	47	Rhode Island	42
New Hampshire	46	Maine	41

Costs for core components of doing business in Massachusetts continue to rise and the potential impact on job growth is telling. For example, Massachusetts has the fifth highest average cost per employee (earnings, health insurance, and unemployment insurance) in the durable manufacturing sector (Table 10). Historically a path for those without a college degree to earn a middle-class wage, this sector is particularly sensitive to overall costs. The current inflationary environment only heightens that sensitivity.

In contrast, the financial services sector is one of the highest paying in the country and one in which Massachusetts has historically had a concentration of jobs. But with the third highest cost structure of any state, Massachusetts is having trouble attracting growth in this sector as firms realize that many of these jobs can be performed elsewhere for less (Table 11).

T - - 4:	\wedge	verage	C1 -			
I dble I		verdde '	LOSTI	oer	Em 5	ovee

Cost/Employee
92,407
83,285
83,129
83,122
80,600
79,807
79,019
78,645
78,371
76,934

Table 11 – Average Cost per Employee

Financial Activities	Cost/Employee
Connecticut	122,752
New York	121,078
Massachusetts	119,100
Florida	112,643
California	109,589
North Carolina	107,680
Maryland	105,904
Pennsylvania	105,484
Illinois	103,662
Colorado	102,918

Since employment lows in April 2020, Massachusetts has experienced anemic growth in both of these sectors. The state recouped 9,500 durable manufacturing jobs (6.6 percent growth), compared to 834,000 jobs in the U.S. (11.8 percent growth). The numbers for financial services are even starker. Massachusetts increased employment in financial services by just 400 jobs over the past two years (0.18 percent growth) compared to 350,000 jobs created in the U.S., a 4.1 percent growth rate nationally.

It's also important to note that in 2020, setting high wages aside, Massachusetts ranked sixth highest in the combined cost of family health insurance and UI per employee. These costs apply in all areas of the state, including those where the pay scales are typically less, depressing job growth in those regions.

Massachusetts increased employment in financial services by 400 jobs over the past two years (0.18 percent growth), while U.S. job growth topped 350,000 (4.1 percent growth).

Further, the recovery from the pandemic continues to drive up other employment costs. In 2021, nearly 48 million people voluntarily left their jobs. Through the first four months of 2022, the quit rate in the U.S. is 21 percent higher than a year ago, which is in line with Gartner's recent forecast of a 20 percent jump. Through the first four months of 2022, Massachusetts is faring better than the nation as a whole, running 11 percent ahead of its 2021 quit rate.

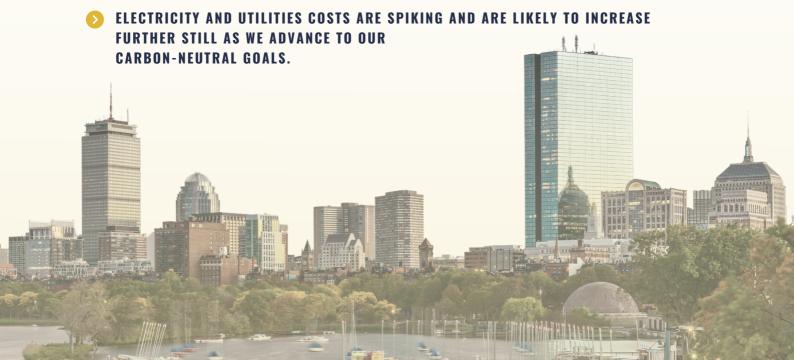
While these record level quits are driving up wages, the staffing shortages will increase other costs – for example, the need to hire more job recruiters to identify and vet candidates, the need to hire additional employees to build redundancies, and the cost of managing turnovers. Moreover, companies must expand their geographic reach to find and attract the talent necessary to maintain and expand business.

And, a newer vexing problem is emerging – "ghosting your employer," where people accept a job but don't show up. According to the Wall Street Journal, manufacturers, restaurants and airlines are seeing a record number of applicants who accept a new position and are never seen or heard from again, perpetuating staffing shortages and recruiting costs, and further delaying critically needed hiring. 18

B. MASSACHUSETTS IS ALSO AN EXPENSIVE PLACE TO LIVE

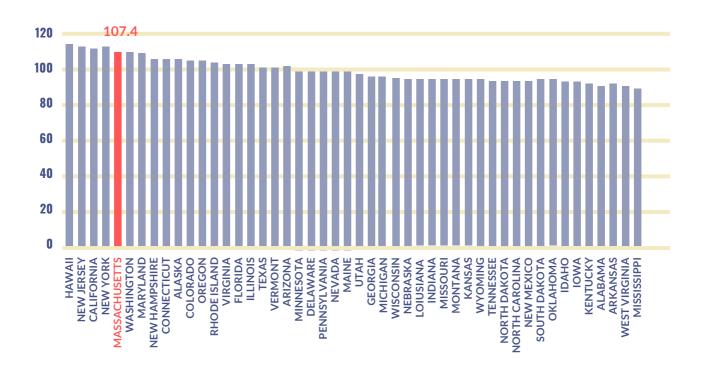
Massachusetts is a very expensive place to live, as all the core cost components of living exceed the national average, especially for housing. Collectively, these costs discourage people from staying or relocating here. Some sobering facts to consider:

- SCARCE INVENTORY AND SURGING PRICES DRIVE UP HOME OWNERSHIP AND RENTAL COSTS.
- TRAFFIC AND CONGESTION HAVE LONG RANKED AMONG THE WORST IN THE WORLD.
- HEALTH CARE CO-PAYS AND DEDUCTIBLES INCREASE EVERY YEAR.
- CHILD CARE COSTS WERE AMONG THE MOST EXPENSIVE IN THE COUNTRY.



The U.S. Bureau of Economic Analysis (BEA) compares the cost of living across jurisdictions in its "Regional Price Parities" annual report. As Figure 12 ¹⁹ shows, Massachusetts was tied with Washington as the fifth most expensive state in 2020, trailing only Hawaii, New Jersey, California and New York. ²⁰

Figure 12 - Regional Price Parities - All Items, 2020





THE BOSTON MSA REQUIRES THE SECOND-HIGHEST INCOME TO MAINTAIN A MINIMUM STANDARD OF LIVING, BEHIND ONLY SAN FRANCISCO.

This ranking is up from ninth in 2008, driven principally by Massachusetts' high housing rental costs at 132.2 percent of the national average

MIT's Living Wage Calculator (LWC) offers another comparative tool. ²¹ LWC provides estimated costs for three household categories: one adult households, two adult households with one adult working, and two adult households with both adults working. Each of the three household categories is further divided by the number of children.

The chart below presents the required gross annual income before taxes for a household with two working adults and two children, to cover expenses for food, child care, medical, transportation, housing, civic, and other expenses aggregated. The calculator shows that the Boston MSA requires the second-highest income to maintain a minimum standard of living, behind only San Francisco. Remarkably, families in Springfield and Worcester face higher costs than a host of southern destinations, including Raleigh, Miami, Durham, Austin, Tampa, Dallas, and a bevy of smaller metro areas. In 2022, median household incomes in Worcester (\$75,705) and Springfield (\$61,360) 22 were below the state average (\$84,385) and fell well short of what the LWC estimates is required to meet the basics needs of a family.



HOUSING

Housing costs present the greatest challenge to employees and employers alike in Massachusetts. Recent market data show that Massachusetts and the Boston MSA respectively now have the second-highest housing costs in the nation. As Governor Baker so forthrightly put it recently, "the lack of affordable housing is an existential threat to Massachusetts."

