



The Work of Leisure

Behind the Scenes of the Massachusetts Leisure, Hospitality
and Tourism Industry

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U N D E R S T A N D I N G B O S T O N

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Preface

The story of our nation's founding is quite literally written across the face of Massachusetts. When you combine this rich historical content with a vast ocean to the east, beautiful mountains to the west and cultural attractions from Boston to the Berkshires, it is no wonder that the Leisure, Hospitality and Tourism industry makes enormous contributions to our economy.

The Boston Foundation commissioned the Economic and Public Policy Research group at the University of Massachusetts Donahue Institute to determine the scope and the implications of those contributions—the first such study in 27 years.

What emerges from this detailed report is how ubiquitous this industry really is and how much influence it has. It employs more than one in 10 Massachusetts workers and, as such, has an overwhelming significance to our economy. It is the third largest industry in the state and among the fastest growing—ahead of Finance and Retail. The fact that so many of its functions rely on person-to-person contact means that its employees can't be outsourced. Companies and employees stay local and contribute even more to the economy through the ripple effect of their own business and personal spending.

It is also a resilient sector: It survived the downturn of 2001 in decent shape and recovered from the Great Recession more quickly than all other sectors combined.

And yet, in many ways, we undervalue the workforce that is essential to this steady, reliable contributor to our economy. The industry's employees have the lowest average wages of any sector and they are often young, disproportionately foreign-born, and often temporary, seasonal or part-time. For many of them, it's a first job. More than one-quarter of workers are also students and juggling the challenges of work and

education. Seventy-one percent of the industry's jobs are in the Food & Beverage subsector, which has the lowest wages of all.

Survey research conducted by the authors of this report shows that the industry's employers and business owners are generally optimistic about the future, but, like other employers in Massachusetts, they worry about obstacles to attracting and retaining the workforce they need—especially the challenges of transportation and of high housing costs.

Employers also worry about maintaining a pipeline of workers in our booming economy. While the majority of the positions offered by this industry do not require significant formal training or education, competition for workers across all employment sectors is leading to high turnover. Many operations are seasonal and employ visiting workers on special visas. As a result, immigrants make up a large percentage of the overall worker population—and the current anti-immigrant climate is another storm cloud on the horizon.

We offer this report as a starting point for an overdue dialogue about policies that will allow the workers in the Leisure, Hospitality and Tourism industry to earn a living wage while at the same time ensuring the enterprises that employ them continue to be profitable. As this report makes clear, these goals are essential to the continued economic success of Massachusetts.



Paul S. Grogan
President & CEO
The Boston Foundation

Executive Summary

For those of us who live or work in Massachusetts, it can be easy to take for granted all that the state has to offer with respect to Leisure, Hospitality & Tourism (LHT). The Commonwealth has an abundance of destinations and activities that appeal to visitors from across New England, the United States, and internationally, as well as to locals. Massachusetts is home to world-class landmarks such as the Berkshires, historic Boston and Salem, the Cape Cod National Seashore, the country's oldest ballpark (Go Sox), and the Basketball Hall of Fame; the state also has a host of recreational and cultural activities that cater to every age and interest. In addition, Massachusetts, and particularly Greater Boston, is one of the prime convention locations in the country.

The Economic and Public Policy Research (EPPR) group at the University of Massachusetts Donahue Institute (UMDI) was commissioned by the Boston Foundation to conduct a detailed investigation into Massachusetts' LHT industry, including an analysis of industry and workforce trends, an assessment of available training programs and career pathways into LHT occupations, and an understanding of employer and stakeholder perspectives. UMDI has also offered a set of ideas designed to enhance the strengths and mitigate the challenges of the LHT industry in Massachusetts. There has not been a detailed study of the statewide LHT industry since 1991,¹ and it is our hope that the present work is as effective as its predecessor in helping the industry move forward.

The Big Picture: A Large and Growing Industry

As we have defined it, the LHT industry is large, stable, and growing. It is the third-largest industry in the Commonwealth, employs more than one in 10 Massachusetts residents, and has grown steadily since at least 2000. Employment in LHT has also been more resilient to economic shocks than other Massachusetts industries: While non-LHT industries experienced serious employment setbacks beginning

with the 2001 recession, LHT employment went unaffected until the Great Recession of 2007–2009. It then took less time to recover from the downturn and grew at a faster rate than all other Massachusetts industries combined.

The Commonwealth's LHT industry employs some 376,000 workers and generates more than \$28 billion in economic output, but its impact on the state economy extends way beyond that. The spending and economic activity associated with LHT spins off another 232,000 jobs and \$41 billion in additional output in industries that benefit from its presence. Also important, LHT jobs cannot be outsourced, contributing to the overall economic stability of the Commonwealth.

For all the industry's strengths in size and performance, however, LHT's average wages are the lowest of any industry in the Commonwealth. The LHT sector makes up roughly 10 percent of the state's total employment, but accounts for only 4 percent of total wages.

To dig deeper into the dynamics and trends of the LHT industry, UMDI broke the industry into several key segments: Accommodation; Food & Beverage; Performing Arts, Spectator Sports & Large-scale Events; Museums & Heritage Tourism; and Amusements & Recreation. Some subsectors have outperformed others and shown greater resilience in the face of the two recessions of this century. In particular, the Amusements & Recreation and Food & Beverage subsectors saw consistent year-over-year gains in employment since 2000. Others, such as Accommodation (hotels and other lodging services), suffered during the 2001 recession, had not fully recovered by the time the Great Recession hit, and only recently reached their pre-2001 employment levels. A critical part of the LHT data story is played out in the Food & Beverage subsector, which employs most of the industry's workers, and drives its comparatively low wages. Constituting 71 percent of the LHT workforce, the subsector accounts for just over 50 percent of LHT wages.

People of Service and Play: LHT Workforce Characteristics

American Community Survey (ACS) data reveal striking differences between LHT workers and the Commonwealth's workforce as a whole. To begin, the LHT workforce is comparatively young. An extraordinary 56 percent of the LHT workforce is under age 35, compared with just over 30 percent of workers in all other industries. Of these young workers, over 63 percent are concentrated in the Food & Beverage subsector. Clearly, the LHT industry—and particularly Food & Beverage—is an important entry point into the labor market, the site of many people's first formal workplace experiences.

LHT workers also have lower levels of educational attainment than their non-LHT counterparts, but they are more likely to be enrolled in school while employed. Across the non-LHT Massachusetts economy, approximately 12 percent of workers are enrolled in formal schooling of some sort, but among the LHT workforce more than twice that proportion—26 percent—is pursuing educational advancement. Of those, more than 90 percent are enrolled in high school or college—on either the bachelor's degree or community college level.

Latinos are far more represented in LHT (14%) than in all other Massachusetts industries (8%). Related, the industry relies heavily on foreign-born labor. One in four LHT workers is foreign-born, with significant overrepresentation in Food & Beverage, and even more in the Accommodation subsector.

ACS data bear out our Chapter 1 findings that LHT workers earn much less than non-LHT workers:²

- The median personal wage or salary income of LHT workers is just under \$17,000, compared with \$45,000 for non-LHT workers.
- Over 50 percent of LHT workers earn less than \$20,000 annually, compared with 21 percent of workers in non-LHT industries.
- One in 10 LHT workers live in poverty, compared with one in 25 non-LHT workers.

Among those living below the federal poverty threshold in Massachusetts, LHT workers are overrepresented. In fact, they comprise 20 percent of all Massachusetts workers living in poverty.

Finally, nearly half of all LHT workers are employed on a part-time basis (meaning less than 35 hours per week). The limited hours are consistent across all subsectors and demographics of the LHT workforce.

The Foreseeable Future: Workforce Projections and Training Capacity

The LHT industry is populated with people working in a multitude of occupations. Given our knowledge of the industry, it should come as no surprise that the industry is heavily concentrated with people working in food-related professions, including waiters and waitresses, chefs, dishwashers, fast food workers and baristas, bartenders, and restaurant support staff. Other top industry occupations include amusements and recreation attendants, maintenance and repair workers, and landscaping and groundskeeping workers.

Given the size of the industry, its growth, and the occupational structure of the sectors, there are many opportunities to work in the LHT industry, both now and in the future. Using short-term employment forecasts collected from the Commonwealth's Executive Office of Labor and Workforce Development (EOLWD), we project that the LHT industry will generate nearly 6,500 new jobs annually—accounting for almost 12 percent of total annual employment growth (54,658) in the entire state. While growth is important for the expansion of the industry, replacement jobs—when workers permanently leave a position due to events such as retirement or changing industries—account for the vast majority of job opportunities in the industry. We estimate that an additional 59,000 jobs in LHT will open up annually due to replacement. Jobs with the largest number of total annual openings include Food & Beverage service workers such as baristas and fast food workers, waiters and waitresses, cooks, and bartenders.

The vast majority of these jobs do not require any formal training or educational credentials. As described in Chapter 2, LHT workers are characterized by their youth and the fact that many of them are still enrolled in school. It therefore comes as no surprise that there is a “skill markup” within LHT occupations: Not only are most workers in LHT occupations currently enrolled in school, but LHT workers in

Massachusetts are exceeding the educational and training requirements typical for their jobs in the field.

In general, while most jobs in LHT, particularly those with the greatest number of annual openings, require limited education and training, the pace of industry growth combined with high turnover rates and shrinking labor availability for most industry jobs places a great deal of pressure on employers.

As for job training, we found that the LHT industry in the Commonwealth is serviced by a broad network of different types of occupational and skill training activities, some of which are specifically responsive and tailored to local labor market and employers' needs and some that are not. We found that, although state and federal databases track educational and training programs that receive government funding, numerous available programs and other types of training opportunities are not tracked.

On the Ground: Employer Survey and Interviews

The perspectives of LHT employers on the general health of the industry is integral for gaining a wholesale understanding of the industry, including what “works” about doing business in Massachusetts and what challenges exist. To benefit from these insights, we conducted a 32-question survey of nearly 300 LHT businesses statewide, including employers from the public and private sectors and nonprofit institutions. It is, as far as we can tell, the first of its scope and detail ever in the state.³ To supplement the survey findings, we conducted hour-long interviews with a cross-section of leaders and stakeholders in the LHT industry from around the state.

In general, our survey and interviews show that most employers have confidence in the LHT industry and are optimistic about its future, with some significant regional variation. They are concerned, however, about transportation access, competition from the sharing economy, and a variety of costs—especially in housing, health care, labor, and utilities—that, if not brought down, are likely to damage their prospects over the next five years. Employers are generally satisfied with their customer bases and the level of support they receive from local and regional business organizations. Roughly two-thirds of respondents say they have difficulty finding appropriately skilled workers across all job types, while dissatisfaction with state

programs—particularly reduced marketing support for the LHT industry—runs high.

Overall, employers and other leaders say that the Massachusetts LHT industry is healthy, but it could be strengthened by addressing these issues and by embarking on a better-funded, more consistent state marketing program with greater regional, national, and international reach.

Policy Implications: Support for the Leisure, Hospitality, and Tourism Industry

UMDI's look into the LHT industry has highlighted many of its strengths and challenges, and has left room for the development of specific policy considerations geared toward reinforcing what works for the industry, and addressing that which does not. Several of our most pressing policy observations include:

- LHT is the state's lowest-paid industry, and especially so in Food & Beverage, which employs 71 percent of the LHT workforce. Recent debates about minimum wage policy, which have the greatest effect on the low-paid service industry, led last year to a statewide increase to \$11/hour, and a \$3.75/hour service rate supplemented by tips. Pressure is on to further raise it progressively, to \$15/hour and \$9/hour, respectively, by 2022. Advocates are right to argue that hard-working service workers deserve a “living wage.” While large corporate entities may be able to afford such increases, most LHT businesses and venues are small, particularly in Food & Beverage. As the minimum wage debate unfolds, it may be prudent to consider including a lower training wage in the mix.
- A remarkably high share of the employers we surveyed—hovering around two-thirds—said that finding appropriately skilled workers for all job types is a challenge. LHT employers report a dearth of workers well-trained for its largest field, culinary work, and they do not have a reliable pipeline at their disposal for finding them. Unfortunately, no one entity tracks the educational and training programs available for acquiring LHT skills, and the pipeline for hiring these workers is more patchwork than optimal. With funding from the

private and philanthropic sectors, as well as the state's education and workforce development programs, this gap could be closed with a regularly updated educational and training program database available online to employers, students, potential workers, and educators alike. The Workforce Skills Cabinet (WSC), a group convened by Governor Baker in 2015, is charged with creating and implementing a strategy to enable workers to improve their skills and technical capacity to meet the hiring demands of employers in the Commonwealth by region for targeted industries and occupations. While action plans and next steps are still being determined, employers and stakeholders in the LHT industry should continue to highlight and advocate for the workforce training needs of the industry.

- Over and over, LHT employers and other stakeholders told us that the state does not do nearly enough to market their industry with appropriate levels of funding and thoughtfully targeted promotion. For the LHT industry to reach its full economic potential, funding must be increased for marketing and promotion within and beyond the state. One approach is to re-fund the Regional Tourism Councils (RTCs), whose grant funding was slashed in half in 2016 and directed to the General Fund. Another approach would involve a novel policy concept in use in several other states, which would allow regions to form Tourism Destination Marketing Districts (TDMD) funded by a locally approved 1–3 percent hotel room assessment (in addition to room taxes collected by the state). TDMD revenue would provide consistent dedicated funding for individual RTCs, who would then use it to drive marketing aimed at increasing overnight visitors to area hotels.

- LHT employers, especially in the hotel industry, also seek relief from unregulated competition from short-term rentals such as Airbnb. It is not clear whether states, municipalities, or both would be the best regulatory vehicles and tax beneficiaries, but so far, municipalities such as Boston have taken the lead. This makes sense since they are responsible for zoning, code enforcement, road and lighting maintenance, health and safety inspections, and other services that ensure the smooth functioning of residential and commercial neighborhoods. Regulations can include annual caps on the number of nights hosts can rent out, registration fees and taxes, restrictions on host properties in which the owner or renter is not living on the premises.

The LHT industry is a robust, wide-ranging, and essential element of the Massachusetts economy; however, we cannot afford to overlook its challenges, nor take its resilience for granted. Those who are directly affiliated with the LHT industry would not be sole beneficiaries of strengthened public support. The LHT industry contributes much more to the Massachusetts economy than its strong employment numbers and business revenues would suggest. Employers, workers, and stakeholders in other Massachusetts industries, along with the Commonwealth's tax base, would also benefit from efforts to enhance LHT's prosperity.

It is our hope that we have successfully laid out the importance of Leisure, Hospitality & Tourism to the Massachusetts economy, and highlighted some of the key issues faced by the industry's businesses, nonprofits, and workforce. We are optimistic that state, municipal, and private-sector leaders will translate our discoveries into viable policy action to help this critical sector of the economy thrive in Massachusetts in the coming years.

CHAPTER ONE

The Big Picture: A Large and Growing Industry

Introduction

The Leisure, Hospitality, and Tourism (LHT) industry is large, stable, and growing. It is the third-largest industry in the Commonwealth, providing work for more than one in 10 Massachusetts residents, and it has grown steadily since at least 2000. Employment in LHT has also been more resilient to economic shocks than other Massachusetts industries: While non-LHT industries experienced serious employment setbacks beginning with the 2001 recession, LHT employment went unaffected until the Great Recession of 2007–2009. It then took less time to recover from the downturn and grew at a faster rate than all other Massachusetts industries combined.

The Commonwealth’s LHT industry employs some 376,000 workers and generates more than \$28 billion in economic output, but its impact on the state economy extends far beyond that. The spending and economic activity associated with LHT spins off another 232,000 jobs and \$41 billion in additional output in industries that benefit from its presence. Also important, most LHT jobs cannot be outsourced, contributing to the overall economic stability of the Commonwealth.

For all the industry’s strengths in size and performance, however, LHT aggregate wages are the lowest of any industry in the Commonwealth. The Leisure, Hospitality & Tourism sector makes up roughly 10 percent of the state’s total employment, but accounts for only 4 percent of total wages.

The LHT industry is also complex, with subsectors that range widely in size, type of service, and economic performance over time. The industry itself is surprisingly difficult to define; while the Bureau of Labor Statistics and other federal agencies formally define the Leisure and Hospitality “supersector” using the North American Industrial Classification System¹ (NAICS) codes for Arts, Entertainment & Recreation (code 71) and Accommodation & Food Services (code 72),² research studies usually include additional data that capture other tourism-related activity. While some studies in the field have developed very broad

definitions of LHT that would include all or parts of related industries, such as transportation or retail,³ we opted to take a more conservative approach to ensure a precise focus on activities specific to the LHT industry. **Table 1.1** below provides our full definition of the LHT industry.

TABLE 1.1

LHT Industry Definition: NAICS Codes

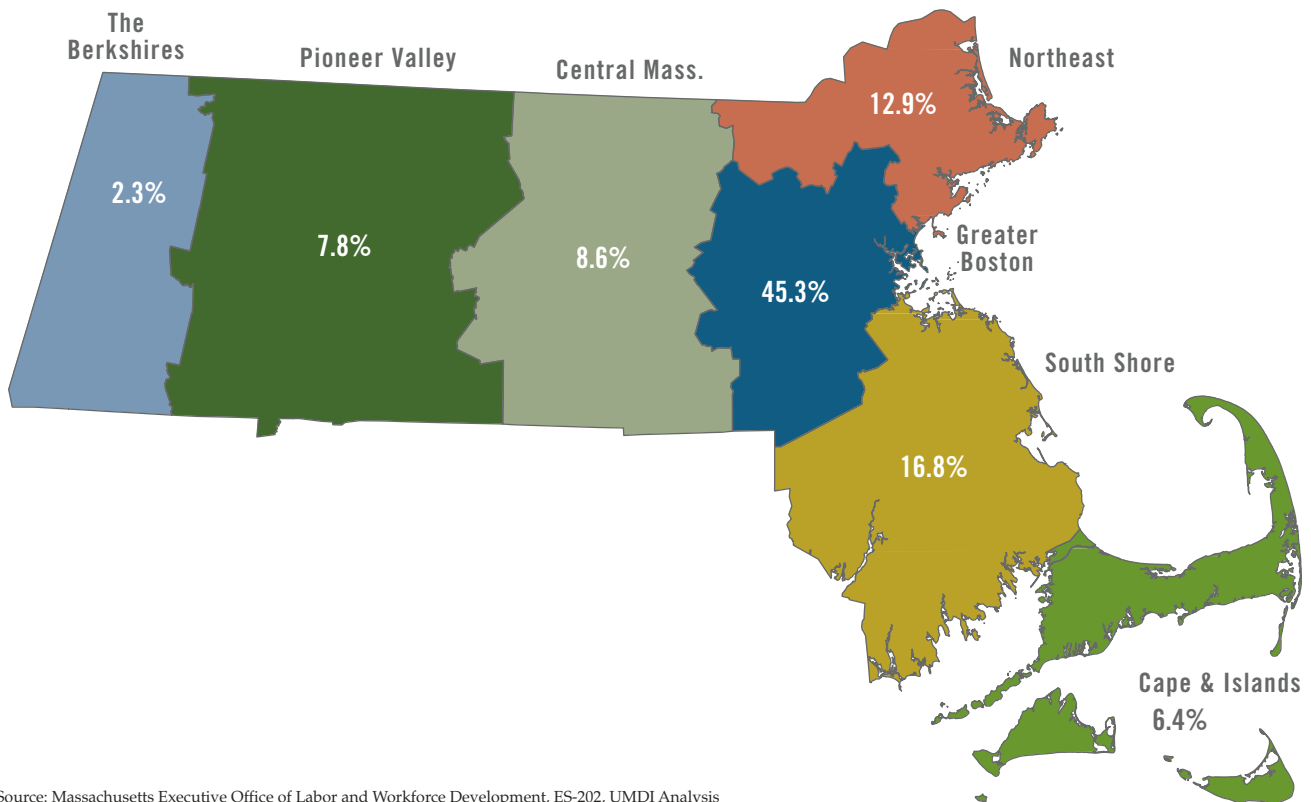
NAICS Code	Industry Description
71	Arts, Entertainment & Recreation
72	Accommodation & Food Services
487	Scenic & Sightseeing Transportation
483212	Inland Water Passenger Transportation
561510	Travel Agencies
561520	Tour Operators
561591	Convention & Visitors Bureaus
561920	Convention & Trade Show Organizers

The broad industry groupings of Arts, Entertainment & Recreation and Accommodation & Food Services are quite large and include a host of related activities or “subsectors,” all of which can be considered a part of the LHT industry, including restaurants, hotels, night clubs, and cultural institutions. The other NAICS codes included in our definition are more narrowly defined in terms of their activities, and were selected due to their close association with the broader LHT industry in Massachusetts.

The two maps featured below illustrate the distribution and concentration of the LHT industry statewide. **Map 1.1** provides a visual representation of the distribution of LHT employment by region in Massachusetts. It shows that the industry is particularly concentrated in the eastern part of the state, with three quarters of LHT jobs being in Greater Boston, the Northeast, and the Southeast regions. This is not terribly surprising, as these regions are also home to the vast majority of all jobs in the state. In fact, the distribution of LHT jobs by region is fairly similar to the distribution of all jobs

MAP 1.1

Percent of Massachusetts LHT Employment by Region, 2016



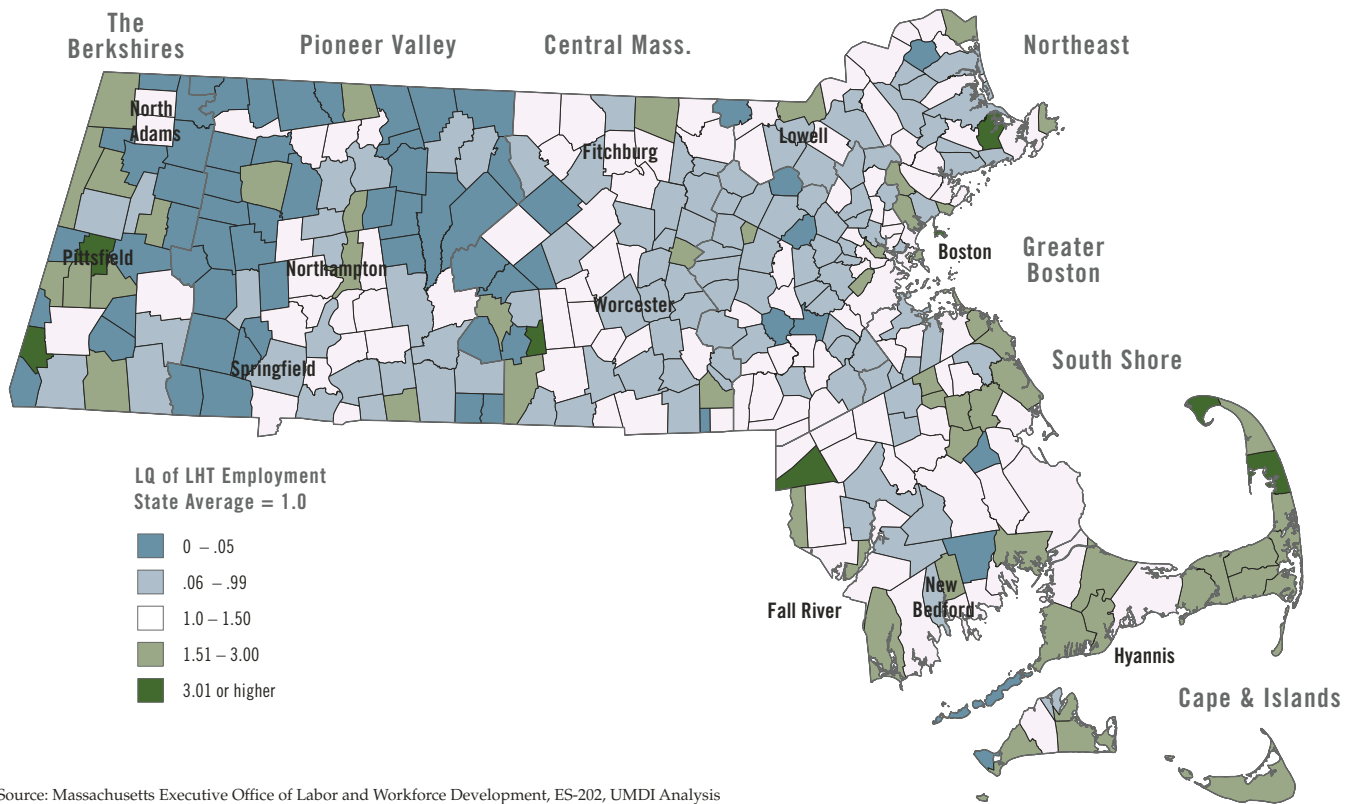
Source: Massachusetts Executive Office of Labor and Workforce Development, ES-202, UMDI Analysis

overall, with the only significant deviation being the Cape and Islands. Over 6 percent of all LHT jobs in Massachusetts are in the Cape and Islands, compared to approximately 3 percent of all jobs statewide.

Map 1.2 shows the concentration of LHT employment within each of the Commonwealth's 351 municipalities relative to statewide LHT employment. This measure, or "location quotient," indicates the significance of a given industry to local economies; it is calculated by dividing the proportion an industry makes up in the local economy by the proportion it makes up in the state economy overall. A location quotient (LQ) score of 1.0 means the industry is concentrated in the local economy in exactly the same way as it is in the state. An LQ below 1.0 suggests the industry is under-concentrated in the local economy compared with the state economy, whereas an LQ over 1.0 indicates the industry is especially concentrated in the local economy. Particularly high LQs of 2.0 or

3.0 would demonstrate that the industry in question has concentrations two or three times above the state average. While we know that employment in the LHT industry in Massachusetts is particularly concentrated in Greater Boston (as is most employment in the state), the LHT industry is uniquely important to several local economies throughout the state. For example, the high LQs in the Berkshires, Cape Ann (on the North Shore), the South Shore, and the Cape and Islands show the relative importance of the LHT industry to these local economies. Conversely, LHT employment is comparatively sparse in the area bordering the Berkshires and Pioneer Valley, and in the region northwest of Worcester.

LHT Location Quotients by Massachusetts Municipality, 2016



Source: Massachusetts Executive Office of Labor and Workforce Development, ES-202, UMDI Analysis

Industry Overview

In this section we provide a big picture snapshot of the Massachusetts LHT industry. We review data on the industry's employment, annual average wages, and economic output over time, and compare its performance with that of other Massachusetts industries and the LHT industry nationwide. To furnish this overview, we drew on the Quarterly Census of Employment and Wages (QCEW) annual datasets. All monetary figures have been adjusted to 2017 dollars.

Employment

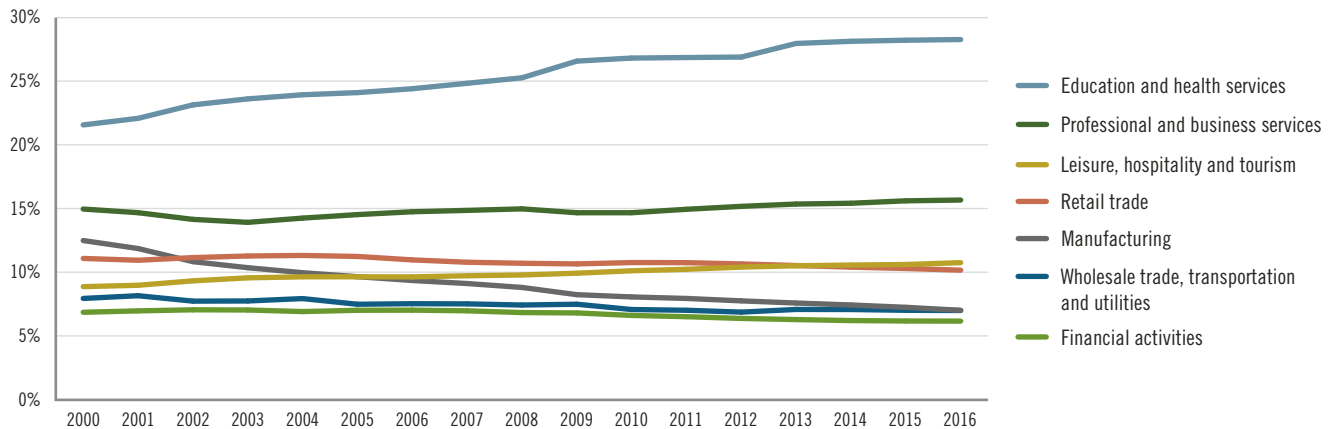
One of the most striking features of the LHT industry is its overwhelming significance to the broader Massachusetts economy. The Bay State is widely known for its strengths in higher education, health care, biotech, and finance. So it often comes as a surprise to learn, as **Figure 1.1** shows, that the LHT

industry accounts for over 10 percent of the state's total employment, providing more than 376,000 jobs. The LHT industry is outranked in employment by Education & Health Care and Professional & Business Services (including Life Sciences), but ahead of such major employers as Finance, Retail, Wholesale Trade, and Manufacturing.

Employment in the LHT industry has also grown steadily, at an average annual rate of 1.6 percent between 2000 and 2016—four times the state's average employment growth rate of 0.4 percent. Its employment growth rate has been second only to the Education & Health Care Services powerhouse, which grew at an average rate of 2.1 percent. Although the Professional & Business Services sector is a larger employer, its average employment growth rate was half that of LHT's, or 0.8 percent, over the same period, while Retail and Finance both saw modest employment declines annually since 2000 (0.1 percent and 0.2 percent, respectively).

FIGURE 1.1

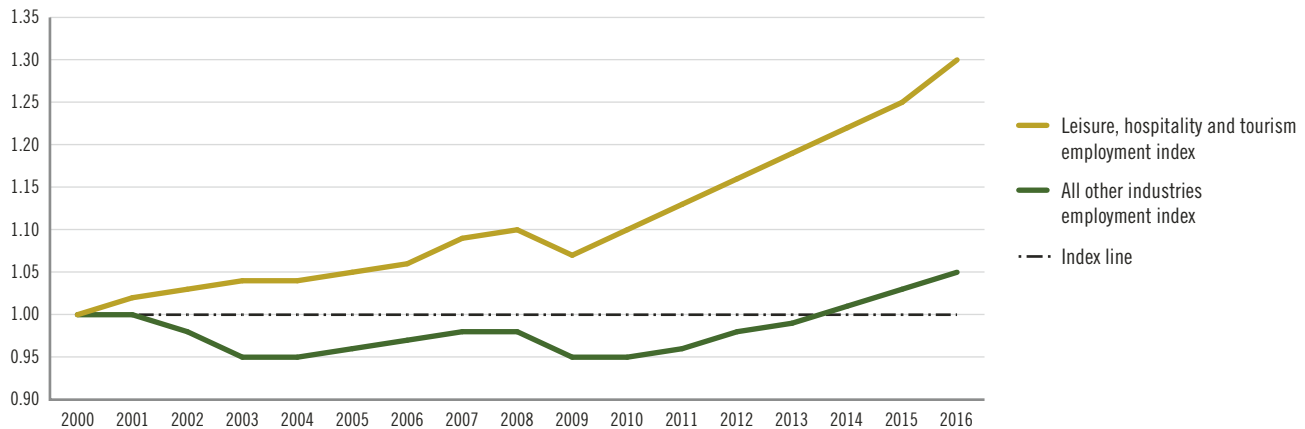
Share of Total Massachusetts Employment by Supersector (Top 7)



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

FIGURE 1.2

Index: Employment Change in LHT vs. All Other Massachusetts Industries



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

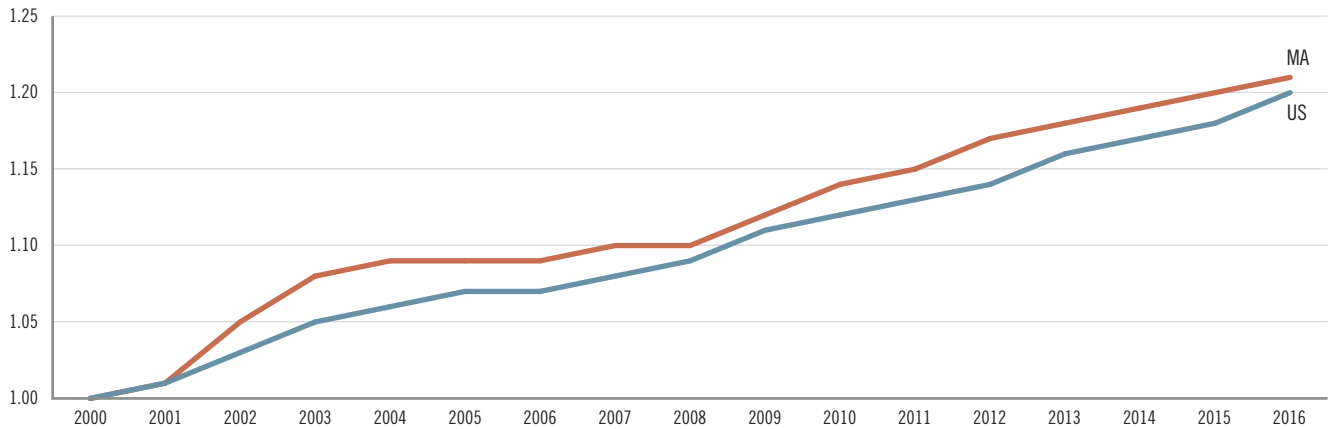
The LHT industry has not only enjoyed comparatively high employment growth rates since 2000, it also better withstood economic downturns than other industries in the Commonwealth. **Figure 1.2**, comparing LHT employment growth with all other Massachusetts industries in aggregate, shows that other industries faced significant employment losses following the 2001 recession, had not recovered by the time the Great Recession struck in 2007, and were unable to rebound to their pre-2001 recession levels until 2014. By marked contrast, LHT employment grew before,

during, and after the 2001 recession. LHT employment levels did not avoid pain during the Great Recession, due to the downturn's sheer magnitude, but the industry rebounded at a much faster pace than other industries—and continues to perform comparatively well through the present day.

As **Figure 1.3** demonstrates, employment in the Massachusetts LHT industry has also outperformed national industry trends. LHT employment in the Bay State grew larger and at a faster pace than the national average after the 2001 recession. Although it

FIGURE 1.3

Index: LHT Industry Share of Total Employment, Massachusetts vs. U.S., 2000–2016



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

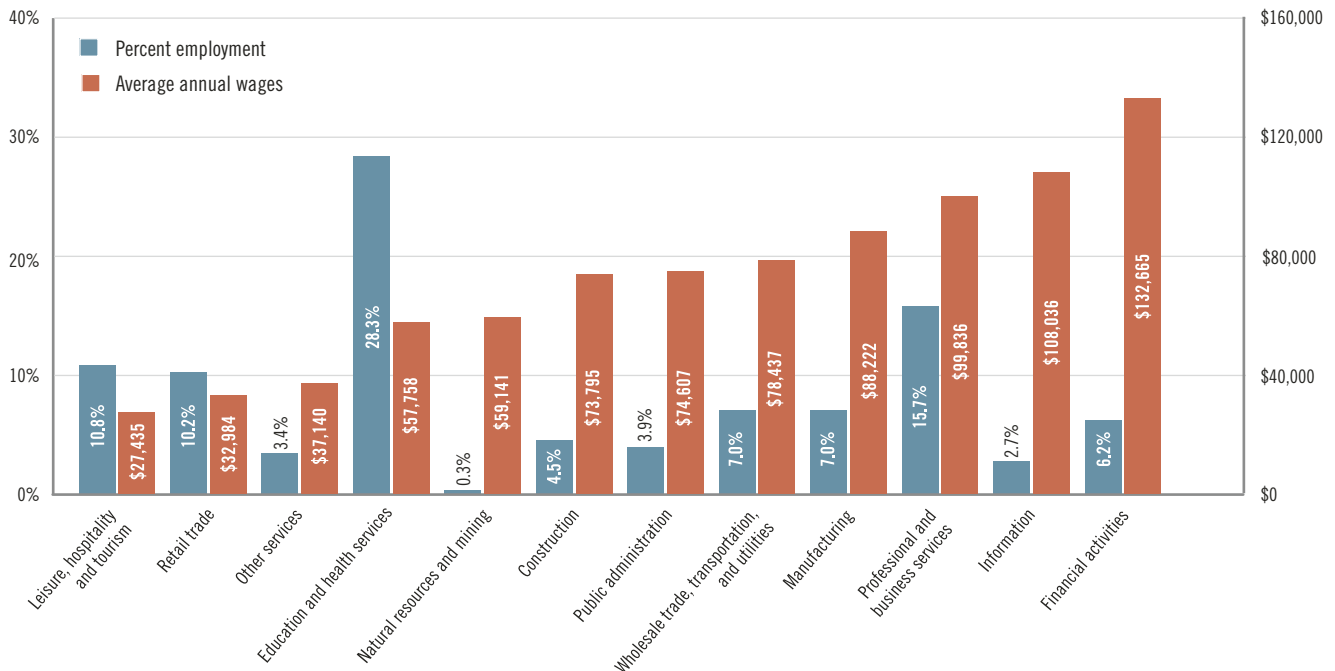
took a hit during the Great Recession, Massachusetts LHT employment had rebounded by 2009 and grew at a faster pace than the rest of the U.S. LHT industry thereafter. It wasn't until 2015 that nationwide LHT employment rates finally caught up with those in Massachusetts.

