



A Snapshot of Massachusetts' Construction Industry during a Decade-long Building Boom

A MassEconmix Report

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Industry during a Decade-long Building Boom**

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PIONEER INSTITUTE
PUBLIC POLICY RESEARCH



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Pioneer Institute is an independent, non-partisan, privately funded research organization that seeks to improve the quality of life in Massachusetts through civic discourse and intellectually rigorous, data-driven public policy solutions based on free market principles, individual liberty and responsibility, and the ideal of effective, limited and accountable government. *Pioneer Institute is a tax-exempt 501(c)3 organization funded through the donations of individuals, foundations and businesses committed to the principles Pioneer espouses. To ensure its independence, Pioneer does not accept government grants.*



This report is a publication of PioneerOpportunity, which seeks to keep Massachusetts competitive by promoting a healthy business climate, transparent regulation, small business creation in urban areas and sound environmental and development policy. Current initiatives promote market reforms to increase the supply of affordable housing, reduce the cost of doing business, and revitalize urban areas.



Infogroup is the provider of the Licensed Database used to create the Your-economy Time Series (YTS). This work/research was authorized to use YTS through the Business Dynamics Research Consortium (BDRC) by the University of Wisconsin-System's Institute for Business and Entrepreneurship. The contents of this publication are solely the responsibility of the authors.

Summary

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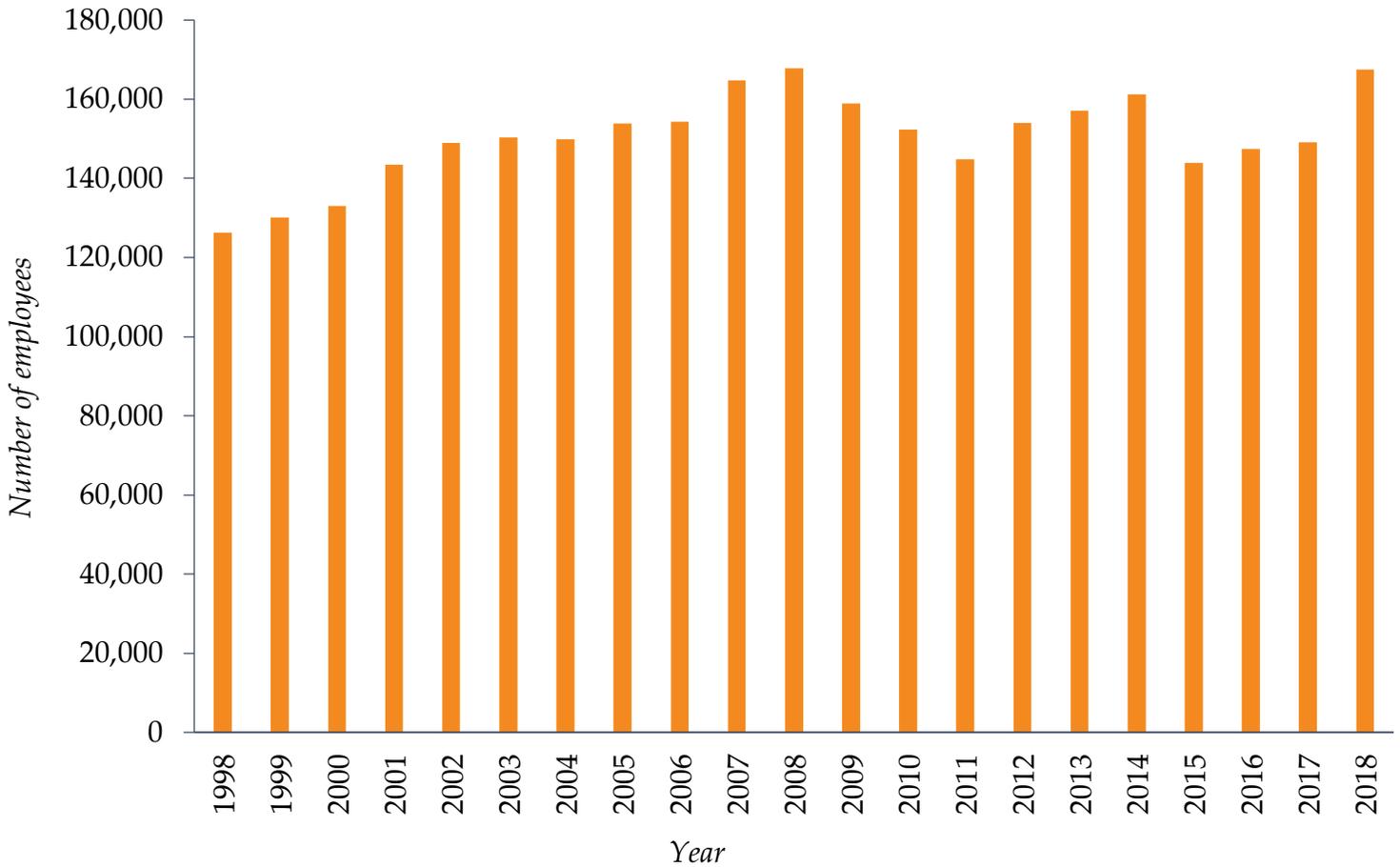
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Summary

