

1. Appendix

This appendix includes supporting charts, maps and tables (and their accompanying sources, definitions and technical notes) for both the **Citywide Analysis** and **District Profiles**, produced as part of the Cambridge Post-Pandemic Commercial District Study.

Public and Private Datasets Information

Massachusetts Department of Economic Research, Employment and Wage (ES-202) Industry Data, Quarterly Census of employment and Wages (QCEW): which provides annual trend data for industry employees and wages in Cambridge, derived from reports filed by all employers subject to unemployment compensation laws.

US Census Bureau: including the Longitudinal Employer-Household Dynamics (LEHD), City and Town Populations, and American Community Survey (ACS).

Data Axle: a third-party business establishment database which uses a unique approach to data compilation and verification. It offers a 'snapshot' of all active businesses – retail and non-retail. For this report data is from June 2024 and features information covering business location, industry sector, employment, sales, and more. For more information see: www.data-axle.com/info

Replica: Replica is a third-party platform that collects various data, like transportation patterns and spending habits, to create a simulated model of all trips taken by both residents and visitors. Replica publishes results of the model runs in the spring and fall, with separate results for a typical Thursday and a typical Saturday for each period. For more information see: www.replicahq.com/platform

Readers should note that Replica compiles various data sources and sometimes uses modelled data and not actual data (for instance, data on visitor characteristics such as age, ethnicity, education and income). Additionally, Replica data – both actual and modelled - can show increased noise and volatility for smaller geographies, such as commercial districts. ***As of December 2025, Replica discontinued its spending data reporting due to the company's standard to reliability.*** For more information see: <https://documentation.replicahq.com/docs/economic-model-methodology>

1.1. Citywide Analysis

Table 1.1 Summary comparison of Cambridge key demographic statistics

Area	Total Population	Population per sq. mile	'Millennial' or 'Gen Z' demographic cohorts (%)	Black, Asian, Native American, Mixed or Other (%)	Below the poverty level (%)	Bachelor's degree or higher educated (%)	Median Household Income (\$)
Cambridge	118,200	16,648	62%	41%	11%	80%	121,500
Boston	653,800	13,150	54%	51%	16%	53%	89,200
Somerville	80,400	19,420	64%	28%	10%	67%	120,800
Waltham	64,500	4,688	52%	34%	8%	57%	113,400
Quincy	101,600	6,062	46%	42%	11%	47%	90,700
Newton	88,400	4,868	38%	25%	4%	80%	176,400
Burlington	26,500	2,234	34%	23%	5%	58%	133,900
<i>Middlesex County</i>	1,624,000	1,919	27%	29%	7%	58%	121,300
<i>Massachusetts</i>	7,001,400	865	25%	27%	10%	46%	96,500

Source: US Census Bureau City and Town Population Totals (for population data), US Census Bureau American Community Survey, five-year estimates (for all other data).

Note: Population data for 2023, all other data for year-ending 2022. Land area (sq. miles) data for 2020, from US Census.