Wages

Although the LHT industry is among the largest employers in the Commonwealth, **Figure 1.4** makes clear that its average annual earnings are the lowest. The spread between the highest- and lowest-compensated industries is also extreme: The average

FIGURE 1.4

Average Annual Wages and Employment Share, 2016 (2017\$)



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

annual wages in the Financial Activities industry is more than four and a half times that in the LHT industry.⁴

Despite the LHT industry's employment growth and resilience during a period of economic and technological upheaval, average wages over time have been consistently low. **Figure 1.5** traces the wage trajectories of the Commonwealth's seven largest employment sectors by percent of total wages between 2000 and 2016. Over the last 16 years, Educational & Health Services and Professional & Business Services are making up a larger proportion of total wages. Manufacturing, on the other hand, is making up a significantly smaller portion of total wages. By comparison, the share of wages going to LHT workers grew, but only slightly—0.7 percent—over the 17-year period.

Gross State Product

The LHT industry also generates much lower economic output than other Bay State industries, as

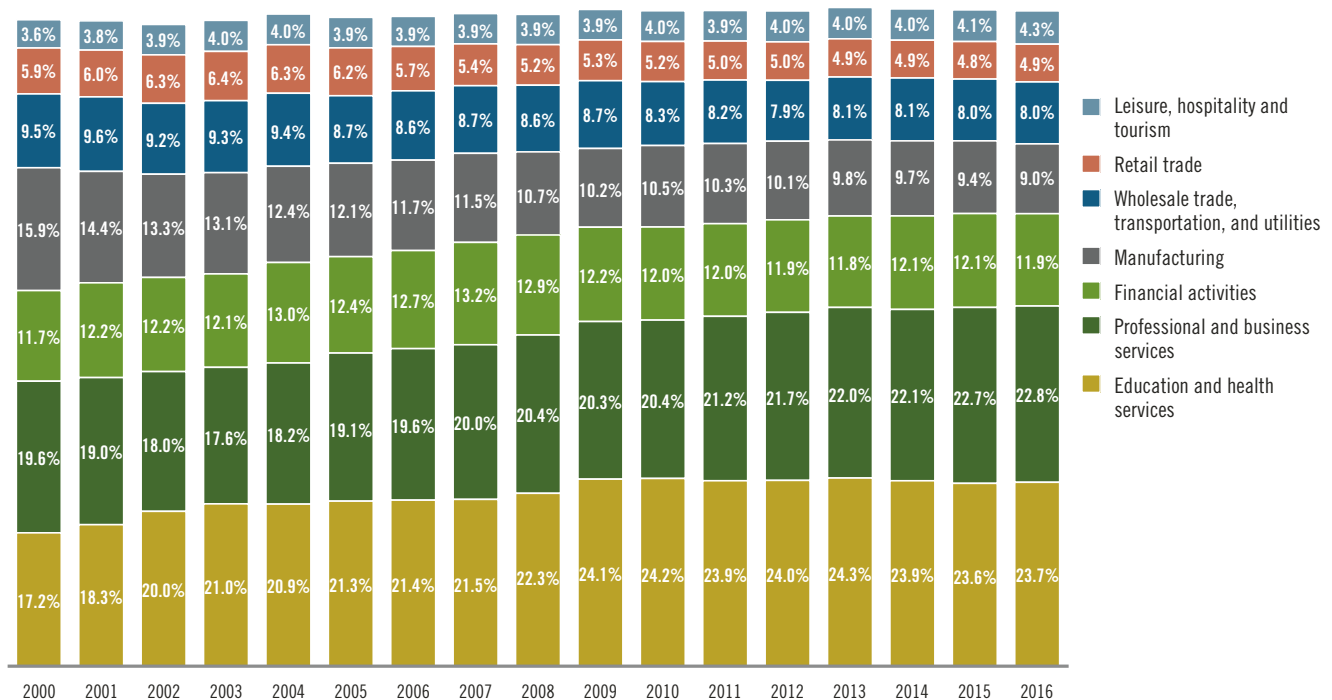
measured by Gross State Product (GSP).⁵ GSP, a commonly used indicator of state economic activity analogous to GDP, which reflects *national* economic activity, measures the market value of the final goods and services produced within a given state.

Figure 1.6 shows that, as with average annual wages, the LHT share of Massachusetts GSP has been comparatively low and growing only slightly over time. LHT generated just 3.9 percent of the state's total GSP in 2016, up from 3.3 percent in 2000. By comparison, Finance, Insurance & Real Estate (FIRE) contributed just under 25 percent to Massachusetts GSP in the same year, while Professional & Business Services generated nearly 17 percent. Both grew by more than 48 percent since 1997. Interestingly, Retail GSP fell during the same period, and by 2016 was nearly on par with that of LHT.

Compared with other Bay State industries, LHT makes a comparatively small GSP contribution to the Massachusetts economy. Compared with other U.S. states, Massachusetts ranks 22nd in LHT share of

FIGURE 1.5

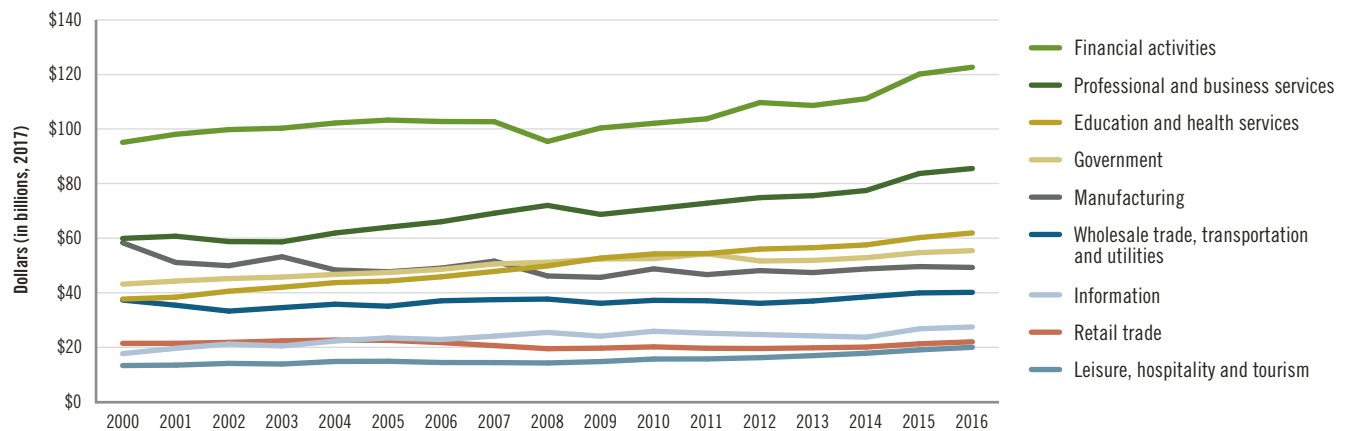
Top 7 Massachusetts Employers' Percent of Average Annual Wages, 2000–2016



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

FIGURE 1.6

Gross State Product Contribution by Top 7 Massachusetts Supersectors, 2000–2016



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

total GSP, placing the state in the high-middle of the pack. Yet its contribution has been stable and quietly growing, resistant to the volatility that has affected GSP trends in other sectors.

Subsector Trends

We have identified five component subsectors⁶ within the LHT industry, and have provided a good sampling of the business or venue types that fall within them:

- Accommodation (hotels, motels, B&Bs, and other types of lodging)
- Food & Beverage (restaurants, coffee shops, food service contractors, and bars)
- Performing Arts, Spectator Sports & Large-Scale Events (theater, dance, and related performing arts; non-recreational sports, excluding professional sports; and convention center activity)
- Museums & Heritage Tourism (art and history museums, tours, festivals, and art galleries)
- Amusements & Recreation (scenic and sightseeing activity; amusement parks and concession stands; and recreational activity, including sports and fitness)

As we will see, some subsectors have outperformed others and shown greater resilience in the face of the two recessions of this century. In particular, the Amusements & Recreation subsector and Food & Beverage subsector saw consistent year-over-year

gains in employment since 2000. Others, such as Accommodation (hotels and other lodging services), suffered during the 2001 recession, had not fully recovered by the time the Great Recession hit, and only recently reached their pre-2001 employment levels. A critical part of the LHT data story is played out in the Food & Beverage subsector, which employs most of the industry's workers, and drives its comparatively low wages. Constituting 71 percent of the LHT workforce, the subsector accounts for just over 50 percent of LHT wages. By examining trends within each of these subsectors,⁷ we can determine what types of businesses, in the aggregate, are driving overall industry trends.

Employment

By far, the majority of jobs in the LHT industry are in the Food & Beverage subsector. As **Figure 1.7** shows, Food & Beverage provides more than 267,000 jobs across the state and accounts for 71 percent of total LHT employment. It is also worth noting that a remarkable 89 percent of these jobs are in Restaurants & Other Eating Places, a designation that does not include food service contractors or caterers.⁸ The Amusements & Recreation subsector, a distant second, is responsible for just over 12 percent of industry employment. This subsector is likely to grow with the opening of two large resort style casinos⁹ over the next two years, with MGM Springfield slated to open in September 2018 and the Encore Boston Harbor opening in June 2019.

The Commonwealth's Convention Centers: Magnets for LHT Development

Convention centers, which are funded through public investment, provide space for trade shows, professional association meetings, and other large-scale events. Although they employ only a small fraction of the LHT industry workforce, they receive a great deal of attention due to the kinds of events they typically host and their considerable impact on the state's overall economy. Convention centers bring business to area hotels, restaurants, and attractions, and introduce their home cities to international, national, and regional travelers who often return with family or friends for leisure travel. They also boost other economic sectors by providing networking space for the state's cutting-edge researchers and business leaders and their peers across the world, fanning the potential for local economic investment.

Massachusetts is home to four convention centers. As measured by exhibition space (the industry standard) the Boston Convention and Exhibition Center (BCEC) is by far the largest. At 516,000 square feet, BCEC is the fourth largest convention center in the Northeast. Constructed in 2004 to expand the city's convention capacity beyond that of Back Bay's John B. Hynes Veterans Memorial Convention Center (176,480 sq. ft.), the BCEC played a strong role in attracting development to the Seaport. Beyond Boston, Worcester's DCU Center (58,960 sq. ft.) and Springfield's MassMutual Center (40,000 sq. ft.), which both double as sports arenas, host smaller civic and regional meetings. The Massachusetts Convention Center Authority (MCCA) owns the Boston and Springfield facilities; it oversees operations in Boston, while the soon-to-open MGM Springfield resort casino manages MassMutual. The City of Worcester owns and operates the DCU Center.

INDUSTRY EMPLOYMENT

In 2016, according to the Bureau of Labor Statistics (BLS), the Massachusetts Convention & Trade Show Organizers industry employed 1,812 workers across 134 unique establishments, representing 0.5 percent of total LHT employment in the Commonwealth. While this figure might seem modest, it exceeds the national average share of only 0.3 percent. In fact, the Commonwealth's four convention centers and the businesses that service them¹⁰ have experienced significant employment growth in recent years. Between 2010 and 2016, employment in the Massachusetts industry rose by 38.5 percent, outpacing a national growth rate of 25.5 percent during the same period.

CONVENTION CENTER PERFORMANCE

Data collected from the convention centers themselves (see **Appendix Table C.1**), support BLS data, showing that demand for conventions and other large-scale events since FY2012 has been growing across the state. The numbers fluctuate year by year, due to the large size of the meetings and trade shows that cycle periodically through the centers, but overall the numbers are on an upward trajectory.

Between FY2012 and FY2017, total attendance at BCEC, Hynes, and MassMutual grew by 40 percent. Hotel bookings (or "room nights") tied to convention center events at these venues rose 23 percent, while the total number of events they hosted increased by 34 percent. Much of this growth was driven by the two Boston convention centers: The BCEC saw steady overall attendee growth of 31 percent, while Hynes saw significant fluctuation but grew its attendance numbers by a third. Meanwhile, Springfield's MassMutual Center business grew only slightly, although its

associated hotel bookings jumped a striking 58 percent after FY2014—probably due to sporting events at the arena. The DCU Center in Worcester, reporting only rough estimates, claims to average about 120 events per year in its exhibition space, with approximately 148,000 attendees.¹¹

THE BCEC'S COMPETITIVE ADVANTAGE

Appendix Table C.2 shows that, with 516,000 sq. ft. of exhibition space, the BCEC is the 24th largest convention center in the country. That said, it has distinct advantages over its three regional competitors: New York's Jacob K. Javits Convention Center (840,000 sq. ft.), Washington, D.C.'s Walter E. Washington Convention Center (703,000 sq. ft.), and Philadelphia's Pennsylvania Convention Center (679,000 sq. ft.). Regional competition is important because most organizers of large periodic meetings cycle through national or global regions on a recurring basis, giving attendees exposure to a geographically diverse range of professional contacts.

Within the Northeast region, the BCEC offers several competitive advantages. It has the closest proximity to both an international airport—MassPort has expanded Logan Airport's international flights in recent years—and downtown Boston, with its range of leisure, hospitality, and tourism offerings. In addition, Greater Boston is a national leader in digital start-up innovation, biotech, and life sciences, thanks to its world-class universities and medical research establishments, making the BCEC ideal for professional cross-pollination in these growing fields, among others. For example, BCEC is in regular rotation for such large events as the BIO International Convention, which hosts its 25th anniversary event in Boston in June 2018.

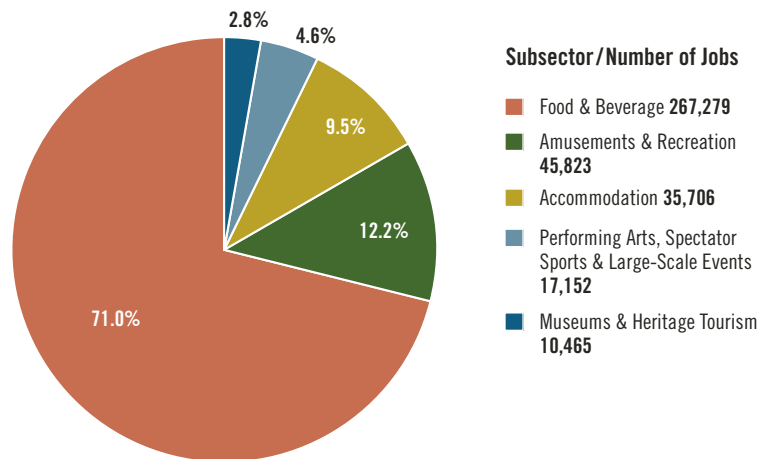
TRENDS

Conventions are often magnets for international visitors, who typically spend more than domestic travelers and stay longer. International marketing and branding efforts in the 2000s put Boston on the map for many foreign visitors, particularly as a meeting destination with the opening of the BCEC in 2004. That contributed at least partly to the number of foreign visitors to Boston doubling between 2005 and 2015. In 2017, overseas travelers comprised 8 percent of total visitation but accounted for nearly 15 percent of total spending. Growth among Chinese visitors has been especially pronounced, up 146 percent between 2013 and 2017.¹²

In view of these figures, city leaders have been pushing to expand the BCEC and increase the number of nearby hotels. Convention centers are politically sensitive, requiring high public investment in a capricious global market. Those with sound exhibition and hotel capacity—and especially those that can host large meetings with substantial international attendance—can contribute disproportionately to the LHT industry's long-term prospects.¹³ That is why over the past few decades, municipal leaders seeking to revitalize their cities went on a convention center building and expansion spree; by 2012, the industry appeared to be oversaturated with facility buildout and plagued by taxpayer fatigue.¹⁴ Nonetheless, BCEC expansion may well be justified in view of its own rising numbers and its host city's rising economic star.

FIGURE 1.7

Industry Subsector Employment, 2016



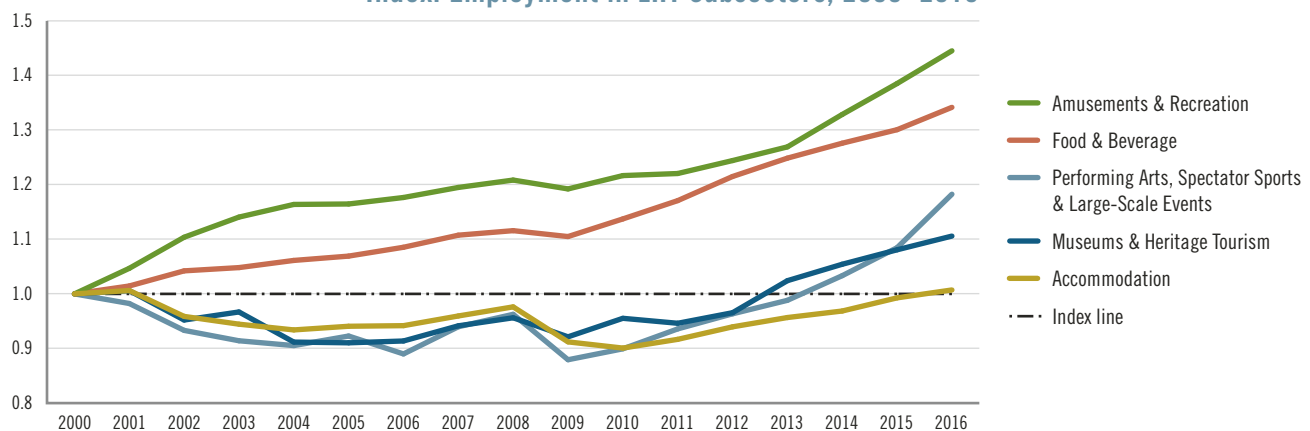
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

Employment in LHT in Massachusetts has been, for the most part, strong and stable since 2000, and its component subsectors have been of consistent size relative to the others. However, employment within three of the industry's subsectors—Performing Arts, Spectator Sports & Large-Scale Events; Museums & Heritage Tourism; and Accommodation—have been subject to decidedly more volatility than aggregate industry numbers would suggest. As **Figure 1.8** shows, these subsectors were immediately affected

by the 2001 recession and then again—and even more dramatically—by the Great Recession; in fact, employment in these three areas did not return to pre-2001 levels until 2013, 2014, and 2016, respectively. By contrast, the 2001 recession altogether bypassed the Amusements & Recreation and Food & Beverage industries, while the Great Recession appears to have issued them just a glancing blow. Employment in Amusements & Recreation has been especially strong, growing almost 150 percent since 2000. Taken together,

FIGURE 1.8

Index: Employment in LHT Subsectors, 2000–2016



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

employment gains in these subsectors—the two largest—have effectively negated the employment losses in the three smaller subsectors.

Wages

Figure 1.9 reveals striking economic disparities among LHT subsectors as of 2016. The largest share of total wages—just over 57 percent, or \$5.9 billion—went to Food & Beverage workers, and yet the same workers received the least compensation per employee: \$22,000 on average annually (including gratuities). Conversely, the Museums & Heritage Tourism subsector paid total wages of a half-billion dollars, but the average worker earned \$48,000 for the year. The highest paid employees are in the Performing Arts, Spectator Sports & Large-Scale Events subsector, which pays their workers \$78,000 a year on average—or more than 3.5 times that paid on average to Food & Beverage workers. (Note that this subsector does not include professional athletes, coaches, and related occupations. The higher wages are likely driven by high-end managerial and administrative salaries.)

Although Food & Beverage accounts for 71 percent of the total LHT workforce and 57 percent of the industry’s total wages, the subsector is responsible for

just 3.9 percent of average annual wages per employee across all subsectors. Performing Arts, Spectator Sports & Large-Scale Events, on the other hand, is responsible for 4.6 percent of total LHT employment, and nearly 14 percent of total wages, but approximately 53 percent of average annual wages per employee.

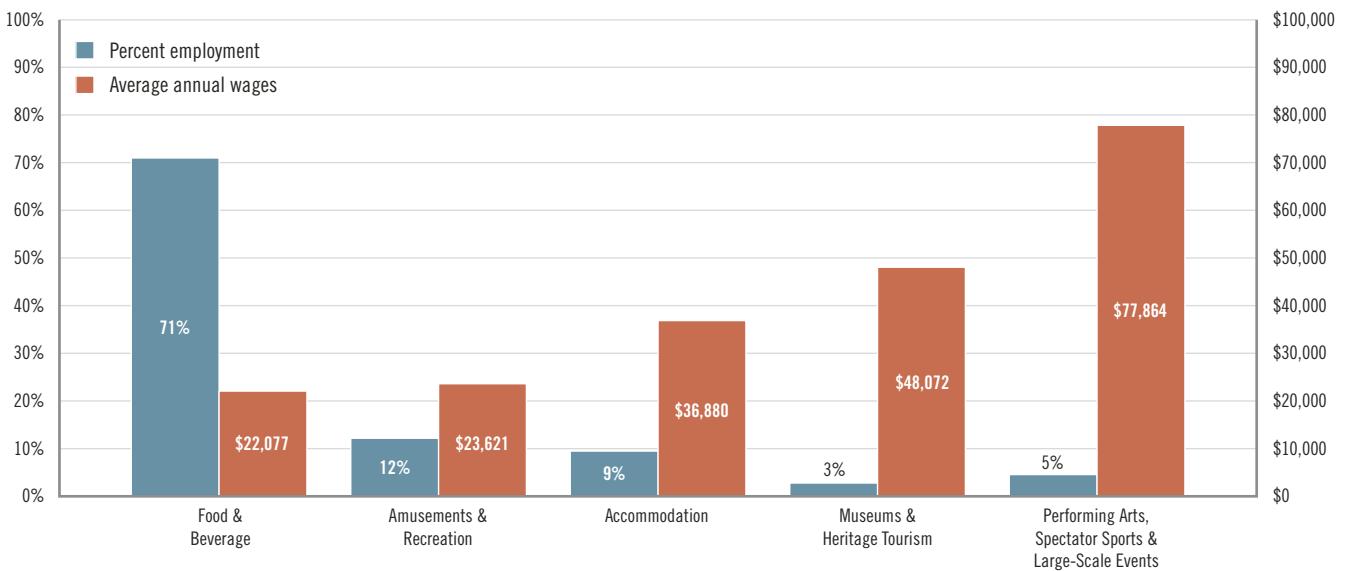
Overall Economic Contributions to the Massachusetts Economy

While previous sections of this chapter evaluated the current state of the LHT industry, this section takes those findings and extends them to a study of the industry’s contributions to the economy of Massachusetts. No industry exists in isolation and all are interconnected with other segments of the economy through their purchases and through the spending of their employees. This section will discuss these interconnections and measure the LHT industry’s statewide economic contributions.

As one of the state’s largest employers, the LHT industry contributes heavily to the state’s economy, with ripple effects that extend well beyond the industry’s direct activities. These secondary effects are either “indirect” (supporting firms that supply goods

FIGURE 1.9

Industry Subsector Annual Average Wages per Employee and Percent of Total LHT Employment, 2016 (2017\$)



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; UMDI calculations

FIGURE 1.10

Economic Impact Analysis Components



or services to LHT businesses or venues) or “induced” (increased sales from household spending as a result of earnings from employment in LHT and its suppliers).

To understand how LHT businesses and venues influence other parts of the economy, we employed an economic impact model called PI⁺ created by Amherst, Mass.-based Regional Economic Models, Inc. (REMI). We populated the PI⁺ model with the same employment and wage data used in previous sections (see *Appendix A for methodological detail*). Models like PI⁺ contain mathematical representations of the state economy that can be changed by users to measure the impacts of hypothetical events such as a new business opening or tax rates changing. In this case, we used the model to understand the role of the LHT industry in the economy of Massachusetts. The basic components of the analysis are shown in **Figure 1.10**.

Table 1.2 summarizes the LHT industry’s total direct, indirect, and induced contributions to the Bay State economy. While the industry directly employs

approximately 376,000 workers,¹⁵ LHT supports nearly 232,000 additional jobs (for a total of 607,813) and adds \$39 billion to Gross State Product. Without this industry, we estimate that some 176,000 fewer people—roughly 172,000 in the labor force—would choose to live in Massachusetts, and \$23 billion of disposable income would be lost.

Table 1.3 breaks out the employment ripple effects—indirect and induced—supported by the LHT industry by supersector. Economic activity originating within the LHT industry fans out through the entire economy, leading to benefits in seemingly unrelated industries like retail and health care. These spin-off effects are mostly supported by supply chain relationships and spending by workers. Every business purchases goods and services from other businesses, which in turn make purchases from yet more firms. In this way, changes in one area of the economy spread via business-to-business transactions. For example, every restaurant examined in this report purchases food from

TABLE 1.2

Total Direct, Indirect, and Induced LHT Contributions to the State Economy

Category	Units	2016
Total Employment	Jobs	607,813
Private Non-Farm Employment	Jobs	591,942
Population	Individuals	176,409
Labor Force	Individuals	172,223
Gross State Product (\$2017)	Billions	\$39.40
Output (\$2017)	Billions	\$69.40
Personal Income (\$2017)	Billions	\$28.96
Disposable Personal Income (\$2017)	Billions	\$23.52

Source: PI⁺ and UMDI calculations

TABLE 1.3

LHT Employment Contributions by Supersector

Industry	Direct	Indirect and Induced	Total
Accommodation and Food Services	302,752	10,011	312,763
Arts, Entertainment, and Recreation	64,399	6,537	70,936
Construction	0	42,828	42,828
Retail Trade	0	27,664	27,664
Health Care and Social Assistance	0	25,294	25,294
Administrative and Waste Management Services	7,160	14,064	21,224
State and Local Government	0	15,871	15,871
Professional, Scientific, and Technical Services	0	15,862	15,862
Other Services, except Public Administration	0	15,633	15,633
Real Estate and Rental and Leasing	0	10,866	10,866
Finance and Insurance	0	8,679	8,679
Manufacturing	0	8,125	8,125
Transportation and Warehousing	1,557	6,181	7,739
Management of Companies and Enterprises	0	6,919	6,919
Wholesale Trade	0	6,526	6,526
Educational Services; Private	0	5,301	5,301
Information	0	3,313	3,313
Forestry, Fishing, and Related Activities	0	1,101	1,101
Utilities	0	719	719
Mining	0	450	450
Total	375,868	231,945	607,813

Source: PI* and UMDI calculations

local wholesalers, retailers, or farms. Each of these businesses requires its own set of goods and services to be able to make the sale to the restaurant and so on through their own suppliers. Moreover, every business has employees who are paid a wage. These wages are spent on consumer goods like clothing, food, utilities, and childcare, which create the need for yet more workers and new supply chain relationships.

In addition to pumping their earnings into the economy, workers produce the goods and services that are sold by the firms that employ them—what economists call output and others call revenues or sales. Output is also a measure of business activity. It is the total of all sales made by every business in the state. To build on the previous example, output counts the sale of a restaurant meal to a diner, the sale of vegetables from the wholesaler to the restaurant, and the sale of lettuce from the farm to

the wholesaler. Output also includes the value of consumer purchases like clothing, cable and internet, and visits to the doctor. **Table 1.4** shows the amount of business revenue (output) created or supported by the LHT industry in Massachusetts by sector. As with employment, LHT's direct output is felt widely throughout the economy and results in more than \$69 billion of total business revenue. (*See Appendix A for detailed analysis of GSP and other LHT economic contributions.*)

The total economic contributions seen in the preceding tables can be further summarized using multipliers. These measures tell us, on average, how many jobs are supported by each LHT job or how many dollars of business revenues are supported by each dollar of LHT revenues. The employment multiplier is 1.62 and the output multiplier is 2.46, meaning that the LHT industry creates 0.62 jobs for every one of its own jobs

TABLE 1.4

Output Contributions by Sector in Billions (2017\$)

Industry	Direct	Indirect and Induced	Total
Accommodation and Food Services	\$22.38	\$0.69	\$23.07
Real Estate and Rental and Leasing	\$0	\$6.09	\$6.09
Construction	\$0	\$5.71	\$5.71
Arts, Entertainment, and Recreation	\$5.04	\$0.66	\$5.70
Professional, Scientific, and Technical Services	\$0	\$3.52	\$3.52
Manufacturing	\$0	\$3.43	\$3.43
Health Care and Social Assistance	\$0	\$3.21	\$3.21
Finance and Insurance	\$0	\$2.96	\$2.96
Retail Trade	\$0	\$2.35	\$2.35
State and Local Government	\$0	\$2.27	\$2.27
Management of Companies and Enterprises	\$0	\$2.07	\$2.07
Administrative and Waste Management Services	\$0.62	\$1.30	\$1.91
Wholesale Trade	\$0	\$1.87	\$1.87
Information	\$0	\$1.69	\$1.69
Other Services, except Public Administration	\$0	\$1.16	\$1.16
Transportation and Warehousing	\$0.19	\$0.83	\$1.02
Educational Services; Private	\$0	\$0.63	\$0.63
Utilities	\$0	\$0.57	\$0.57
Forestry, Fishing, and Related Activities	\$0	\$0.11	\$0.11
Mining	\$0	\$0.05	\$0.05
Total	\$28.22	\$41.18	\$69.40

Source: PI* and UMDI calculations

and \$1.46 of revenues for each dollar of its revenues. It is not unusual that the employment multiplier is smaller than that for output. It tells us that the LHT sector needs more workers to generate a dollar of revenue than the other sectors of the economy, which makes sense for an industry that is labor intensive and creates affordable products. For example, a manufacturer could need 20 people to generate tens of millions of dollars of annual sales. That scenario is unlikely at a restaurant or hotel. Thus a smaller employment multiplier than output multiplier is a reflection of the nature of the industry and its product.

Summary

By providing more than 10 percent of the jobs in Massachusetts, the LHT industry plays a crucial role in creating economic opportunity for the residents

of the Commonwealth. Its low average wages are partly a function of an industry structure that relies heavily on people rather than machines, computers, or automation to provide affordable goods and services to customers. The LHT sector is also just as interconnected with the rest of the economy as any other sector, making itself an important customer of other businesses, such as construction, real estate, and wholesale. Its many employees spend their wages in and around their communities, spreading economic activity even more widely. Finally, as a face-to-face service provider, the LHT industry cannot be offshored and can be relied upon to provide local jobs into the future. It supports many direct and secondary jobs throughout the economy, and the LHT industry's contributions to overall business revenues are proportionally even greater, strengthening higher-value-added industries across the Commonwealth.

People of Service and Play: LHT Workforce Characteristics

As we established in Chapter 1, the LHT industry is the third-largest employer in the state. The core questions of this chapter are, who are these workers and how does their collective profile compare with that of workers in other Massachusetts industries? To answer these questions, we examined self-reported data collected through the U.S. Census Bureau's American Community Survey (ACS), organizing our analysis into six broad areas:

- Age
- Education
- Race and ethnicity
- Nativity and English language proficiency
- Annual wages
- Full- or part-time status

We also pay attention to regional and subsector workforce characteristics, which affect local training needs and economic development planning.

Massachusetts LHT Workforce Overview

ACS data reveal striking differences between LHT workers and the Commonwealth's workforce as a whole. To begin, the LHT workforce is comparatively young. An extraordinary 56 percent of the LHT workforce is under age 35, compared with just over 30 percent of workers in all other industries. Of these young workers, 63.2 percent are concentrated in the Food & Beverage subsector. Clearly, the LHT industry—and particularly Food & Beverage—is an important entry point into the labor market, the site of many people's first formal workplace experiences.

LHT workers also have lower levels of educational attainment than their non-LHT counterparts, but they are more likely to be enrolled in school while employed. Across the non-LHT Massachusetts economy, 12.2 percent of workers are enrolled in formal schooling of some sort, but among the LHT workforce more than twice that proportion—26 percent—is pursuing educational advancement.

Of those, more than 90 percent are enrolled in high school or college—on either the bachelor's degree or community college level.

Consistent with New England's racial and ethnic profile, whites¹ predominate in both the LHT and non-LHT workforce. The most notable difference is that Latinos are far more represented in LHT (14%) than in all other Massachusetts industries (8%). Related, the industry relies heavily on foreign-born labor. One in four LHT workers is foreign-born, with significant overrepresentation in Food & Beverage, even more so in the Accommodation subsector.

ACS data bear out our Chapter 1 findings that LHT workers earn much less than non-LHT workers:²

- The median personal wage or salary income of LHT workers is just under \$17,000, compared with \$45,000 for non-LHT workers.
- Over 50 percent of LHT workers earn less than \$20,000 annually, compared with 21 percent of workers in non-LHT industries.
- One in 10 LHT workers live in poverty, compared with one in 25 non-LHT workers.

The federal poverty standard is the same throughout the United States. In 2017, the poverty threshold was \$24,600 for a family of four (and higher or lower depending on the size of the household). In places with a high cost of living, such as Greater Boston, households may be experiencing poverty-like conditions, while not technically being defined as living in poverty by federal standards.

Finally, nearly half of all LHT workers are employed on a part-time basis (meaning less than 35 hours per week). This scheduling structure is consistent across all subsectors and demographics of the LHT workforce.

Please note that the data source for all figures, tables and the map in this chapter is: U.S. Census Bureau, 2012-2016 American Community Survey (ACS) 5-year estimates.

LHT Workforce Characteristics at a Glance

AGE: **56%** of LHT workers are **under age 35**, compared with 33 percent of non-LHT workers.

EDUCATION: **45%** of the LHT workforce has a **high school education or less**, compared with 27 percent of non-LHT workers.

RACE AND ETHNICITY: **The employment ratio for Latino workers is 1.62** meaning that the concentration of Latinos in LHT is almost **2x** higher than that in other industries.

NATIVITY AND ENGLISH LANGUAGE PROFICIENCY: **Foreign-born workers** are dramatically **overrepresented** in the Accommodation subsector—**twice their share** of the total workforce.

ANNUAL WAGES: Almost **1/3** of **LHT workers** earn **less than \$10,000** per year, compared with 11 percent of non-LHT workers.

FULL- OR PART-TIME STATUS: Nearly **50%** of the **LHT workforce** is **part-time**, more than twice that of the non-LHT workforce.

Workforce Characteristics

Age

One of the most striking characteristics of the LHT workforce, especially compared with other industries, is its youth. **Figure 2.1** shows that:

- 56 percent of LHT workers are under age 35, compared with 33 percent of non-LHT workers;
- 14 percent of LHT workers are over age 55, compared with 24 percent of workers in other industries; and
- 42 percent of LHT workers are between the ages of 20 and 34, while fewer than a third of workers in other industries fall within the same age range.

Younger workers are drawn to the LHT industry for a variety of reasons. With its flexible work hours, availability of part-time work, low skill requirements, and numerous establishments (especially in Food & Beverage), the LHT industry offers both entry-level and temporary work for those at various stages of their careers. This can present turnover challenges for employers, as significant segments of the LHT workforce will move on to other fields after finishing their education or move up the LHT ladder after acquiring experience and skills. **Figure 2.2** shows that the Food & Beverage subsector has the highest concentration of workers under 35 (63.2%), followed by Amusements & Recreation, where more than half of workers are 34 or younger.