\$160 \$140 \$120 \$100 \$80 \$60 \$40 \$20 Śn LOS ANGELES DENVER SPRINGFIELD, MA SEATTLE MANCHESTER, NH WORCESTER PORTLAND OR RALEIGH PHOENIX SAN ANTONIO **ALBUQUERQU**

Figure 13 - Income before Taxes for 2 Working Adults and 2 Children



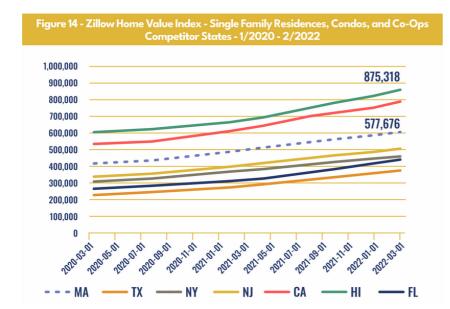
MASSACHUSETTS AND THE BOSTON MSA RESPECTIVELY NOW have the second-highest housing costs in the nation.

"I had an opening for a senior leader position and received a great recommendation on a gentlemen from Ohio. I flew him to Boston to interview, see the resort, and visit the city. He really liked Boston and I really liked him, so knowing the cost of living differential, I offered him the job at twice his current salary. He turned me down, because even with the increase in pay, a home comparable to what he currently lived in would be ~1 hour commute each way. He had two small daughters and so the quality of life sacrifice wasn't worth the large role.

Unfortunately, this was not an isolated experience. We continue to have difficulty recruiting top leadership to the area - six figure talent can buy a lot more for their money in other markets. As a result, we now focus on A) local talent that can learn our industry and B) developing more robust internal leadership training programs to build our talent bench in house."

Jenny Holaday
President ENCORE BOSTON HARBOR

As shown in the chart below, Zillow estimates that the average value of a Massachusetts residence reached \$577,000 in April 2022, third to Hawaii and California, representing an increase of 17 percent from 12 months earlier. 24





Further, Boston now has the second-highest rental costs in the country, an average of \$3,586 per month. This is nearly double the national average, trailing only the New York/Newark region and surpassing San Francisco. REDFIN estimates that Boston rents increased by a whopping 19 percent in February 2022 from a year earlier (Table 12).

REDFIN estimates that Boston rents increased in February 2022 versus a year earlier by a whopping 19 percent



Table 12 - REDFIN Rental Market Tracker - February 2022²⁵

Rank	Region	Avg. Rent Feb 2022	Y-o-Y Change
1	New York / Newark, NJ	\$3,858	35.7%
2	Boston, MA	\$3,586	19.2%
3	San Francisco / Oakland, CA	\$3,535	16.1%
4	San Jose, CA	\$3,426	13.7%
5	Lose Angeles / Anaheim, CA	\$3,316	9.8%
6	Can Diego, CA	\$3,181	18.9%
7	Miami / Fort Lauderdale, FL	\$3,010	30.3%
8	Seattle, WA	\$2,762	28.6%
9	Denver, CO	\$2,729	29.4%
10	Riverside, CA	\$2,653	17.2%
	U.S.	\$1,901	15.5%



66 Although Boston no longer has the worst traffic in the U.S. as it did in 2019, its commuting costs remain high, behind only New York, Chicago, and Philadelphia,

CONGESTION

Adding to the housing challenge is the congestion that plagues our roadways. It limits the attractiveness of the option to purchase a more affordable home further away from the urban core in exchange for a longer commute. Pre-COVID, Boston metro area drivers experienced some of the worst traffic in the world. New data from the 2016-2020 five-year American Community Survey (ACS) and INRIX shows that Boston and Massachusetts rank among the worst traffic and longest commutes in the U.S. This is particularly vexing for people because it reduces their personal time – and this cost is avoidable.

The recently released ACS found that Massachusetts had the fourth-longest commute in America behind New York, Maryland, and New Jersey. The average commute time by all modes of transportation in Massachusetts was 30 minutes. ²⁶ The ACS survey found that nearly one-in-four people (23.6%) in Massachusetts experienced daily travel times to work of longer than 45 minutes.

The latest INRIX report found that a 48 percent reduction of downtown vehicle trips due to COVID reduced lost hours from 149 in 2019 to 78 hours in 2021. Although Boston no longer has the worst traffic in the U.S. as it did in 2019, its commuting costs remain high at an average cost of \$1,223 per driver, behind only Chicago, New York, and Philadelphia. 27

To put Boston's congestion in context, the 78 hours and \$1,233 in annual costs are twice the national average (Table 13).

Table 13 – INRIX - 2021 INRIX U.S. Traffic Scorecard						
			Hours Lost			
2021 Rank	Urban Area	2021	2020	2019	Compared to Pre-COVID	Cost per Driver
1	Chicago	104	86	145	-28%	\$1,622
2	New York, NY	102	100	140	-27%	\$1,595
3	Philadelphia, PA	90	94	142	-37%	\$1,404
4	Boston, MA	78	48	149	-48%	\$1,223
5	Miami, FL	66	35	81	-19%	\$1,028
6	San Francisco, CA	64	47	97	-34%	\$1,001
7	New Orleans, LA	63	42	79	-20%	\$977
8	Los Angeles, CA	62	45	103	-40%	\$968
9	Houston, TX	58	35	81	-28%	\$897
10	Atlanta, GA	53	20	82	-35%	\$820
	U.S.	36	26	99	-64%	\$564



To make matters worse, Massachusetts drivers pay an average of \$620 per year for repairs from roads in poor condition, the fifth-worst ranking in the country. 28

CHILD CARE

Accessible and affordable child care is essential to the size and composition of the state's workforce. It enables parents to work and businesses to thrive, creating financial security and economic opportunity for families and children. However, the U.S. child care system has long struggled to meet these needs, leaving many families without the care they need to participate fully in the nation's economy.

These challenges are particularly acute in Massachusetts. The state has the highest average annual cost for infant care at more than \$20,000, which is about the cost of tuition at a state college, while costs for a 4-year-old surpass \$15,000. 29

66 The shortfall in seats was estimated to be over 100,000, leaving one-third of children without access to care

Table 14 - Average Annual Cost for Infant Care			
Massachusetts	20,913		
California	16,945		
Minnesota	16,087		
New York	15,934		
Connecticut	15,501		
Maryland	15,335		
Colorado	15,325		
Washington	14,554		
Virginia	14,063		
illinois	13,802		

While Massachusetts had a substantial gap in child care availability before the pandemic – the shortfall in seats was estimated to be over 100,000, leaving one-third of children without access to care. 30 - COVID has permanently closed many child care centers, which will only drive up costs further. One recent report estimates that from December 2017 to March 2021, there was an 11 percent decline in the number of child care seats in the city of Boston. Other communities throughout the Commonwealth are experiencing a 30 percent decline.31

INDIVIDUAL TAXES

At first blush, state tax comparisons are relatively straightforward. For example, Massachusetts ranked eighth in the U.S. in total tax revenues collected in fiscal year 2021 and eighth in tax revenue per capita, suggesting that we are a high tax state. But often these comparisons do not provide a complete picture. For example, Massachusetts is also a high income state. When we take personal income into account, the state ranks 25th, right in the middle of the pack (Table 15).