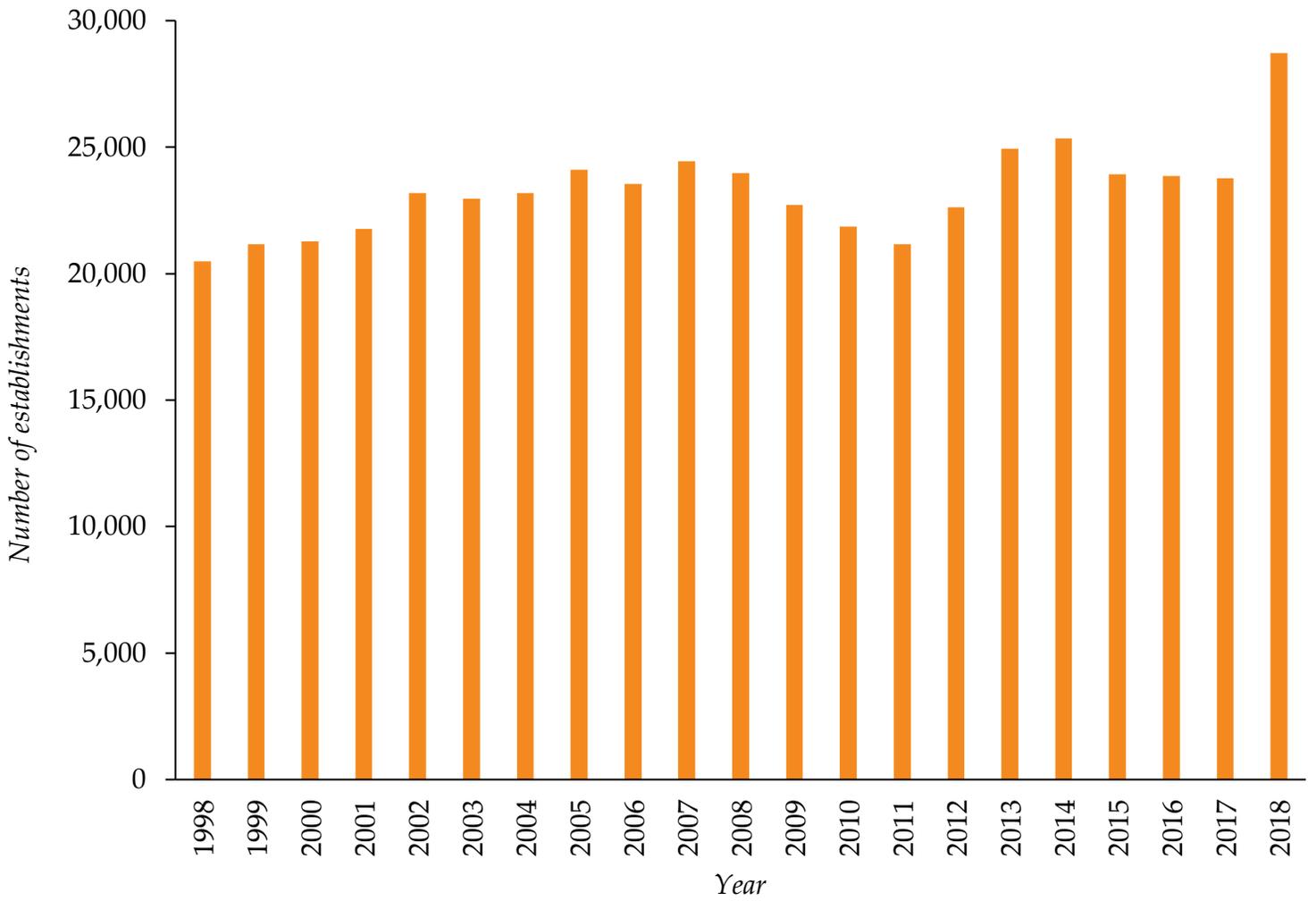
In Massachusetts, Construction industry employment has yet to surpass pre-Great Recession levels despite recent growth. The largest industry employer in 2018 was Eversource Energy. Acushnet, Richmond, and Sunderland have the highest concentration of Construction firms in MA relative to the national average, while 7 rural towns, mostly in Western Mass, have none at all. Nantucket County has the most Construction businesses per capita, while Suffolk County has the fewest. Most Construction employees in Massachusetts work in local real estate development, as opposed to construction products and services. Over 70 percent of Construction businesses in Massachusetts have fewer than 5 employees.