FIGURE 2.1

Workforce Age Distribution, LHT vs. Non-LHT

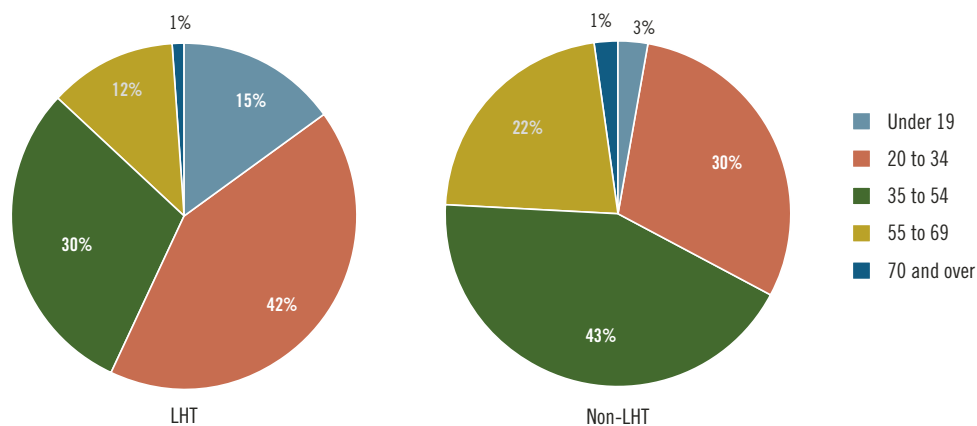


FIGURE 2.2

Workforce Age Distribution by LHT Subsector

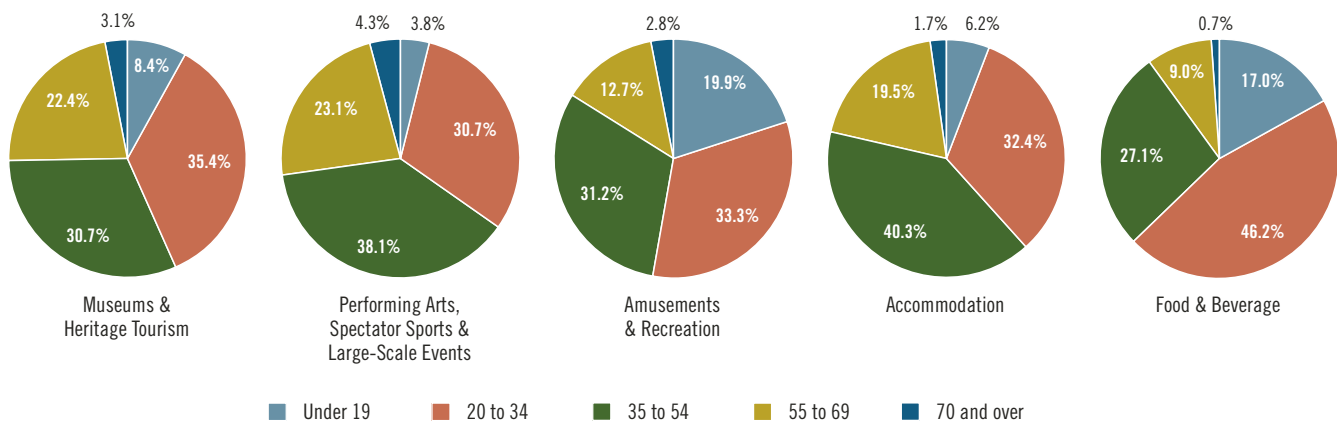
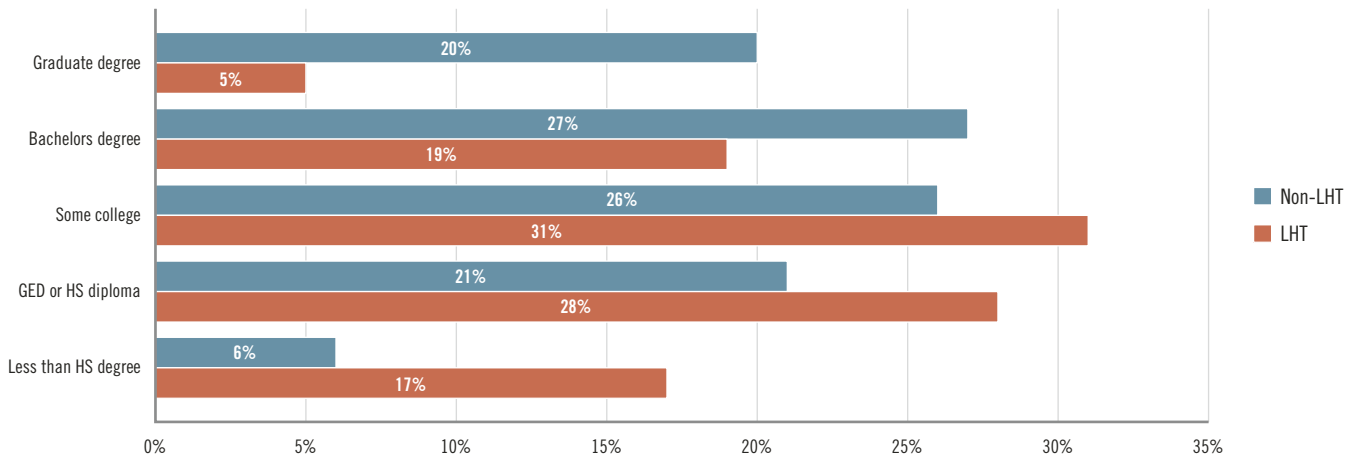


FIGURE 2.3

Educational Attainment by Degree, LHT vs. Non-LHT



Education

Figure 2.3 shows that LHT employees have attained lower levels of formal education than workers in other industries. In fact, educational attainment trends in the LHT industry run opposite to those seen elsewhere in the Massachusetts economy: 45 percent of the LHT workforce has a high school education or less, compared with just 27 percent of the non-LHT workforce. An even wider gap prevails at the upper end of the educational attainment ladder: Where nearly half of the non-LHT workforce has at least a college degree, just 24 percent of LHT workers have attained a bachelor's degree or higher.

The comparatively low educational level of the LHT workforce is related to its predominately youthful, often transitional character. **Figures 2.4** and **2.5** reveal that a disproportionate share of these workers are enrolled in school at some level. More than one in four LHT workers is currently in school, compared with just one in 10 in other industries. About a third of school-enrolled LHT workers are high school students, whereas only 11 percent of non-LHT workers are still in high school. Virtually the same share of both LHT and non-LHT workers—about 60 percent—is enrolled in either a two- or four-year degree program, but the numbers diverge significantly again at the graduate level. Just over 6 percent of school-attending LHT workers are enrolled in graduate programs, compared with over 27 percent in other industries.

It should come as no surprise that the LHT industry attracts, and needs, a large number of young people,

FIGURE 2.4

School Enrollment, LHT vs. Non-LHT

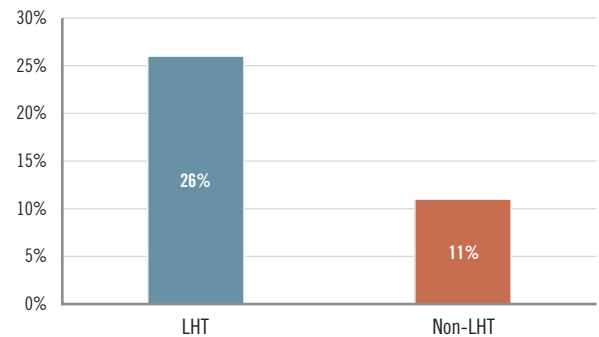
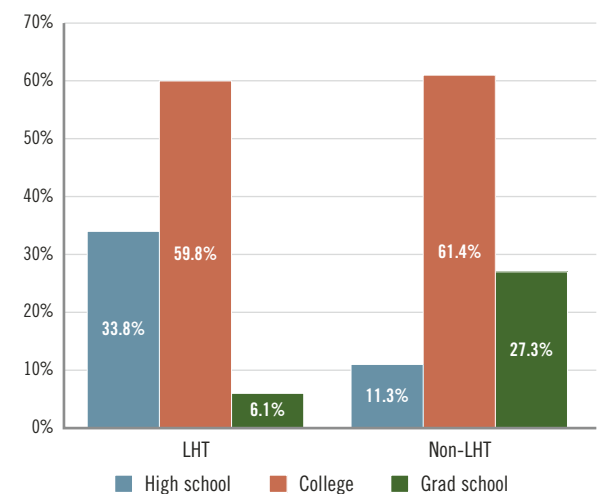


FIGURE 2.5

Type of School Enrollment, LHT vs. Non-LHT



and that many of them are in school. Scheduling in the industry is often flexible—part-time, seasonal, and available from dawn to late at night—allowing time for classes and other activities. And the ubiquity of LHT venues, particularly in Food & Beverage, puts the work close at hand in most Massachusetts communities. These characteristics allow many LHT workers to ascend the educational ladder while employed in the industry. Indeed, LHT (along with Retail) is often the first industry in which young people find formal employment. Most do not remain there once their educational goals have been met, however, as evidenced by the comparatively low number of employees with college and graduate level educational attainment, and high number with no more than a high school education. As captured in Figure 2.1 earlier, the lower concentration of workers 35 and older—43 percent in LHT, compared to 67 percent for all other industries—also suggests that workers “age out” of the LHT industry after completing school.

Race and Ethnicity

As shown in **Figure 2.6**, the LHT workforce in Massachusetts has a higher share of Latino workers than non-LHT industries have, and a lower share of white workers. Black workers make up 6 percent of both the LHT and the non-LHT workforce, and Asian workers comprise 7 and 6 percent, respectively.

The size of the Latino labor force in LHT is striking. **Figure 2.7** shows the concentration of each of the five main racial and ethnic groups (including *other*) in Massachusetts in LHT relative to their representation in the workforce overall.³ A ratio of 1.0 would reflect perfect parity between LHT and total workforce representation. A ratio over 1.0 would indicate that the group is overrepresented in LHT. As shown in Figure 2.7, the employment ratio of white workers in LHT is 0.91, indicating an underrepresentation of white workers. On the other end of the spectrum, Latino workers’ employment ratio is 1.62, meaning that the

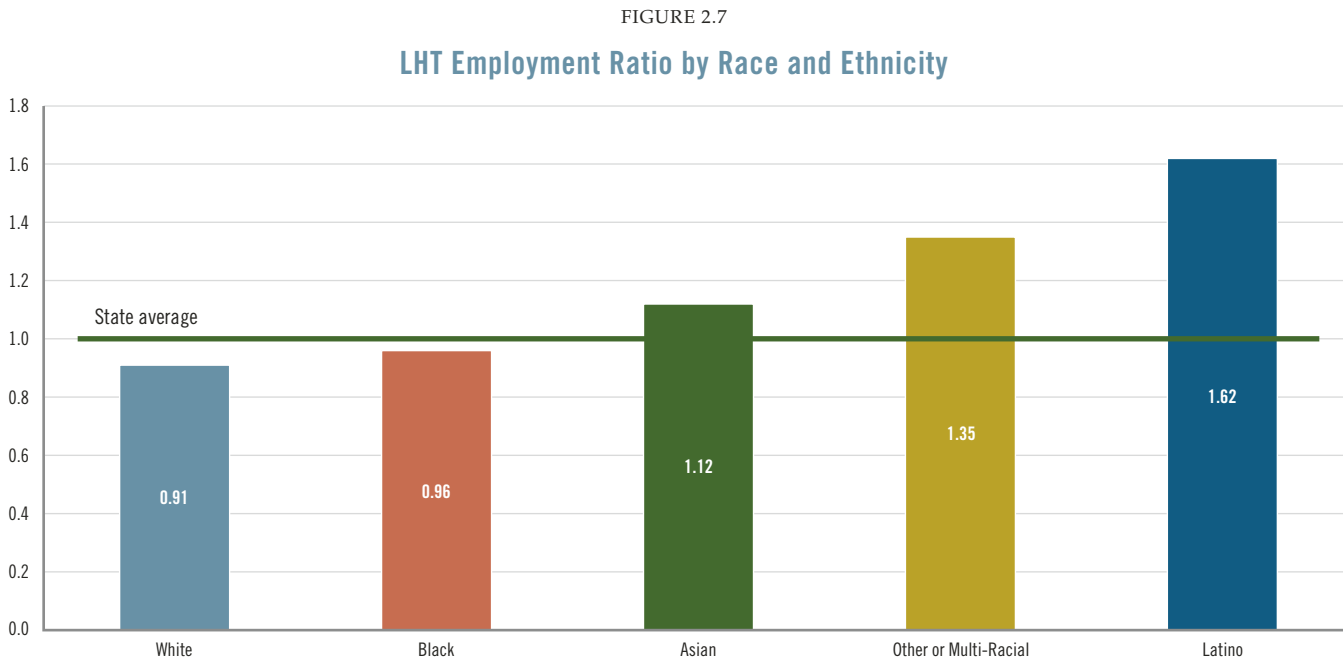
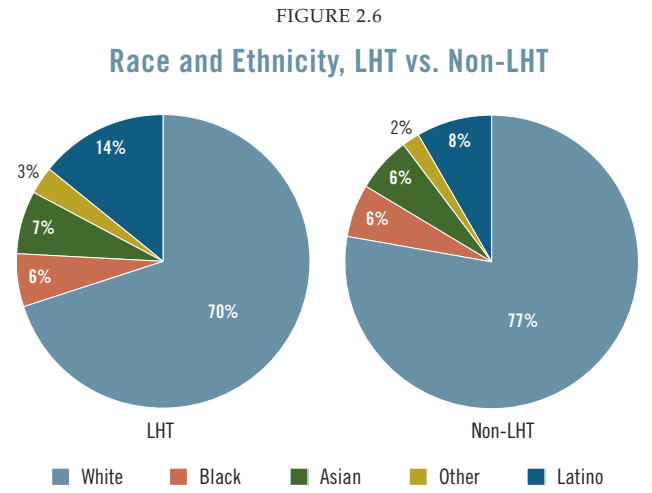
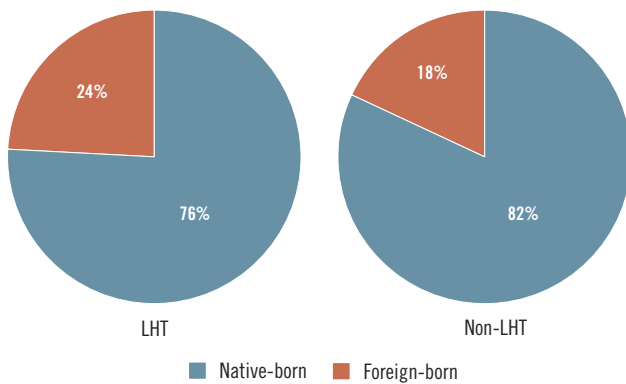


FIGURE 2.8

Nativity Status, LHT vs. Non-LHT



concentration of Latinos in LHT is almost two times higher than that in other industries.

Nativity and English Language Proficiency

A sizable majority of LHT workers (76%) are native-born Americans—including Puerto Ricans and others born in U.S. territories—as shown in **Figure 2.8**, and their share is somewhat higher (82%) in non-LHT industries. Nevertheless, the employment ratio for foreign-born workers in LHT is 1.26, indicating an overrepresentation, though not nearly to the degree seen among Latino workers in the industry.

Figure 2.9 breaks out the foreign-born employment ratio across the five LHT subsectors, revealing much variation within the industry. Foreign-born workers are dramatically overrepresented in the Accommodation subsector—twice their share of the total workforce. Food & Beverage also has a significant concentration of foreign-born workers, but they are underrepresented in Museums & Heritage Tourism; Performing Arts, Spectator Sports & Large-Scale Events; Amusements & Recreation; and Amusements & Recreation.

From which world regions do foreign-born workers in Massachusetts originate, and what proportion of them land in the LHT industry? What jumps out from **Figure 2.10** is that LHT relies most heavily on foreign-born workers from Latin and South America, while foreign-born workers in other industries are significantly more European. Almost half of LHT foreign-born workers come from Latin and South America, compared with 36.7 percent in non-LHT industries. Europeans in non-LHT industries lead those in LHT by 6.5 percentage points. Just over a quarter of the LHT foreign-born workforce is from Asia, and another 15 percent hail from Europe. LHT and non-LHT workers from other regions of the world—Africa and Asia—are close to par with one another, with less than two percentage points separating them.

FIGURE 2.9

LHT Employment Ratio by Subsector and Nativity

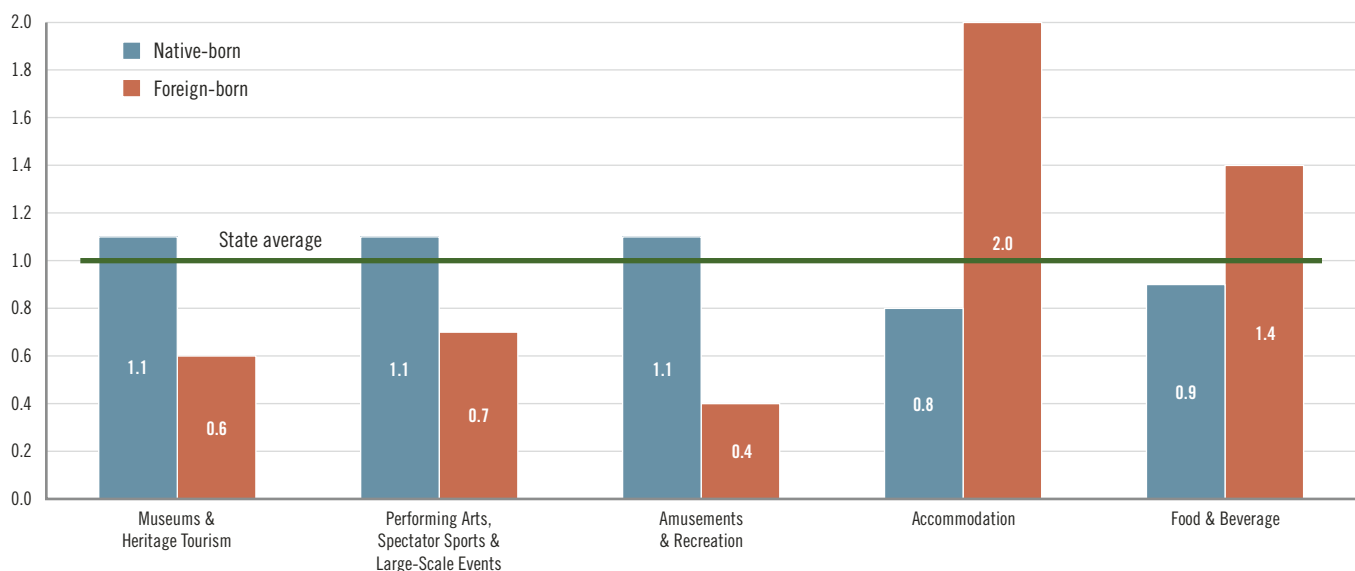


FIGURE 2.10

Regions of Origin, Foreign-Born Workers, LHT vs. Non-LHT

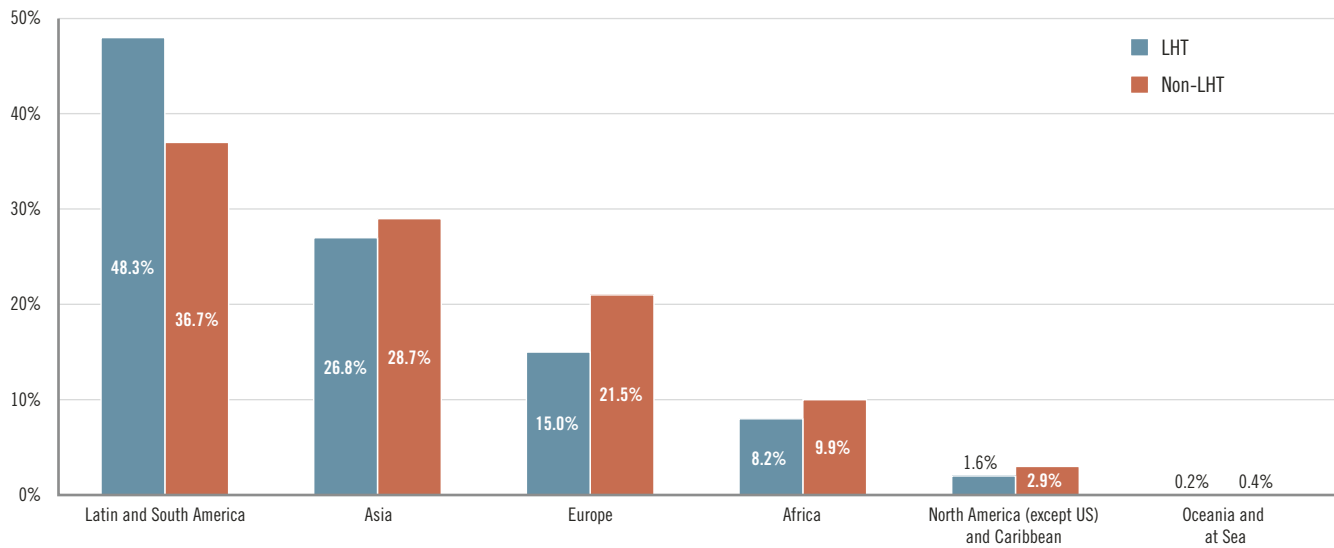


FIGURE 2.11

Top 20 Birth Countries for Foreign-Born LHT Workers in Massachusetts, 2016

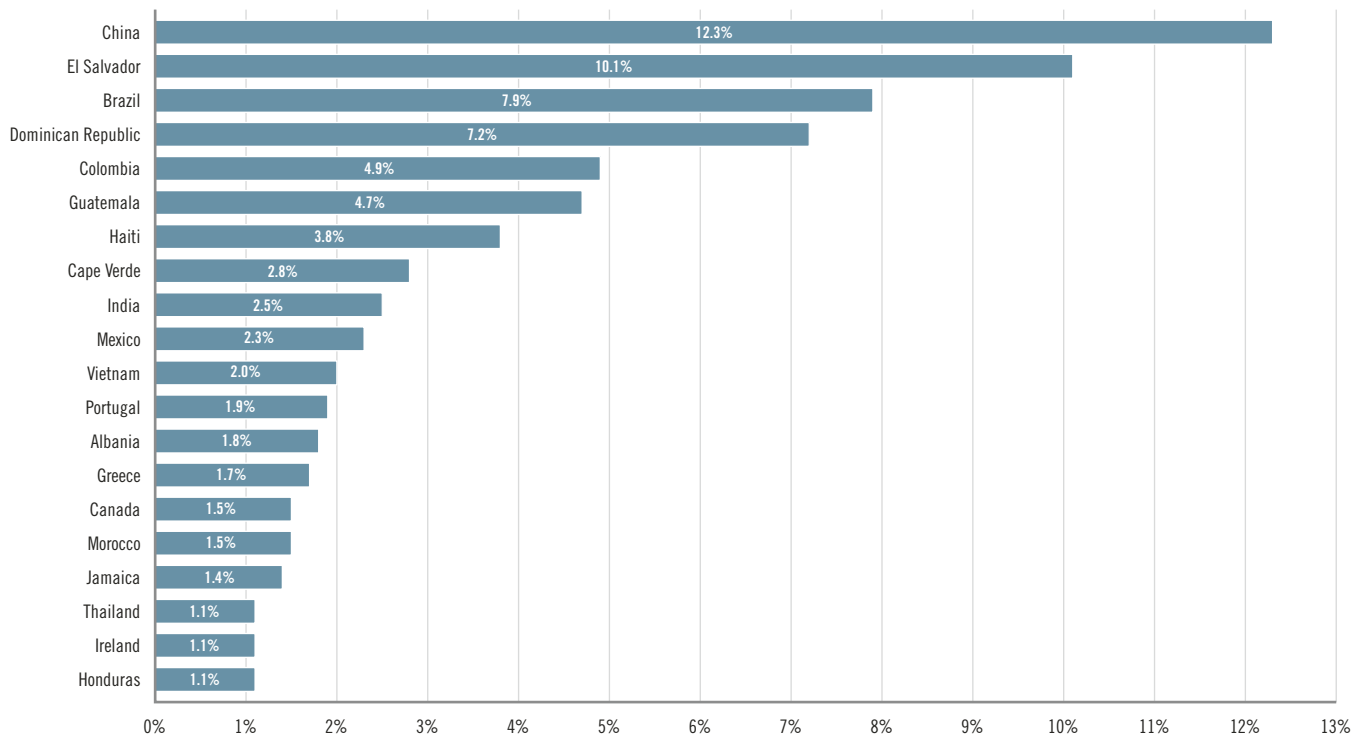


Figure 2.11 breaks down Massachusetts' foreign-born LHT workers by country of origin. Although nearly 50 percent of foreign-born LHT workers originate from Latin or South America, China leads as the single foreign country that provides the most LHT workers (over 12 percent), followed by five countries in Latin and South America: in order, El Salvador, Brazil, the Dominican Republic, Colombia, and Guatemala. These proportions make sense given China's size, emigration volume, and multigenerational ties to the United States.⁴

A lower level of educational attainment also distinguishes foreign-born workers in LHT from foreign-born workers in other industries. This educational disparity reflects the fact that Massachusetts is home both to immigrants with limited educational backgrounds and to those with more advanced degrees. **Figure 2.12** shows that 64 percent of foreign-born LHT workers have no more than a high school education, compared with 37 percent of foreign-born non-LHT workers. Just 16 percent of foreign-born LHT workers have a bachelor's degree or higher, compared with 42 percent of their counterparts in other industries. Approximately the same percentages, roughly 20 percent, have had some college education. They are matriculated undergraduates or community college students, or hold an associate's degree.

FIGURE 2.12

Educational Attainment of Foreign-Born Workers, LHT vs. Non-LHT

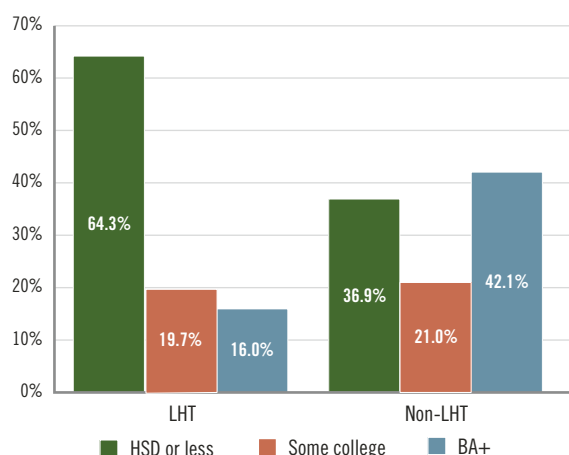
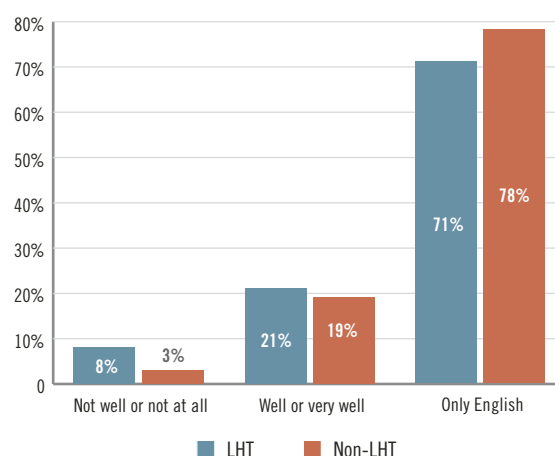


FIGURE 2.13

English Language Proficiency, LHT vs. Non-LHT

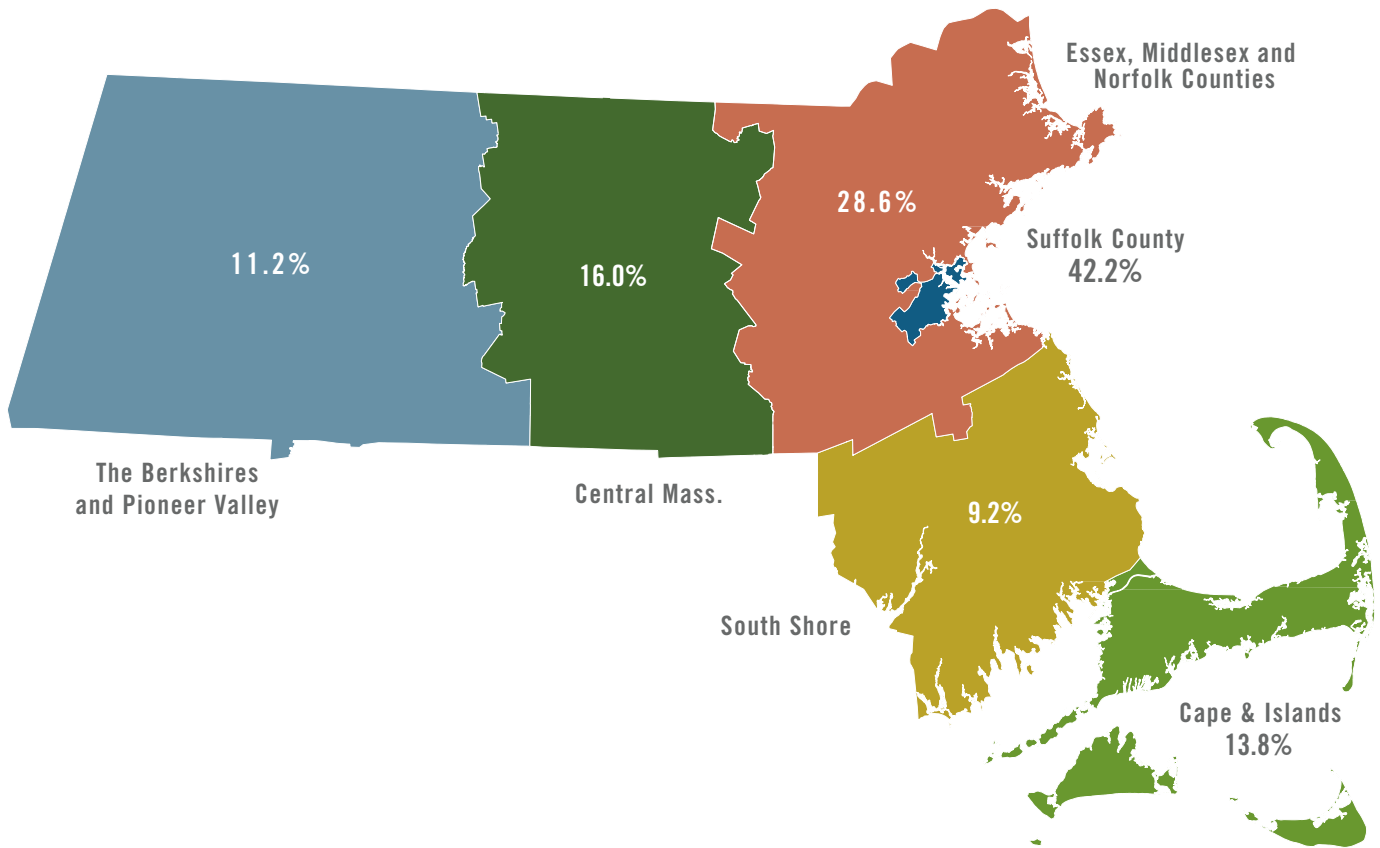


Although nearly a quarter of the LHT workforce is foreign-born, only 8 percent report that they do not speak English or do not speak it well, as seen in **Figure 2.13**. Ninety-two percent report that they speak only English, or speak it well, compared with 97 percent of workers in other industries. It should be noted, however, that these self-assessments are subjective and may not align with employer perceptions or needs.

With its significant concentration of foreign-born workers, the LHT industry has reason to be concerned about more restrictive federal immigration and visa policies. Given the irregular distribution of foreign-born LHT workers across the state, however, such policy changes could be more disruptive in some regions than in others. LHT venues in Greater Boston, and the Cape and Islands would likely be most hard pressed. **Map 2.1** shows the share of LHT workers that are foreign-born in each region. Over 42 percent of the LHT workforce in Suffolk County is foreign-born, followed by nearly 29 percent of the LHT workforce in the region surrounding Boston, inclusive of Essex, Middlesex, and Norfolk counties. Yet tightening access to immigration and visas perhaps poses the greatest economic threat to the Cape and Islands. Although just 14 percent of LHT workers in the region are foreign-born, LHT is the region's economic driver. Much of the industry is also seasonal and, with the

MAP 2.1

Share of Foreign-Born LHT Workers by Region



region's aging population, heavily dependent on temporary foreign-born labor.

Wage and Salary Income, and Poverty Rates

Simply put, aggregate earnings in the LHT industry are low. Chapter 1, based on Bureau of Labor Statistics (BLS) data, showed that while the LHT industry is the third-largest employer in the state, it ranks eighth in the annual wages paid to its workers. The ACS data examined here bear out the finding that LHT workers are comparatively low paid. (Note, however, that ACS figures are self-reported and thus come in lower than aggregate income levels reported by the BLS.) **Figure 2.14** shows that LHT workers' self-reported median annual earnings are \$16,900, much less than half that of non-LHT workers, who bring home \$45,000 a year. LHT earnings are so low relative to other industries that they pull down median annual earnings across the entire economy to \$41,400. It should be noted, however, that these low comparative figures reflect

FIGURE 2.14

Median Annual Wage and Salary Income, LHT vs. Non-LHT vs. All

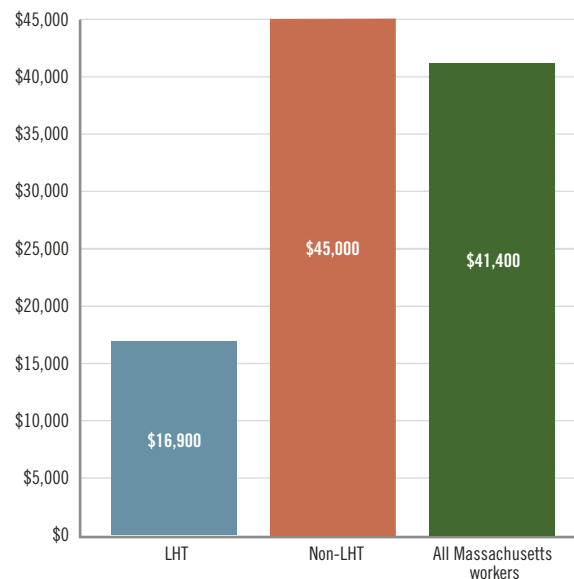
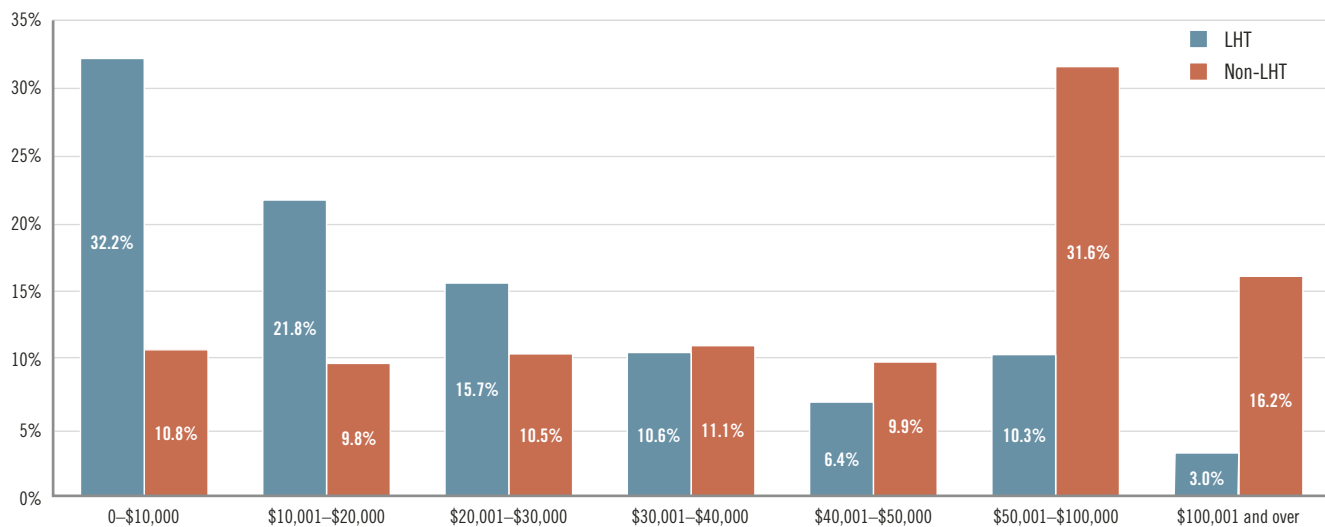


FIGURE 2.15

Wage and Salary Income, LHT vs. Non-LHT, 2016 (2017\$)



the larger percentage of part-time workers in the LHT industry.

In fact, the relationship between LHT employment concentration and average annual earnings is negatively correlated, as shown in **Figure 2.15**. The LHT workforce is more concentrated at the lower ends of the wage and salary income scale than the non-LHT workforce. Almost one-third of LHT workers earn less than \$10,000 per year, compared with 11 percent of non-LHT workers. At the upper end of the scale, 13 percent of LHT workers earn over \$50,000 a year, while 48 percent of non-LHT workers are in the upper-income bracket. In other words, the LHT industry is bottom heavy, while non-LHT industries are more top heavy.

A better gauge of LHT workers' economic well-being, however, can be derived through application of federal poverty guidelines, which are based not on individual wages but on household income.⁶ A household of one is considered to be in poverty if his or her income is \$12,140 or less; a household of four is considered to be in poverty if their joint income is \$24,600 or less. These measures take into account households in which, for example, one person is the principal breadwinner making a good salary while one or more others are working for much less to supplement that income. It is important to bear in mind, however, that federal poverty thresholds do

not account for local cost of living, which varies across the country and within the state. In Greater Boston particularly, where the cost of living is much higher than elsewhere, federal thresholds fail to capture many households living in poverty conditions.

Figure 2.16 shows that, based strictly on federal poverty guidelines, almost three times as many LHT workers (11%) are living in poverty as their non-LHT counterparts (4%).