Table 15 – FY 2021 Total Tax Collections 32					
State	Total Taxes (\$ million)	Per Capita	Rank	% of Pers. Income	Rank
California	248,188	6,325	3	9.0	6
New York	93,755	4,727	10	6.5	27
Texas	65,377	2,214	50	4.0	49
Illinois	55,532	4,382	12	7.0	20
Pennsylvania	49,720	3,835	22	6.3	31
Florida	49,314	2,264	49	4.1	47
New Jersey	43,683	4,714	11	6.7	26
Massachusetts	36,522	5,229	8	6.8	25
Ohio	34,909	2,963	38	5.6	40
North Carolina	34,712	3,290	34	6.5	28

What makes comparisons more complicated is the variation in how states rely on any one tax to fund their budgets and the different levels of government imposing the tax. For example, as shown in Table 16 below, Massachusetts collects approximately 29 percent of its revenues from sales taxes, whereas Washington, Florida, and Texas derive 72, 78 and 87 percent respectively. Additionally, Washington, Florida, and Texas are among 38 states that add local sales taxes to state rates.

In contrast, California (59%), New York (59%) and Massachusetts (54%) rely heavily on individual income taxes which, unlike the sales tax, take a larger percentage of income from high income groups than from low income filers, based on the concept of ability to pay.

Table 16 – Sources of Tax Revenues						
State	Property	Sales	Selective Sales*	Individual Income	Corporate Income	Other
Connecticut		23.8	13.1	46.5	11.8	4.8
Maine	0.8	35.0	13.2	38.1	5.2	7.7
Massachusetts	0.0	21.3	7.2	53.9	10.1	7.5
New Hampshire	12.4		30.3	4.6	31.3	21.5
Rhode Island	0.1	30.6	18.3	40.3	5.9	4.8
Vermont	29.3	12.4	18.0	30.1	4.1	6.1
California	1.3	16.9	7.7	59.0	10.5	4.6
Florida		60.6	17.5	-	6.9	15.0
New Jersey	0.0	29.3	11.6	38.5	13.6	6.9
New York		16.7	12.3	58.7	5.3	7.1
Texas		61.8	24.8			13.4
Washington	13.1	57.4	14.9			14.5

INCOME TAX

Massachusetts is one of nine states with a flat income tax. Rates range from 3.07 percent (Pennsylvania) to 5.25 percent (North Carolina). Despite the flat rate, 40 percent of Massachusetts tax filers pay an average effective tax rate of less than 3 percent, while the highest quintile pays an effective rate of 4.6 percent. 33 Further demonstrating the state's progressive approach, the highest quintile pays over 70 percent of all income tax collections, while the bottom two quintiles contribute approximately 3.5 percent.

Based on these and other data, the Tax Foundation ranks Massachusetts 11th in its overall income tax burden (with 1 being the best), just slightly behind New Hampshire (9th) and Florida (7th) and well ahead of other high cost states, including New York (50th), California (49th), New Jersey (48th) and Connecticut (47th). 34 As these data points demonstrate, such comparisons are useful but don't tell the entire story.

SALES TAX

At 6.25 percent, Massachusetts ranks 35th (with 1 being the worst), according to the Tax Foundation, based on their analysis of the effective tax rate that encompasses both state and local taxes. What is not included in the ranking is the state's tax base. Many states exempt groceries, while others charge a reduced rate and some charge the same rate as other goods. State taxation on clothing varies as well.

Since Massachusetts exempts groceries, all clothing less than \$175, and all services, the state has one of the broadest exemptions in the U.S. If this were included in the Tax Foundations' calculations, it would improve the state's ranking.



PROPERTY TAX

Massachusetts' property taxes, governed by Proposition 2½, which was enacted in 1980, sets a strict limit on the amount of property tax revenue a community can raise annually. The 2.5 percent growth rate applies to the Levy Limit and does not necessarily apply to an individual's tax bill, meaning that property taxes often increase at lower rates.

The Tax Foundation ranks Massachusetts 18th (with 1 being the best) in 2020, when taking into account the amount of property taxes paid as a percentage of the value of the owner-occupied house.

ESTATE TAX

Massachusetts is one of just twelve states that applies a dedicated estate tax to the assets of deceased residents. Even among the dozen states, the Massachusetts version stands out as burdensome due to the low threshold at which it begins (\$1 million) and the fact that the tax is applied to the entire value of estates subject to the assessment, not just the amount in excess as in other states.

This outdated tax policy subjects more people of moderate means to an estate tax in Massachusetts than anywhere else in the country. 35

Table 18 – Estate Tax Exemptions						
State	Exemption	State	Exemption			
Massachusetts	1,000,000	Vermont	5,000,000			
Oregon	1,000,000	Maryland	5,000,000			
Rhode Island	1,648,611	Hawaii	5,490,000			
Washington	2,193,000	Maine	6,010,000			
Minnesota	3,000,000	New York	6,110,000			
Illinois	4,000,000	Connecticut	9,100,000			

Table 17 – Property Taxes Paid as a Percentage of Owner-occupied Housing Value, 2020

State	Effective Tax Rate	Rank
New Jersey	2.21%	1
Illinois	2.05%	2
New Hampshire	1.96%	3
Vermont	1.82%	4
Connecticut	1.76%	5
Texas	1.66%	6
Wisconsin	1.63%	7
Nebraska	1.61%	8
Ohio	1.58%	9
Iowa	1.50%	10
Pennsylvania	1.49%	11
Rhode Island	1.43%	12
New York	1.38%	13
Michigan	1.38%	14
Kansas	1.32%	15
Maine	1.25%	16
South Dakota	1.18%	17
Massachusetts	1.14%	18
U.S.	1.08%	

FAIR SHARE TAX

There is also a pending ballot initiative that would impose a 4% surtax on income over a million dollars. This tax applies to many unincorporated businesses, proceeds from the sale of a business or residence and some retirement income. It will likely inhibit investment in Massachusetts by discouraging individuals from starting businesses here. Because the tax applies to income from the sale of real estate, it also adds to the cost of owning a home in Massachusetts. According to IRS data, in the ten-year period from 2010 to 2019, approximately 800,000 tax filers and \$65 billion of adjusted gross income left the state. Adding additional tax burdens in the Commonwealth when other states are reducing their tax burdens will make Massachusetts more costly for individuals and small businesses, exacerbate the outflow, and hurts the state's efforts to attract talent.

in the ten-year period from 2010 to 2019, approximately 800,000 tax filers and \$65 Billion of adjusted gross income left the state.

WHY COSTS OF LIVING MATTER

The playbook that Massachusetts has relied on to attract talent must be updated to reflect the changing environment. Employers face a wide array of uncertainties resulting from the COVID pandemic. Chief among them is the change to the work paradigm from in-person working to hybrid or remote models. This change is forcing employers to make adaptations to their workspace, retention and recruitment strategies, and how they do business. Massachusetts employers also confront a different playing field with much fiercer competition. 940,000 people voluntarily left their jobs in the state in 2021, an increase of 63 percent from 2020. The resulting labor shortages caused 308,000 job openings to go unfilled this past April.

The cost of a job has increased for businesses because they must offer higher pay, better benefits, and flexible work options to remain competitive. They also have to tackle ongoing supply chain shortages, surging inflation, and expensive real estate holdings, and must figure out how to manage hybrid work. As a result, they are seeking to cut costs where they can, and may no longer be willing to pay the premium it costs to live here.