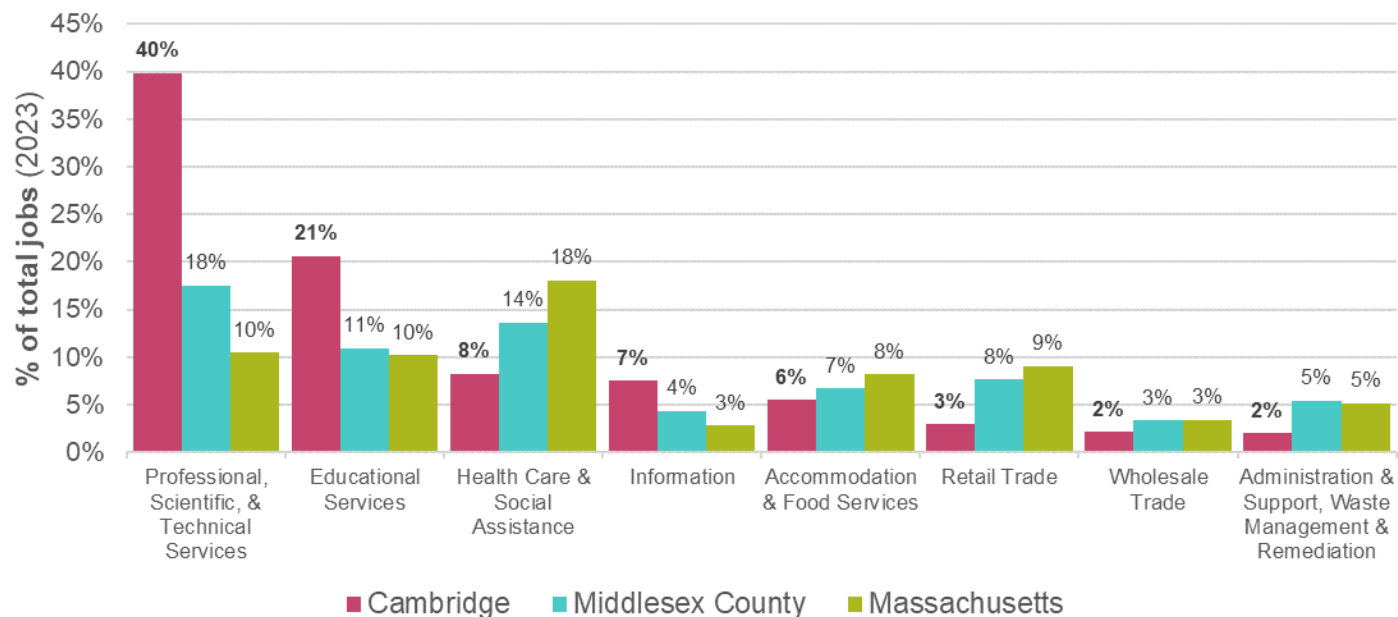
Table 1.2 Cambridge business tenants by employee numbers, sales volume, and premises size, 2024

% of Cambridge business tenants by:					
Employee numbers		Sales volume (\$)		Premises square foot (SF)	
1 to 4 employees	64%	1 to 500,000 sales	54%	1 to 1,499 SF	9%
5 to 9	16%	500,000 to 1M	16%	1,500 to 2,499	17%
10 to 19	10%	1M to 2.5M	15%	2,500 to 4,999	24%
20 to 49	6%	2.5M to 5M	7%	5,000 to 19,999	27%
50 to 99	2%	5M to 10M	4%	20,000 to 39,999	9%
100 to 249	1%	10M to 50M	4%	40,000 to 99,999	8%
250+ employees	<1%	50M+ sales	1%	100,000+ SF	7%

Source: Data Axle US Business database.

Note: Business tenant defined as any business active and operational in Cambridge, including non-ground floor and home-based businesses.