Moving from the individual to the industry scale, **Table 2.1** shows the disproportionate concentration of LHT workers living in poor households. Overall, the LHT industry has a much higher concentration of workers in poverty than all other industries as well as the state average. Using the employment ratio calculation used to measure racial concentrations earlier in this chapter (in this case, the percent of workers in poverty in the LHT industry over the percent of all workers in poverty in Massachusetts), the LHT industry has over two and a quarter times the proportion of impoverished workers as the state average. In fact, 20 percent of all Massachusetts workers who are living in poverty work in the LHT industry.

There are also significant differences in poverty concentration among the LHT industry's subsectors. **Table 2.2** shows that poverty-level workers are overrepresented in every LHT subsector, though with

TABLE 2.1

Concentration of Workers in Poverty, LHT vs. Non-LHT

Percent of Federal Poverty Level	LHT workers	Non-LHT workers
Up to 100%	2.26	0.88
101% and over	0.94	1.01

TABLE 2.2

Concentration of Workers in Poverty by LHT Subsector

Percent of Federal Poverty Level	Museums & Heritage Tourism	Performing Arts, Spectator Sports & Large-Scale Events	Amusements & Recreation	Accommodation	Food & Beverage
50%	1.30	1.85	1.35	0.82	2.45
51 to 100%	1.29	1.09	1.39	2.25	2.81
101 to 150%	1.05	1.18	1.05	1.68	2.41
151% and over	0.98	0.97	0.98	0.93	0.85

notable variation. Two subsectors stand out: Food & Beverage and Accommodation employ twice as many workers at the lowest ends of the household earning scale as do employers in other industries.

Employment Type

The LHT industry has a large and disproportionate share of part-time work. The LHT vs. non-LHT

employment ratio for part-time workers is 1.86, indicating a significant concentration. **Figure 2.17** shows that nearly half of the LHT workforce is part-time, more than twice that of the non-LHT workforce. Yet it is also possible to make a more stable career in LHT, where 53 percent employees work full-time.

Part-time workers are distributed unevenly across the five industry subsectors, as shown in **Figure 2.18**. All

FIGURE 2.16

Percent of Workers in Poverty, LHT vs. Non-LHT

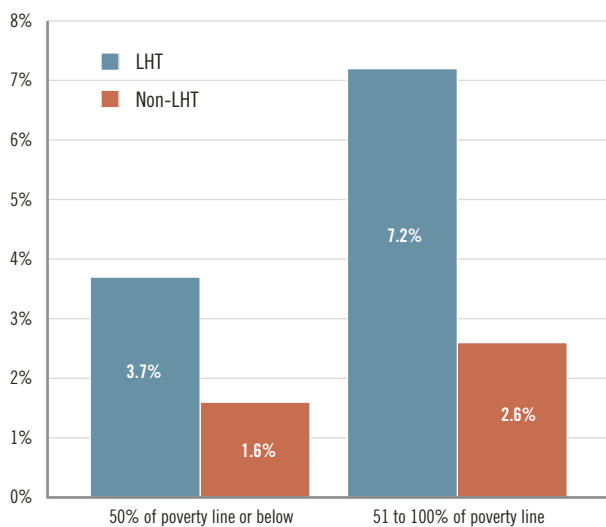


FIGURE 2.17

Full-Time vs. Part-Time Employment, LHT vs. Non-LHT

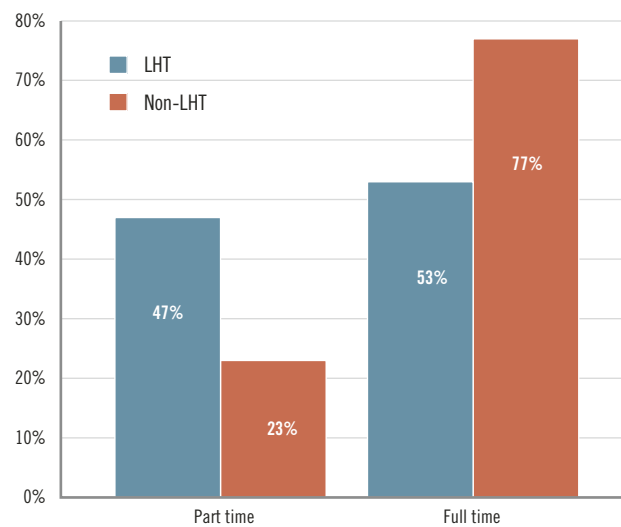
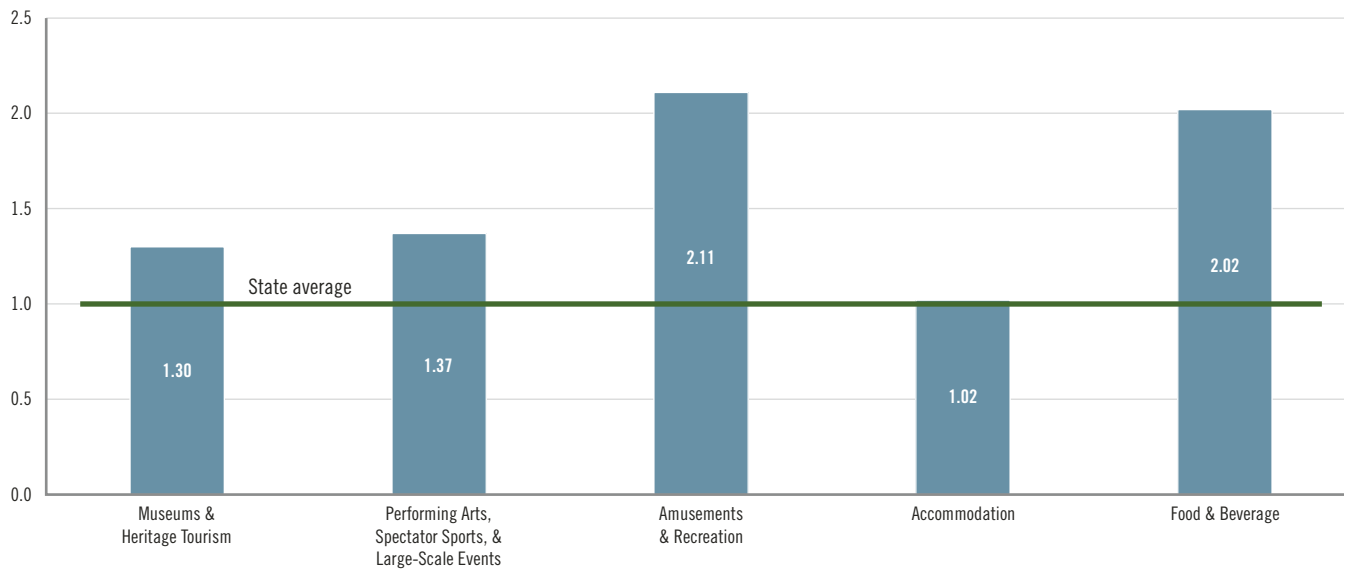


FIGURE 2.18

Part-Time Employment Ratio by LHT Subsector



but Accommodation have significant concentrations of part-time workers, but Amusements & Recreation and Food & Beverage are particularly dense.

Summary

The demographic and work-structure profile of the Massachusetts LHT industry has several attributes that distinguish it from other industries in the state. The LHT workforce, particularly in the Food & Beverage subsector, has significantly higher concentrations of the following employee characteristics:

- Young, or under 35
- Low or in-progress educational attainment
- Latino
- Foreign-born
- Low-income and in poverty
- Part-time employment

The LHT industry appears to attract a high number of workers who face employment challenges elsewhere in the Massachusetts economy. A disproportionate share of the labor force who have low skill levels, have need of flexible work arrangements or a first job, or are looking to establish themselves in the U.S. economy find work in the LHT industry. Some, though fewer than in other industries, make a full-time career of it.

Given the social and economic needs of the large LHT workforce, the industry faces distinct pressures while holding great potential to expand its contribution to the Massachusetts economy. We turn to these challenges and opportunities in the next chapters.

CHAPTER THREE

The Foreseeable Future: Workforce Projections and Training Capacity

The health of an industry—its capacity for growth—is mainly a function of demand for its services, but it is also determined by the strength and resilience of its workforce. Likewise, workforce strength is shaped by how well an industry attracts, trains, and provides career ladders for employees. In this chapter we find that, although the industry itself is growing by every standard metric, there is considerable room for improvement in its workforce training and advancement capacity, and its alignment with employment demand by sector and region.

First, we review and describe the LHT industry in terms of its central occupations—the specific roles and responsibilities taken on by its workers. We then provide growth projections for the entire industry as well as for its specific occupations for both new and “replacement” jobs (jobs that become available due to current workers permanently leaving the field), which constitute 90 percent of all projected annual employment opportunities to work in the LHT industry. This distinction is significant because while employment growth is an important measure of industry durability, both workforce-development specialists and potential employees scouting out the job market need to plan for the actual opportunities and types of jobs that will become available within an industry. We then discuss the alignment of required and realized skills in the LHT workforce, and whether or not the training requirements of various LHT occupations are being satisfied. Finally, we provide an analysis of currently available LHT education and training programs—a complicated system of tracked and non-tracked opportunities, some that are directly responsive to local labor market needs and some that are not. Nonetheless, our findings bear out the testimony of employers, revealed in our survey and interviews in the following chapter, that the industry’s training infrastructure does not fully meet their needs.

Top LHT Occupations

The LHT industry is unusual in many ways but perhaps most of all in its reach. It is truly all around us. Every time we stroll through the park, or order a beverage at the local coffee shop, or take a trip to the gym, we benefit from the services of LHT workers. Most people probably have a picture in their minds of LHT occupations, but the field’s real scope is likely broader than that. The LHT industry employs people across a wide variety of occupations, including cooks, servers, bartenders, hotel workers, and recreation attendants, but also event planners, museum staff, aestheticians and personal care workers, and groundskeepers, among others. The majority of these occupations are present in multiple, if not all, LHT subsectors. For example, people in occupations as varied as food preparation, buildings and grounds maintenance, and business and financial operations are employed across the entire LHT industry, from Food & Beverage to Museums & Heritage Tourism.

Table 3.1 lists the top 15 occupations in the LHT industry according to 2016 employment numbers provided by the Massachusetts Executive Office of Labor and Workforce Development (EOLWD). The total number of LHT employees in these occupations is estimated to be just below 260,000, representing nearly 70 percent of all workers employed in LHT.

Projected Opportunities to Work in LHT Occupations

In addition to tracking occupational staffing patterns, EOLWD develops industry and occupational employment projections. These data are useful and important for understanding an industry’s strength and future prospects. It should be noted that state employment projections estimate industry and occupational growth trends based on recent aggregate economic activity. They do not consider economic

TABLE 3.1

Top 15 LHT Occupations in Massachusetts by Employment, with Average Annual Wages, 2016 (2016\$)

Occupation Title	2016 Employment	Percent of Total MA LHT Employment	2016 Annual Average Wages
Food & Beverage Serving Workers except Bartenders, Waiters and Waitresses ¹	71,548	19.0%	\$25,930
Waiters and Waitresses	59,953	15.9%	\$30,280
Cooks, Restaurant	25,863	6.9%	\$30,910
First-Line Supervisors of Food Preparation and Serving Workers	18,238	4.8%	\$40,080
Bartenders	16,031	4.3%	\$30,490
Dishwashers	14,273	3.8%	\$26,380
Food Preparation Workers	12,576	3.3%	\$28,770
Dining Room and Cafeteria Attendants and Bartender Helpers	8,827	2.3%	\$27,550
Cashiers	7,744	2.1%	\$25,580
Cooks, Short Order	5,043	1.3%	#N/A
Amusement and Recreation Attendants	4,986	1.3%	\$27,650
General and Operations Managers	4,690	1.2%	\$133,950
Landscaping and Groundskeeping Workers	3,791	1.0%	\$36,410
Chefs and Head Cooks	3,478	0.9%	\$57,540
Maintenance and Repair Workers, General	2,450	0.7%	\$46,280

Source: Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections for select industries; Massachusetts Executive Office of Labor and Workforce Analysis, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections; UMDI calculations

development projects in the local development pipeline. With respect to the present study, this means that current state employment projections do not include information on casinos (or other potential developments). Beyond that, due to the existence of just one casino at the time the data were published, employment totals and projection estimates were suppressed by EOLWD. That said, the Mass Gaming Commission anticipates that there will be 7,500 jobs across three casinos (Plainridge Park, MGM Springfield, and Encore Boston Harbor) by 2020. It is difficult to know at this time whether these jobs will all be “new jobs” in the economy or if some will replace already existing jobs in the LHT industry. Regardless, while the casinos will undoubtedly have a significant impact on the state economy overall, anticipated total employment in the three casinos would represent a very small part (less than 2%) of the total current employment in LHT as defined in this study.

Further, from a workforce development perspective, industry leaders and public policy makers will need

to track “back fill” issues regionally in the LHT industry with things like the casinos. Meaning, there is potential in local labor markets for shortages for some occupations down the road. For example, competition for line cooks in Springfield could get intense when MGM comes online. These types of issues are difficult to measure at this point and lay beyond the scope of this study.

Focusing on EOLWD’s most recent short-term projections (2017 Q2 through 2019 Q2), we estimate that LHT employment will grow 4.2 percent, outpacing all other industries in the state at 2.7 percent. As impressive as these numbers are, however, they tell only part of the LHT employment story: the number of *new* jobs projected to open (in the 15 largest occupations) as a result of LHT industry growth. While such job creation due to economic growth reflects the industry’s overall health, it is not the main source of job openings in LHT. Most employment opportunities—in LHT and other industries—become available due to *replacement*, or already-existing jobs

that have been permanently vacated by previous employees. Replacement jobs do not reflect simple job turnover, as when, say, a waitress leaves one restaurant to take another server job down the street. Rather, replacement jobs open up when employees embark on different career paths in other industries, move out of state, retire, or leave the workforce for other reasons, making existing jobs opportunities available to others.² Adding these “replacement” jobs to the number of positions that will become available due to employment growth provides the total number of job openings projected for the industry.

In fact, we project that the vast majority of annual LHT job openings—90 percent—will become available as a result of replacement. **Figure 3.1** shows the breakdown between the annual projected growth in LHT based on EOLWD projections, or newly created jobs, vs. jobs that will become available through replacement.³ We estimate that more than 65,000 jobs will open annually in the LHT industry, with almost 6,500 due to growth and over 59,000 due to permanent turnover. Overall, approximately 14 percent, or one in seven, job openings annually in Massachusetts will be in LHT.

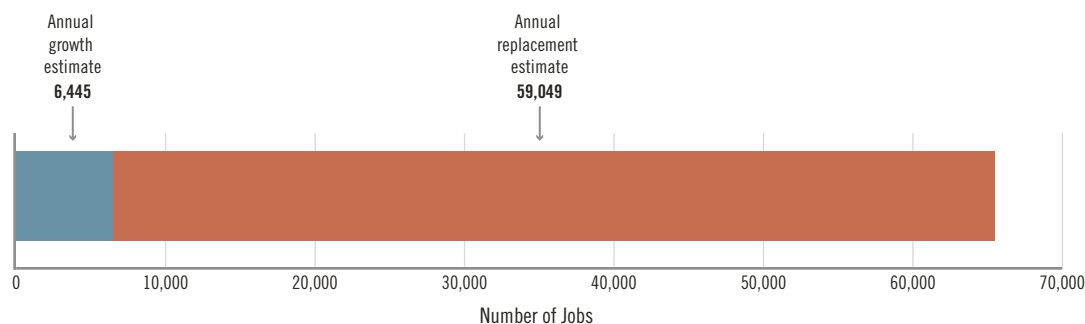
Given what we know about the LHT workforce from Chapter 2, its employees are often young, foreign-born, flexible, and occupationally transitional. Consistent with this finding, the LHT industry is particularly prone to workforce turnover, and

therefore a multitude of replacement job openings. In fact, four of the occupations with the most annual replacement openings across all industries statewide are in LHT: Food and Beverage Serving Workers except Bartenders, Waiters, and Waitresses; Waiters and Waitresses; Restaurant Cooks; and Landscaping and Groundskeeping Workers.

As we discussed earlier in this report, occupational opportunities in the LHT industry tend to require limited levels of education and training. For example, as we saw in our workforce analysis in Chapter 2, over 75 percent of workers in LHT have less than a bachelor’s degree, compared with just over half of the non-LHT workforce. Unsurprisingly, our analysis of future openings in the industry demonstrates that opportunities in LHT will be concentrated in low-skill occupations. Leveraging EOLWD data on typical educational requirements for occupational titles, **Figure 3.2** shows that 80 percent of estimated annual openings in the industry do not require any formal educational credentials whatsoever. About 17 percent of job openings require a high school diploma. Less than 3 percent of industry openings require a bachelor’s degree or higher. This signals that most of the training needs for the industry, which we will explore in greater detail later in this chapter, fall on those providing short-term and on-the-job training such as in-house training or industry-specific programming.

FIGURE 3.1

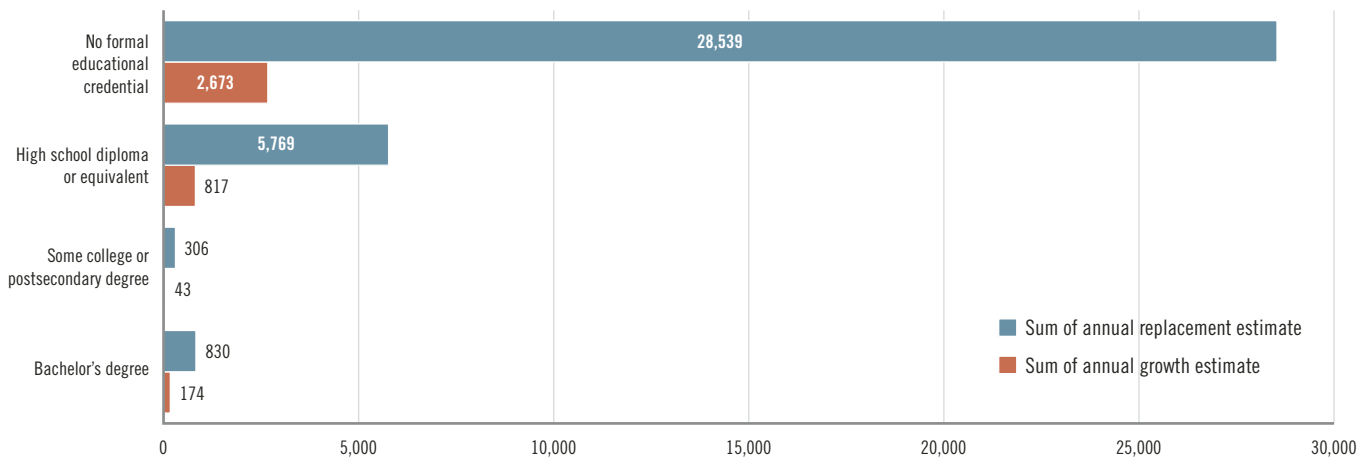
LHT Openings: Annual Projected Growth vs. Replacement



Source: Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections for select industries; Massachusetts Executive Office of Labor and Workforce Analysis, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections; UMDI calculations

FIGURE 3.2

LHT Occupations: Annual Projected Openings by Educational Requirements



Source: Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections for select industries; Massachusetts Executive Office of Labor and Workforce Analysis, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections; UMDI calculations

LHT Skills Gap: An Over- and Under-Educated Workforce

Unlike many industries, particularly those that require STEM-related skills, LHT overall is not much troubled by a “skills gap” as commonly understood. The term typically refers to employer claims that potential workers lack the necessary skills to fill available openings. As we will see, the lion’s share of projected LHT job openings are “low skill” and require little to no education. If anything, in most LHT occupations, a significant share of workers are actually overeducated for their jobs, or are currently enrolled in school. A skills gap, however, does plague parts of the industry, particularly in culinary fields in which most occupations require middle-skill training.⁴

Figure 3.3, listing the top 25 occupations in LHT by projected number of annual openings over the next three years, illuminates three prevailing conditions in the industry.

1. The most significant LHT occupations by employment, as shown in Table 3.1, are also projected to see the greatest number of job openings, which reflects the role that turnover plays in the universe of job opportunities in the LHT industry.

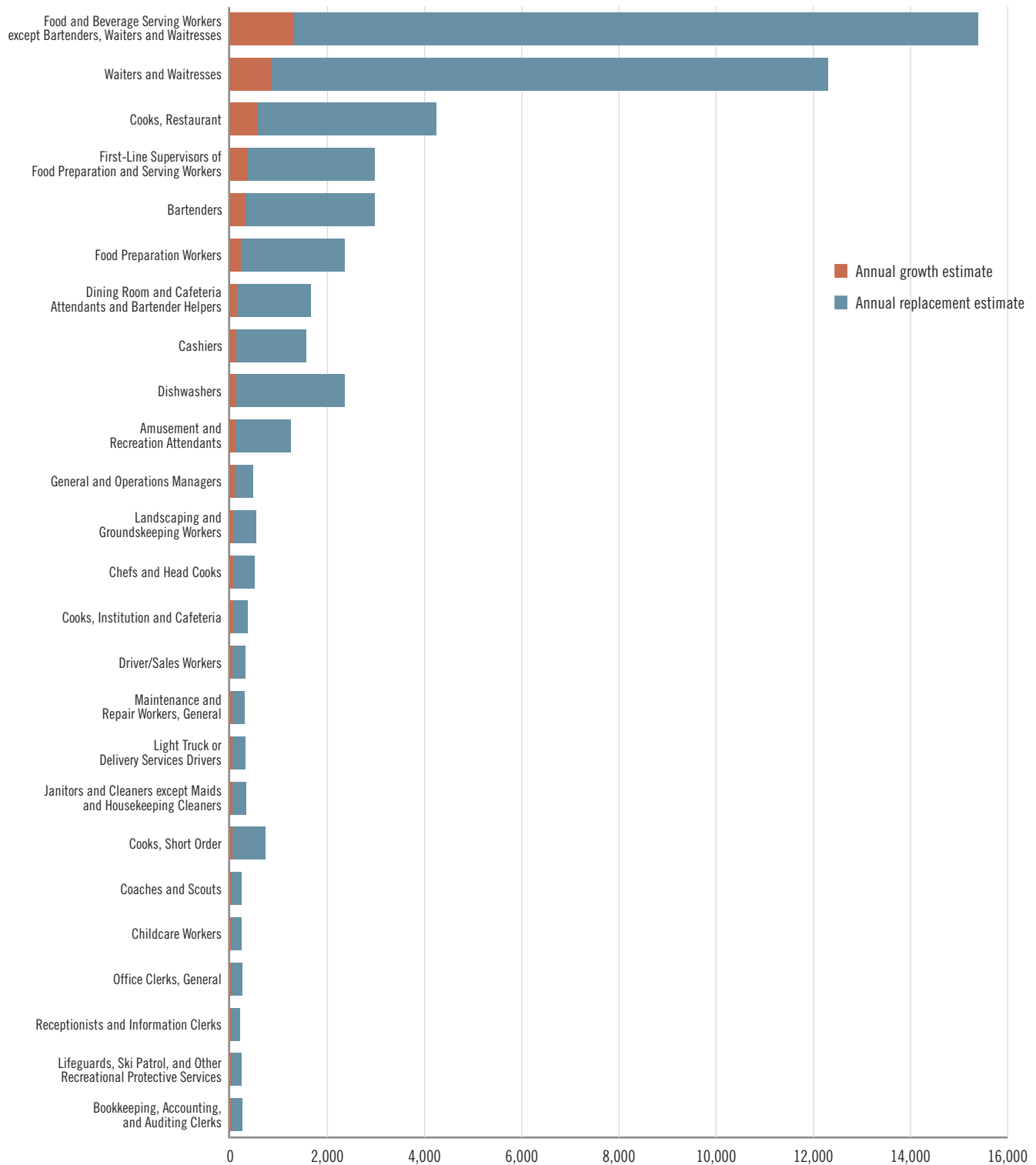
2. The greatest number of LHT job openings are far and away found in Food & Beverage, and particularly in food preparation and serving positions, such as Cooks; Bartenders; and Waiters and Waitresses. Numerous occupational openings are projected for Amusement and Recreation Attendants as well as Landscaping and Groundskeeping Workers.
3. While significant growth is forecast in the LHT industry annually over the next three years, the vast majority of job opportunities will come about through replacement of existing jobs rather than through newly created ones.

These takeaways translate into a unique set of pressures on LHT employers, as well as on the industry’s workforce training infrastructure. In the first place, employers must have an adequate labor force pipeline to meet their high-churning employment needs. In the face of unusually high job turnover, LHT employers must be able to align skills and responsibilities, and to do so continuously. As a result, most LHT job skills must also be easy to digest and master in a short period of time, and preferably translate across several industry subsectors.

To assess skill alignment within the top 25 largest LHT occupations in Massachusetts, **Table 3.2** serves as a job

FIGURE 3.3

Total Openings in Top 25 LHT Occupations: Growth and Replacement (by Number of Net New Jobs)



Source: Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections for select industries; Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections; UMDI calculations

TABLE 3.2

O*Net Job Zone Legend

Job Zone	Name	Education
1	Job Zone One: Little or No Preparation Needed	Some of these occupations may require a high school diploma or GED certificate.
2	Job Zone Two: Some Preparation Needed	These occupations usually require a high school diploma.
3	Job Zone Three: Medium Preparation Needed	Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
4	Job Zone Four: Considerable Preparation Needed	Most of these occupations require a four-year bachelor's degree, but some do not.
5	Job Zone Five: Extensive Preparation Needed	Most of these occupations require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).

Source: Bureau of Labor Statistics, O*Net OnLine

zone legend for **Table 3.3**, which compares several data points from different sources:

- Percentage of workers with a bachelor's degree and higher (from ACS);
- Level of preparation necessary to fulfill the responsibilities of each job type (from the BLS's Occupational Information Network (O*Net);⁵ and
- Percentage of workers in the position currently attending school (from ACS).

Note that the higher the job zone, the more education and training the position requires.

Of the top 25 LHT occupations by number of annual openings, 10 are directly related to food services; just two of these 10 occupations—Chefs and Head Cooks, along with First-Line Supervisors of Food Preparation and Serving Workers—require a high school degree or equivalent, according to EOLWD. In fact, according to O*Net, of these food services jobs, just Chefs and Head Cooks need any kind of specialized training. Only two occupations require “considerable preparation”: General and Operations Managers and Coaches and Scouts. Twelve out of 25 jobs on this list have no formal educational requirements, and just three require more than a high school diploma. While the O*Net data shows higher educational requirements for certain occupations than the EOLWD data would suggest, the lion's share of jobs in the industry require little or no preparation.

According to ACS data, Massachusetts workers in LHT occupations are more than meeting the minimum educational requirements suggested by both EOLWD and O*Net. In those occupations that require a bachelor's degree, half of all workers have a B.A. or higher. One-third of Bookkeeping, Accounting and Auditing Clerks, which EOLWD indicates requires some college, also have a B.A. or higher.

The remaining occupations in the list of top 25 by openings do not require any significant educational training. There is, however, an observable skill markup in some occupations. Bartenders, for example, are not required to have any formal educational credential, but more than one in four have a college degree. The same is true for almost one in five Waiters and Waitresses; Landscaping and Groundskeeping Workers; and Amusement and Recreation Attendants. Office Clerks do not need more than a high school diploma according to EOLWD and O*Net, but almost 30 percent have earned a B.A.

Across the Massachusetts economy, roughly 25 percent of workers are currently enrolled in school. But as we look at the list of LHT occupations by annual openings, several have very high concentrations of students. For instance, approximately half of all Massachusetts LHT workers employed as Dining Room and Cafeteria Attendants and Bartender Helpers; Cashiers; Amusement and Recreation Attendants; Childcare Workers; Coaches and Scouts; and Receptionists and Information Clerks are currently students;

TABLE 3.3

Educational Attainment and Required Occupational Credentials for Top 25 LHT Occupations by Projected Annual Openings

Occupation Title	Total Openings	Job Zone (O*Net)	% BA (ACS)	% Attending School	% HS Student	% College or Grad Student
Food & Beverage Serving Workers except Bartenders, Waiters and Waitresses	15,390	1	6.7%	51.9%	29.2%	22.7%
Waiters and Waitresses	12,311	1	17.4%	36.3%	7.8%	28.5%
Cooks, Restaurant*	4,243	2	8.9%	15.9%	5.8%	10.1%
Bartenders	2,967	2	25.0%	16.2%	0.2%	16.0%
First-Line Supervisors of Food Preparation and Serving Workers	2,966	2	27.5%	15.4%	2.2%	13.2%
Dishwashers	2,351	1	6.6%	26.2%	14.0%	12.2%
Food Preparation Workers	2,349	1	9.8%	37.4%	16.0%	21.4%
Dining Room and Cafeteria Attendants and Bartender Helpers*	1,653	1	5.7%	54.5%	32.3%	22.2%
Cashiers*	1,563	1	9.0%	47.3%	21.2%	26.1%
Amusement and Recreation Attendants*	1,243	1	18.1%	55.8%	24.2%	31.6%
Cooks, Short Order*	726	1	8.9%	15.9%	5.8%	10.1%
Landscaping and Groundskeeping Workers	531	1	16.2%	24.1%	5.3%	18.9%
Chefs and Head Cooks	500	3	13.0%	6.5%	0.6%	6.0%
General and Operations Managers	469	4	50.2%	3.3%	0.0%	3.3%
Cooks, Institution and Cafeteria*	353	2	8.9%	15.9%	5.8%	10.1%
Janitors and Cleaners except Maids and Housekeeping Cleaners*	322	2	10.1%	13.9%	6.6%	7.3%
Driver/Sales Workers*	304	2	14.4%	24.0%	6.0%	17.9%
Light Truck or Delivery Services Drivers*	303	2	14.4%	24.0%	6.0%	17.9%
Maintenance and Repair Workers, General	284	3	10.9%	2.5%	0.0%	2.5%
Office Clerks, General	239	2	27.2%	24.3%	9.2%	15.2%
Bookkeeping, Accounting, and Auditing Clerks	239	3	31.3%	1.1%	0.0%	1.1%
Coaches and Scouts*	229	4	47.2%	43.2%	19.6%	23.6%
Lifeguards, Ski Patrol, and Other Recreational Protective Services*	226	2	9.4%	86.3%	40.2%	46.1%
Childcare Workers	222	2	14.3%	53.9%	31.7%	22.2%
Receptionists and Information Clerks	207	2	16.9%	47.6%	16.1%	31.5%

*Due to ACS data limitations with respect to aggregating SOC data, percent of BA or higher and percent in school statistics reflect five-digit or higher SOC code occupational grouping.

Source: Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016–2018 Short-Term Industry Staffing Pattern Projections; Bureau of Labor Statistics, O*Net OnLine; American Community Survey 2012–2016 5-year data via IPUMS-USA; UMDI calculations

almost 90 percent of those working as Lifeguards, Ski Patrol, and Other Recreational Protective Services are currently students. The same is true for about one-third of Food Preparation Workers; Dishwashers; and the most numerous LHT jobs—Waiters and Waitresses. The fact of the matter is that many of these professions are held by high school students—further underscoring the transience and low skill requirements in this industry.

Workforce Training Capacity

Up to now, this chapter has focused on occupational opportunities in the LHT industry that are projected to come about through either economic growth or permanent employee turnover. With high turnover and replacement rates and predominately limited job training and educational requirements, the LHT industry does not suffer from widespread “skills gap” issues as they are popularly understood. In fact, a sizeable number of workers in the LHT industry have education levels higher than is typically “required” for LHT occupations. Many of these workers, too, are still enrolled in school, with no long-term plans for staying in either their occupations or the industry, which contributes heavily to LHT’s high turnover rates. A sizeable number of low-skill workers are also foreign-born and in need of so-called soft skills (such as communication, resume writing, and interviewing proficiency), English language instruction, and citizenship application assistance, which represents a different kind of skills gap. Altogether, we project nearly 32,500 annual job openings in culinary-related work requiring less than a high school education for which many immigrants would be otherwise qualified with this additional training. As we will see in the following chapter, however, the employers we surveyed and interviewed say that it has become extremely difficult to find appropriately skilled staff for culinary work, from chefs and cooks to first-line food prep supervisors. There are a total of 8,062 job openings for skilled culinary-related occupations requiring at least a high school diploma, which are identified in **Table 3.4**.

A number of factors account for the shortage of skilled culinary workers relative to employer need. Part of the trouble lies with high and growing employment demand, as demonstrated in Chapter 1. Inadequate labor supply is also a significant cause for the culinary

TABLE 3.4

Culinary-Related Job Openings

Occupation	Job Openings	O*Net Job Zone
Cooks, Restaurants	4,243	2
First-Line Supervisors of Food Preparation and Serving Workers	2,966	2
Chefs and Head Cooks	500	3
Cooks, Institution and Cafeteria	353	2

Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment Statistics (OES) DUA 2016-2018 Short-Term Industry Staffing Pattern Projections; Bureau of Labor Statistics, O*Net Online; UMDI calculations

skills gap, however, and for several reasons. The state’s high cost of living, particularly in Greater Boston, combined with the low average pay for these jobs, drives people out of culinary work or does not attract them in the first place. Recent federal restrictions on foreign-born workers, who comprise a significant share of the LHT workforce, also contribute to reduced labor availability. A good number of these jobs are seasonal in nature, most notably in the Cape and Islands, combining housing challenges and unpredictable tip-reliant compensation. And then culinary training can be expensive; in recent years, several regional schools have closed due to plunging enrollments.⁶

For this section, we sought to understand the LHT workforce development system in the state. While it is tempting to want to talk about workforce development for an industry as a “system,” the reality is that there are a variety of different types of occupational and skill training activities in the workforce development arena—some that are specifically responsive and tailored to local labor market needs and some that are not (e.g., most four-year college programs are not developed solely with local labor market needs in mind nor are their graduates tethered to the local labor market after graduation). Likewise, some of these training activities are tracked and measurable in terms of enrollments or graduates, such as secondary and postsecondary educational institutions receiving state or federal funding. Others, however, are not tracked or measured much at all, such as nonprofit and in-house training programs, which are in great abundance in the LHT universe. Again, this is not unique to the LHT industry, but it does underscore some of the challenges of aligning the workforce skills with industry labor demand, made even more difficult by the industry’s extremely high turnover rates.

To develop an overview of educational and training opportunities for the LHT industry in Massachusetts, we combined an analysis of available secondary data on academic offerings (most notably from the Massachusetts Department of Elementary and Secondary Education (DESE) and Department of Higher Education), a literature review and Internet research on available programming around the state, and a set of key informant interviews and meetings with various stakeholders related to the LHT training universe, including faculty at UMass Amherst's Hospitality and Tourism Management Department in the Isenberg School of Management. Also highly useful was our employer survey, covered in the next chapter. The survey itself told us a great deal about employer experiences, in the aggregate, with workforce training and educational programs, and the extent to which they met their needs for appropriately skilled workers. Anonymous written comments provided voluntarily in the survey told us a great deal more, with more detail. Finally, our key stakeholder and employer interviews were indispensable to this part of the study: We probed our interview subjects about workforce training and capacity in their subsectors and regions of the state, among many other subjects, and they were remarkably forthcoming.

Our analysis found a patchwork system of various types of academic (vocational technical high school, comprehensive high schools offering vocational programming in LHT, community colleges, four-year institutions, and graduate programs) and non-academic programs (for-profit and nonprofit industry and occupational training, including that provided by trade association foundations). In addition, the high concentration of low-skill occupations in the industry means that a large amount of training in the sector occurs in different forms of in-house and on-the-job training, catering mostly to occupations in Food & Beverage and hospitality services.

In **Table 3.5** we developed a typology for understanding the different types of educational and job training programs in the LHT industry across Massachusetts. These range from traditional secondary and postsecondary educational institutions to industry-specific programs and certificates. After the table we provide an overview of each type of training activity in the state, with examples of specific programs and their requirements.

Community Colleges

Sometimes grouped together with private two-year colleges under the heading “junior colleges,” these state and federally supported non-residential colleges are suited to students on a tight budget who want to get into the skilled workforce quickly or hope to eventually transfer to more expensive four-year institutions. The only requirements for admission are a high school diploma or GED (General Equivalency Development) test credentials. Community colleges offer full-time, part-time, evening, and online coursework, enabling employed students the flexibility to accommodate their jobs. In the 2016–2017 academic year, full-time in-state tuition and fees ran between approximately \$5,200 and \$6,800, depending on the school. Out-of-state costs were roughly two to three times that much.⁷

As of 2017, 14 of the state's 15 two-year community colleges offered associate's degrees or certificates in LHT-related fields. Where a two-year associate of science degree (A.S.) prepares students for management careers and related career-ladders, certificates provide working knowledge in a specific field, and are geared to both students preparing for floor-level employment and adults interested in continuing education. Most associate's degrees are in specific concentrations within hospitality management. Bristol Community College in Fall River, for example, offers an A.S. in Hospitality Management with a choice of concentration in Casino, Food Service, Hotel, or Tourism. The college also offers an A.S. in Business Administration (Leisure Services Management—Sport Concentration). Middlesex Community College in Bedford offers both an associate's degree and a certificate in Hospitality Management, and also permits a concentration in Culinary Arts in either if students wish to focus on that field. Others offer degrees or certificates in areas such as Hotel/Restaurant Management and Hospitality and Tourism.