At the same time, employees are using their new-found flexibility to re-assess career choices, re-balance their work and home lives, leave the workforce altogether, and re-locate to lower-cost residences with more space and less congestion. Every story is unique, but these important themes have consistently emerged when employers have reached out to their employees to discuss return to work plans. 36

Together, these shifts point to a new way of doing business for both employers and employees that calls for updated strategy to address changing circumstances and needs. Without modifications to the state's economic development approach, we will be unable to effectively compete in this rapidly evolving environment. As the next section makes clear, the writing is already on the wall. Massachusetts must heed the warning signs or face numerous economic challenges in the coming years.

The playbook that Massachusetts has relied on to attract talent must be updated to reflect the changing environment.





III. I.DISQUIETING TRENDS

Two years into this pandemic, several concerning trends are notable:

COSTS OF LIVING AND REMOTE WORK CHANGE LOCATION CHOICES

Those who can work remotely are embracing the change. Remote work enables employees to seek lower cost and less dense residential locations in Massachusetts and other states. Surveys show that remote workers have a strong aversion to returning to long commutes and traffic congestion, suggesting that work flexibility is a vital determinant in their location and job choices.

IT AND FINANCIAL SERVICES EMPLOYMENT - A BELLWETHER?

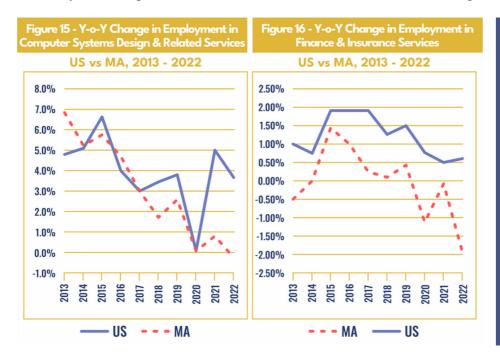
The tech sector is extremely geographically concentrated in a handful of what the Brookings Institution calls "superstar" cities/regions. A 2019 report by Brookings and the Information Technology Innovation Foundation showed that 90 percent of all new high tech job growth in the U.S. from 2005 – 2017 occurred in just five metro areas: Boston, San Diego, San Francisco, Seattle, and San Jose.³⁷

However, two years after the start of the pandemic, early trends indicate an emergent dispersion of tech sector growth. The work-from-anywhere policies put in place by companies to attract key tech personnel has started a mass migration of capital, companies and workers away from high-cost coastal "superstars." 38

The Brookings report on the geographic dispersion of six tech sectors – semiconductors, computer equipment, computer design, software, data processing, and information services – found that "the emerging tech hubs of Austin, Miami, Denver, Phoenix and Houston saw significant increases in their national share of tech job postings, while five established clusters – San Francisco, San Jose, Boston, New York and Washington, D.C. – saw substantial declines in theirs." 39

As shown in Figure 15 below, growth in employment in computer systems design 40 from 2020 through March 2022 was negligible in Massachusetts after falling to 0.1 percent in 2020, while the rest of the U.S. added nearly 190,000 jobs (8.6 percent growth). This is a clear warning sign: as the U.S. economy rebounds, information technology job growth has shifted away from Massachusetts to other regions across the country.

A similarly concerning trend has occurred in financial and insurance services (Figure 16).





As the U.S. economy rebounds, information technology job growth has shifted away from Massachusetts to other regions across the country.

DOMESTIC MIGRATION ACCELERATES

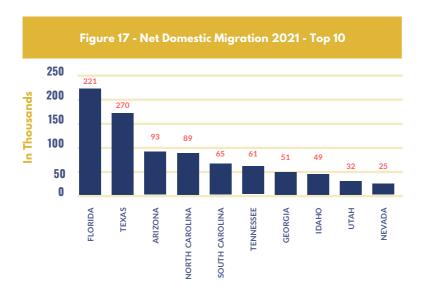
This increased migration is not likely to abate any time soon. In an update of its 2020 report, **Remote Workers** on the Move, researchers at Upwork surveyed 23,000 people across the U.S. in 2021 and found that remote work is influencing peoples' plans to relocate. Key findings from the report include: 41

- PEOPLE HAVE ALREADY MOVED: 2.4% OF RESPONDENTS. WHICH TRANSLATES TO 4.9 MILLION 1. AMERICANS, REPORT THAT THEY RELOCATED SINCE 2020 BECAUSE OF REMOTE WORK.
- MORE PEOPLE PLAN TO MOVE: 9.3% RESPONDENTS, OR 18.9 MILLION PEOPLE, SAY THEY WILL MOVE BECAUSE OF REMOTE WORK.
- PEOPLE ARE MOVING FAR AWAY: 41% OF RESPONDENTS REPORT THAT THEY WILL MOVE MORE THAN 2 HOURS AWAY FROM THEIR CURRENT WORK LOCATION.
- HIGH-COST CITIES ARE THE BIGGEST LOSERS: HIGH-COST CITIES/REGIONS WHERE REMOTE WORK IS AVAILABLE ARE THE MOST LIKELY TO EXPERIENCE OUT-MIGRATION.

In a recent survey conducted by Pew Research (February 7 - February 13, 2022), one in three people cited the desire to relocate to a different area as a reason to guit their job. 42 The report also found that those who guit and found a new job have more flexibility and a better work-life balance.

THE MASSACHUSETTS DEMOGRAPHIC DATA ARE ALARMING

The 2020 Census revealed some surprising data when it was released last July: Massachusetts' population had increased by 7.2 percent since 2010. This growth rate was higher than all other New England states and greater than the Census had projected, reflecting the strong economic health of Massachusetts relative to our neighboring states.

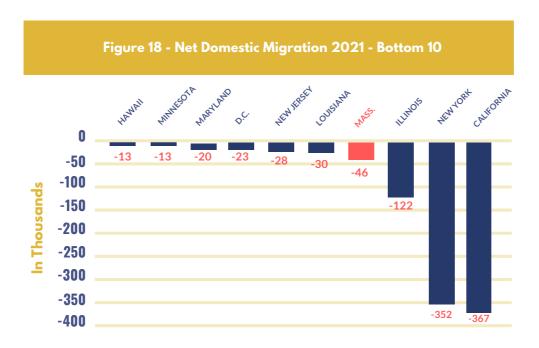


The census surveys were completed in the fall of 2020, capturing only preliminary impacts from COVID. More recent data are far less encouraging. The Census Bureau's Vintage 2021 estimates, released in late 2021 and 2022, show a very different migration trend.

Massachusetts has been losing population within its most populous counties and at least 21 cities. Per Figure 17 above, census results affirm that people continue to move south and west at the expense of Northeast states.

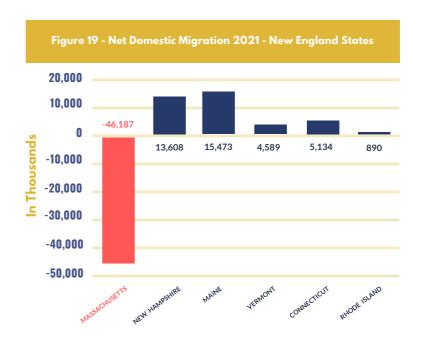


Behind only high-cost states such as New York, California and Illinois, Massachusetts ranked fourth for highest emigration in 2021, with 46,000 people leaving the Commonwealth. This represents a loss of 0.7 percent of the state's population, a significant change from the 2020 Census results. When measured as a percent of the state's population, Massachusetts ranked sixth behind New York (-1.82%), California (-0.99%), North Dakota (-0.96%), Illinois (-0.95%), and Hawaii (-0.93%) for greatest population loss in 2021 (Figure 18).