Basic Metrics of Growth

Number of Employees by Year

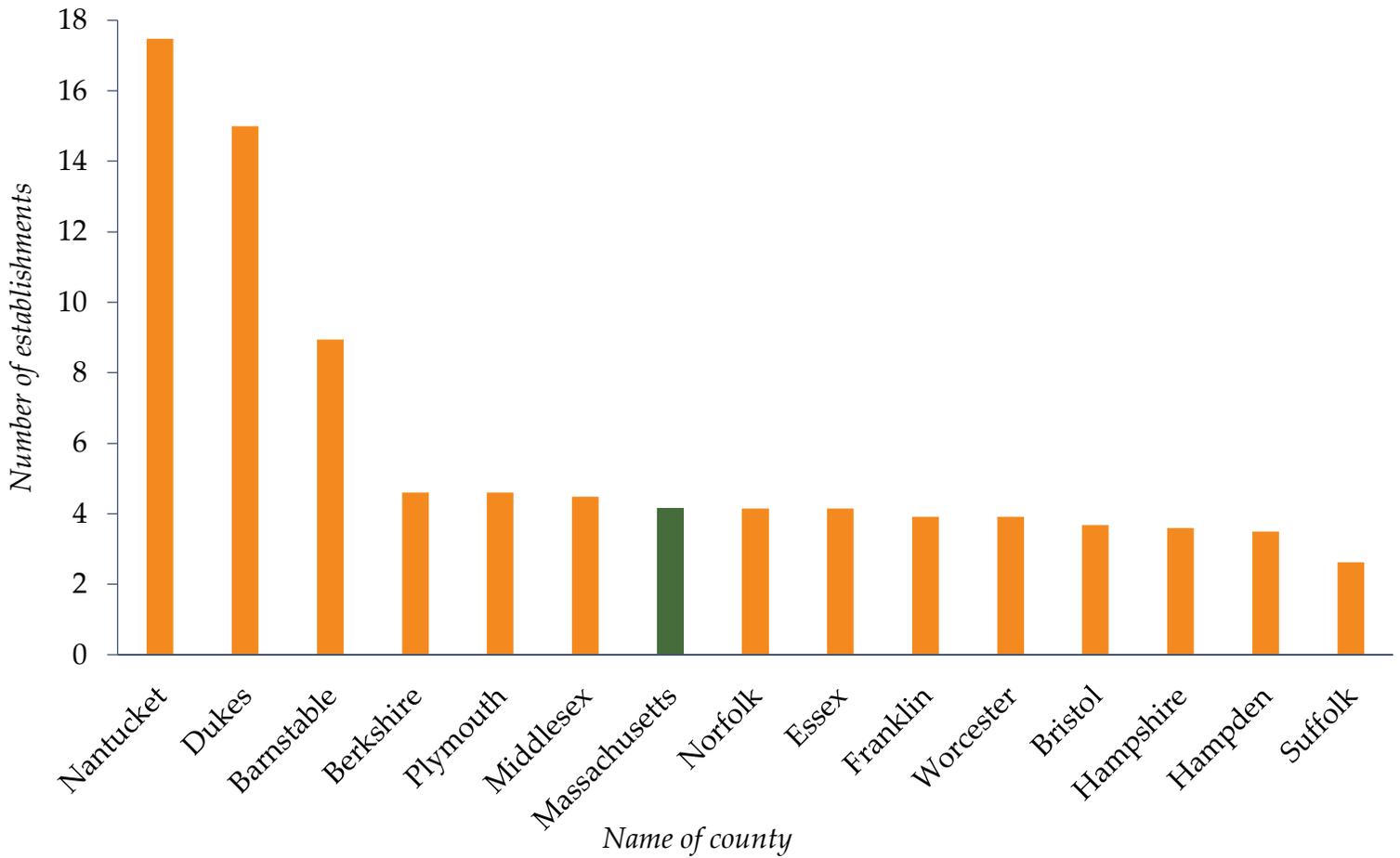


Number of Establishments by Year

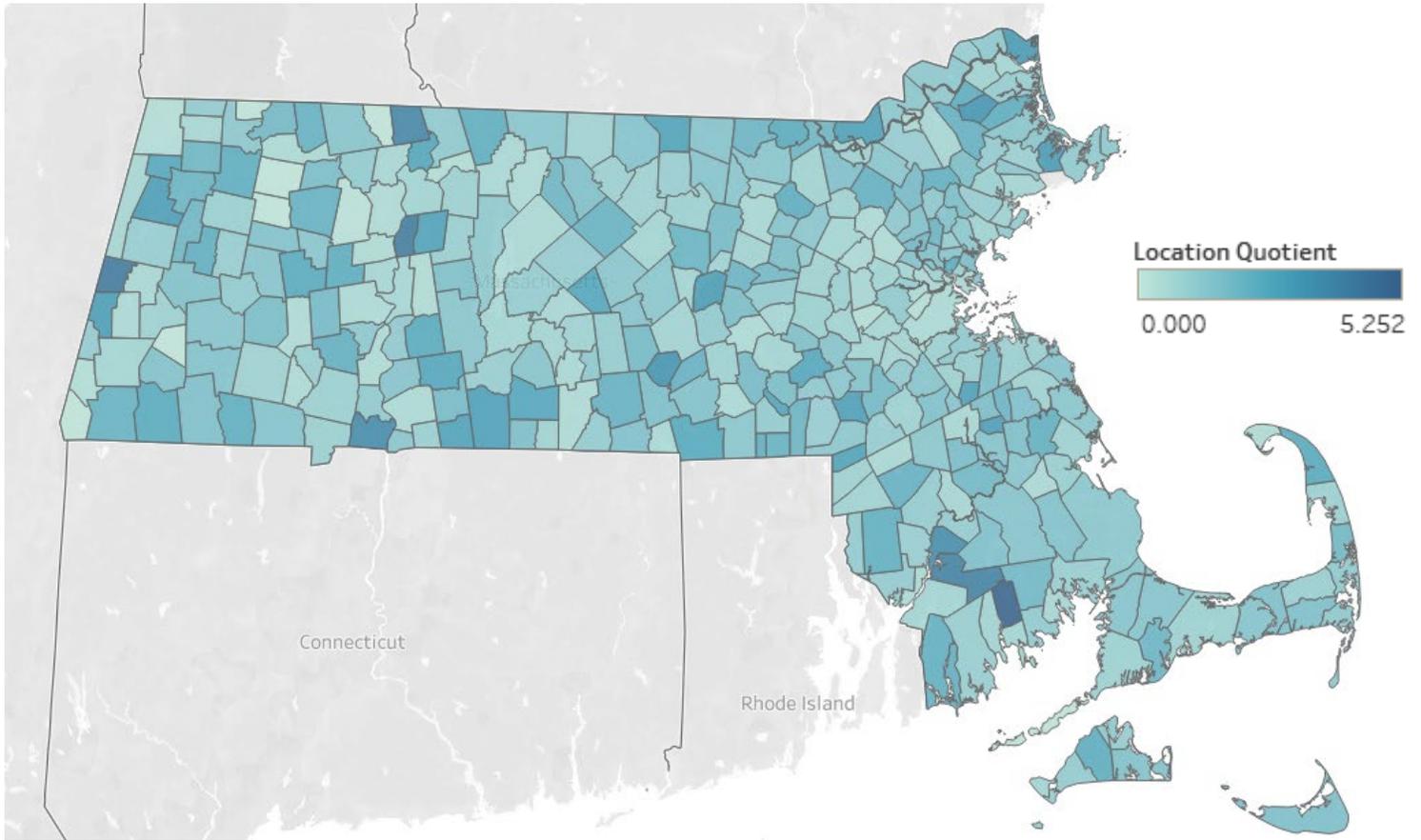


Business Concentration