Community colleges can also be outfitted to work hand-in-glove with employers who have specific, often local staffing needs. As it prepares to open a casino complex in Springfield, MGM Resorts International is one such employer. It plans to hire around 3,000 people in a variety of fields, some of which have virtually no local educational programs in place to support them. The employment volume is particularly pressing given that MGM is obliged to hire 35 percent of its workforce

TABLE 3.5

Massachusetts Educational Institutions and Other Programs Offering LHT Training

Type of Institution or Program	Degrees/Fields of Study or Programs with Examples
Community Colleges	<p>TWO-YEAR AS DEGREES that can be applied for credit in four-year programs elsewhere Field Examples: Culinary Arts, Baking and Pastry Arts, Hospitality and Tourism Management, Leisure Services Management, Business Administration with concentration in one of a variety of fields</p> <p>CERTIFICATE PROGRAMS, requiring up to a year of study that can often be applied as credit in longer programs. Field Examples: Culinary Arts, Hospitality Management, Hotel/Restaurant Management</p>
Colleges and Universities	<p>FOUR-YEAR BS DEGREES in Management or Business Administration Field Examples: Culinary, Hospitality and Communications, Hospitality and Tourism, Sports, Recreation, Event Planning, Resort and Casino</p> <p>MA AND AS DEGREES, though fewer in number, are also available at some schools. Field Examples: see above</p> <p>PHD DEGREE in Hotel Management offered at UMass Amherst, in preparation for an academic career in research, teaching, and consulting</p> <p>CERTIFICATE IN CULINARY ARTS offered at the BU Metro College</p>
Public High Schools	<p>These include both REGIONAL VOCATIONAL TECHNICAL HIGH SCHOOLS and COMPREHENSIVE HIGH SCHOOLS WITH VOCATIONAL TECHNICAL PROGRAMS.</p> <p>OUTCOMES: High school diplomas, with LHT concentration</p> <p>Fields: Culinary Arts, Hospitality Management</p>
Training Programs	<p>A COMBINATION OF OFFERINGS BY NONPROFITS, FOR-PROFITS, TRADE ASSOCIATIONS, AND GOVERNMENT PROVIDERS. Most of these are geared toward people who are vulnerable to chronic un- and under-employment.</p> <p>Examples: Community Servings (nonprofit) • Future Chefs (nonprofit) • BEST Corp (nonprofit) • SnapChef (for-profit) • Mass Lodging Association Education Foundation (trade association) • Mass Restaurant Association Education Foundation (trade association) • Job Corps (federal government)</p>

UMass Donahue Institute

from the city of Springfield and must have local training infrastructure in place to do so. In addition, MGM needs not only hundreds of employees with culinary and hospitality training, but also hundreds more with specialized training in gaming skills in a state that only recently legalized gambling. MGM expects to hire 800 Food & Beverage workers, 550 dealers, and an assortment of hospitality, marketing, spa, and security professionals by the time it opens later this year.

To meet these challenges, MGM partnered with Holyoke Community College (HCC) and Springfield Technical Community College (STCC) in several critical ways. It gave HCC \$500,000 to expand its culinary school and renovate its facilities, now renamed HCC MGM Culinary Arts Institute. Both community colleges are also collaborating with MGM in the development of its gaming school,

providing administrative scaffolding (personnel support, funding-stream coordination, scholarship administration) for the Massachusetts Casino Career Training Institute. The dealer school is part of a statewide consortium established with the legalization of gaming in 2011 that includes Fall River's Bristol Community College, which also offers gaming instruction. At the school, sited in MGM Springfield's administrative offices with skilled instructors and equipment provided by MGM, students learn the skill of dealing in poker and table games such as roulette, blackjack, craps, and mini baccarat, along with the art of entertaining tableside conversation. Classes run from 130 to 200 hours and cost in the neighborhood of \$500 each; after successfully completing two courses, students can apply to MGM and, if hired, course expenses are reimbursed.⁸

Once applicants are hired—by MGM and other large brands—they undergo formal in-house training. Through on-property and online instruction, new employees learn proper brand representation and practices, safety methods, and position-specific knowledge.

Four-Year Colleges and Universities

Eleven of the Commonwealth's more than 70 colleges and universities that grant bachelor's or higher level degrees offer LHT concentrations. Most of these are bachelor's programs, with a sprinkling of associate's or graduate level offerings. Boston University's Metropolitan College offers a certificate in culinary arts that is somewhat legendary: The program was founded by Julia Child and Jacques Pépin in 1989. Two—UMass Amherst and Boston University—offer Ph.D. programs, which prepare students for careers in academic research and teaching or private consulting, and should be considered separate from the state's LHT workforce education and training system because these students are being prepared for opportunities in a much broader labor market.

Bachelor of Science (B.S.) degrees in LHT are awarded in management or business administration, with some specific sectoral concentrations. Lasell College, for example, offers B.S. degrees in Hospitality Management, Event Management, and Resort and Casino Management. Students acquire general administrative knowledge in areas such as accounting, finance, operations and information management, and business economics, along with meeting core requirements in science, math, and the liberal arts. Through electives, students gain specialized knowledge in their field. A student pursuing a B.S. in Event Management might take additional courses in trade show management or wedding planning, or higher level courses in finance or facility operations. These programs usually require some form of experiential learning such as internships, site visits, capstone projects that analyze and propose solutions for a particular problem facing a specific LHT venue, or some other type of "real world" exposure.

These undergraduate degrees prepare students for executive-level positions in their sectoral concentration, although the skills and knowledge they acquire can be transferable to other industries. Graduates with a B.S. in, say, Hospitality and Communication, which is offered at Boston University,

are also equipped to work in food service management or to jump over into features journalism or public relations in some other field. The same is true for graduates of the several master's degree programs offered throughout the state, although these programs usually appeal to those already in the industry who are looking to either ascend the corporate ladder or enter Ph.D. programs.

As with all college programs, on-campus bachelor's degree programs in LHT are not cheap. Academic-year tuition and fees alone range between about \$18,000 (Salem State University) and \$53,000 (Boston University). Most schools with residence facilities require freshmen (with some exemptions) to purchase room and board, which can run anywhere from \$12,000 to \$16,000 a year. Part-time and online credits are less costly.

Table 3.6 shows that a total of 1,044 LHT-related degrees, certificates, or awards—demonstrations of successfully completed class work—were conferred by the Commonwealth's postsecondary educational institutions across an array of concentrations in 2016. The majority of bachelor's degrees (389) were in Hospitality or Hotel Management, while most culinary degrees were conferred on the associate's level. Surprisingly, all master's degrees (36) were in Culinary Arts and Related Services.

We do not have reliable comprehensive data on placement. But we do know, thanks to departmental data sharing, that in 2017 the UMass Amherst's Hotel and Tourism Management program graduated 150 students with bachelor's degrees. Just over half found jobs in Massachusetts, while 4.1 percent found work in other New England states.

Public High Schools with Vocational Technical Programming

Most jobs within the LHT industry do not require formal educational credentials, and very few require a college degree. Many workers, however, receive LHT training as part of their secondary education in high school, at either a regional vocational technical high school or a comprehensive (or traditional) high school with a vocational programming component. In all, there are 74 such high schools across the state.⁹ These LHT programs introduce students to the culinary and hospitality fields, usually midway through their high school years. In 2016–2017, total enrollments in

TABLE 3.6

2016 Massachusetts Higher Education Degrees, Awards, and Certificates Conferred by Field and Level

	Award of less than 1 academic year	Award of at least 1 but less than 2 academic years	Certificates below the baccalaureate level	Associate's degree	Bachelor's degree	Master's degree	Total Conferrals
Hospitality Administration/Management, General	3	0	3	50	384	0	440
Tourism and Travel Services Management	0	0	0	1	20	0	21
Hotel/Motel Administration/Management	13	0	13	11	5	0	42
Restaurant/Food Services Management	7	0	7	5	0	0	19
Resort Management	0	0	0	0	1	0	1
Meeting and Event Planning	3	0	3	0	6	0	12
Hospitality Administration/Management, Other	2	2	4	29	0	0	37
Culinary Arts and Related Services	35	91	126	176	8	36	472
Total	63	93	156	272	424	36	1044

Source: IPEDS 2015-2016 Final Data on Conferrals by CIP Field and Degree Level for all degree-granting higher education institutions in Massachusetts

LHT programs across all grades stood at about 3,900, with nearly all (96%) in culinary arts. A little less than one-third of these students, approximately 1,200, graduate each year with LHT training.

Culinary programs offer real-life experience in a commercial kitchen or dining room. Most schools build these facilities on campus, and many sell their services to the public, such as catering or running a café. Students are taught not only cooking, service, and restaurant management skills, but also industry-standard sanitation and safety procedures. For young people just starting out, this experience is essential to many culinary job postings, even for lower-level floor management and line cooks, requiring at least a year of experience elsewhere.

Some examples of high school culinary arts programs include:

- The Lower Pioneer Valley Career and Technical Education Center in West Springfield serves seven high schools in Western Mass. Here, students spend half a day at their regular district and half a day at the center. The school's culinary arts program runs its own commercial kitchen and two restaurants, one for breakfast and one for lunch. Students are taught industry standards set by organizations

such as the American Culinary Federation and the Federation of Dining Room Professionals. Through "articulation agreements" with local community colleges and culinary institutes, students have the opportunity to continue their education after graduation.

- Most regional vocational high schools, such as Blackstone Valley Regional Vocational High School in Upton, offer vocational training such as that outlined above along with the standard high school curriculum in the same facility.
- The Somerville High School Culinary Arts and Baking Program teaches basic food preparation as well as marketing and operational skills applicable to wholesale food and restaurant services. It also runs a small restaurant, a baked-goods store, and a butcher shop.

High school hospitality programs are much fewer in number but also provide valuable training, mainly of an administrative nature. These courses cover subjects such as customer relations, bookkeeping, and reservation processing. Many programs also include culinary arts coursework, since Food & Beverage services are usually entwined with the hospitality industry. Internships at hotels and other hospitality

businesses are vital to these programs, as are field trips and event planning experiences. Hospitality students may be involved, for example, in preparing events such as job fairs or conferences held at their schools.

Some examples of high school hospitality programs include:

- The Milford High School Hospitality and Tourism Management Program is the first such program at a non-vocational technical public high school to be approved by the state. Students participate in a two-year program that includes internships, event planning, and site visits to nearby businesses. As with all vocational-technical programs in Massachusetts, students must also complete standard-curriculum course work.
- The Worcester Technical High School Hotel and Tourism Management Program provides training, primarily for the hotel industry, in four key modules: Principles of Hospitality & Tourism, Hospitality & Tourism Management, Hospitality Marketing, and Work-Based Learning Experience. Students are trained in customer service, business management, sales and marketing, safety and security practices, and tourism. Students work alongside culinary arts students and share management of the school's public restaurant. On-the-job experience is required through local internships with local hotels and the DCU Center, with rotating assignments throughout the facility. Online course work is also available.

In 2015, a DESE survey found that 68 percent of culinary and hospitality graduates planned to pursue some type of additional education, but only 25 percent planned to do so in an LHT field.¹⁰ Those who planned to go directly to work were more likely to stick with culinary arts or hospitality: 36 percent. In other words, although a large number of students graduate each year from high school culinary and hospitality programs, this survey showed that roughly a third or fewer planned to continue their education or work in the culinary or hospitality fields. In this way, the high school-to-LHT worker pipeline is far less dependable than the college-to-LHT pipeline for bringing workers into the industry. It bears repeating, however, that the majority of leisure and hospitality positions require no previous educational experience, and workers can be trained on the job. In fact, thousands of high school students throughout the state find employment in

the LHT industry each year regardless of their formal class work, even if careers in the industry are not yet available to them.

Training Programs

Most LHT workforce training programs are offered by nonprofits, including community-based associations and advocacy groups, labor unions, and trade associations, often with private support, state funding, or public-private funding partnerships. They are most commonly geared toward people who are vulnerable to chronic under- and unemployment. Those who are low-income, under-educated, low-skilled, or are emerging from conditions of homelessness, incarceration, or other forms of personal instability often have difficulty finding and maintaining employment that pays a living wage. Nonprofit training programs are offered free of charge in locations accessible to potential trainees, and operate on a flexible schedule. Many offer additional “wraparound services,” such as general job-readiness training, life coaching, housing assistance services, and other social service interventions in addition to industry-specific skills training.

Some of the most popular training programs offered by Massachusetts nonprofits are LHT-specific, preparing trainees for employment in food services (such as culinary, catering, and cafeteria operations) and hotel and hospitality work, including reception and housekeeping. These occupations are especially well-suited to socially vulnerable people entering or re-entering the workforce because they a) do not require extensive training and b) are the source of significant employment opportunities in the state. By most standards, these are “good jobs,” and the training programs offered by nonprofits are important points of entry for many workers into the LHT industry.

More than two dozen nonprofit workforce development programs operate throughout the state. They include:

- The New England Center for Arts and Technology (NECAT), in Boston's Roxbury neighborhood, which offers a free 16-week culinary training program. Participants receive hands-on instruction, access to paid work opportunities, life skills training such as resume writing assistance and time management coaching, and job search services.

- Among the several training programs offered by Community Work Services in Boston are three hospitality programs: Introduction to Food Arts, Food Arts Careers certificate program, and “At Your Service” for those looking to enter hospitality occupations and specialize in reception or front-desk administration.
- Pine Street Inn is a homeless shelter and transitional housing provider in Boston that offers job training in food services and housekeeping. Both programs are eight weeks long. The Food Service Training Program trains 100 participants annually. They receive both classroom and on-the-job training in the staff cafeteria and through the organization’s catering services. The Hospitality Program trains janitors and housekeepers in maintenance and safe-handling skills.
- Boston Education, Skills & Training (BEST) is affiliated with Unite Here! Local 26, which represents employees working primarily in hotels, but also in food service, airport, and gaming occupations. BEST offers training in hospitality, banquet service, culinary, and food safety, and classes for foreign-born workers—English for Hospitality and Citizenship Prep (among others) for currently employed union members. It also offers pre-employment training in hotel housekeeping and pre-apprenticeship and apprenticeship programs for non-members. The apprenticeship is a six-week, full-time program that includes training in both hotels and classrooms. Many graduates go on to full-time employment with high-wage employers and union partners.

Additional nonprofit organizations offering LHT training programming include The Salvation Army Kroc Corps Community Center, Future Chefs, Commonwealth Kitchen, X-Cel Education, Haley House, and Project Place.

Other Program Types

FOR-PROFIT ORGANIZATIONS

For-profit training programs are also available. For example, SnapChef offers culinary training and job placement services, with locations in Dorchester, Worcester, Springfield, and Cranston, Rhode Island, with an additional location soon opening in Gloucester. The program, which is free of charge, is funded by hospitality and food service businesses—including large corporate entities such as Sodexo—looking to ensure that enough workers are in the culinary pipeline for hire. The program provides culinary and food safety training, helps participants secure apprenticeships, and offers transportation to and from training sessions.

INDUSTRY TRADE ASSOCIATIONS

Trade associations also offer training through their nonprofit educational foundations. The Mass Lodging Association Education Foundation provides training and internships for high school, college, and workers from underrepresented populations, including a course in English for Speakers of Other Languages. The Mass Restaurant Association Education Foundation offers ProStart, a two-year high school culinary arts program; an online Food Handlers’ course, leading to certification with the national organization’s ServSafe Food & Beverage safety program; and a continuing education program for owners and operators.

GOVERNMENT

While not offering direct training programs in LHT, the Commonwealth of Massachusetts supports a Workforce Training Fund Program that awards grants to specific employers across all industries. These grants are intended to help employers expand or upgrade the skills of their staffs. In LHT, recent awards were given to a Hudson ice cream shop (\$36,400), for example, and a Northborough catering company (\$53,200).¹¹ More rarely, municipalities offer similar funding programs, such as the Worcester Jobs Fund, which has yet to award grants to LHT businesses.¹²

One direct government training program targeting the LHT industry is offered by Job Corps, a 1960s-era U.S. Department of Labor subagency. Job Corps provides free culinary arts training to low-income eligible youth ages 16–24 at three locations in Massachusetts. Upon

successful completion, trainees receive credentialing from institutes affiliated with trade associations such as the National Restaurant Association and the American Hotel and Lodging Association.

Summary

Throughout this report and in this chapter, we highlight that the LHT industry is growing and that a number of key occupations in the industry traditionally have high turnover rates. Using state projections from the Commonwealth's Executive Office of Labor and Workforce Development (EOWLD), we project that the LHT industry will generate nearly 6,500 new jobs annually over the next three years. Further, we estimate that an additional 59,000 jobs in the industry will open up annually due to turnover, when workers permanently leave a position due to events such as retirement or changing industries. Jobs with the largest number of annual openings include Food & Beverage service workers Food & Beverage Serving Workers except Bartenders, Waiters and Waitresses; Waiters and Waitresses; and Restaurant Cooks.

As for job training, we found that the LHT industry in Massachusetts is serviced by a broad network of different types of occupational and skill-training activities, some that are specifically responsive and tailored to local labor market and employers' needs and some that are not. We found that, although state and federal databases track educational and training programs that receive government funding, numerous available programs are not tracked. We provide a typology and overview of both tracked and untracked programs here, to give readers an understanding of LHT training programs.

In general, while most of the jobs in LHT, particularly positions with the most annual openings, require limited education and training, the pace of industry growth, concerns about federal immigration policy and the availability of immigrant labor, and the high turnover rates for most industry jobs places a great deal of pressure on employers and job-training professionals. The next chapter will, among other things, continue exploring challenges employers face in hiring and maintaining an adequately trained staff.

CHAPTER FOUR

On the Ground: Employer Survey and Interviews

Chapters 1 and 2, based on secondary data, provided a high-level overview of the Massachusetts LHT industry and workforce and how it compares with both the national LHT industry and other industries across the state. This chapter examines the perspectives of LHT employers on the general health of the industry, including what “works” about doing business in Massachusetts and what challenges exist. To gain their views, we conducted a 32-question survey of LHT employers statewide—as far as we can tell, the first of its scope and detail ever.¹

This chapter is split into five main sections:

- Business Climate
- Regional Perspectives
- Anticipated Challenges in the Years Ahead
- Workforce Satisfaction
- State, Local, and Regional Support

Together, these sections provide a detailed picture of the industry from the perspective of employers and other industry leaders. In general, our survey and interviews show that most employers have confidence in the LHT industry and are optimistic about its future, with some significant regional variation. They are concerned about a variety of costs, transportation access, and competition from the sharing economy—now and in the years ahead—and they are generally satisfied with their customer bases and the level of support they receive from local and regional business organizations. A remarkable two-thirds, give or take, say they have difficulty finding appropriately skilled workers across all job types, while dissatisfaction with state programs—particularly reduced marketing support for the LHT industry—runs high.

Please note that the data source for all figures, tables and the map in this chapter is: UMass Donahue Institute (2017), Survey of LHT Employers in Massachusetts. (See Appendix E for a sample survey.)

The Survey

Our survey reached a broad cross-section of LHT employers, both regionally and across subsectors, and their responses indicated significant areas of concern about local business conditions and state policy support for the industry.

Nearly 300 businesses from across the state responded, including employers from the public and private sectors and nonprofit institutions. They told us about their successes and frustrations with “doing business” in the Bay State, as well as in their specific regions. Respondents were also given the opportunity to share more detailed anonymous comments (which are flagged as such below). To supplement the survey findings, we conducted hour-long interviews with a cross-section of leaders and stakeholders in the LHT industry from around the state.

Business Climate

The LHT industry across Massachusetts is sound, but employers have deep concerns about housing and health-care costs. These concerns are consistent with other survey research on Massachusetts employers, including the UMass Donahue Institute’s recent study with MassEcon on business expansion and relocation factors in the state.² In addition, employers reflected on the opportunities and pressures facing their own specific subsectors, and on business conditions in their regions of the state.

Table 4.1 shows that, overall, LHT enterprises report a high level of confidence in the industry and optimism about its future. Over a third have increased employment over the past five years and are planning to hire more workers over the next five. About 13 percent reduced staff over the past five years, but only 7 percent anticipate doing so in the coming five years.

Figure 4.3 shows that, in the aggregate, employers are most satisfied—and by significant margins—with the support they receive from local and regional business organizations (54%) and the size of their customer

Who Took the Survey?

This survey was distributed between mid-October and mid-December 2017 by the 16 Regional Tourism Councils, the Mass Lodging Association, the Mass Restaurant Association, the Mass Cultural Council, and the Greater Boston Chamber of Commerce Leisure and Hospitality Leadership Council. Its 287 respondents are well-distributed by subsector³ (**Figure 4.1**), although the comparatively large employment size of the Food & Beverage industry (71%) is not fully reflected in our respondent pool.

FIGURE 4.1

Survey Respondents by Industry Subsector

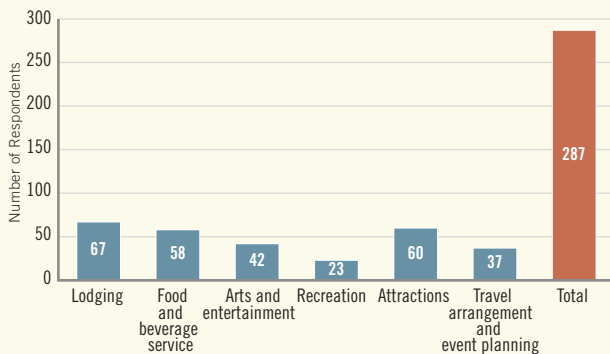
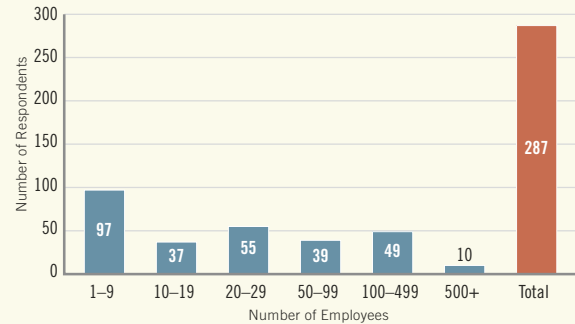


FIGURE 4.2

Survey Respondents by Number of Employees



Most respondents run small-to-midsize enterprises (**Figure 4.2**). Close to half employ fewer than 20 employees, a plurality consistent with the state profile: Approximately 86% of Massachusetts firms consist of 19 employees or fewer.⁴

Respondents are well distributed by region (**Map 4.1**), with 66% in regions of highest LHT employment concentration: Greater Boston, Northeast, the Cape and Islands, and the Berkshires. Only the Pioneer Valley is somewhat overrepresented.

75% have **leisure-oriented** patron bases rather than business customers.

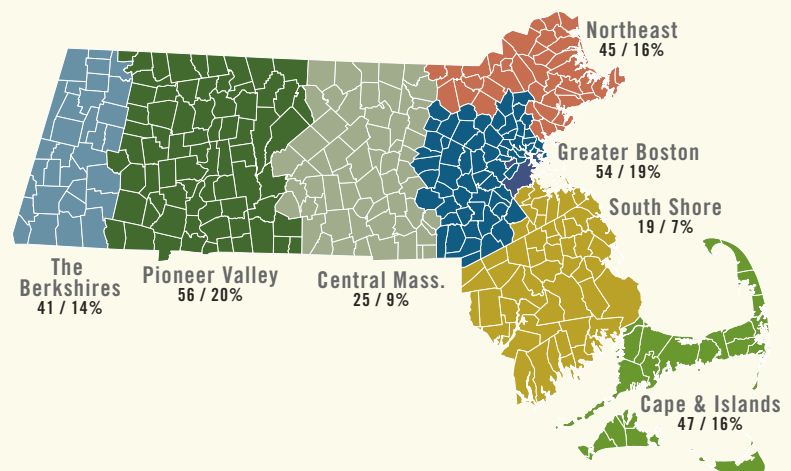
- A third of patrons are local, traveling no more than 20 miles to enjoy respondents' services. Another 39% originate from Massachusetts or elsewhere in New England, while 20% travel from elsewhere in the United States, and 7% from international locations.

47% reported 2016 gross revenues of **\$1 million or less**; 29% brought in \$1–\$5 million; 15% reported \$5–\$20 million; and 8% reported \$20 million+.

- On average, 45% of respondents' employees work full-time and 55% work part-time, which aligns with ACS data covered in Chapter 2. Among service and operations employees, the spread is 41% full-time and 59% part-time.

MAP 4.1

Survey Respondents by Region



87% manage **year-round operations**, some with additional season-specific programming; 13% are strictly seasonal.

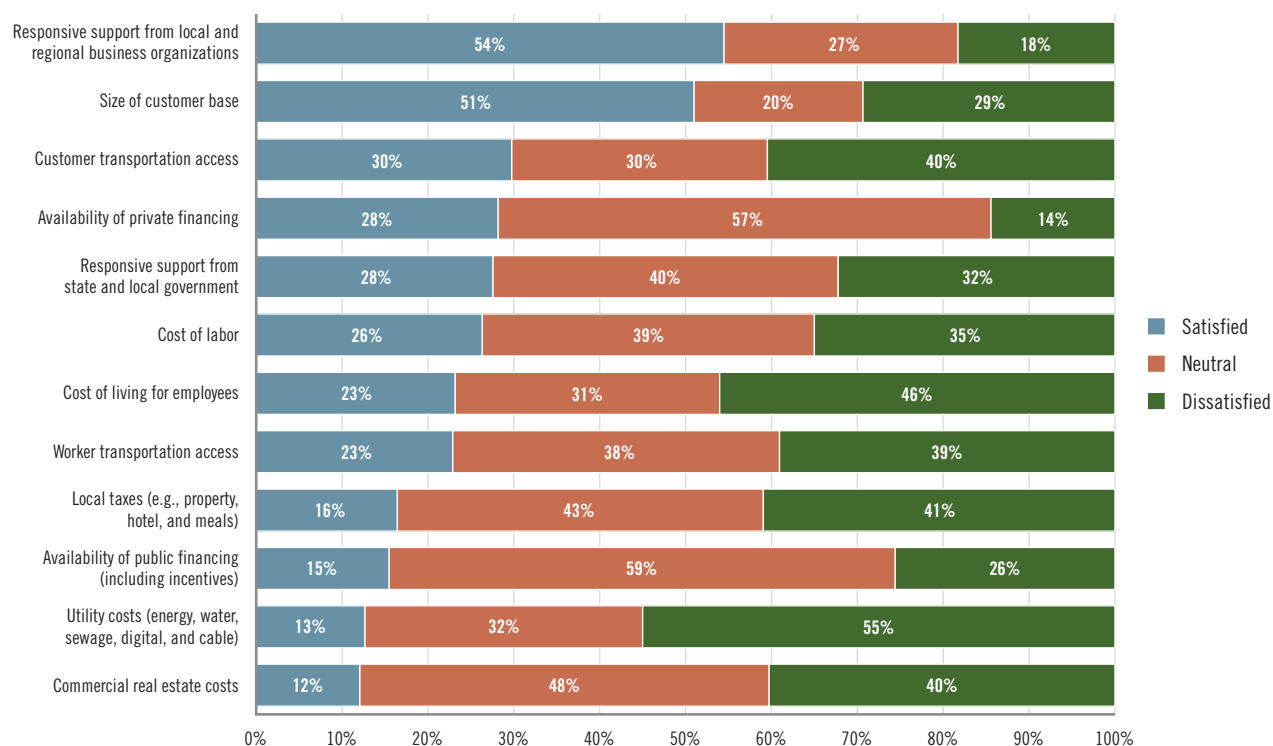
base (51%). They register consistent discontent with cost factors. The greatest sources of dissatisfaction are utility costs (55%) and employee cost of living, which is mainly driven by housing (46%), but employers are also concerned about local taxes (41%), commercial real estate costs (40%), and labor costs (35%) to a significant degree. Transportation access for both customers and employees receives low marks from about 40 percent of employers, as well.

Roughly a third of employers say they are dissatisfied by the support they receive from state and local government, although when asked specifically about state policy (in section four of this chapter), nearly half identify state efforts to market the LHT industry as a major source of dissatisfaction. In interviews and comments, most employers voiced deep discontent about recent cuts to the state's Tourism Trust Fund, which slashed support for the 16 Regional Tourism

TABLE 4.1
Employment Expansion or Reduction over the Past Five Years,
and Anticipated Employment Plans over the Next Five Years

Experience/Expectation	Over the Last 5 Years	In the Next 5 Years
Increase	37%	37%
Stay about the same	50%	56%
Reduce	13%	7%
Total	100%	100%

FIGURE 4.3
Level of Regional Satisfaction with Key Business-Related Conditions



Councils (RTCs) by half and moved the monies into the General Fund.⁵ They also complained about the intermittent nature of regional funding allotments, making it even more difficult to develop effective marketing plans.

“Our industry needs to unify to fight the constant disrespect of taking our marketing dollars. We need a strong MOTT [Massachusetts Office of Travel and Tourism] and strong [Convention and Visitors Bureaus, which often serve as RTCs], that aren’t constantly worried that their funding will be stripped. This challenge makes planning and marketing our region and state almost impossible. We employ many locals, and we are also the first job students have, and retirees love the industry as well. Tourism is an important industry.”

—survey respondent

Regional Perspectives

There are significant regional differences in employers’ experiences with local business conditions, and a few similarities. Although Massachusetts is a small state, it is remarkably varied in its natural features, attracting visitors with a variety of interests and LHT venues to serve them. The state is also one of few in the country, including New York and Illinois, that is home to one large globally facing metro—Boston and its surrounding communities—where the economy differs significantly from other regions in the state. These characteristics make for considerable regional diversity.

In this section, we delve into how employers regard business conditions in their specific regions, showing how their aggregate concerns and contentment are distributed geographically. **Appendix D** summarizes our findings, showing significant dissatisfaction with various costs. Dissatisfaction with cost of living and labor costs is particularly acute in Greater Boston and the Cape and Islands, and concern about utility costs runs high across all regions. Both worker and customer transportation access are also cause for concern, especially in the Berkshires, the Pioneer Valley, and Greater Boston. With few regional exceptions, employers are generally satisfied with their local and regional business organizations and their customer bases.

Regional Costs

Employee cost of living is of greatest—even grave—concern in Greater Boston (72%) and the Cape and Islands (78%). This concern is also significant in the Northeast region (45%). In contrast, satisfaction with employee living costs is highest in the South Shore (47%), Central Mass (44%), and the Pioneer Valley (42%). Not surprisingly, these satisfaction levels track closely with regional housing costs. The Cape and Islands, home to a heavily seasonal tourism economy, face an acute rental housing crunch during the high season, if not year-round.

Similarly, about half of employers in Greater Boston (54%) and the Cape and Islands (48%) are dissatisfied with the cost of labor. These high numbers reflect some across-the-board grievances, particularly with recent and possibly future minimum wage increases. But they also reflect regional differences: union wage scales in parts of the core Boston-area hotel industry, for example, or additional auxiliary costs such as paying for visas and on-site housing for seasonal foreign workers in the Cape and Islands, where there is a dearth of young workers.

“Our costs are rising at an alarming rate, but our sales are flat. We are being asked to pay to solve issues small businesses did not create. The cost of goods rises with payroll and taxes, often causing companies to price their products above what the market will bear. Then, if tourism is not funded well, all Massachusetts businesses will suffer loss of business.”

—survey respondent

“Due to the ridiculous cost of living here, we have to house all of our staff on the premises, which is advantageous to our H-2B crew, but to locals who already have housing, we are unable to stay competitive.”

—Nantucket hotel owner

“Massachusetts is a well-regarded destination for travelers from all around the globe in spite of the dearth of marketing dollars that the Commonwealth spends on promotion. However, it can be very expensive to operate a travel-related business here due to high labor and benefit costs, especially in urban unionized entities.”

—survey respondent

Remarkably, a third to a half of employers across all seven regions rank utility costs—from water and sewage to energy and digital access—among their top concerns. From comments and interviews, it appears that cell and Internet costs and service availability are of particular concern in the Berkshires. Employers in the Cape and Islands, particularly those with seasonal businesses, feel burdened by sharing equally the cost of sewer buildout, snow plowing, and other year-round services. Others have more business-specific utility complaints.

“Challenge is not having reliable Internet in Western Mass. Customers demand it and it is essential for operation at this point in time. Towns should not have to pay for this infrastructure. It’s a public utility at this point and should be handled by the Commonwealth rather than burdening small towns with this very complex buildout.”

—survey respondent

“As a seasonal business on Cape Cod it is very challenging to handle the high utility costs and plan for sewage issues when dealing with a short business cycle. All projects are assumed to be providing services 365 days a year.”

—survey respondent

“Utility costs, along with rising labor costs over the past two years, are big challenges. The industry has become dependent on much-improved snow-making and grooming capacity, and our water bills have skyrocketed.”

—ski mountain operator

Transportation Access

Both worker and customer transportation access are serious concerns in the western part of the state. In the Berkshires, two-thirds of employers are frustrated with customer transportation access, and over half with their employees’ ease (i.e., their difficulty) in getting to work. In the Pioneer Valley, roughly half are dissatisfied with both forms of transportation access.

“We have a lot of unfilled jobs in the Berkshires, and we have to do better at getting the word out. But workforce transportation is a real problem. Bad BART service, especially on weekends, is bad for employment.”

—regional economic development director

“Western Mass needs better public transportation as well as train service from both New York and Boston.”

—survey respondent

Greater Boston employers also register high levels of concern about both forms of transportation (39–43%), while customer access is of particular concern on the South Shore (58%).

“Once visitors arrive in Plymouth via commuter rail or coach, public transportation is totally ineffective, and we hit brick walls when trying to improve that portion of our industry.”

—heritage destination marketing director

“Transportation to Lexington is a challenge. Most of our visitors come in from Boston, and this is not possible on Sundays due to the 62/76 bus routes not running. Ridesharing services have mitigated this to a small degree.”

—survey respondent

“Transportation in the city of Boston is atrocious, and it is starting to upset visitors. The cost of transportation is also high, and it’s affecting Convention Center business, forcing convention planners to contract with private bus companies to move people around.”

—Boston Seaport hotel general manager

“The traffic in Boston due to the increase of Uber and Lyft cars on the roads: I don’t understand how there are no regulations on the number of permits granted like there used to be for taxis. It is not only a traffic nightmare, but it is dangerous.”

—survey respondent

Support from Local and Regional Organizations

Employers are widely satisfied with their support from local and regional business organizations, in marked contrast to their dissatisfaction with state and local government programs. The one exception is in the Berkshires where the survey respondents reported similar levels of low satisfaction with local and regional business organization and state and local government programs, both in the 30s.

“Springfield and Hartford are over-rich in cultural offerings for small cities. Until about six years ago, local newspaper publisher and arts philanthropist David Starr convened monthly meetings of Springfield’s institutional directors to coordinate their activities and outreach with the city. Things worked well for a time but then fragmented. Two or three years ago, a new group, the Springfield Cultural District, coordinated with the Mass Cultural Council, took up similar work, and it seems to be putting us back on track.”

—historical museum director

Customer Base

Employers across the state are also generally satisfied with their customer bases, though nearly half of those in Central Mass are not satisfied. Although most employers in the region (63%) are pleased with local and regional business organizations, one thought they might be missing an opportunity to expand the region's customer base by including more arts and culture activities.

“The focus for many in Central Mass seems to be on sports and sports-related activities, including the Worcester Chamber of Commerce and Discover Central Massachusetts, despite memberships on the part of many arts and culture entities in these two.”

—survey respondent

“Worcester needs a touring program—trolley tours and similar programs.”

—survey respondent

Anticipated Challenges in the Years Ahead

Looking ahead, employers are again most concerned about their growing costs. Most are worried about rising health-care costs, and large numbers are concerned about labor costs and availability, and unfair competition with the sharing economy.

We asked employers to rank their level of concern about the challenges they might face over the next five years. **Figure 4.4** summarizes their responses.