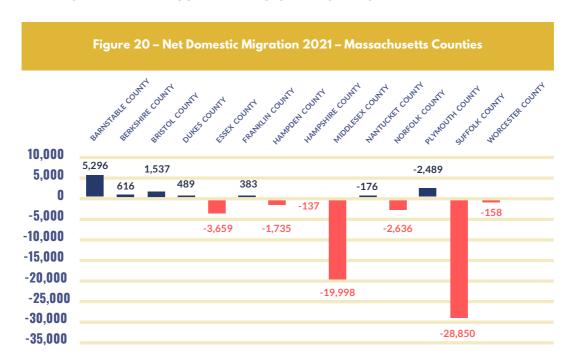


Recently-released Census data of county migration covering the pandemic period paints an equally disturbing picture: 43

- WHILE MASSACHUSETTS LOST 46,187 RESIDENTS WHO MOVED OUT OF STATE, THE FIVE OTHER NEW ENGLAND STATES GAINED 39,694 PEOPLE (FIGURE 19).
- NAINE (+1.16%), NEW HAMPSHIRE (+1.03%)
 AND VERMONT (+0.73%) ALL RANKED IN THE TOP 15 STATES IN GAINS AS A PERCENT OF THE STATE'S POPULATION.



- SUFFOLK COUNTY SAW 28,850 PEOPLE LEAVE IN 2021, REPRESENTING 3.6 PERCENT OF ITS POPULATION. THIS PLACES IT SIXTH IN SIZE OF LOSS AMONG 600 COUNTIES IN THE U.S. WITH POPULATIONS GREATER THAN 100,000 (FIGURE 20).
- THERE ARE 67 COUNTIES IN THE SIX NEW ENGLAND STATES AND 58 EXPERIENCED GAINS IN DOMESTIC MIGRATION IN 2021. OF THE NINE COUNTIES THAT LOST RESIDENTS. SEVEN WERE IN MASSACHUSETTS. THE OTHER TWO WERE PROVIDENCE AND HARTFORD.
- THE 2021 COUNTY DATA DEMONSTRATE THAT MASSACHUSETTS RESIDENTS ARE MOVING AT A HIGH RATE WHEN COMPARED TO OTHER STATES.



U.S. Census data released in May show that Boston had the 5th highest population decline among cities with at least 100,000 residents, having lost 3.2 percent of its population from the start of the pandemic through July 2021 (Table 19). The data also reveal that 21 of the 24 Massachusetts cities included in the release saw a decline in population.

At a U.S. Census forum, Zillow presented some of the drivers behind the decisions to change location due to the availability of remote work.44 These include:

THERE WERE OVER 2 MILLION RENTERS WHO EARNED ENOUGH TO BUY A STARTER HOME - BUT NOT IN THEIR CURRENT METRO LOCATION. TELEWORKING PROVIDED THEM WITH THE FLEXIBILITY TO RELOCATE AND PURCHASE A HOME.

Table 19 – Population Decline by Percent, Cities with More than 100,000 Residents

Population

Decline	Rank
-6.72%	1
-3.82%	2
-3.52%	3
-3.29%	4
-3.17%	5
-3.06	6
-2.99%	7
-2.90	8
-2.83%	9
-2.74%	10
	-6.72% -3.82% -3.52% -3.29% -3.17% -3.06 -2.99% -2.90 -2.83%

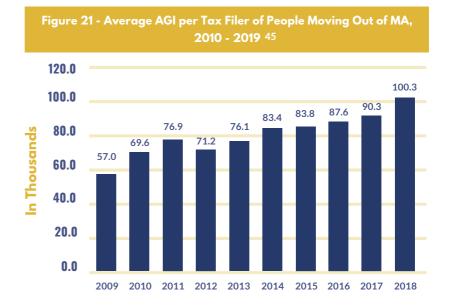
USING ACS CENSUS DATA, ZILLOW IDENTIFIED DOZENS OF VACATION TOWNS THAT HAVE DRAWN THE INTEREST OF TELEWORKERS WHERE PENDING HOME SALES HAVE INCREASED BY 65 PERCENT.

WEALTHIER RESIDENTS ARE LEAVING

In the ten-year period from 2010 to 2019, 1.28 million people moved from Massachusetts to another U.S. location - 797,000 tax filers plus their 481,000 dependents. While there is relatively little demographic data on these movers, the IRS data shows the amount of Massachusetts lost adjusted gross income (AGI) continues to grow. The average AGI of a tax filer who moved from Massachusetts to another state increased from \$57,000 in 2010 to \$100,900 in 2019, a nearly 80 percent increase over the last decade (Figure 21). This indicates that it is higher income tax filers who are moving.

WORKFORCE SHORTAGES IMPEDE **GROWTH**

U.S. job openings averaged 9.7 million per month in 2021, up 60 percent from 2020, while guits reached 47 million in 2021, which was 30 percent higher than the previous year. Employees are taking the opportunity to rethink their work and career choices while employers struggle to fill vacancies.



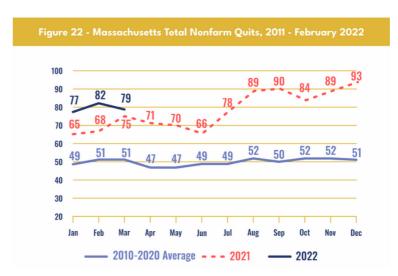
QUITS SURGE

Massachusetts businesses have long had difficulties filling job vacancies. Unfortunately, these workforce shortages are noticeably worsening.

Data from the U.S. Bureau of Labor Statistics 46 demonstrate the labor force is tightening as more people voluntarily leave their jobs and employers struggle with an increasing number of job openings to fill. The Massachusetts data show that 938,000 people voluntarily left their jobs in 2021. That's an annual increase of

340,000 above the 10-year average for 2011 - 2020, a 55 percent spike which is 15 points higher than the U.S. average. 47

It is evident that a healthy economic recovery offers workers the confidence and flexibility to opt out for change. The monthly trend in quits that has grown from 65,000 in January to 93,000 in December, a period in which Massachusetts added 185,000 jobs. Further, the trend continues in 2022 with 310,000 quits through the four months (Figure 22).





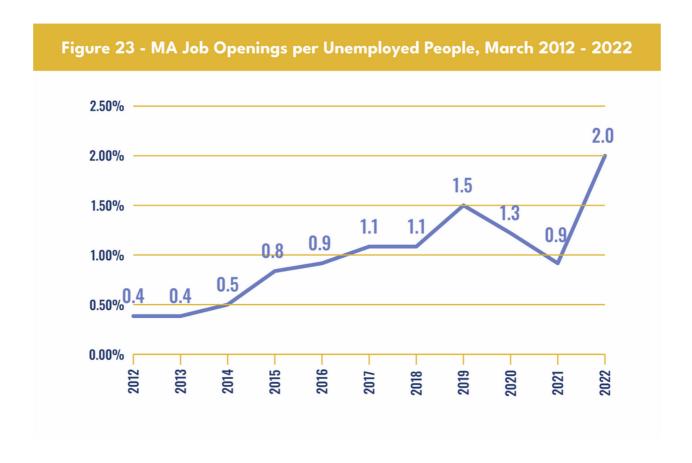
A healthy economic recovery offers workers the confidence and flexibility to opt out for change.

JOB OPENINGS SPIKE

The increased number of quits and retirements helps to explain the jump in job openings in Massachusetts. In March 2022, the state reached 318,000 openings, up from 205,000 in March 2021. Over the same period, the number of people unemployed in the state fell from 240,000 to 160,000.