Businesses per 1,000 Residents by County



Location Quotient¹ by Municipality in 2018



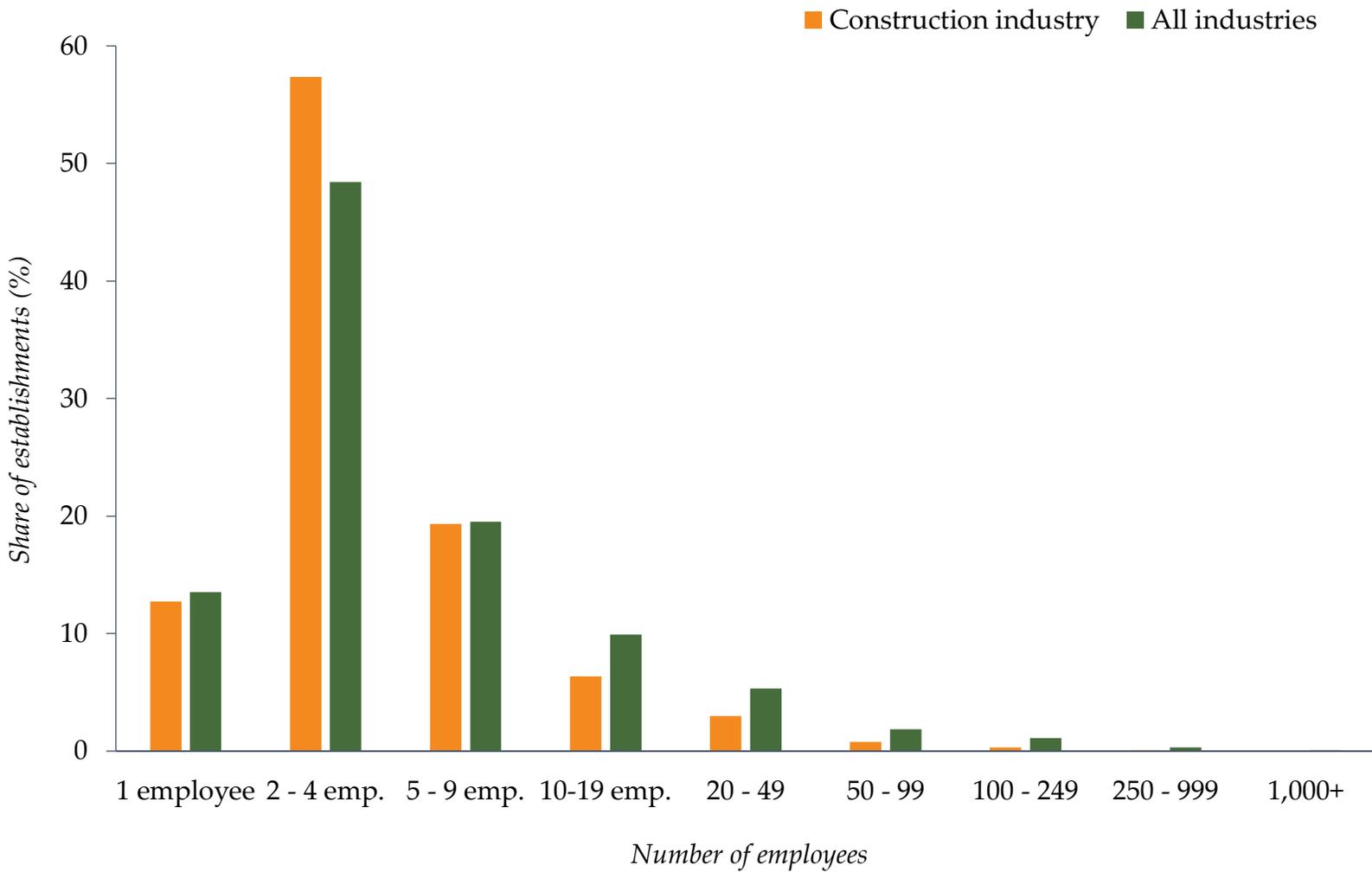
¹ The location quotient is an industry's share of employment in a given city or town relative to its share of employment in Massachusetts as a whole. It is often used as an indicator of economic specialization within an industry. Specifically, it is calculated as follows:

$$\frac{(\text{no. of employees in industry in city})/(\text{total employees in city})}{(\text{no. of employees in industry in state})/(\text{total employees in state})}$$

Any industry with a location quotient more than 1 is more highly concentrated in the specified city than in Massachusetts as a whole. Any industry with a location quotient less than 1 is more concentrated in Massachusetts as a whole than in the specified city.

Firm Size

Share of Establishments by Firm Size in 2018



Methodology

YTS stands for “Your-economy Time Series”, a database compiled by the Business Dynamics Research Consortium (BDRC), which is housed at the University of Wisconsin System Institute for Business and Entrepreneurship in Madison, Wisconsin. YTS contains annual, establishment-level, time series data on companies that are considered to be “in-business” in a given year. In order to be considered as an “in-business” company, an establishment must have intent on conducting commercial activities in that year, or have a DBA (doing business as) physical location. Businesses included in YTS are for-profit (both private and public), nonprofit, and government establishments. The YTS database provides access to information regarding employment trends, establishment level affiliations, relocation, and industrial sectors in any geographical area.

YTS is assembled from annual Infogroup Business Data historical files. This “snapshot” reflects the first half of a calendar year for all years except 2018, after which the snapshot includes the full calendar year to ensure the most accurate account of active establishments. Infogroup business records are culled from public and government sources (secretaries of state, city clerks, county courthouses, and business journals). Infogroup then works to verify this information through internet “crawling” of URLs and website scripts, telephone calls, U.S. Yellow Pages, industry directories, business registrations, and press releases. Teams also work to identify new businesses each year, and also corporate linkages between companies that may have experienced mergers or acquisitions. Infogroup contacts 55,000 businesses daily to verify company information. Over a typical month, 15% of the dataset is re-verified. For employment data specifically 49% of establishments have their jobs data verified via telephone interview. For the remaining 51%, a model using already-verified employment numbers estimates employment size at individual locations.

The Business Dynamics Research Consortium (BDRC) compiles all yearly snapshots and links businesses using the unique ABI (American Business Identifier) number for each listing. This creates a time-series database of active companies for the years after 1997. BDRC then adds more time-series variables to the data, derived from the original Infogroup variables. BDRC also removes “gaps” in missing years of data for an individual firm by “rolling” values for existing years into the next or previous year until a company’s record is complete. Algorithms are occasionally used to identify and remove major outliers, although BDRC states this occurs with less than 1 percent of the data. This process occurs with each annual snapshot release and the entire YTS database (1997-last year) is assembled and released.

Pioneer Institute then aggregates and visualizes this data using various software, including SQL, Tableau, QlikSense, and Microsoft Excel. Most of the core summary statistics, such as the number of employees over time, are extracted directly from Pioneer’s interactive tool,

[MassEconmix](#). All sector codes used in compiling this report are from the North American Industry Classification System, any population figures referenced are from the U.S. Census Bureau, and any other external sources consulted are referenced in footnotes.