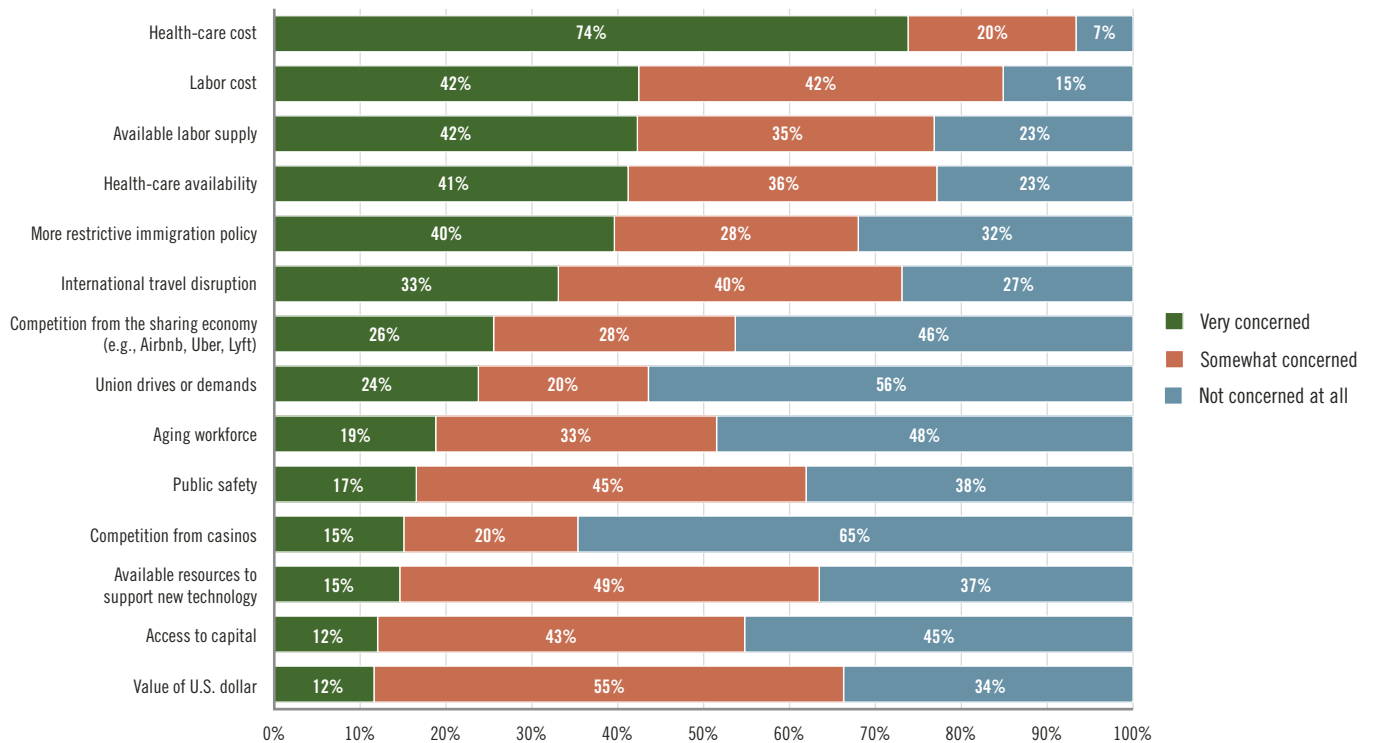
Their biggest concern by far is rising health-care costs. Labor cost and availability of both young and foreign-born workers are also a great source of anticipated strain. Related, so is continuation of a more restrictive immigration policy.

“The minimum wage increase [to \$11/hour] has been a tremendous challenge. Going to \$15/hour would be disastrous for our small business.”

—survey respondent

FIGURE 4.4

Level of Employer Concern about Potential Challenges over the Next Five Years



“There are not enough workers. It is much worse than it’s ever been in my 37 years in the restaurant business. One in three first jobs are in the restaurant industry. Younger workers pass through on their way to something else. Now that most operators use E-Verify, hiring illegals to make up the difference is now gone, and they are handcuffed. And they are under assault like never before by union activists who are not in the industry and want to raise the minimum wage and get rid of tip wages, which will bring down workers’ now-decent pay.”

—restaurant industry professional

“Being the owner of a small three-season ice cream parlor on Cape Cod, finding teenage workers gets more and more difficult every year. Never mind the \$11 an hour minimum wage for an entry-level worker who must be shown something as simple as how to use a broom and mop correctly. The competition for their availability between sports, drama, cheerleading, dance, and the myriad other afterschool activities makes for a very slim workforce. There needs to be a Training or Student Wage that is lower than the minimum wage for youth under 18 years old, and schools need to work with the business community to create course credits while students are employed.”

—survey respondent

“We are seasonally and geographically challenged. We depend on experienced foreign workers who return year after year, mainly for back-of-the-house work and mainly from Jamaica, with H-2B visas. We pay around \$2,000 a year per worker for their visas and housing, and it’s worth it. If they pull H-2B, we’re out of business!”

—Cape Cod restaurant owner

A third of employers rank the potential for international travel disruption, due to the “political climate” and the “Trump factor,” as a threat to their businesses and venues.

Of significant concern, mainly among smaller inns and B&Bs, is competition from the sharing economy. Short-term rentals such as Airbnb are the principal problem, in their view, since they are not taxed or subject to regulation and therefore have an unfair cost-lowering advantage.

“Airbnb remains a major issue for all lodging businesses in Massachusetts but in particular for the smaller inns and B&Bs. They nickel and dime us and are gradually eroding our base, while getting a free ride relative to room taxes, income taxes, government inspections,

parking, and fees. Our niche businesses have found it is becoming increasingly difficult to turn a profit, so they cannot be sold as viable cottage businesses and are turned into private homes, resulting in lost jobs. This hurts the hotel tax situation both locally and statewide and results in less state income tax being collected as well, for the small Airbnbs in all likelihood do not claim their income while the legitimate B&Bs do!”

—survey respondent

“Airbnb is not your enemy! These places should be taxed, but they bring in younger visitors. We can keep legacy visitors while also finding a new audience.”

—regional economic development director

Interestingly, employers in the aggregate are relatively unconcerned about union drives, casino competition, and the aging of the workforce—a New England-wide demographic shift. Those who are concerned about a greying workforce tend to be concentrated in Western Mass.

“In Hampshire County, the population is aging and being replaced by immigrant groups. College grads today want to live in cities where they can walk everywhere. Amherst and Northampton can’t keep them because the cost of living is now expensive, there aren’t many jobs for them, and they’d have to drive. It’s also hard to convince senior-level people who know how to develop the arts and culture economy to move to Western Mass.”

—art museum director

Workforce Satisfaction

Finding appropriately skilled workers for all job types is a challenge, even though satisfaction with most educational programs runs high.

Table 4.2 reveals that a strikingly large proportion of employers—63 percent or more—have difficulty hiring and retaining appropriately skilled workers across all job types, both full- and part-time. This may speak, to some degree, to the transient nature of the LHT workforce, with many individuals starting in the field but moving on to other industries later in their careers or after they finish school. This section explores which specific roadblocks pose the greatest challenges within the educational and employment pipeline, and what is working well.

In **Table 4.3**, we see again that in recent years cost of living ranks highest (65%) among reasons given for

difficulty maintaining a well-staffed, appropriately skilled workforce. The transitional nature of the workforce, consisting of a large number of part-time jobs, little opportunity for upward career paths, and high staff turnover, contributes heavily to their difficulty. Nearly half (47%) of employers report that addiction and substance abuse among employees and applicants complicate their staffing efforts. Although employers are generally satisfied with the education and training received by their employees (*see Table 4.4*),

41 percent claim that there are not enough training programs and 61 percent are concerned about career ladder availability. In numerous interviews, we learned that training capacity is particularly inadequate in the culinary field. This is especially the case in Greater Boston and the Springfield area, where MGM Resorts is working with local community colleges to expand their culinary programs to meet an obligation to hire 35 percent of its workforce from Springfield.

TABLE 4.2

Level of Challenge in Hiring and Retaining Appropriately Skilled Employees by Job Type

	% Not a Challenge	% Slightly Challenging	% Very Challenging
Full-time management or administration	12%	25%	63%
Part-time management or administration	10%	24%	66%
Full-time “front of the house” (customer-facing) wage workers	8%	24%	67%
Part-time “front of the house” (customer-facing) wage workers	10%	27%	64%
Full-time “back of the house” wage workers	6%	27%	67%
Part-time “back of the house” wage workers	6%	21%	73%
Full-time equipment or operations workers	12%	19%	68%
Part-time equipment or operations workers	9%	26%	65%

TABLE 4.3

Types of Challenge in Maintaining a Well-Staffed, Appropriately Skilled Workforce over the Past Five Years

	% Not a Challenge	% Slightly Challenging	% Very Challenging
Local cost of living	11%	24%	65%
Available Career Ladders for Workforce	14%	25%	61%
Fitting employees with scheduling needs	11%	39%	50%
Addiction/Substance Abuse	25%	27%	47%
Staff turnover due to re-employment, further education, or retirement	22%	32%	46%
Available training programs	31%	28%	41%
Basic or “soft” skills	24%	38%	39%
Federal or state labor regulations	36%	27%	38%
Federal or state immigration policy	43%	19%	38%
Staff turnover due to family demands	23%	40%	37%
English language proficiency	50%	28%	22%
Union demands	57%	22%	22%
Union drives	66%	16%	19%

TABLE 4.4

Level of Satisfaction with Employee Educational Preparation by Type of Institution

	% Not Satisfied	% Somewhat Satisfied	% Satisfied	% Very Satisfied
Traditional academic high schools	17%	26%	45%	12%
Vocational technical high school programs	9%	27%	50%	14%
Community colleges	8%	29%	50%	14%
Four-year colleges and universities	4%	18%	53%	25%
In-house training programs	5%	28%	50%	17%
For-profit training programs	15%	38%	40%	8%
Nonprofit training programs	11%	41%	38%	10%
Union training programs	24%	34%	34%	8%
The military	3%	25%	53%	20%

“People really want to work here and we have low turnover, so finding the right workers is not a huge problem. The one exception is culinary—at all levels.”

—Boston Seaport Hotel general manager

Employers are generally satisfied with the quality of their employees’ educational preparation. **Table 4.4** shows that they are most satisfied with preparation provided by four-year colleges and universities and the military. Employers are also pleased with in-house training programs, although since they have a hand in such programs and know precisely what they want from their staff, their reported satisfaction levels may skew favorably.

Nearly two-thirds of employers are satisfied to very satisfied with vocational tech and community college programs. In interviews, several employers also reported a high degree of satisfaction with Job Corps, a ‘60s-era federal anti-poverty program with four sites in Massachusetts.⁶

“We have hired a number of people 18-to-25 years old through a Rhode Island Job Corps center. We have had really good luck with that program.”

—South Coast catering business owner

Roughly half of surveyed employers are least satisfied with for-profit, nonprofit, and union training programs, although the latter may reflect employer aversion to unions in general.

We also asked employers about their experiences with various employment pipelines and advertising methods when seeking 1) service or operations staff and 2) management and upper-administrative employees.

Table 4.5 shows that, overall, employers have had more success finding skilled management and upper administrative staff through most sources than they have had finding operations and service personnel, which is not surprising given that such employees usually require a higher level of education and strong career aspirations. However, many employers say that it is difficult to find professional, well-educated management staff in areas beyond Greater Boston.

“These kids send in resumes for managerial positions, and they’re a joke. They’re not being well educated. And most of them don’t want to run a restaurant, which is very demanding. They all want to be wedding planners or get into marketing.”

—owner of several Cape Cod restaurants

By far, the most successful routes to hiring all types of workers are through employee referrals, or what many commenters called “word of mouth.” Such high success levels suggest that informal networks play an enormous role in identifying potential applicants. Those without connections to the already employed face a big disadvantage. About half of employers also report success with Internet advertisements for all types of jobs.

TABLE 4.5

Employer Success Levels in Hiring Appropriately Skilled Staff by Source

	Management and Upper-Administrative Positions	Service and Operations Positions
Employee referrals	62%	64%
Internet advertisements	52%	48%
Private employment/recruiting agencies	50%	23%
Union referrals	50%	22%
College or university outreach	39%	33%
Industry networking events	39%	33%
Temporary employment agencies	38%	26%
Career fairs	29%	22%
One-Stop Career Centers	25%	16%
Newspaper advertisements	17%	18%
High school outreach (traditional)	15%	16%
Community College outreach	14%	15%
High school outreach (vocational)	10%	14%

Of all the institutional means of identifying suitable applicants for upper-level jobs, those that prove the most successful (39–50%) are private recruitment and temp agencies, industry networking events, and college and university outreach programs. A lower proportion of employers using these venues, a quarter to a third, have success in finding operations and service workers.

Half or more employers report that their use of the 37 federally and state-sponsored One-Stop Career Centers was not successful. It is not entirely clear why: Legislation was passed in 2014 to improve the then-15-year-old program.⁷ One large employer, however, offered that her company did not go through One-Stops “because we want to talk directly with potential employees.”

Employer use of outreach programs with traditional and vocational technical high schools and community colleges are only marginally successful, and yet they are the schools most likely to offer vocational training courses—particularly in hospitality and operations work.

State, Local, and Regional Support

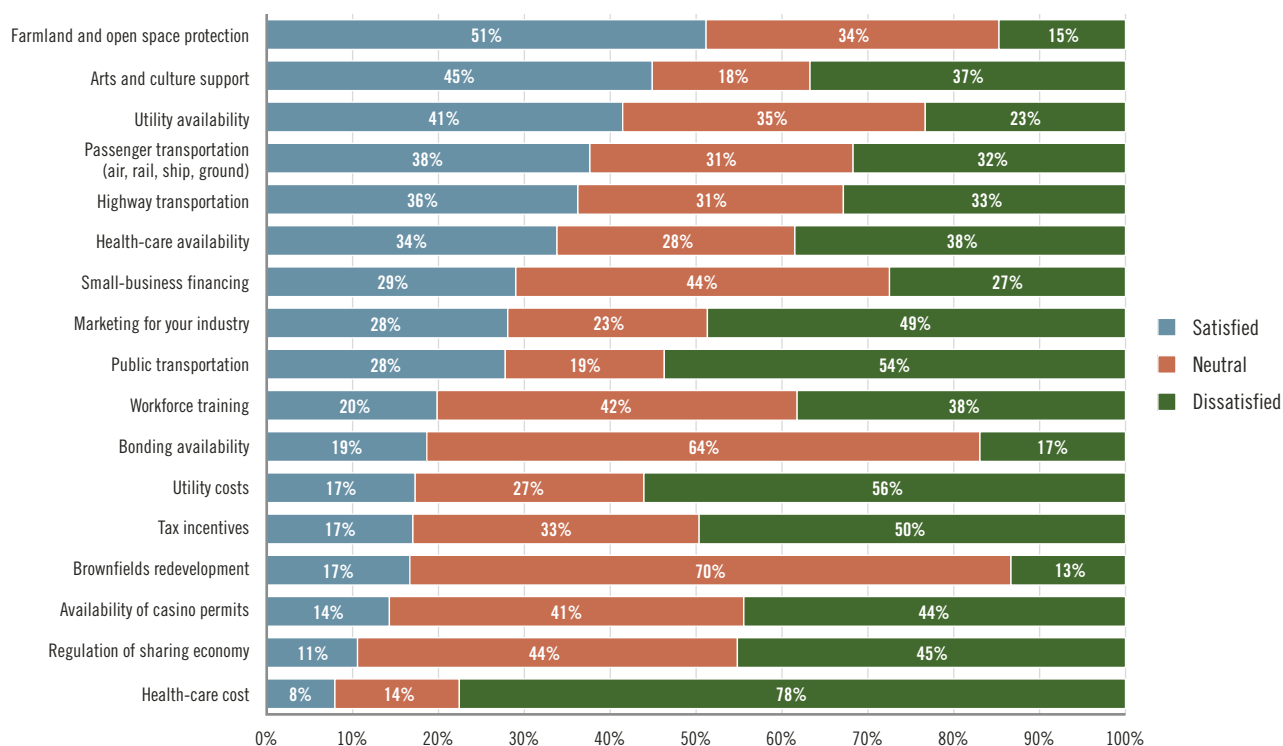
Employers are clamoring for more support from state programs, and attribute many of their local and regional grievances to limited state funding and recognition of their industry’s economic value.

For the final section of our survey, we asked employers about the performance of various state, local, and regional policies as they relate to their industry. We also asked them to assess the importance of several regional development organizations.

Figure 4.5 summarizes employer assessment of state programs. By far, employers register the most satisfaction with state programs that protect farmland and open space (51%) and support arts and culture (45%). These satisfaction levels reflect recent shifts toward non-traditional LHT programming, such as eco- and agritourism, arts and culture venues, festival planning, and farm-to-table food offerings. They also reflect the smaller scale, outdoor-recreational, and heritage tourism that has long been a hallmark of Massachusetts as a destination.

FIGURE 4.5

Level of Employer Satisfaction with Industry-Related State Policy by Program



“The importance of supporting conservation land, open space, and clean water regulations is extremely important to our business.”

—summer camp operator

Once again, health-care costs (which are tailored to meet federal requirements) top the list of employer concerns, with more than three-quarters reporting dissatisfaction. As we have also seen elsewhere in this report, more than half report frustration with utility costs and the condition (or availability) of public transportation. Half of LHT employers are dissatisfied with the state’s tax incentive programs, although it is not clear whether they think these programs are poorly targeted, too generous, or not generous enough. Nearly half (45%) are dissatisfied with state regulation—or lack thereof—of the sharing economy, with only 11 percent saying they are satisfied with current arrangements.

Roughly half of employers are also dissatisfied with the Commonwealth’s marketing efforts on behalf of the LHT industry (49%).

“We wish the state would do a better job of advertising all Massachusetts has to offer tourists to the rest of the U.S. and the world. Massachusetts must maintain and grow its tourism or I fear that it will begin to slide. International tourists never see anything about Massachusetts, whereas they see a lot about New York and Florida.”

—small inn owner

Employers have a decidedly mixed response to casino development; it isn’t clear how to interpret their dissatisfaction with casino permit availability. Do they want more or fewer permits? In Springfield, for example, some “are certain that when consumers choose to spend their dollars at the casino, they will not be spending them on other leisure activities on the same weekends.” Others believe that by attracting new leisure consumers to the city, casinos will generate new business for local hospitality and tourism venues. A more widely shared anticipated concern is that, by adding thousands of jobs in Boston (4,000) and Springfield (3,000), casinos paying at a higher wage scale will drain off workers from existing leisure and hospitality businesses in those

regions, leaving employers scrambling to find skilled, experienced replacement staff.

While casino management has much to praise in the state's support for the new industry, at least one bureaucratic issue has introduced headaches to their massive hiring process: access to occupational license data.

"The state keeps track of licenses, but they don't make the information available to employers. This is difficult across the board, but especially with gambling licenses, which require deep background checks, and people who have those are the ones we especially need to attract. But it also poses a problem for finding people licensed for HVAC and electrical work. Employers should be able to find people with licenses more easily."

—casino employer

Regional Views

Not surprisingly, employer views of state policy and programs by region run parallel with most of their perspectives on regional business conditions, as revealed in Appendix D shows where in the state satisfaction and dissatisfaction levels are strongest. Not surprisingly, dissatisfaction with health-care costs runs high in all regions, but it is highest—above 80 percent—in the Berkshires, Central Mass, and the Cape and Islands. Employers in the same three regions register the greatest dissatisfaction with health-care availability, too, ranging from 46 to 55 percent disapproval. More than a half to two-thirds of employers across all regions take exception to utility costs, although they show less concern in Greater Boston and the South Shore. Forty percent or more are also dissatisfied with utility availability. Not surprisingly, given what they told us in interviews and in the survey, employers are uniformly dissatisfied with state marketing programs for the LHT industry, with dissatisfaction rates running from 43 to 56 percent across all regions of the state. A third or more are dissatisfied with sharing economy regulations, most by more than two-to-one margins, and Greater Boston leads the pack with 53 percent of employers registering dissatisfaction.

Consistent with aggregate numbers, most employers across all regions of the Commonwealth are very pleased with farmland and open space protection programs. They also register a high level of appreciation for the state's arts and culture support, with one exception: Central Mass, where less than half are satisfied with such programs.

We see greater regional variety in employer assessment of other services and programs. Dissatisfaction with public transportation is very strong in the western part of the state, where transit is piecemeal and doesn't meet tourist and youthful demand, and significant in Greater Boston, where the MBTA is in disrepair. Employers in the Berkshires, in particular, are also concerned about inadequate passenger rail to New York and Boston, limiting their customer base. We also found that concern with inadequate workforce training runs highest in the regions with the most tourist activity: The Berkshires, the Cape and Islands, and Greater Boston, where employers have particular trouble finding culinary workers. Finally, we asked employers about their satisfaction with various financing programs. Four regions register significant dissatisfaction with tax incentive programs: The Cape and Islands, Greater Boston, the Pioneer Valley, and above all, Central Mass at 69 percent. Forty-five percent of employers in Central Mass, by far the largest grouping, are also dissatisfied with small business financing programs. Clearly, a high proportion of LHT employers in Central Mass believe that, with better state financing, their industry could better meet its potential.

Figure 4.6 covers employer satisfaction levels with local policy and programs. Here it is worth recalling that most of our survey respondents run small-to-midsize venues, many of whom work in non-traditional, small-scale, cultural, or recreational fields. This may in part be why most report satisfaction with local programs that meet the basic requirements of such fields: public safety, farmland and open land preservation, and installation of bike paths. More than half of employers also report satisfaction with their local chambers of commerce.

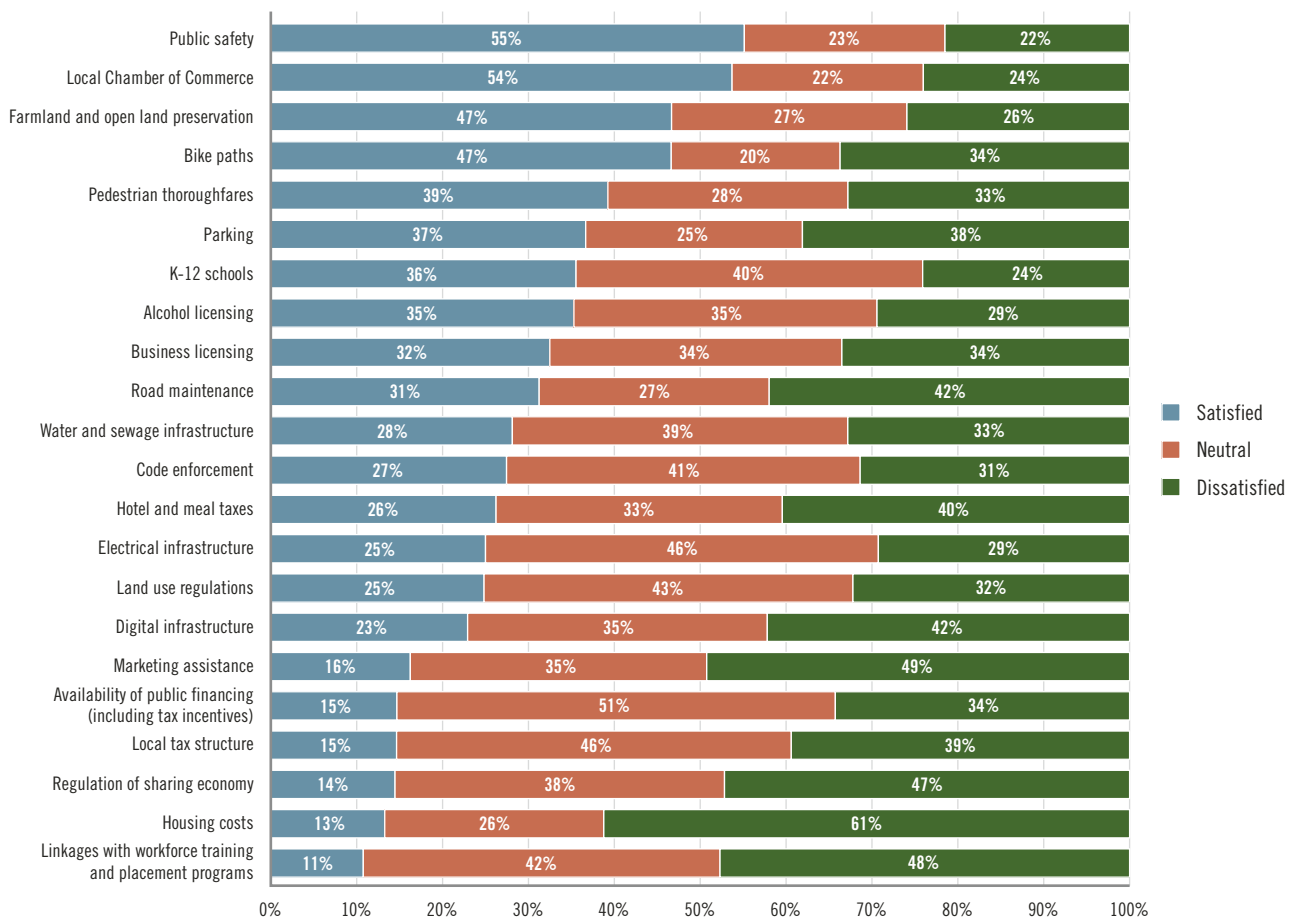
The most widely shared source of dissatisfaction with local policy by far is the cost of housing (61%), with several employers commenting that local zoning must incentivize more workforce housing.

Once again, employers also register high levels of concern about poor regulation of the sharing economy (47%) and lack of marketing assistance (49%). Since most are pleased with their local chambers, we can assume that their marketing criticism is directed primarily at local government.

As we saw in the previous section, nearly half of employers are not satisfied with local programs—more specifically the absence of them—linking workforce

FIGURE 4.6

Level of Employer Satisfaction with Industry-Related Local Programs, Regulations and Costs



training and placement programs. There is also considerable dissatisfaction (42%) with the quality of road maintenance and digital infrastructure. These concerns are especially sharp in more rural areas not well served by public transit or good Internet access.

“Real estate taxes in Greenfield are exorbitantly high compared to other towns, and it’s not clearly evident who/what is benefitting (not transportation, maintenance, infrastructure projects, education). Downtown Greenfield still seems to be in decay, local properties obviously are in decline without resources for repair, and general and especially winter road maintenance is inferior to local towns, to name a few things. Overall, this creates a bad situation for attracting tourists, on which our business depends.”

—survey respondent

Although land-use regulations and code enforcement are not chief among employer concerns in the aggregate (roughly a third), in interviews and comments small businesses seeking to expand or upgrade expressed great frustration with these programs.

“We are a multi-generational business that is currently unable to pass our business on to the next generation due to the extraordinary costs involved in fully complying with onerous Title V [septic] regulations. Likewise, restrictive, non-commonsense plumbing codes greatly increase costs, reducing our ability to make incremental improvements in our plumbing infrastructure. For example, for commercial use we are not allowed to utilize PVC in our plumbing. PVC would otherwise easily be the most economical, least corrosive and most durable alternative for use in our restrooms.”

—survey respondent

“Our biggest challenge is the lack of cooperation from local government agencies, specifically those elements restricting individual business owner attempts to make property improvements. We have overregulated permitting and zoning procedures and an absolute lack of assistance and support by locally appointed or hired town administrators and workers. It’s an old story played out in probably every small town in Massachusetts: ‘It’s not what you know, but who you know’ that matters. It’s very frustrating and anathema to all of us trying to do something good and make a difference in the local community.”

—survey respondent

Likewise, dissatisfaction with local tax structure is of great concern (40%). Some of this dissatisfaction is attributed to “exorbitantly high real estate taxes” without seeing good road maintenance and other forms of repair to infrastructure upon which their businesses depend. Others complain of additional imbalances in the local tax structure. Those who run seasonal businesses object to paying year-round rates in taxes and bonding issues. Those who operate small, owner-occupied lodging businesses object to paying full commercial tax rate.

Table 4.6 captures employer assessment of regional business organizations. A large proportion of respondents, 74 percent, regard the Regional Tourism Councils as exceptionally important to the success of their industries. Half or more are pleased with their regional planning agencies and chambers of commerce.

Strikingly, relatively few (29%) find their Workforce Investment Boards (WIBs) play an important role in their success.

“In the Springfield area, there are not enough training facilities to meet our needs, and the WIB isn’t much help.

Our hospitality team sat in a room with them and they seemed to understand, but haven’t released any funds. They tend to grant their training dollars to the trades.”

—casino workforce development director

Indeed, as we have seen elsewhere in this chapter, workforce quality, training, and pipeline capacity in the LHT industry are in great need of improvement if the industry is to thrive as both employer and revenue generator for the state.

Summary

LHT employers and other industry leaders are bullish about their industry and proud of the jobs and revenue they generate. They also believe, however, that they could bring even greater prosperity both to their own operations and to the Massachusetts economy with more funding and programmatic support, particularly from state government. Our survey and interviews show that they are especially concerned about a variety of costs—particularly in housing, health care, labor, and utilities—that, if not brought down, are likely to damage their prospects over the next five years. Transportation access, labor availability (in part due to immigration restrictions), and inadequate regulation of the sharing economy are also strong concerns, though with more significant regional variation.

Overall, the Massachusetts LHT industry is strong, employers and other leaders say, but it could be strengthened by addressing these issues and by embarking on a better-funded, more consistent state marketing program with greater regional, national, and international reach.

TABLE 4.6

Employer Assessment of Regional Development Organizations

	% Extremely Important	% Very Important	% Moderately Important	% Slightly Important	% Not at all Important
Regional Tourism Council	53%	21%	14%	8%	4%
Regional planning agency	26%	24%	22%	14%	14%
Regional Chamber of Commerce	33%	25%	22%	11%	10%
Workforce Investment Board	15%	14%	25%	10%	35%
High school vocational technical education programs	19%	19%	21%	11%	31%

CHAPTER FIVE

Policy Implications: Support for the Leisure, Hospitality, and Tourism Industry

In this report, we have taken the measure of the Commonwealth's LHT industry—through hard data and survey analysis, and both formal and informal conversation—and conveyed just how important it is to the Massachusetts economy. With approximately 376,000 jobs statewide, LHT is the third-largest industry in Massachusetts. Beyond that, though, LHT has a significant ripple effect throughout the state economy, supporting an additional 232,000 jobs through other business and consumer spending (indirect and induced effects). Altogether, LHT is responsible for nearly 608,000 jobs and approximately \$69 billion in economic activity in Massachusetts.

LHT is not only a large industry with sizeable impact, but it has been quietly growing since at least 2000, employing a rising number of workers whose jobs cannot be outsourced. It has also demonstrated resilience in the face of two recessions, barely affected by the 2001 recession and executing a quick turnaround after the 2007–2009 hit, when many other Massachusetts industries were left staggering for years after those downturns.

Yet for all its strengths, the LHT industry faces significant challenges. Here, we suggest some policy approaches to address them.

Goal: **Better Align LHT Workforce with Cost of Living, Training, and Recruitment Challenges**

Challenge: **Low Pay**

In the aggregate, LHT is the state's lowest-paid industry, and especially so in the Food & Beverage subsector, which employs 71 percent of the LHT workforce. While some jobs in the industry pay high or mid-range salaries, a high concentration of jobs in LHT pay low wages. A substantial number of these low-wage workers are young or foreign-born, working part-time on their way to future educational or employment goals, supplementing the income of

a household breadwinner, or residing with others bringing in an income. But an alarming share, nearly 11 percent, live in households at or below federal poverty thresholds, compared with 4.2 percent in all other Massachusetts industries combined. Notably, the federal poverty thresholds do not take into account the high cost of living in parts of Massachusetts, especially Greater Boston and other locations where housing costs are soaring. Taken together, this compensation profile raises a number of issues for workers and employers alike, issues that policy intervention can help to address and alleviate.

Recent debates about minimum wage policy, which have the greatest effect on the low-paid service industry, led last year to a statewide increase to \$11/hour, and a \$3.75/hour service rate supplemented by tips. Pressure is on to further raise it progressively, to \$15/hour and \$9/hour, respectively, by 2022. Advocates are right to argue that hard-working service workers deserve a "living wage." While large corporate entities may be able to afford such increases, most LHT businesses and venues are small, particularly in Food & Beverage. They operate on extremely tight margins, often just seasonally, employing workers with a range of skill and experience—many in a first job, still living with parents and enrolled in high school. As the minimum wage debate unfolds, it may be prudent to consider including a lower "training wage" in the mix.

Challenge: **Cost of Living and Transportation Access**

Most of the employers we surveyed registered deep concern about employee cost of living and transportation access to job sites. The intensity of these concerns was pegged mainly to regional housing markets. The high cost of housing, particularly in Greater Boston and the Cape and Islands, drives LHT employees in need of affordable housing far from their places of employment, and that, in turn, places great strain and expense on their work commutes. In recent years, these dynamics have made it increasingly difficult for even well-compensated employees to get to work, much less the many low-wage workers in

the LHT industry. Combined, these pressures could force valuable and badly needed workers out of the Massachusetts labor market.

To accommodate these workers more affordably, we need a combination of increased housing supply to cool the red-hot housing costs in Greater Boston and more units of subsidized affordable housing, some on a seasonal basis in the Cape and Islands. The City of Boston is gradually moving toward its goal of adding 53,000 housing units by 2030 by expediting the residential building permit process and making city-owned land available for affordable housing, among other measures. Suburban localities, however, have been slow to change their zoning laws to accommodate denser housing, either through the state's Chapter 40R (and 40S) "Smart Growth" Overlay District formulas or through allowing single-family homeowners to build additional units on their properties. These are good programs that, in addition to seeking to bring down housing costs, are incentivized to locate affordable housing near transit networks.¹

Challenge: **Workforce Development and Training**

A remarkably high share of the employers we surveyed—hovering around two-thirds—said that finding appropriately skilled workers for all job types is a challenge. This is partly a reflection of industry demographics—the transient nature of its predominately youthful and foreign-born workers—but it also has something to do with the seasonal and part-time nature of much of this work, which presents acute scheduling difficulties that limit the field of potential employees to those whose time is flexible. That said, employers report a dearth of workers well-trained for its largest field, culinary work, and they do not have a reliable pipeline at their disposal for finding them.

No one entity tracks the educational and training programs available for acquiring LHT skills, and the pipeline for hiring these workers—particularly those with less than a bachelor's degree, where employers have the greatest need—is more patchwork than optimal. With funding from the private and philanthropic sectors, as well as the state's education and workforce development programs, this gap could be closed with a regularly updated database of suitable programs, posted online for employers, students, potential workers, and educators alike.

Similarly, although the state tracks occupational licenses and permits through the Division of Professional Licensure

Boards of Registration, it does not make the information available to employers. This places a burden on employers who must scramble to find licensed local workers to perform facilities, security, spa, gaming, and other LHT-related work. Again, an online database or listing could make it easier for qualified workers and employers to find one another.

The Massachusetts Workforce Skills Cabinet (WSC) was created by Governor Baker in 2015 to align three Executive Offices—Education, Labor & Workforce Development, and Housing & Economic Development—in developing a comprehensive economic growth agenda. The Cabinet is charged with creating and implementing a strategy to enable workers to improve their skills and technical capacity to meet the hiring demands of employers in the Commonwealth. To this end, in April 2017 the WSC launched a Regional Planning Initiative. The initiative sought to better understand worker supply and occupational demand in local labor markets and to develop strategies for addressing potential regional labor shortages for targeted industries and occupations.

While the Commonwealth is still reviewing these action plans and considering next steps, employers and stakeholders in the LHT industry should continue to highlight and advocate for the workforce training needs of the industry. This is particularly critical while the Commonwealth considers further strategic planning related to aligning workforce development resources to the critical needs of employers throughout Massachusetts.

Challenge: **Federal Immigration Policy**

Recent changes to federal immigration policy are contributing to labor shortage concerns. The H-2B visa program, granting temporary work permits for non-U.S. citizens doing seasonal or "peak load" work, is indispensable to seasonal restaurant and hotel businesses, particularly in the Cape and Islands. By statute, these visas are capped nationally at 66,000 a year, but the Department of Homeland Security (DHS) is authorized to increase the cap by another 15,000 each year, which employers in LHT (and other sectors such as Construction) contend is insufficient for the needs of their growing industry. Further complicating matters, negotiating the cap in recent years has become embroiled in budget negotiation politics, with the Trump administration and congressional Republicans pressing for cap reductions. The annual uncertainty rattles employers, who must apply for these visas

well before summertime—and arrange for temporary worker housing—and cannot be certain that their applications will even be approved. In March 2018, the final federal budget actually authorized DHS to double the cap, thanks to last-minute maneuvering by the Democrats, but the point is that this issue keeps seasonal employers and their temporary employees on knife’s edge year to year.

Recent efforts to ban or further limit immigration from specific countries and to crack down on undocumented workers is also reducing available labor supply across many more LHT operations, including those that are year-round. Beyond that, the entire industry is concerned about the chilling effect (as people feel unwelcome or dissuaded from visiting the U.S.) these policies will have on international travel and foreign student enrollments in our institutions of higher education, which form a significant part of the industry’s customer base.