The surge in job openings underlines the Massachusetts workforce challenges of today. Last March, there were 0.9 jobs available for every person out of work and seeking a job. The latest data now show that there are 2.0 jobs available for every unemployed person (Figure 23). That imbalance demonstrates the challenges and costs employers face in hiring in this new workplace paradigm.

Massachusetts must figure out how to attract more people into the workforce to sustain and grow our current economy. This will require lawmakers to address costs where we are an outlier, to encourage immigration, and enable all our residents who are unemployed to obtain the skills and supports they need to re-enter the workforce.



Massachusetts has suffered a steeper decline in international migration since peaking in 2017, slumping to 12,675 in 2021, 35,000 fewer than four years earlier. This is the lowest it has been since 1990.

INTERNATIONAL MIGRATION DOWNTURN CONSTRAINS WORKFORCE

The other source of talent Massachusetts relies on is its international immigration population, but this is also showing signs of slippage. Due to increased restrictions on immigration and travel as a result of the pandemic, there were an estimated 2 million fewer working age immigrants in the U.S. than would have been expected had pre-2020 immigration trends persisted. Approximately 1 million of these lost immigrants would have been college educated. **48**

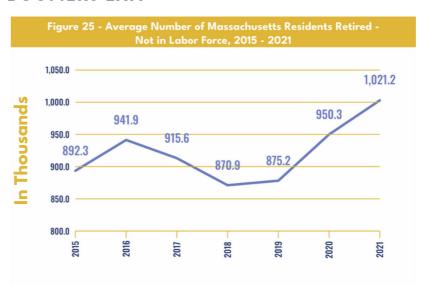
Massachusetts has suffered a steeper decline in international migration since peaking in 2017, slumping to 12,675 in 2021, 35,000 fewer than four years earlier. This is the lowest it has been since 1990 (Figure 24). When combined with domestic outmigration, Massachusetts has seen its population decline by 33,500 people due to migration decisions in 2021.





RETIREMENTS JUMP AS BOOMERS EXIT 49

More people have also opted to leave the workplace since the pandemic began than in previous years. As shown in Figure 25 below, the number of people who report that they are not in the labor force due to retirement averaged approximately 900,000 a year from 2015 through 2019 (data reported monthly). The 2021 figure increased to 1.02 million and 1.06 million in May 2022.50 It is not yet clear whether some will return to the workforce, but given the increasing numbers of people reaching 65, it is more likely that retirement numbers will continue to ascend.



IV. TACKLE EXCESSIVE COSTS AND **WORKFORCE SHORTAGES**

Massachusetts faces a conundrum. On the one hand, we have built a global economy driven by the best and brightest talent commanding high salaries and a high cost structure. On the other hand, the resulting high labor costs and high cost of living now make it much more difficult to compete because businesses and topnotch talent that can locate anywhere.

This dynamic saddles Massachusetts with serious baggage as it enters the post pandemic competition. Adding to its woes is an aging and diminished workforce. These challenges are not new, but the tools we use to address them must be. The advantages we've take for granted may no longer be reliable or sufficient in this new remote work world. Much of the appeal of Massachusetts has been the concentration of talent that results in synergistic opportunities, fosters innovation, and attracts investment. If that concentration dissipates, so too may our competitive advantage and the sizeable tax base that it represents. Policymakers must react now because other states are aggressively promoting their strategic advantages to attract businesses and employees.

The risks to those businesses and residents who remain in Massachusetts are considerable. Economic growth has allowed the state the financial agility to fund programs such as education reform and universal health care to combat income inequality, educational attainment gaps and other

societal needs. But if growth falters, stagnant resources will leave the state and its residents less equipped to compete in this fast-changing environment.

We've seen this story before across numerous regions in the U.S. It rarely ends well for the people who live there. Policymakers must pay careful attention to this upheaval in our economy and begin immediately to address the state's impediments to growth to avoid a similar outcome.

Determining the path forward for sustainable economic growth will take our collective and continuous efforts. What follows are some immediate action steps that lawmakers can take to proactively manage this change.

On the one hand, we have built a global economy driven by the best and brightest talent commanding high salaries and a high cost structure. On the other hand, the resulting high labor costs and high cost of living now make it much more difficult to compete because businesses and topnotch talent that can locate anywhere.



CONTAIN FXCFSSIVE COSTS

RECOGNIZE THE INTERCONNECTEDNESS OF HOUSING. **CONGESTION AND A WELL-FUNCTIONING MBTA**

Massachusetts housing costs are among the most expensive in the country. Recent efforts to relax approval of new projects should provide more stock, but will take considerable time. Connecting people to less expensive housing may have some merit, but longer commutes on top of the state's existing congestion challenges negates the benefits for many.

In recognition of these impediments, the economic development bill passed in January 2021 requires 175 MBTA communities to develop at least one zoning district where multi-family housing is permitted within one-half mile of a commuter rail, subway, or bus station or ferry terminal in order to increase affordable housing options near transit stations that will help reduce commuting times, traffic on the roadways, and greenhouse gas emissions.

As promising as the legislation appears, it won't matter if the MBTA cannot significantly improve its operations because the benefit of being within walking distance of a transit hub disappears if the transit system is perceived as unsafe and unreliable, thereby forcing people to their cars.

Faced with a looming financial crisis for both its operating and capital budgets, as well as five Federal Transit Administration mandatory directives focused on fixing numerous safety deficiencies, lawmakers must tackle the problems that plague the MBTA if the state is to maintain its economy and compete with cities around the country.

CHILD CARE AVAILABILITY

Massachusetts has the most expensive child care services in the nation as well as a shortage of more than 100,000 seats available. This translates into about one-third of the state's children lacking access. These challenges were made worse by the COVID pandemic forcing thousands of moms to leave the workforce to care for a child. Often, it was women who could least afford the loss of employment that were most impacted.

Lawmakers must address the cost and capacity to provide flexible and affordable child care in order to address the state's workforce shortage and our affordability problem. Failure to do so comes with considerable consequences – even greater income inequities, a substantial hit to the state's workforce, and diminished prospects for economic growth.

UNEMPLOYMENT INSURANCE

Massachusetts is an extreme outlier among the 50 states when it comes to unemployment insurance, and the extent of our cost differences continue to grow. During a period (2015-2020) that the U.S. average cost of UI declined by \$93 from \$370 to \$277, Massachusetts saw a \$97 increase to \$584 - more than twice the U.S. average. In fact, during this timeframe, 46 states experienced reduced average UI costs and Massachusetts was one of only four states whose UI costs increased. Worse, the average cost for UI in Massachusetts increased by nearly 20 percent in 2021.

As recent reforms clearly showed, Massachusetts could reduce UI costs by reducing benefit duration from 30 weeks to 26 or fewer weeks like every other state, eliminating the child dependency allowance and requiring stricter ties to the workforce before becoming eligible for the benefit. In short, UI must return to its original purpose of a wage replacement system rather than serving as a social benefit program.

ELECTRICITY AND THE GRID

Policymakers must carefully balance reliability, affordability and adequacy of energy resources while the commonwealth strives to meet its ambitious carbon neutrality goals. Massachusetts imports most of the sources used to produce electricity with LNG accounting for nearly two-thirds. As such, the state is at the whims of global energy markets until it is able to expand its reliance on renewables, especially wind. As the state undertakes the challenges to develop offshore wind, it must also expand its investments in the electric grid across the state to be able to handle the increased demands from growth and conversions of the transportation fleet from fossil fuels to electric vehicles. We must continue to pursue a mixed portfolio of clean energy options that include hydro, nuclear, and other more reliable sources as we build out our renewable energy capacity.