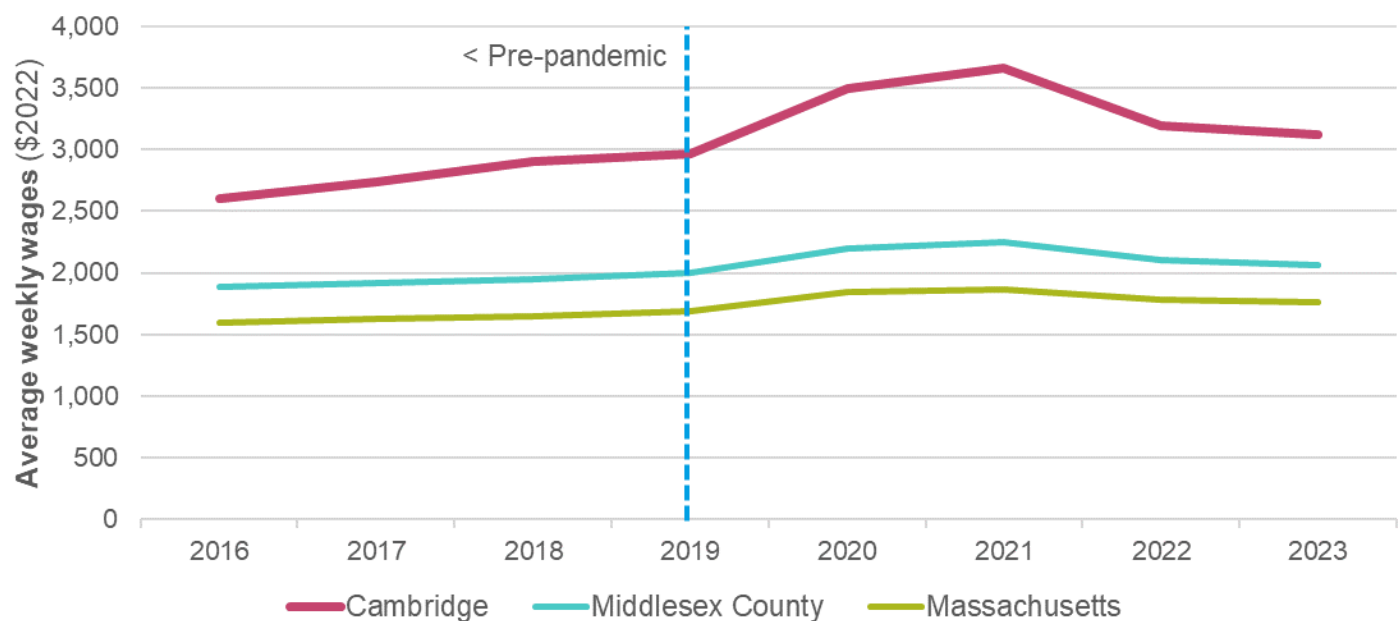
Figure 1.3 Cambridge employees by NAICS industry (percent of total employees), 2023



Source: Massachusetts Department of Economic Research, Employment and Wage Industry Data (ES-202) (QCEW).

Note: Data only includes employees for whom unemployment tax is paid; it does not include self-employed persons or sole proprietors.