The federal government drives immigration policy, and there is little that states and localities can do to shape it beyond policy advocacy and pressing for change at the ballot box. Massachusetts is already a sanctuary state, but that political and humanitarian positioning in itself does little to influence federal policy. Our Congressional caucus and Republican gubernatorial leadership, however, can advocate for loosening of current restrictions on H-2B visas and to render the capping mechanism more attuned to employer staffing needs. They can also pressure their peers to support realistic pathways to citizenship and to oppose arbitrarily executed Immigration and Customs Enforcement (ICE) raids and deportations. Such efforts, if well publicized, might send a message to the international community that foreign-born workers and students are welcome here.

Goal: Improve LHT Marketing Funds and Strategy

Marketing programs and state and regional organizations are essential components of the LHT industry. These businesses and venues rely not only on local patrons, but also on tourists and business travelers from across the state, from other states, and from countries around the world. As we have seen from convention center data (see page 20), those who visit from out of state bring additional dollars to the Massachusetts economy and tax base, with secondary effects that further circulate throughout the economy.

We also know that international travelers typically spend more than domestic travelers and stay longer, so from an economic perspective it is especially important (if more difficult and costly) to reach them with marketing efforts.

Challenge: State Funded Marketing

Employers and other stakeholders have told us over and over that the state does not do nearly enough to market the LHT industry with appropriate levels of funding and thoughtfully targeted promotion. Most believe that LHT is not appreciated as an “economic powerhouse,” with untapped revenue-generating potential that could be optimized with greater understanding of its marketing needs and funding to support them. They also point to the competitive disadvantage they face from other states. Last year, for example, New York State, which competes for the same regional customer base, poured \$70 million into its tourism budget, while Massachusetts budgeted just \$10 million for its Tourism Trust Fund. The mosaic character of the industry in the Commonwealth, with its many subsectors, small businesses, 16 Regional Tourism Councils (RTCs), and lack of big destinations like Orlando’s Disney World, also makes it difficult to lobby on its behalf with a unitary voice. As a Western Mass LHT business leader put it, “We market our place but not ourselves as an industry.”

For the LHT industry to better reach its full economic potential, funding must be increased for marketing and promotion within and beyond the state. That much is clear. The question is, by what formula and organizational structure, and through what budgeting sources? The current structure could stay in place, with the Massachusetts Office of Travel and Tourism receiving significantly more funding than at present, directed toward a well-developed, multi-targeted marketing campaign on behalf of the state in collaboration with entities such as MassPort, the Mass Convention Center Authority, and the Greater Boston Convention and Visitors Bureau, with strong input from the statewide RTCs. In this scenario, the RTCs, whose grant funding was slashed in half in 2016 and directed to the General Fund, should have their funding restored or even increased from previous levels.

Another approach would involve a novel policy concept in use in several other states, which would allow regions to form Tourism Destination Marketing Districts (TDMD). Funded by a locally approved 1–3 percent hotel room assessment (in addition to room taxes collected by the state). The revenue would provide consistent dedicated funding for individual RTCs who would then use it to drive marketing aimed at increasing overnight visitors to area hotels. These two policy approaches are not mutually exclusive, and some combination of both could be devised. One suggestion in executing a TDMD plan might be to pool some RTC regions together for taxing and marketing, to help achieve better economies of scale.

Goal: Level the Competitive Playing Field for LHT

Challenge: Sharing Economy and Digital Disruption

Sharing economy transportation services such as Uber and Lyft, which are available in Greater Boston with more limited service in Worcester and Western Mass, solve some access issues facing LHT employers, while also presenting other challenges. Putting so many extra vehicles on the road makes Greater Boston's already dense traffic congestion even worse, particularly during rush hour at Logan Airport and on metro highways, and at nearly all hours in downtown Boston.²

Unregulated competition from the sharing economy, such as short-term rentals via Airbnb, are moving LHT employers, especially in the hotel industry, to seek relief. Owners of bed & breakfast establishments are feeling the pinch from these “disruptive” arrangements acutely, and some are being put out of business. While these services attract some visitors who otherwise would not be able to afford hotel rates and thus patronize restaurants and tourism venues, short-term rentals also drive down rates (particularly at limited-service accommodation establishments), and cut into hotels' business traveler customer base.³ They are able to do so because they do not pay occupancy taxes or absorb other regulatory expenses required of hotels, giving them an unfair pricing advantage and depriving the Tourism Trust Fund of badly needed hotel-tax marketing revenue. Moreover, workforce housing prices and rents are driven up as more homes and even entire buildings are taken out of the housing market by investment purveyors of short-term rentals.

This is particularly true in Greater Boston. The LHT industry is not alone in suffering the effects of this cycle, but with a comparatively large segment of its workforce low-wage, anything that drives up the cost of housing compels a disproportionate share of LHT workers to move ever farther from their jobs, forcing them to spend more time and limited resources on commuting.

Although Airbnb and other short-term rental platforms are useful to homeowners and renters seeking to supplement their budgets, it has become, as one of our survey-takers put it, a “renegade” operation. Disrupting neighborhoods, housing and accommodation prices, and the tax revenue necessary to maintain public services upon which rental “hosts” rely, these arrangements should be brought under regulatory control. It is not clear whether states, municipalities, or both would be the best regulatory vehicles and tax beneficiaries, but so far, municipalities have taken the lead. This makes sense since they are responsible for zoning, code enforcement, road and lighting maintenance, health and safety inspections, and other services that ensure the smooth functioning of residential and commercial neighborhoods. Regulations can include annual caps on the number of nights hosts can rent out, registration fees and taxes, restrictions on host properties in which the owner or renter is not living on the premises. Regulations are hard to enforce, however, because short-term rental platforms do not share their data, making it impossible to track which homes are on the temporary market.

In January 2018, Boston Mayor Marty Walsh proposed a tiered regulatory scheme designed for three classes of hosts. It has been on hold, however, partly because the State has been preparing its own regulations, but also due to organized host resistance and inadequate enforcement mechanisms—leading some to call for banning use of these platforms altogether.⁴ An outright ban would be unfortunate, for short-term hosting attracts mid-market visitors, often to towns and neighborhoods underserved by lodging establishments, and can help cash-strapped residents make ends meet. But a consensus seems to be emerging that something needs to be done to level the playing field.

Goal: **Control Rising Costs of Doing Business in the LHT Industry**

Challenge: **Digital Communications**

It is difficult to tell whether the LHT industry is uniquely affected by the cost of utilities, but our survey found that LHT employers across all regions of the state are dissatisfied with these expenses. Regardless, this is a common concern raised by businesses operating in other industries throughout the state.

The costs associated with digital communications appear to be the most commonly shared concern regarding all utilities, including water, electricity, and heat. Reliable access to Internet and cell phone services are crucial to LHT customers and patrons, and employers now rely on digital reservation platforms and travel sites such as TripAdvisor to conduct business. In most regions and city neighborhoods, service providers have a functional monopoly in the marketplace, without incentive to keep rates low and service uniformly steady.

Digital infrastructure has become just as essential to commerce, education, and domestic life as transportation, water and sewage, and energy infrastructure. The difference is that the latter are so widely recognized as public goods that they are either publicly owned or receive government subsidies. Some are public utilities, providing everyday services prone to monopoly and high monopoly pricing were they not brought under public utility regulations that ensure a decent level of service at a fair price.

It may be time to treat digital infrastructure as a public utility, too. Theoretically, municipalities could take on this responsibility. Of the ones that have done so, it was at significant expense—likely unaffordable to many places.⁵ States are better suited to advancing and funding such regulatory and pricing controls, and to pressing for federal oversight similar to that exerted by the Federal Energy Commission. With such oversight, large Internet and cell phone service providers that reach across state borders cannot undercut each other and have to play by the same rules. Whether publicly or privately owned, most utilities operate as private businesses. If folded into public utility regulation, current providers would not be put out of business but put on a regulated footing. If properly structured, doing so would reduce consumer and business costs, representing good economic development policy.

Challenge: **Water Costs**

Water costs are also of particular concern. Water bills cover not only the cost of water, but also maintenance, operations, and some buildout expenses. Costs have risen significantly since 2009, in Boston by approximately 20 percent (adjusted for inflation).⁶ Although energy, agriculture, mining, and manufacturing industries rank among the largest commercial water consumers, LHT is also a leading consumer, particularly in the Accommodation and Food & Beverage subsectors due to their heavy kitchen and bathroom use and high clientele turnover. In some communities, notably the Cape and Islands, water-use costs are compounded by sewer buildout bond issues, for which seasonal operators are expected to share year-round rates. Moreover, some LHT recreational businesses, such as ski and pool facilities, require unusually heavy water use, with high costs placing a heavy burden on their budgets.

Municipalities and regional economic development agencies have good reason to replace their septic-based systems with sewer buildout to attract business activity across a wide range of industries. This is particularly so in the Cape and Islands, which is reliant on a seasonal tourist economy but struggles to attract year-round residents and visitors. Here, local entities risk driving away critical seasonal businesses operating on tight margins with year-round commercial bonding rates. Offering tiered rates could help accommodate their budgetary needs. In other regions of the state where sewer capacity is limited, such as Central Mass, public-private partnerships might be a way of together investing in the region's future.

Challenge: **Statewide Transportation Access**

The condition of both worker and customer transportation access across the state is a pressing concern for all employers; it's fair to say that every industry has been affected by the deterioration of the nation's roads, rails, and public transit. But for LHT, which relies heavily on visitor travel, the results can cut deeply into the bottom line. In Boston's suburban and exurban areas and in other parts of the state, LHT businesses clamor for better bus-transit service, particularly on weekends when visitor volume runs high and bus service is often curtailed. Meanwhile, in Western Mass and particularly the Berkshires, LHT enterprises located about a three hours' drive from the

New York City and Boston customer markets would like to see Amtrak rail service extended to their region.

Transit upgrades and buildouts represent big-ticket budget items, and would require increases in federal and state funding, and public-private partnerships across state, local, and regional levels of governance. In view of the state's limited transportation funding, business leaders and public officials must find ways of coming together to make the case and raise the funds for strategically targeted improvements to the Commonwealth's transportation system. As a matter of policy, state and local leaders need to understand the critical role transportation infrastructure plays in the long-term economic health of the Commonwealth and its regions. This is not specifically an LHT issue, but it is a common theme we have seen throughout our research exploring the long range prospects of the Massachusetts economy. There is a delicate relationship between housing, economic development, and transportation that is of critical importance to business leaders, local officials, and state residents that cannot be overlooked by those charged with maintaining Massachusetts' strong economic positioning. The Governor recently appointed a Future of Transportation Commission (on which one of our authors sits) that is wrestling with these issues, as well as with the disruptive technologies and environmental concerns that may influence the transportation system in the coming years.

These policy ideas are intended to advance further reflection, discussion, and debate. Most are not original to us, but gleaned from our survey, our review of the literature, and numerous formal and informal conversations with those who have a direct stake in optimizing the prospects of the LHT industry. The challenges revealed by these sources are supported by our secondary data analysis, sealing our confidence in the suggestions laid out here.

Those who are affiliated with the LHT industry would not be sole beneficiaries of the strengthened policy support we have outlined. As we have shown, the LHT industry contributes much more to the Massachusetts economy than its strong employment numbers and business revenue would suggest. Employers, workers, and stakeholders in other Massachusetts industries, along with the Commonwealth's tax base, would also benefit from efforts to enhance LHT's prosperity. It is our hope that we have successfully made the industry's case to citizens across the Commonwealth, and that state, municipal, and private-sector leaders will translate our discoveries into viable policy action.

Endnotes

Executive Summary

1. Dermot J. Dwyer, Arnold M. Howitt, and Stacey M. Marx, *The Visitor Industry in Massachusetts: Strategic Recommendations: Summary Report* (Cambridge, MA: Taubman Center for State and Local Government, John F. Kennedy School of Government, Harvard University, 1991).
2. The wage and salary data reported here is different from wage data presented in Chapter 1. The ACS data used in this chapter relies on self-reported data. Data are derived from five-year weighted averages that include collections between 2012 and 2016.
3. Note that the influential and groundbreaking study *The Visitor Industry in Massachusetts* (1991) did not include a formal survey.

Chapter 1

1. For more information on the NAICS classification system, see “2017 NAICS Manual” North American Industry Classification System. <https://www.census.gov/eos/www/naics/>
2. To learn more about the Bureau of Labor Statistics’ definition of the Leisure, Hospitality & Tourism industry “at a glance,” visit “Industries at a Glance: Leisure and Hospitality.” Bureau of Labor Statistics. <https://www.bls.gov/iag/tgs/iag70.htm>.
3. In fact, the very terms used for the industry vary, depending on which sectors researchers include in their definitions. “Travel and Tourism” and “Hospitality and Tourism” are commonly used, along with “Leisure and Hospitality,” the term used for the BLS supersector. For a statewide report on Utah that includes direct employment in a portion of the transportation industry in its definition, see Jennifer Leaver, M.A. “The State of Utah’s Travel and Tourism Industry, 2015.” Kem C. Gardner Policy Institute: The University of Utah. April 2016. <http://gardner.utah.edu/wp-content/uploads/2016/05/TourismReport-v7.pdf>. Another, on New Jersey, includes a portion of direct retail employment: “The Economic Impact of Tourism in New Jersey: Tourism Satellite Account Calendar Year 2016.” Tourism Economics. <https://www.visitnj.org/sites/default/master/files/2016-nj-economic-impact.pdf>.
4. Wage data collected through the Quarterly Census of Employment and Wages (QCEW) includes “bonuses, stock options, severance pay, profit distributions, cash value of meals and lodging, tips and other gratuities, and, in some states, employer contributions to certain deferred compensation plans such as 401(k) plans.” See <https://www.bls.gov/cew/cewfaq.htm> for more information.
5. Gross State Product (GSP) data is reported by the Bureau of Economic Analysis, which provides detail only at the 3-digit NAICS code level. Due to this data limitation, we report GSP only for NAICS codes 71 (Arts, Entertainment & Recreation) and 72 (Accommodation & Food Services). While this is smaller than the industry definition we use throughout, the combination of these two major industry groups accounts for 97.7 percent of total LHT employment and is, therefore, an appropriate proxy for the entire industry.
6. The subsectors we used here generally rely on the 3-digit NAICS sectors within NAICS 71 (Arts, Entertainment & Recreation) and 72 (Accommodation & Food Services).
7. For more information on the concentration of the LHT industry around Massachusetts, see Appendix B, which includes maps of the concentration of business establishments by employment size and subsector for the LHT industry.

8. The following table breaks down the Food & Beverage subsector by share of employment in each of its industries.

Massachusetts Food & Beverage Industries by Share of Employment, 2016

NAICS	NAICS Title	Employment	Share
722	Food & Beverage	267,279	100%
7223	Special Food Services	22,515	8%
7224	Drinking Places (Alcoholic Beverages)	6,761	3%
7225	Restaurants and Other Eating Places	238,003	89%

9. Employment at casinos is expected to rise by roughly 8,000 employees over the next several years, with the opening of the Encore Boston Harbor casino in Everett (5,000 employees) and the MGM Resort casino in Springfield (3,000 employees).
10. For statistical purposes, the federal government combines those who work directly for convention centers with employees of businesses that service convention center events under NAICS code 561920: Convention & Trade Show Organizers.
11. DCU record-keeping does not distinguish between convention center and arena numbers for attendees or events. The numbers given here are rough estimates provided by DCU staff. At the time of this report, a system was not in place for consistent room-night reporting by local hotels and motels. Also of note, the 160,000 sq. ft. Seaport World Trade Center, along with the Seaport Hotel, is privately developed and managed on land leased from MassPort, and thus is not included in our data from MCCA and DCU, which are publicly funded entities.
12. Greater Boston Convention & Visitors Bureau, Overseas Visitation Report Summary, 2015. See “International Visitation to the United States: A Statistical Summary of U.S. Visitation (2015).” U.S. Department of Commerce: National Travel and Tourism Office.
13. According to MCCA Executive Director David Gibbons, two-thirds of the BCEC’s business now lies in hosting association meetings. A third of the 22,000+ attendees at the 2007 BIO International Convention, held at the BCEC, hailed from overseas, as did a large number of exhibitors. See “2012 BIO International Convention Closes in Boston with Unprecedented Partnering Activity within BIO Business Forum.” *Biotechnology Innovation Organization*. June 2012. <https://www.bio.org/media/press-release/2012-bio-international-convention-closes-boston-unprecedented-partnering-activit>.
14. Amanda Erickson, “Is It Time to Stop Building Convention Centers?” *City Lab*, June 11, 2012. <https://www.citylab.com/solutions/2012/06/stop-building-convention-centers/2210/>.
15. Due to differences between the BLS’s QCEW data and REMI’s estimates, the LHT employment numbers used in this analysis differ slightly from the totals discussed elsewhere in this chapter—by 297 jobs. See Appendix A for a methodological explanation.

Chapter 2

1. Technically, the U.S. Census Bureau does not treat “Latino” or “Hispanic” as racial groups in its reporting. That said, since people commonly refer to those of Latino or Hispanic ethnicity as belonging to racial groups, we disentangled them from other racial groups to which they are assigned. For ease of reading, we just write “white” or “black” for these groups, when in actuality we are referring to white non-Hispanic or black non-Hispanic, for example. Further, to refer to those from South and Latin America, we use the term *Latino* throughout since it includes all countries in the area and not just those that are Spanish-speaking.
2. The wage and salary data reported here is different from wage data presented in Chapter 1. The ACS data used in this chapter relies on self-reported data. Data are derived from five-year weighted averages that include collections between 2012 and 2016.
3. The LHT Employment Ratio is generated for each representative racial/ethnic group, covering white, black, Asian, and Hispanic workers. It is calculated as the share of workers of each racial/ethnic group in the LHT workforce out of the share of workers of each racial/ethnic group in the total state workforce. For example, if black workers made up 75 percent of the LHT workforce and 50 percent of the total workforce, the black LHT Employment Ratio would be calculated as $[\frac{.75}{.5}] = 1.5$. The Employment Ratio metric is similar to a Location Quotient in both construction and logic, as both are intensity measures that quantify concentrations relative to larger or comparative areas.

4. Biao Xiang. *Emigration Trends and Policies in China: Movement of the Wealthy and Highly Skilled*. (Washington, D.C.: Migration Policy Institute, 2016), p. 2.
5. Data reflected in Map 2.1 is based on Place of Work rather than Residential PUMA. Due to this data limitation, the regional boundaries drawn in the map are not comparable to those that appear elsewhere in this report.
6. Poverty status is determined by the U.S. Census Bureau using income data and poverty thresholds. For more information, see “How Census Bureau Measures Poverty.” United States Census. <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>.

Chapter 3

1. Food and Beverage Serving Workers except Bartenders, Waiters and Waitresses includes SOC Occupations 35-3021 (Combined Food Preparation and Serving Workers, Including Fast Food), 35-3022 (Counter Attendants, Cafeteria, Food Concession, and Coffee Shop), and 35-3041 (Food Servers, Non-restaurant). Source: Massachusetts Executive Office of Labor Development, Occupational Employment Statistics DUA 2016-2018 Short Term Industry Staffing Pattern Projections for select industries.
2. From a macro-perspective, replacement does not “create” new openings in the economy.
3. To estimate the annual replacement rate for occupations in LHT, we calculated an annual replacement rate for each occupation in the economy from EOLWD’s short-term (three-year) projections. EOLWD provides an estimate of the number of positions that will become available due to replacement within an occupational title (regardless of industry) over a three-year period. From there, we developed an annual replacement rate for each occupation and applied it to the current occupational distribution in the LHT industry. The assumption here is the replacement rate for an occupational title in LHT is the same for that occupational title in the entire economy. This is a reasonable assumption as most of the major occupational titles in LHT are particularly concentrated in LHT and not in many other industries (e.g., waiters, waitresses, cooks, etc.).
4. On middle-skill gap definitions and trends, See Harry Holzer. “Job Market Polarization and U.S. Worker Skills: A Tale of Two Middles.” *Economic Studies at Brookings*. April 2015. https://www.brookings.edu/wp-content/uploads/2016/06/polarization_jobs_policy_holzer.pdf.
5. The Bureau of Labor Statistics Occupational Information Network, also known as O*Net, collects and shares employment, education, training, and other data for most of the occupations included in the Standard Occupational Classification (SOC) system. See <https://www.onetcenter.org/database.html> for more information.
6. Alison Arnett. “Enrollment at Costly Culinary Schools Shrinks.” *Boston Globe*. April 24, 2018. <https://www.bostonglobe.com/lifestyle/food-dining/2018/04/24/enrollment-costly-culinary-schools-shrinks-demand-grows-for-skilled-kitchen-workers/B3vHZc5WCbj66w7Y57D6XO/story.html>.
7. “Tuition and Mandatory Fees at Massachusetts Public Colleges and Universities.” Massachusetts Department of Higher Education Data Center. February 2, 2018. <http://www.mass.edu/datacenter/tuition/appendixtuitionfeesweight7.asp>.
8. Interview with Wanda Smith-Gispert, February 15, 2018. A local four-year private college is also pitching in. At its Springfield location, Cambridge College, which is tailored to adult learners, is offering a classroom pre-apprenticeship program in hospitality, co-designed by MGM Springfield. These classes, for which students are charged tuition by the class, are one to four weeks long, culminating in a certificate of completion, and may be credited toward the college’s degree program in hospitality management. See also Katie Johnston. “In Staffing Springfield Casino, MGM Leaves Little to Chance.” April 2, 2018. <https://www.bostonglobe.com/business/2018/04/01/mgm-springfield-embarks-hiring-spreefLAXdBSOIul4ydsobAfKqK/story.html>.
9. This number includes high schools that are not chapter 74 approved by DESE, but meet federal guidelines.
10. DESE Career/Vocational Technical Education Graduate Follow-Up Survey (2015). See also Barry Bluestone, James Huessy, Ali El Toukhy, Catherine Tumber, and Don Walsh. *The Critical Importance of Vocational Education in the Commonwealth*. Northeastern University. January 2016. <http://www.northeastern.edu/dukakiscenter/wp-content/uploads/2016/01/AVTE.NORTHEASTERN-REPORT-final.pdf>. A survey-based statewide study that shows, among other things, that the state’s vocational education system performs so well academically that roughly 60 percent of students report plans to attend four-year degree programs upon graduation on a full- or part-time basis, with another 16 percent reporting similar plans to continue their educations in two-year degree programs.

11. Zane Razzaq. "Hudson Microcreamery Gets Workforce Training Grant." *The Metrowest Daily News*. April 4, 2018. <http://www.metrowestdailynews.com/news/20180404/hudson-microcreamery-gets-workforce-training-grant>; "MetroWest Business Digest for Oct. 10, 2017." *The MetroWest Daily News*. October 10, 2017. <http://www.metrowestdailynews.com/news/20171010/metrowest-business-digest-for-oct-10-2017>.
12. "Worcester Jobs Fund Connects Worcester Residents with Meaningful Career Pathways" City of Worcester, MA, August 1, 2016. <http://www.worcesterma.gov/announcements/worcester-jobs-fund-connects-worcester-residents-with-meaningfulcareer-pathways>.

Chapter 4

1. Note that the influential and groundbreaking study *The Visitor Industry in Massachusetts* (1991) did not include a formal survey. Dermot J. Dwyer, Arnold M. Howitt, and Stacey M. Marx. *The Visitor Industry in Massachusetts: Strategic Recommendations: Summary Report*. (Cambridge, MA: Taubman Center for State and Local Government, John F. Kennedy School of Government, Harvard University. 1991.)
2. "Choosing Massachusetts for Business: Key Factors in Location Decision-Making." *MassEcon*. March 2017. <https://massecon.com/choosing-massachusetts-business-key-factors-location-decision-making/>.
3. This survey was designed prior to the finalization of industry subsector categories used throughout this report. Subsector types have been adjusted to the five-category typology as defined in Chapter 1.
4. "Small Business Community in Massachusetts." *Mass.gov*. <http://www.mass.gov/hed/economic/eohed/bd/about/small-business-community-in-massachusetts.html>.
5. Ethan Forman and Dustin Luca. "Tucker Leads Charge to Restore Tourism Funds." *The Salem News*. December 16, 2016. http://www.salemnews.com/news/local_news/tucker-leads-charge-to-restore-tourism-funds/article_e5d09e9e-c7e8-5d12-868e-38fec1267371.html.
6. State and federal programs were not offered as an option among survey answers, accounting for their absence in Table 4.4. Some respondents did mention government programs under the option "Other."
7. "WIOA Overview." United States Department of Labor. <https://www.doleta.gov/WIOA/Overview.cfm>.

Chapter 5

1. Barry Bluestone and James Huessey. "The Greater Boston Housing Report Card 2017: Ideas from the Urban Core." November 2017. <https://www.tbf.org/-/media/tbf/reports-and-covers/2017/2017-housingreportcard.pdf>
2. Alison Felix, Steven R. Gehrke, and Timothy Reardon. "Fare Choices: A Survey of Ride-Hailing Passengers in Metro Boston," Metropolitan Area Planning Council. February 2018. <http://www.mapc.org/wp-content/uploads/2018/02/Fare-Choices-MAPC.pdf>.
3. Tarik Dogru, Makarand Mody, and Courtney Suess. "The Hotel Industry's Achilles Heel? Quantifying the Negative Impacts of Airbnb on Boston's Hotel Performance." *Boston Hospitality Review*. Fall 2017. <http://www.bu.edu/bhr/2017/10/05/the-hotel-industrys-achilles-heel-quantifying-the-negative-impacts-of-airbnb-on-bostons-hotel-performance/>.
4. Josh Cohen. "Boston Moves to Regulate Short-Term Rentals Like Airbnb." *Next City*. <https://nextcity.org/daily/entry/boston-moves-to-regulate-airbnb>.
5. Peter Moskowitz. "Chattanooga Was a Typical Postindustrial City. Then It Began Offering Municipal Broadband." *The Nation*. <https://www.thenation.com/article/chattanooga-was-a-typical-post-industrial-city-then-it-began-offering-municipal-broadband/6/>.
6. "Water and Sewer Rates." Boston Water and Sewer Commission. <http://www.bwsc.org/SERVICES/Rates/rates.asp>

APPENDIX A

Economic Impact Analysis, Methodology and Additional Notes

Methodology

This analysis used the PI⁺ model from Regional Economic Models, Inc. (REMI) and the same state-level 2016 BLS Quarterly Census of Employment and Wages (QCEW) data used elsewhere in this study. PI⁺ is a leading economic model employed throughout Massachusetts, the United States, and the world. The model accepts changes in employment and wages, and uses them to calculate the full economic impacts of those changes. We used a six-region model of Massachusetts for this analysis, though only state-level results are presented here.

Because the economic activity we wished to study already exists in the model, we cannot add it again to determine economic impacts, especially since PI⁺ is a nonlinear model. Analyses such as this that study an existing industry are known as contribution analyses rather than impact analyses. In a contribution analysis, the activity in question is removed from the economy, and the resulting negative effects represent the

contributions of that sector to the economy. In simple terms, when something is removed, the size of the hole left behind reveals the size of the original object. The same logic applies here. For ease of understanding and display, we reverse the sign of the numbers from the model so that the negative numbers are shown as positive numbers and vice versa.

This study assumes that the contribution of the LHT industry is reflected in and limited to LHT businesses themselves. It excludes spending by tourists on activities outside of the NAICS sectors evaluated herein, most prominently retail (see **Table A.1** for the NAICS codes we used). As a result, this study does not measure the contributions of tourists but rather the contributions of businesses providing LHT services. That said, our analysis covers direct and induced contributions to other sectors, such as retail, as a result of LHT business activity.

The data by NAICS sector obtained for this study exist at a level of disaggregation that exceeds the industry

TABLE A.1

NAICS Codes Used in REMI Analysis

Industry	NAICS Code
Water transportation	483
<i>Inland Water Passenger Transportation</i>	483212
Scenic and sightseeing transportation and support activities for transportation	487-488
<i>Scenic and Sightseeing Transportation</i>	487
Administrative and support services	561
<i>Travel Agencies</i>	561510
<i>Tour Operators</i>	561520
<i>Convention and Visitors Bureaus</i>	561591
<i>Convention & Trade Show Organizers</i>	561920
Performing arts and spectator sports	711
Museums, historical sites, zoos, and parks	712
Amusement, gambling, and recreation	713
Accommodation	721
Food services and drinking places	722

Source: PI⁺

detail available in PI⁺. Therefore, employment and wages were summed to the industry levels shown in Table A.1. Items shown in *italics* indicate industry detail that exceeds that available in the model. These items are placed below the industry used for modeling. The state-level data was apportioned across the model's region by each region's share of total employment in the relevant NAICS sectors.

Our simulations were run for 2016, the most recent year QCEW data were available at the time of our study. For this year, the data show no employment in sector 483212 (Inland Water Passenger Transportation) anywhere in the state—which is highly unlikely and probably represents data suppression by the Bureau of Labor Statistics (BLS). As a proxy, we used the average employment and wages for the previous five years for this sector.

Unlike some other economic models, PI⁺ includes a description of the baseline economy, with its own estimates of employment and wages. The existence of the baseline causes analysts to make accommodations to the model's default behaviors. Regarding employment, an analyst cannot remove more jobs than exist in the baseline. This limitation is not typically a problem as very few studies seek to eliminate entire industries from the economy. However, this is just such a study; without removing all the LHT jobs, we cannot measure their contribution. Fortunately, because our analysis is based on five- or six-digit NAICS codes and PI⁺ mainly uses three-digit codes, our inputs (Table A.2) were far from hitting the model's limits in all sectors but one: Museums, Historical Sites, Zoos, and Parks (NAICS 712). Here we encountered an input value that was 315 jobs greater than the model's estimate. This discrepancy is small (about 5%) and not an indication of error in either our data or the model's. The analysis year, 2016, is a year with actual data in the QCEW but an estimated year in our version of PI⁺ therefore there is not an expectation that they would match precisely. However, as a result of this mismatch, for NAICS 712 our analysis removed only the 6,223 jobs in the model's baseline rather than the 6,538 jobs in the QCEW data.

In our test runs, the secondary and tertiary economic effects caused errors in the Cape and Islands region of our PI⁺ model, specifically causing total employment in Food Services and Drinking Places to fall below zero. Because we are removing whole industries to see their impacts, encountering this error somewhere,

especially in a small region, was not unexpected. As a remedy, we used the methodology for NAICS 712 detailed above for the Cape and Islands region while removing the exact number of jobs we calculated from the other model regions.

The industries that did not exceed the baseline values were removed using the employment variable "Industry (Exogenous Production)." This variable directly removes the number of jobs specified. For Museums, Historical Sites, Zoos, and Parks (NAICS 712), we used a different approach. PI⁺ has a specific method that must be used when removing an entire industry from the model. The variable "Firm Employment" must be used as a share with the value of -100, i.e., removing 100 percent of the employment. Using firm employment for this industry meant that NAICS 712 appeared in the results in a manner different than the other industries. The results presented have been modified to move the contributions of Museums, Historical Sites, Zoos, and Parks to the same place as the other industries.

As a result of adding Inland Water Passenger Transportation jobs and using fewer jobs in Museums, Historical Sites, Zoos, and Parks, the employment numbers used in the economic contribution analysis are lower than the totals discussed elsewhere by 297 jobs.

When reducing the number of jobs in a modeling simulation, PI⁺ will automatically remove wages associated with those jobs using its own estimates of average wages per employee. Again, because our inputs are based on more detailed NAICS code than those in the model, our estimates of average wages and the model's differed. To correct for this, the difference between the model's wages and our wages was entered into the model as another set of inputs. We retained the wage adjustment for Museums, Historical Sites, Zoos, and Parks (NAICS 712) to reflect the true amount of wages we wished removed.

Because of the mixing of firm and industry employment variables in our inputs, PI⁺ accounts for our impacts in different places in the model, placing some effects that most would consider direct under indirect and induced effects. We undertook recalculations of the data to appropriately reflect the accounting that our audience would expect and understand. In no circumstances did these recalculations result in changes to top line totals or summary results.

TABLE A.2
Inputs to PI⁺ Model

Category	Detail	Region	Units	2016
Employment	Industry (Exogenous Production): 483 - Water transportation	Massachusetts	Units	-48.2
Employment	Industry (Exogenous Production): 487-488 - Scenic and sightseeing transportation and support activities for transportation	Massachusetts	Units	-1509.0
Employment	Industry (Exogenous Production): 561 - Administrative and support services	Massachusetts	Units	-7159.8
Employment	Industry (Exogenous Production): 711 - Performing arts and spectator sports	Massachusetts	Units	-12346.0
Employment	Industry (Exogenous Production): 712 - Museums, historical sites, zoos and parks	Massachusetts	Units	0.0
Employment	Industry (Exogenous Production): 713 - Amusement, gambling, and recreation	Massachusetts	Units	-45830.0
Employment	Industry (Exogenous Production): 721 - Accommodation	Massachusetts	Units	-35760.0
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Massachusetts	Units	0.0
Employment	Firm (competes locally): 712 - Museums, historical sites, zoos and parks	Massachusetts	Percent	-100.0
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Metro Boston	Units	-157446.4
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Southeast	Units	-39348.6
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Pioneer Valley	Units	-23196.7
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Central	Units	-25673.8
Employment	Industry (Exogenous Production): 722 - Food services and drinking places	Berkshires	Units	-5587.1
Employment	Firm (competes locally): 722 - Food services and drinking places	Cape and Islands	Percent	-100.0
Wage Bill	483 - Water transportation	Massachusetts	Nominal \$ (Units)	-\$ 241,064.10
Wage Bill	487-488 - Scenic and sightseeing transportation and support activities for transportation	Massachusetts	Nominal \$ (Units)	\$ 12,275,583.70
Wage Bill	561 - Administrative and support services	Massachusetts	Nominal \$ (Units)	-\$ 99,739,304.80
Wage Bill	711 - Performing arts and spectator sports	Massachusetts	Nominal \$ (Units)	-\$ 907,499,473.80
Wage Bill	712 - Museums, historical sites, zoos, and parks	Massachusetts	Nominal \$ (Units)	-\$ 26,997,666.10
Wage Bill	713 - Amusement, gambling, and recreation	Massachusetts	Nominal \$ (Units)	-\$ 147,474,488.00
Wage Bill	721 - Accommodation	Massachusetts	Nominal \$ (Units)	-\$ 18,091,013.80
Wage Bill	722 - Food services and drinking places	Massachusetts	Nominal \$ (Units)	-\$ 12,884,193.00

Source: PI⁺ and UMDI calculations

ADDITIONAL NOTES

All of the 607,813 jobs created or supported by the LHT industry come with a wage or salary. These earnings are recorded by place of work. In other words, wages are counted by job location rather than by employee residence. After adjusting for outflows from commuters and mandatory contributions to social security and similar programs, earnings by place of work becomes earning by place of residence, i.e., the amount of money Massachusetts residents earn because of the existence of the LHT industry. Earnings are supplemented by non-labor income to yield personal income, which after taxes becomes disposable personal income. Our analysis finds that the jobs created or supported by the LHT industry pay \$32 billion of earnings. After adjustments, those earnings result in \$23 billion of disposable income in the pockets of Massachusetts residents.

TABLE A.3

Contributions to Earnings and Personal Income, in Billions (2017\$)

Category	2016
Total Earnings by Place of Work	\$32.70
<i>Less: Contributions for Government Social Insurance</i>	\$3.06
<i>Plus: Adjustment for Residence</i>	(\$1.77)
Equals: Net Earnings by Place of Residence	\$27.87
<i>Plus: Property Income</i>	\$1.46
<i>Plus: Personal Current Transfer Receipts</i>	(\$0.38)
Equals: Personal Income	\$28.96
<i>Less: Personal Current Taxes</i>	\$5.44
Equals: Disposable Personal Income	\$23.51

Source: PI* and UMDI calculations

By creating new jobs and incomes, the LHT industry contributes to economic opportunity. The PI* model then translates this opportunity into an estimate of changes in population and labor force. The new economic opportunity prompts domestic migration into Massachusetts of not just working-age adults but also their children. Furthermore, employment and income opportunities entice some residents outside of the labor force to join, pushing up labor force numbers independent of any economic migration. With the economic contributions of the LHT industry, nearly 176,000 additional people choose to live in

Massachusetts, which results in 172,000 more people in the labor force, including those added to the labor pool through the 3 percent increase in participation rates (Table A.4).