THE ESTATE TAX

Massachusetts is one of just twelve states that applies a dedicated estate tax to the assets of deceased residents. Even among the dozen states with an estate tax, the Massachusetts version stands out due to the low threshold at which it begins (\$1 million) and the fact that the tax is applied to the entire value of estates subject to the assessment.

Lawmakers should immediately make the estate tax less burdensome by bringing the state closer to the federal exemption level and eliminating any tax on the value of assets below the exemption level. Longer-term it should consider eliminating the tax to compete with other fast-growing states.



THE FAIR SHARE AMENDMENT

The Fair Share Amendment included in the November 2022 ballot would change the state's constitution by embedding in it a 4 percent surtax on top of the state's current income tax rate (5 percent for income and longterm capital gains and 12 percent for short-term capital gains) on income in excess of \$1 million. That means that the tax rate for income up to \$1 million would be 5 percent and 9 percent for income over the \$1 million threshold – an 80 percent jump.

This tax, on top of the estate tax and our high cost structure, serves as an incentive for affected taxpayers to change their domicile to avoid the tax, and could result in a loss of revenue from the other taxes such residents currently pay. The data from states like Connecticut and New Jersey are clear and compelling that taxes influence peoples' residential choices. Will the same story play out here in Massachusetts? One could argue that an exodus is already happening.

According to IRS data, in the ten-year period from 2010 to 2019, approximately 800,000 tax filers and \$65 billion of adjusted gross income left Massachusetts. Nearly 75 percent of those who left Massachusetts moved to either Florida or New Hampshire - two states with completely different weather but lack an income tax.

Encouraging people to change their residence from Massachusetts at a time when many are already leaving for lower costs regions is ill-advised given the state's healthy fiscal status.

EXPAND THE SIZE AND SKILLS OF THE WORKFORCE

Because we may not be able to attract talent as before, we must make sure that every Massachusetts resident has the skills needed to reach their maximum productivity and potential. It is estimated that Massachusetts may need to reskill 400,000 workers to meet the demands of the new economy, representing "the largest reskilling efforts that the Commonwealth has ever undertaken." 51 This requires the state to ascertain whether the sizeable investments in K-12 education, college and career readiness, public higher education institutions and workforce training programs are having the intended results. We can do so by articulating more clearly defined goals, developing clear metrics for measuring success and regularly evaluating progress and most importantly, be willing to change course if these programs are not effective.

In its report, Closing the Racial Divide in the U.S. and Massachusetts, MTF demonstrates the opportunity costs of not making adequate progress. We estimated that if Blacks and Hispanics graduated from college at the same rate as their white peers, there would be approximately 11,000 more college graduates annually to support the state's economy, which would add \$20 billion in economic activity over 10 years. Further, if graduation rates were the same in high school, there would be 1,500 more people primed to enter college or technical training program each year in preparation for a career.

RETHINKING JOB QUALIFICATIONS

As employers across a wide spectrum of sectors search for employees, they are increasingly willing to rewrite job descriptions around skills and training certifications rather than degree requirements. Our community colleges, partnering more closely with local employees, should reset their missions to provide the technical training and career paths for the types of jobs in high demand – from IT to pharmaceutical and medicine manufacturing.

The state's education system must provide students the skills needed to obtain better paying jobs as they enter the workforce. This would reduce the income gap and add to the economic vitality of the state.

COORDINATE TRAINING PROGRAMS

Massachusetts must streamline its workforce training system to make it more user-friendly for employers and employees alike. Currently, there are numerous workforce and career readiness initiatives in place across disparate agencies and institutions in Massachusetts. Further, there are 15 community colleges in the state, each with multiple campuses and satellite locations offering different curriculums. The sheer number of programs offered, each with different curricula and criteria for eligibility, makes it hard for employers and employees to access these resources. The state should better catalogue, simplify and coordinate federal and state funded training programs into one accessible and transparent portal for users to determine eligibility and initiate interest.

ATTRACT TALENT

Massachusetts must find new ways and new potential growth areas to leverage the collaboration between our academic institutions, private sector and government that has served us well in the past to attract topnotch talent. This strategy has made Massachusetts a world leader in financial services, healthcare and life sciences. We must foster innovative clusters tied to our strengths – such as renewable energy, cybersecurity, AI, and robotics – and use strategic state investments to be world leaders in these emerging industries.

INCENT LABOR FORCE PARTICIPATION

To counter the state's challenging demographics, we must do all that we can to enact policies that incent workforce participation, and encourage those of workforce age on the sidelines to actively engage by providing them with the tools they need to be productive. This includes requiring those qualifying for UI benefits to be actively seeking new employment, expanding early college programs, helping students succeed by better preparing them and defraying the cost of obtaining a college degree. For those without a college degree, we must expand programs that provide apprenticeships, certifications and other training.

CONCLUSION

The problems confronting Massachusetts are a product of our success. High wages and generous benefits are the price of a vibrant economy. A belief in Massachusetts exceptionalism as home to the best and brightest contributes to the current challenge we confront. Businesses and people have far greater flexibility about their location than ever before and we must face this new reality.

This report is intended to alert policymakers to the threats to the state's economic future. We hope that it will foster a robust discussion in the upcoming election cycle by candidates and voters.

This list we offer for short-term action is far from exhaustive. Nor will any one of these ideas by themselves make a material difference in Massachusetts' cost structure. But taken collectively, they could reduce our costs, better prepare our workforce for the jobs of tomorrow, and demonstrate that Massachusetts remains a dynamic place to work and live.





ENDNOTES

See for example: Bloomberg's annual State Innovation Index, June 2020; The Information Technology and Innovation Foundation, October 2020; 2022's Most & Least Innovative States, WalletHub, March 2022; and State Technology and Innovation Index 2020, the Milken Institute.

MASSACHUSETTS CURRENT AND LEADING ECONOMIC INDICES. MASSBENCHMARKS, UMASS DONAHUE INSTITUTE, APRIL 28, 2022.

Massachusetts Department of Unemployment Assistance, Labor Market Information, *Employment and Wages*.

Average Weekly Earnings of All Employees in Private Companies, In Dollars, U.S. Bureau of Labor Statistics, 2021.

State Trends in Employer Premiums and Deductibles, 2010 - 2020, Commonwealth Fund Data Brief, January 2022.

Commonwealth Fund Report

Massachusetts made changes to the unemployment insurance system effective January 1, 2015, that were expected to reduce costs by 17 percent. These changes included:

- An adjustment to the rate table so that employers with fewer layoffs provide a smaller subsidy to those with more layoffs;
- An increase in the wage base from \$14,000 to \$15,000; and
- A modification to the tax rate schedule from the 'old' E (minimum 1.26% maximum 12.27%) to Schedule C (minimum 0.73% - maximum 11.13% for years 2015 through 2017).

As shown in Figure 3, these measures helped lower average unemployment costs for a few years. Despite a change to rate schedule D in 2018, the average UI costs held at \$496 from 2015 to 2018. Chapter 63 of the Acts of 2017 set the tax rate schedule at E for 2019 pushing, the minimum rate to 0.94% and the maximum to 14.37%. This schedule change affected average employee UI costs, which spiked to \$631 in 2019.

2022 State Business Tax Climate Index Ranks and Component Tax Ranks, The Tax Foundation, 2022.

Unemployment Insurance Trust Fund Report, Massachusetts Department of Unemployment Assistance, February 2021, p.8.

State Unemployment Insurance, Tax Measures Reports, 2014 - 2020, U.S. DOL, Office of Unemployment Insurance and **Unemployment Insurance Trust Fund Report**, Massachusetts Department of Unemployment Assistance, February 2021, p.8.

Massachusetts and Montana are the only two states that provide more than 26 week maximum coverage. Thirtyeight states provide 26 weeks, 9 states provide less than 26 weeks, and New Jersey may provide an additional 13 weeks of extended benefits beyond the 26. Source: Policy Basics: How Many Weeks of Unemployment **Compensation Are Available?** Center on Budget and Policies Priorities, April 4, 2022.

State Paid Family Leave Laws Across the U.S., Bipartisan Policy Center, January 13, 2022. The six other states are California, New Jersey, Rhode Island, New York, Washington, and Connecticut. Oregon and Colorado are expected to be effective in 2023.

The paid contribution rate is set each year and applies up to the Social Security wage limit, which was \$142,800 in 2021 and \$147,000 for 2022. Employers with 25 or more covered individuals must send to the Department of Family and Medical Leave (DFML) a contribution of 0.68% of eligible wages in 2021 and 2022. This rate was reduced from 0.75%, the effective rate in the first year of implementation. This contribution can be split between employees through a covered individuals' payroll or wage withholdings and an employer contribution. Employers with fewer than 25 covered individuals must send an effective contribution rate of 0.344% of eligible wages in 2022, down from 0.378%. This contribution rate is lower because small employers are not required to pay the employer share of the medical leave contribution.

Massachusetts: State Profile and Energy Estimates, U.S. Energy Information Administration, September 16, 2021.

Electric costs skyrocket along with oil usage, Bruce Mohl, CommonWealth, February 2, 2022.

Eversource customers, your electric bill is about to jump, Sean Murphy, The Boston Globe, December 3, 2021.

The property tax portion of the Index is composed of two equally weighted subindices devoted to measuring the economic impact of both rates and bases. The rate subindex consists of property tax collections (measured both per capita and as a percentage of personal income) and capital stock taxes. The base portion consists of dummy variables detailing whether each state levies wealth taxes such as inheritance, estate, gift, inventory, intangible property, and other similar taxes.

18

Hiring is Hard Enough. Now New Workers Are Vanishing Before They Even Start, Chip Cutter, Lauren Weber, and Ray A. Smith, The Wall Street Journal, May 5, 2022.

19

The Regional Price Parities report measures buying power across the country and metropolitan area. The latest report, released in December 2021, breaks out the costs of housing (rentals), goods, and utilities as well as a summary of all items in a metric called 'regional price parities'.

Regional Price Parities by state and metropolitan area, U.S. Bureau of Economic Analysis, December 2021.

Learn more about MIT's Living Wage Calculator here. Access the Living Wage Calculator data here.

Census Reporter from the ACS 2020 5-year report, Worcester and Springfield.

U.S. Census QuickFacts Massachusetts, 2016 - 2020 in 2020 dollars. Household defined by Census as "all the people who occupy a housing unit" whether people are related or not. See full definition here.

Zillow Home Value Index, Federal Reserve Economic Data (FRED), March 17, 2022.

Rental Market Tracker: Asking Rents Increased 40% Year Over Year in Austin, Tim Ellis, REDFIN News, March 21, 2022

21

2016 - 2020 American Community Survey, Means of Transportation to Work by Selected Characteristics, Table S0802, U.S. Census Bureau, March 17, 2022.

27

2021 INRI Global Traffic Scorecard, Bob Pishue, December 2021.

28

2021 U.S. road conditions by state, Some roads are less traveled for a reason, Kathryn Parkman, Consumer Affairs, February 25, 2022.

29

Child Care Costs in the United States, Economic Policy Institute, 2019.

30

The Supply of, Potential Need for, and Gaps in Child Care in Massachusetts in 2019, Bipartisan Policy Center.

31

Boston's Child-Care Supply Crisis, The Boston Opportunity Agenda, 2021.

32

2021 State Tax Collections, Federation of Tax Administrators.

33

Tax Year 2018: Statistics of Income Tax Returns by Quintile.

34

Ranking Individual Income Taxes on the 2022 State Business Tax Climate Index, The Tax Foundation.

35

The Estate Tax in Massachusetts: In Dire Need of Reform, Massachusetts Taxpayers Foundation, March 2022.

36

See: <u>People are going out again, but not back to the office</u>, Peter Grant, The Wall Street Journal, February 14, 2022; <u>COVID-19 Pandemic Continues To Reshape Work in America</u>, Pew Research, February 16, 2022; <u>The Five-Day Work Week is Dying</u>, Derek Thompson, The Atlantic, February 23, 2022; and <u>Our return-to-office survey finds</u> <u>a disconnect between employers and employees on back to work policies</u>, Business Insider, December 14, 2021.

37

Five Cities Account for Vast Majority of Growth in Tech Jobs, Study Finds, Jon Hilsenrath, The Wall Street Journal, December 9, 2019.

38

America's New Tech Hubs, Axios, March 8, 2022; Superstars, rising stars, and the rest: Pandemic trends and shifts in the geography of tech, Mark Muro and Yang You, Brookings Institution, March 8, 2022; and How the Pandemic Broke Silicon Valley's Stranglehold on Tech Jobs, Christopher Mims, The Wall Street Journal, March 12, 2022.

39

The Post-Pandemic Geography of the U.S. Tech Economy, Richard Florida, Bloomberg City Lab, March 9, 2022.

40

Computer systems design and related services - establishments primarily engaged in providing expertise in the field of information technologies through: (1) writing, modifying, testing, and supporting software to meet the needs of a particular customer; (2) planning and designing computer systems that integrate computer hardware, software, and communication technologies; (3) on-site management and operation of clients' computer systems and/or data processing facilities; and (4) other professional and technical computer related advice and services.

41

The New Geography of Remote Work, Dr. Adam Ozimek, Upwork,

42

Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected, Kim Parker and Juliana Menasce Horowitz, Pew Research, March 9, 2022.

43

Over Two-Thirds of the Nation's Counties Had Natural Decrease in 2021, U.S. Census Bureau, March 24, 2022.

44

Remote Working, Commuting Time, Life Events All Affect Home Buyers' Decisions, Earlene K.P. Dowell, October 4, 2021.

45

Statistics of Income (SOI) Tax Stats - Migration Data, U.S. Internal Revenue Service.

46

Us. Bureau of Labor Statistics Job Openings and Labor Turnover Surveys or JOLTS provides insights into workforce changes on hirings, quits, and job openings

47

Job Openings and Labor Turnover Survey (JOLTS), U.S. Bureau of Labor Statistics, April 22, 2022.

48

<u>Labor Shortages and the Immigration Shortfall</u>, Giovanni Peri and Reem Zaiour, Econofact, University of California, Davis, January 11, 2022. The authors conclude that approximately half of those two million lost immigrants would have been college educated.

49

JOLTS does not include retirements under Quits. Retirements are listed under 'Other Separations' along with transfers to other locations; deaths; or separations due to employee disability. See: **JOLTS data definitions.**

50

Source: U.S. Bureau of the Census Microdata, here

51

Preparing for the Future of Work in Massachusetts, McKinsey & Company, p. 7.