TABLE A.4

Contributions to Population and Labor Force

Category	2016
Population	176,409
Labor Force	172,223
Participation Rate	3%

Source: PI* and UMDI calculations

As already discussed, output counts the value of all transactions. Relatedly, the value of each transaction includes the full cost of producing the purchased products and services. Taken together, these two considerations imply that the value of some, if not many, transactions are counted more than once. For example, output includes the sale of flour to a baker and the sale of bread to a consumer. But the sale price of the bread includes the cost of the flour used to produce it. The value of goods and services purchased by businesses for transformation into other goods and services are called intermediate demand. Because intermediate demand is double-counted, output does not reflect the net new economic activity attributable to an economic change. The appropriate measure is gross product, which is output less intermediate demand. Our analysis estimates the gross state product attributable to the presence of the LHT sector to be \$39 billion in 2016.

TABLE A.5

Contributions to Gross State Product, in Billions (2017\$)*

Category	2016
Output	\$69.38
<i>Less: Intermediate Demand</i>	\$29.36
Equals: Gross State Product or Net New Economic Activity	\$39.38

Source: PI* and UMDI calculations

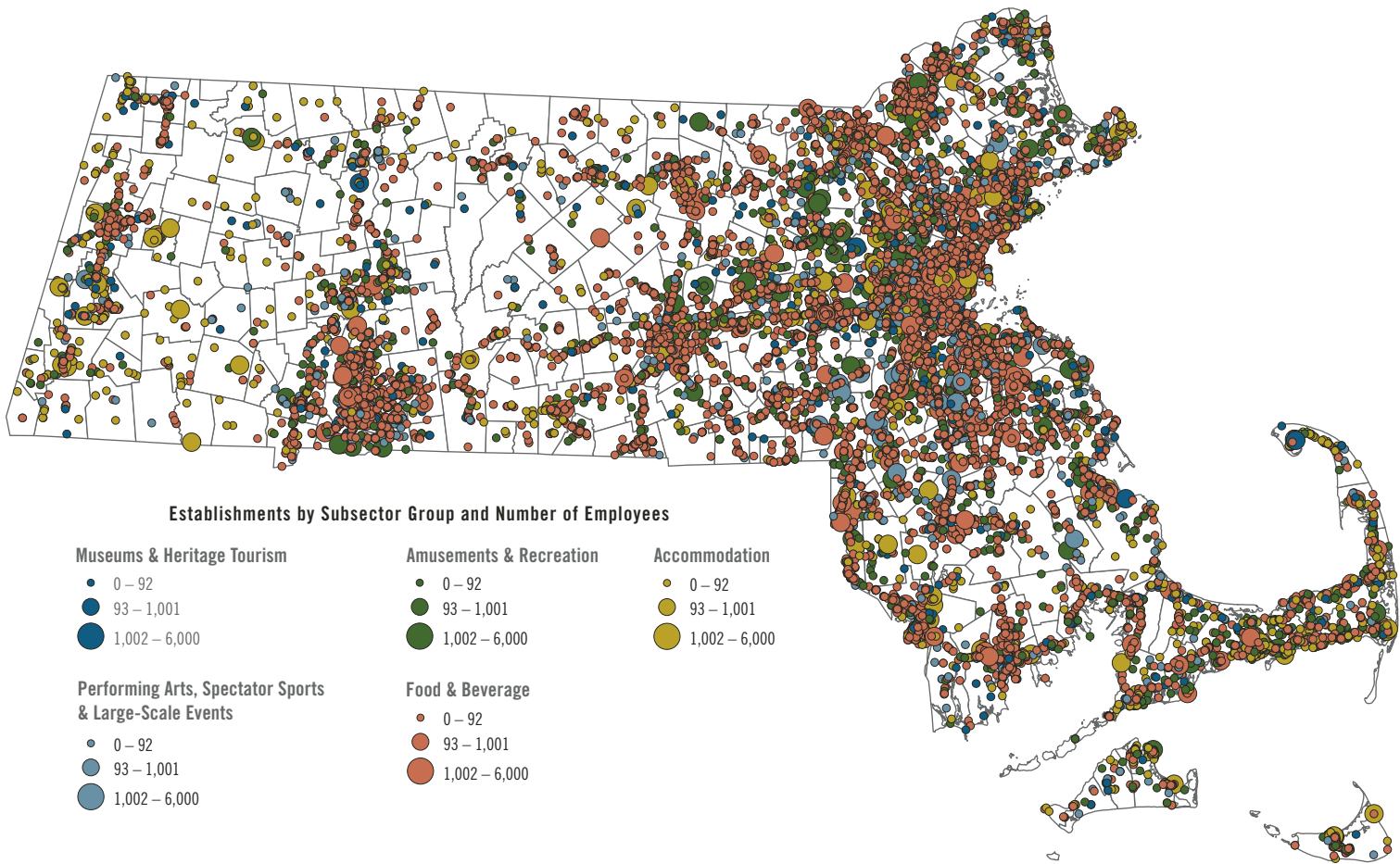
* Note: GSP = Output – Intermediate Demand. This table reflects the values taken directly from the model, but if one subtracts the value of Intermediate Demand in this table from Output, the result does not equal the value of GSP because the dollar values have been deflated to 2016 dollars. Using the default units in PI*, this calculation does equal.

APPENDIX B

Distribution of LHT Establishments in Massachusetts

MAP B.1

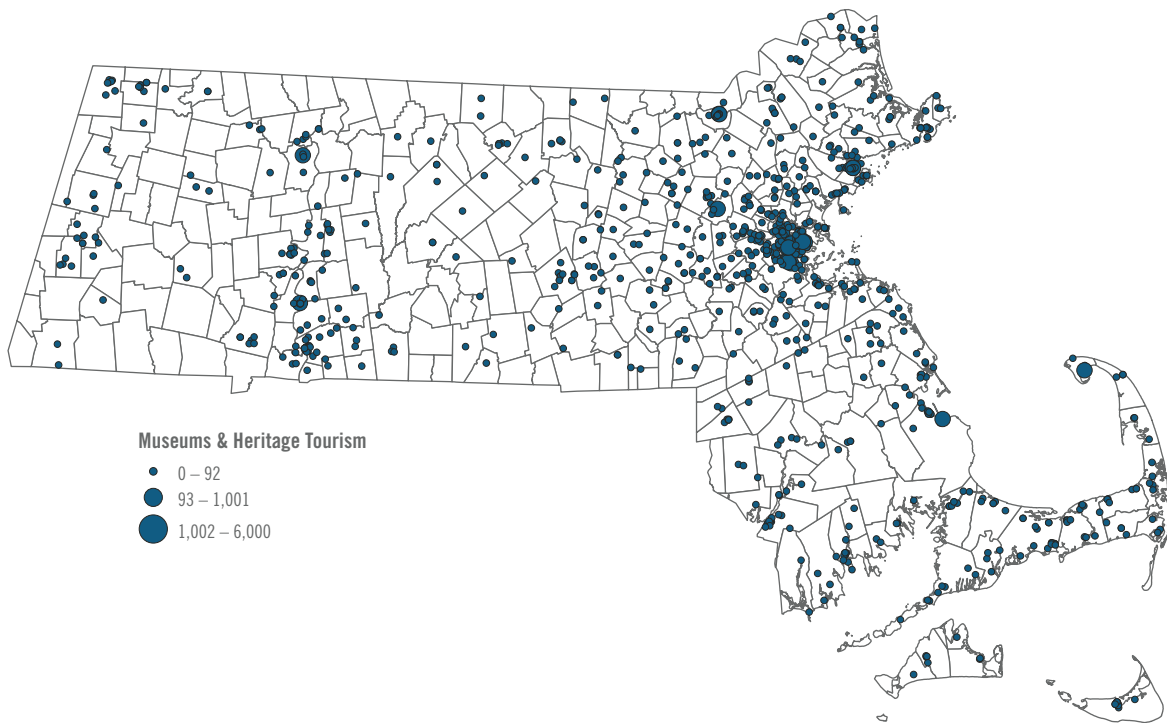
Distribution of All LHT Establishments and Estimated Employee Count



Source: Massachusetts Executive Office of Labor and Workforce Development, ES-202, UMDI Analysis

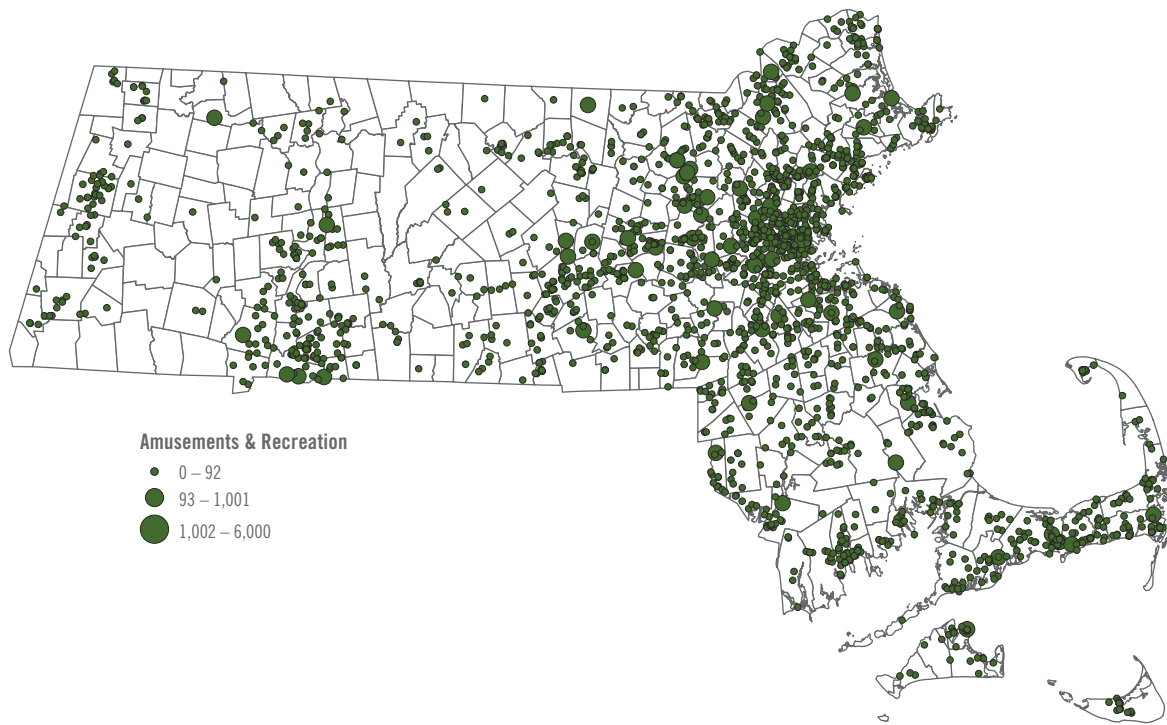
MAP B.1a

Distribution of LHT Establishments and Estimated Employee Count: **Museums & Heritage Tourism**



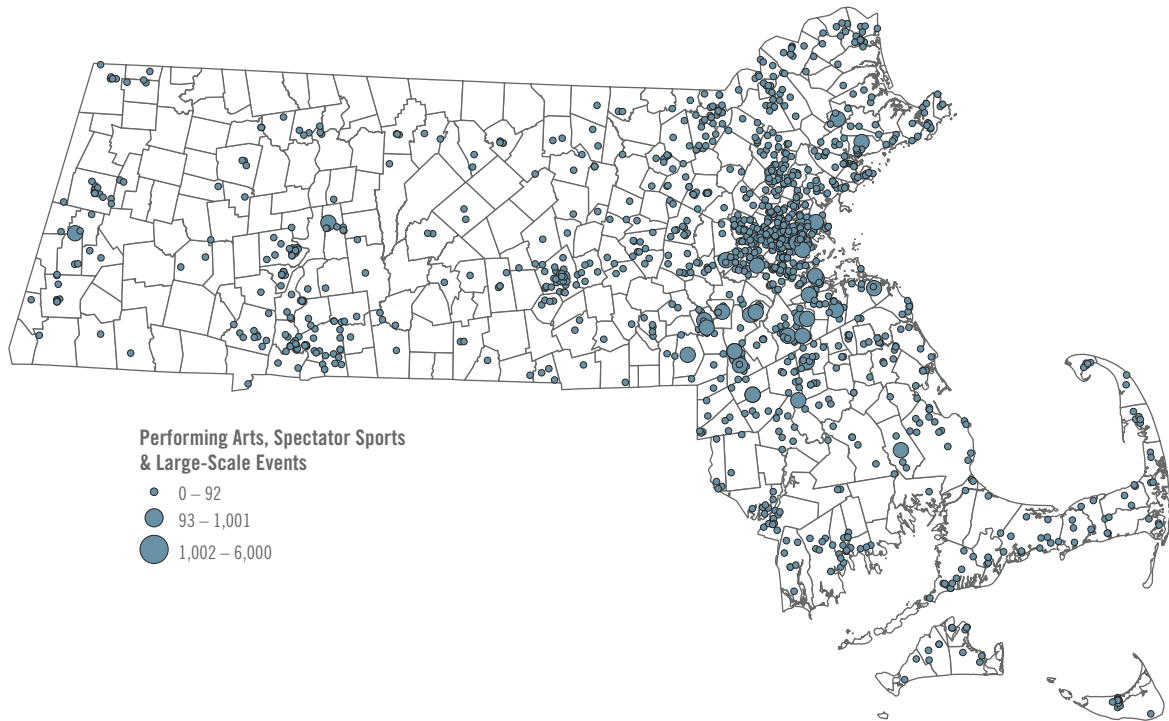
MAP B.1b

Distribution of LHT Establishments and Estimated Employee Count: **Amusements & Recreation**



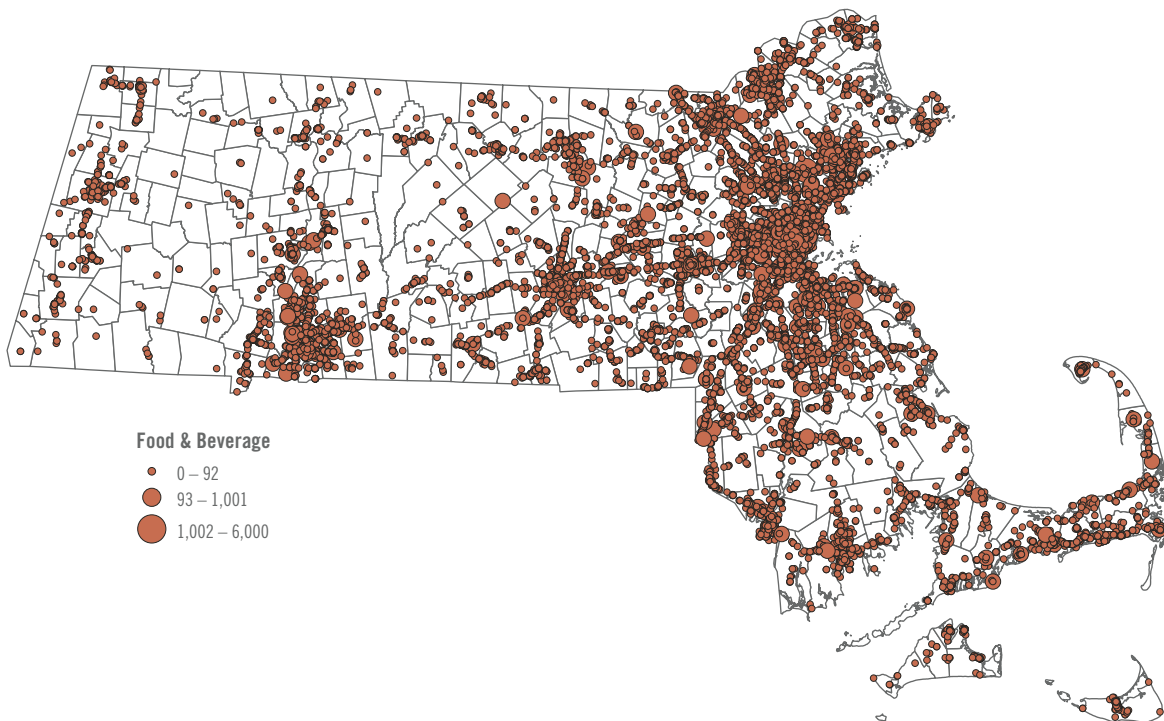
MAP B.1c

Distribution of LHT Establishments and Estimated Employee Count: **Performing Arts, Spectator Sports & Large-Scale Events**

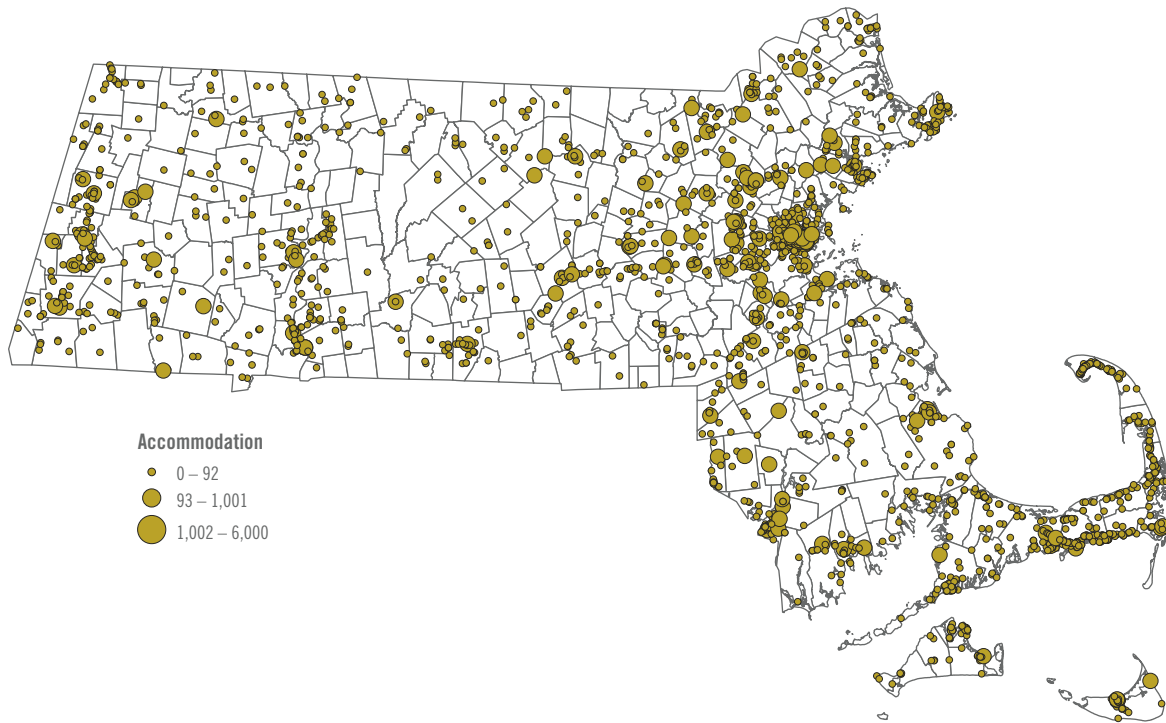


MAP B.1d

Distribution of LHT Establishments and Estimated Employee Count: **Food & Beverage**



Distribution of LHT Establishments and Estimated Employee Count: **Accommodation**



APPENDIX C

Convention Centers

TABLE C.1
MCCA Convention Center Performance, FY2012-FY2017

	FY12	FY13	FY14	FY15	FY16	FY17
Attendees (all)	642,946	776,277	840,815	735,787	765,551	902,564
BCEC	431,839	417,220	488,504	480,659	518,104	564,143
Hynes	211,107	359,057	352,311	255,128	247,447	282,063
Mass Mutual	54,046	70,840	55,460	64,351	72,866	56,358
Room Nights (all)	505,635	526,378	477,412	636,823	604,872	621,815
BCEC	289,253	289,521	264,669	413,895	397,625	363,474
Hynes	216,382	231,598	207,563	214,822	198,889	250,172
Mass Mutual	Unavailable	5,259	5,180	8,106	8,358	8,169
Total Events (all)	333	366	359	379	376	447
BCEC	121	124	139	147	136	211
Hynes	105	136	116	115	119	128
Mass Mutual	107	106	104	117	121	108

Source: MCCA and MGM Springfield

TABLE C.2

Top 25 Convention Centers in the U.S. by Square Footage, 2015

Category	Detail	Units	2016
1	McCormick Place	2,600,000	Chicago, IL
2	Orange County Convention Center	2,100,000	Orlando, FL
3	Las Vegas Convention Center	1,940,631	Las Vegas, NV
4	Georgia World Congress Center	1,400,000	Atlanta, GA
5	Sands Expo & Convention Center	1,305,052	Las Vegas, NV
6	Kentucky Exposition Center	1,100,000	Louisville, KY
7	New Orleans Ernest N. Morial Convention Center	1,100,000	New Orleans, LA
8	NRG Park	1,056,213	Houston, TX
9	International Exposition Center (I-X Center)	1,050,000	Cleveland, OH
10	Mandalay Bay Resort & Casino	1,045,295	Las Vegas, NV
11	George R. Brown Convention Center	893,590	Houston, TX
12	Jacob K. Javits Convention Center	840,000	NYC, NY
13	Donald E. Stephens Convention Center	840,000	Rosemont, IL
14	Anaheim Convention Center	813,000	Anaheim, CA
15	Indiana Convention Center & Lucas Oil Stadium	749,100	Indianapolis, IN
16	Kay Bailey Hutchison Convention Center	724,526	Dallas, TX
17	Cobo Center	722,500	Detroit, MI
18	Los Angeles Convention Center	720,000	Los Angeles, CA
19	Walter E. Washington Convention Center	703,000	Washington, D.C.
20	Pennsylvania Convention Center	679,000	Philadelphia, PA
21	Phoenix Convention Center	645,500	Phoenix, AZ
22	San Diego Convention Center	615,701	San Diego, CA
23	Colorado Convention Center	584,000	Denver, CO
24	Boston Convention & Exhibition Center	516,000	Boston, MA
25	Calvin L. Rampton Salt Palace Convention Center	515,000	Salt Lake City, UT

Source: PI* and UMDI calculations

APPENDIX D

Survey Respondent Satisfaction Levels

TABLE D.1

Level of Employer Satisfaction with Key Business-Related Conditions by Region

	The Berkshires		Central Mass		Pioneer Valley		Northeast		Greater Boston		South Shore		Cape and Islands	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Cost of living for employees	29%	34%	44%	15%	42%	22%	12%	45%	4%	72%	47%	37%	8%	78%
Cost of labor	34%	20%	26%	41%	43%	20%	22%	27%	13%	54%	32%	42%	17%	48%
Commercial real estate costs	18%	33%	19%	33%	22%	22%	4%	50%	5%	46%	16%	37%	6%	57%
Utility costs (energy, water, sewage, digital, and cable)	7%	68%	15%	63%	25%	47%	8%	51%	7%	52%	16%	47%	10%	59%
Local taxes (e.g., property, hotel, and meals)	18%	50%	22%	33%	28%	30%	15%	44%	7%	42%	21%	47%	8%	45%
Availability of public financing (including incentives)	10%	30%	19%	23%	12%	24%	18%	29%	20%	29%	21%	42%	12%	12%
Availability of private financing	15%	24%	31%	15%	24%	15%	27%	12%	35%	9%	42%	21%	33%	10%
Size of customer base	43%	38%	35%	46%	48%	33%	46%	29%	64%	16%	53%	26%	59%	24%
Worker transportation access	10%	53%	22%	37%	18%	48%	30%	21%	34%	43%	11%	33%	24%	33%
Customer transportation access	25%	65%	26%	22%	17%	52%	31%	33%	46%	39%	11%	58%	39%	18%
Responsive support from state and local government	32%	29%	44%	19%	28%	25%	31%	33%	29%	34%	5%	32%	18%	49%
Responsive support from local and regional business organizations	39%	34%	63%	4%	52%	17%	61%	10%	55%	18%	63%	11%	55%	27%

Note that we removed the "Neither Satisfied nor Dissatisfied" responses, therefore the percentages to not add up to 100%.

TABLE D.2

Level of Employer Satisfaction with Industry-Related State Policy by Program

	The Berkshires		Central Mass		Pioneer Valley		Northeast		Greater Boston		South Shore		Cape and Islands	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Public transportation	14%	72%	28%	39%	24%	63%	38%	38%	28%	54%	17%	83%	40%	33%
Highway transportation	37%	41%	35%	30%	43%	33%	38%	28%	29%	45%	46%	38%	43%	23%
Passenger transportation (air, rail, ship, ground)	20%	56%	27%	33%	28%	34%	32%	20%	58%	24%	56%	22%	39%	27%
Marketing for your industry	37%	43%	26%	47%	26%	46%	31%	56%	27%	49%	23%	54%	33%	48%
Farmland and open space protection	56%	25%	91%	0%	62%	18%	57%	7%	38%	0%	50%	13%	52%	21%
Utility costs	14%	62%	19%	67%	17%	62%	14%	57%	25%	44%	42%	33%	17%	57%
Health-care availability	27%	46%	20%	55%	33%	42%	32%	32%	51%	20%	50%	33%	23%	52%
Health-care costs	11%	86%	5%	85%	14%	68%	16%	74%	9%	71%	17%	58%	6%	81%
Brownfields redevelopment	17%	25%	40%	0%	13%	13%	38%	13%	13%	13%	57%	0%	20%	20%
Small-business financing	35%	29%	18%	45%	24%	24%	32%	26%	33%	33%	30%	30%	30%	19%
Tax incentives	33%	33%	15%	69%	16%	59%	15%	35%	27%	45%	33%	33%	14%	53%
Bonding availability	33%	0%	25%	25%	27%	27%	0%	25%	60%	0%	50%	0%	21%	29%
Regulation of sharing economy	13%	44%	17%	33%	18%	41%	11%	33%	29%	53%	38%	38%	16%	44%
Workforce training	13%	50%	33%	33%	30%	20%	26%	21%	14%	33%	20%	20%	15%	44%
Arts and culture support	59%	34%	25%	58%	47%	27%	53%	37%	37%	33%	45%	36%	47%	35%
Availability of casino permits	14%	29%	25%	25%	15%	46%	8%	50%	9%	64%	25%	25%	22%	33%
Utility availability	40%	32%	24%	47%	37%	29%	40%	16%	68%	12%	50%	17%	41%	20%

Note that we removed the “Neither Satisfied nor Dissatisfied” responses, therefore the percentages to not add up to 100%.

APPENDIX E

Selected Questions from the UMDI LHT Employer Survey

Section 1: Company Profile

ANSWER ALL: Which of these sectors best describes your company's **main** operations? (Check only one.)

Lodging

- ☐ Full-service hotel
- ☐ Limited-service hotel
- ☐ Motel
- ☐ Bed and Breakfast
- ☐ Campground

Food and Beverage Service

- ☐ Full-service restaurant
- ☐ Limited-service restaurant (pay-in-advance)
- ☐ Non-alcoholic beverage establishment (e.g., coffee shop)
- ☐ Food service contractor
- ☐ Caterer
- ☐ Bar or nightclub
- ☐ Specialty service (e.g. brewery, winery, farm-to-table venue, food truck)

Arts and Entertainment

- ☐ Performing arts (dance, theater, musical groups)
- ☐ Visual arts (e.g., painting, sculpture, crafts)
- ☐ Spectator sports
- ☐ Amusements and theme parks
- ☐ Gambling

Recreation

- ☐ Outdoor recreation (e.g., golf, bicycling, swimming)
- ☐ Indoor recreation (e.g., swimming pools, hockey rinks, health clubs, bowling lanes, spas, retreats)

Attractions

- ☐ Museums, historical sites
- ☐ Nature parks and trails
- ☐ Zoos and aquariums
- ☐ Botanical gardens and arboreturns
- ☐ Scenic and sightseeing activities (e.g., whale watches, deep sea fishing, harbor cruises, duck boats)

Travel Arrangement and Event Planning

- ☐ Travel agencies
- ☐ Convention and visitors bureaus
- ☐ Convention and trade show organizers
- ☐ Event planning
- ☐ Fair and festival organizing
- ☐ Digital travel and leisure portals (e.g., TripAdvisor, Orbitz, Yelp, Open Table)

Other

- ☐ (e.g., retail, sales, promotion) _____

ANSWER ALL: In addition to its main operations, does your company or organization provide other goods or services?

- ☐ Yes
- ☐ No

If yes, please check all that apply:

- ☐ Full-service restaurant
- ☐ Limited-service restaurant (pay-in-advance)
- ☐ Non-alcoholic beverage establishment (e.g., coffee shop)
- ☐ Catering
- ☐ Bar or nightclub
- ☐ Performing arts (e.g., dance, theater, music)
- ☐ Visual arts (e.g., painting, sculpture, crafts)
- ☐ Event planning
- ☐ Fair and festival organizing
- ☐ Indoor recreation
- ☐ Outdoor recreation
- ☐ Food and/or beverage manufacturing and supply (e.g., craft beer, baked goods, ice cream)
- ☐ Retail
- ☐ Other (Please specify) _____

ANSWER ALL: Which of the following best characterizes your business or organization?*

- ☐ Year-round
- ☐ Strictly seasonal
- ☐ Year-round, with shifting seasonal activities or services

ANSWER ALL: What is the ownership structure of your company or organization?

- ☐ Independently owned and operated
- ☐ Franchise
- ☐ Private-investor owned
- ☐ Private-equity owned
- ☐ Publicly-owned corporation
- ☐ Real Estate Investment Trust (REIT)
- ☐ Nonprofit
- ☐ Don't know
- ☐ N/A

Section 2: Market Dynamics

ANSWER ALL: Where does your customer base originate from? (Please provide approximate percentages totaling 100%)

Local (within 20 miles):	_____
Elsewhere in Massachusetts (more than 20 miles from home):	_____
New England (beyond MA):	_____
U.S. (beyond New England):	_____
International:	_____
Total:	100%

ANSWER ALL: Are you considering expanding your business, company, or organization over the next five years?

- ☐ Yes
☐ No
☐ N/A

a. If so, where would you likely expand? (Please check all that apply.)

- ☐ Current Property
☐ Current town or city
☐ Elsewhere in Massachusetts
☐ New England (excluding MA)
☐ Other states in the U.S. (excluding New England) Where? _____
☐ Outside the U.S. Where? _____

ANSWER ALL: How satisfied are you with these key *business-related* conditions in your region in Massachusetts?

	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied
Cost of living for employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost of labor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Commercial real estate costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utility costs (energy, water, sewage, digital, and cable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local taxes (e.g., property, hotel, and meals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of public financing (including incentives)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of private financing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Size of customer base	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worker transportation access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer transportation access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive support from state and local government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responsive support from local and regional business organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: How concerned are you about the following potential challenges to your Massachusetts business (es) over the next five years?

	Not Concerned at All	Somewhat Concerned	Very Concerned	N/A
Available resources to support new technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competition from the sharing economy (e.g., Airbnb, Uber, Lyft, Blue Apron)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value of U.S. Dollar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to capital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competition from casinos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aging workforce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Available labor supply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health care cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health care availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union drives or demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More restrictive immigration policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labor cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International travel disruption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 3: Workforce Information

ANSWER ALL: Approximately how many staff members (management and workers) does your company employ at your business, organization, or property (ies) in Massachusetts?

Note: If your business is seasonal, please use numbers that apply during the active season.

Number of Employees

- ☐ 1-4
- ☐ 5-9
- ☐ 10-19
- ☐ 20-49
- ☐ 50-99
- ☐ 100-249
- ☐ 250-499
- ☐ 500-999
- ☐ 1000+
- ☐ Don't know

ANSWER ALL: Approximately what share of your entire staff works full-time and part-time?

Full-time: _____

Part-time: _____

Total: 100%

ANSWER ALL: Of the share of your staff that performs **service or operations work** (e.g., housekeeping, bartending, maintenance, wait service, reception, arts-assistance, driving, cleaning, dispatching, administrative assistance, IT support), approximately what percentages work full-time and part-time?

Full-time: _____

Part-time: _____

Total: 100%

ANSWER ALL: Over the **past five years**, has your business, organization, or property increased or reduced the total number of staff you employ in Massachusetts?

- ☐ Increased
- ☐ Stayed about the same
- ☐ Reduced
- ☐ Don't know

ANSWER ALL: Over the **next five years**, is your business, organization, or property likely to increase or reduce the total number of staff employed in Massachusetts?

- ☐ Increase
- ☐ Stay about the same
- ☐ Reduce
- ☐ Don't know

ANSWER ALL: How satisfied are you with the educational preparation of employees from the following types of institutions?

	Very Satisfied	Satisfied	Somewhat Satisfied	Not Satisfied	N/A
Traditional academic high schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocational technical high school programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community colleges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Four-year colleges and universities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In-house training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For-profit training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-profit training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: How challenging is it to hire and retain appropriately skilled employees for the following job types?
(Click arrow at right to see answer choices.)

	Not a Challenge	Slightly Challenging	Moderately Challenging	Extremely Challenging	N/A
Full-time management or administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time management or administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time "front of the house" (customer-facing) wage workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time "front of the house" (customer-facing) wage workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time "back of the house" wage workers (e.g., housekeepers, dishwashers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time "back of the house" wage workers (e.g., housekeepers, dishwashers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time equipment or operations workers (e.g., drivers, IT support, administrative assistance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time equipment or operations workers (e.g., drivers, IT support, administrative assistance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: Over the **past five years**, how challenging have the following issues been in maintaining a well-staffed, appropriately skilled workforce?

	Not a Challenge	Slightly Challenging	Moderately Challenging	Extremely Challenging	N/A
Available training programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Available career ladders for workforce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Addiction/substance abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff turnover due to re-employment, further education, or retirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff turnover due to family demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English language proficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic or "soft" skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union drives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local cost of living	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fitting employees with scheduling needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal or state immigration policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal or state labor regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: Have you used the following sources to find and hire appropriately skilled **service or operations staff** (e.g., driving, housekeeping, bartending, maintenance, wait service, reception, cleaning services, dispatching, administrative assistance, IT support)?
If so, how successful have these sources been?

	Very Successful	Successful	Somewhat Successful	Not Successful	Not used
Private employment or recruiting agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temporary employment agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school outreach (vocational)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school outreach (traditional)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community college outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College or university outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career fairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
One-stop career centers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet advertisements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Newspaper advertisements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employee referrals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union referrals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry networking events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: Have you used the following sources to find and hire appropriately skilled **management and upper-administrative staff**? If so, how successful have these sources been?

	Very Successful	Successful	Somewhat Successful	Not Successful	Not Used
Private employment or recruiting agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temporary employment agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school outreach (vocational)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school outreach (traditional)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community college outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College or university outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career fairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
One-stop career centers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet advertisements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Newspaper advertisements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employee referrals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Union referrals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry networking events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section 4: Industry Relationship with State, Local, and Regional Governance

ANSWER ALL: How satisfied are you with the following **state programs, regulations, and costs** as they relate to your industry?

	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Extremely Dissatisfied	N/A
Public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Highway transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passenger transportation (Air, rail, ship, ground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing for your industry by MOTT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmland and open space protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utility availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utility costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health care availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health care costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brownfields redevelopment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small-business financing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tax incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bonding availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulation of sharing economy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workforce training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arts and culture support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of casino permits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: How satisfied are you with the following **local programs, regulations, and costs** as they relate to your industry?

	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Extremely Dissatisfied	N/A
Land use regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business licensing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcohol licensing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Code enforcement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Chamber of Commerce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hotel and meal taxes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of public financing (including tax incentives)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmland and open land preservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bike paths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pedestrian thoroughfares	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulation of sharing economy (e.g. Airbnb, Lyft, Uber, Blue Apron)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linkages with workforce training and placement programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K-12 schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing assistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local tax structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electrical infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water and sewage infrastructure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ANSWER ALL: How important to the success of your industry are the following **regional development organizations**?

	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at all Important
Regional Tourism Council**	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional planning agency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional Chamber of Commerce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workforce Investment Board	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school vocational technical education programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

****Regional Tourism Councils**

- Greater Boston Convention and Visitors Bureau
- North of Boston Convention and Visitors Bureau
- Greater Merrimack Valley Convention and Visitors Bureau
- Southeastern Massachusetts Convention & Visitors Bureau
- Plymouth County Convention and Visitors Bureau
- Cape Cod Chamber of Commerce
- Martha's Vineyard Chamber of Commerce
- Nantucket Island Chamber of Commerce
- Metro West Tourism & Visitors Bureau
- Discover Central Massachusetts
- Johnny Appleseed Trail Association
- Greater Springfield Convention and Visitors Bureau
- Hampshire County Tourism & Visitors Bureau
- Franklin County Chamber of Commerce
- Berkshire Visitors Bureau
- Mohawk Trail Association

ANSWER ALL: Would you like to share anything else about the advantages or challenges of operating a leisure, hospitality, or tourism business or organization in Massachusetts, in your town, or in your region of the state?