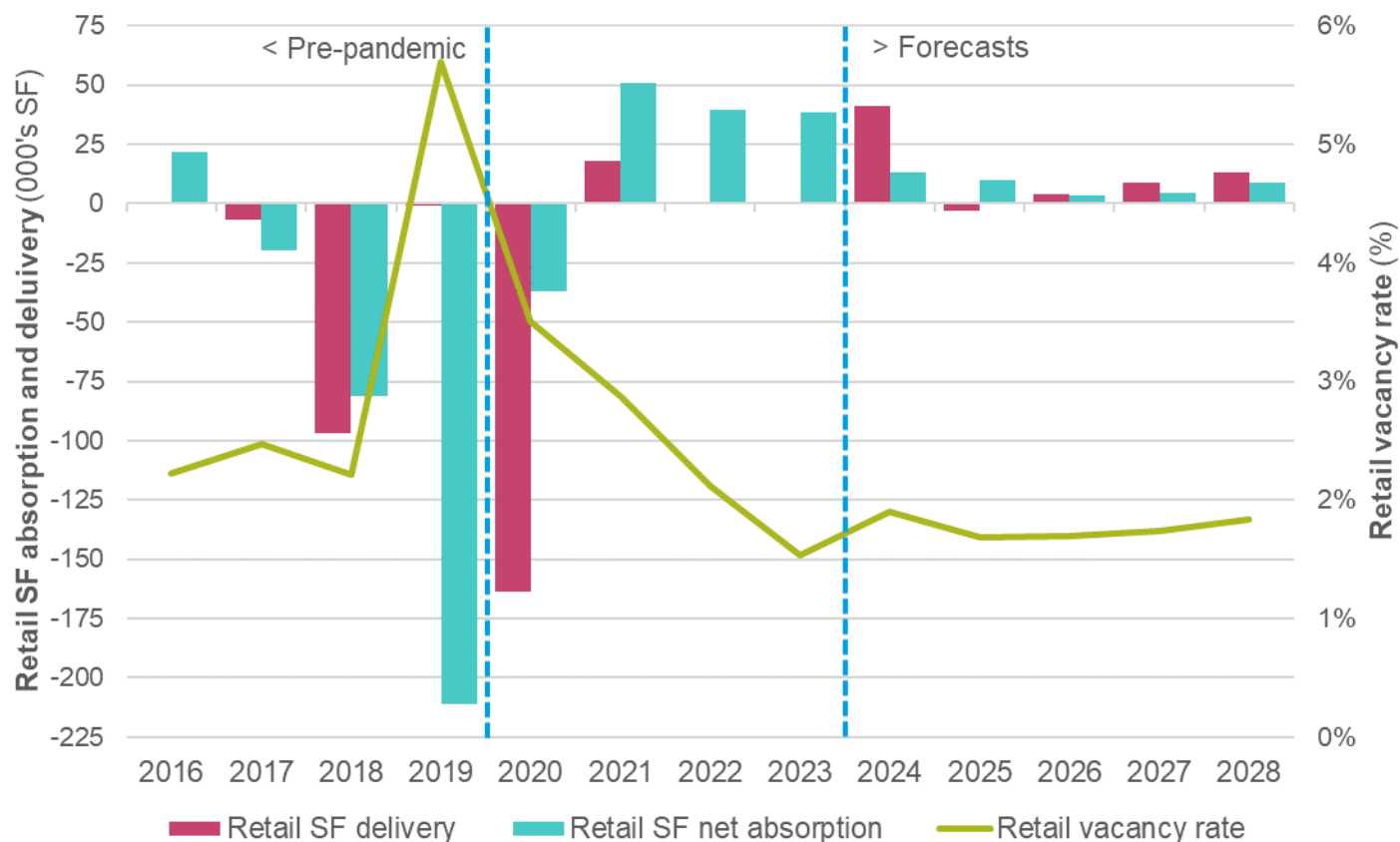
Figure 1.4 Cambridge average weekly wages, 2016-2023



Source: Massachusetts Department of Economic Research, Employment and Wage Industry Data (ES-202) (QCEW).

Note: Data only includes employees for whom unemployment tax is paid; it does not include self-employed persons or sole proprietors. Weekly wages deflated into real terms using the Bureau of Labor Statistics Northeast Consumer Price Index for All Urban Consumers, re-based to 2023.

Figure 1.5 Cambridge retail floorspace absorption and vacancy rate, 2016-2028



Source: CoStar Group.

Note: Net absorption [defined by CoStar Group](#) as the measure of total square feet occupied less the total space vacated over a given period of time - lease renewals are not factored into net absorption. Vacancy rate is defined as amount of New/Relet/Sublet space vacant divided by the existing Rentable Building Area.

Table 1.6 Cambridge retail business tenants by employee numbers, sales volume, and premises size, 2024

% of Cambridge retail & leisure establishments by:					
Employee numbers		Sales volume (\$)		Premises SF	
1 to 4 employees	51%	1 to 500,000 sales	50%	1 to 1,499 SF	11%
5 to 9	25%	500,000 to 1M	22%	1,500 to 2,499	21%
10 to 19	13%	1M to 2.5M	15%	2,500 to 4,999	30%
20 to 49	8%	2.5M to 5M	6%	5,000 to 19,999	24%
50 to 99	2%	5M to 10M	3%	20,000 to 39,999	6%
100 to 249	2%	10M to 50M	3%	40,000 to 99,999	4%
250+ employees	<1%	50M+ sales	<1%	100,000+ SF	4%

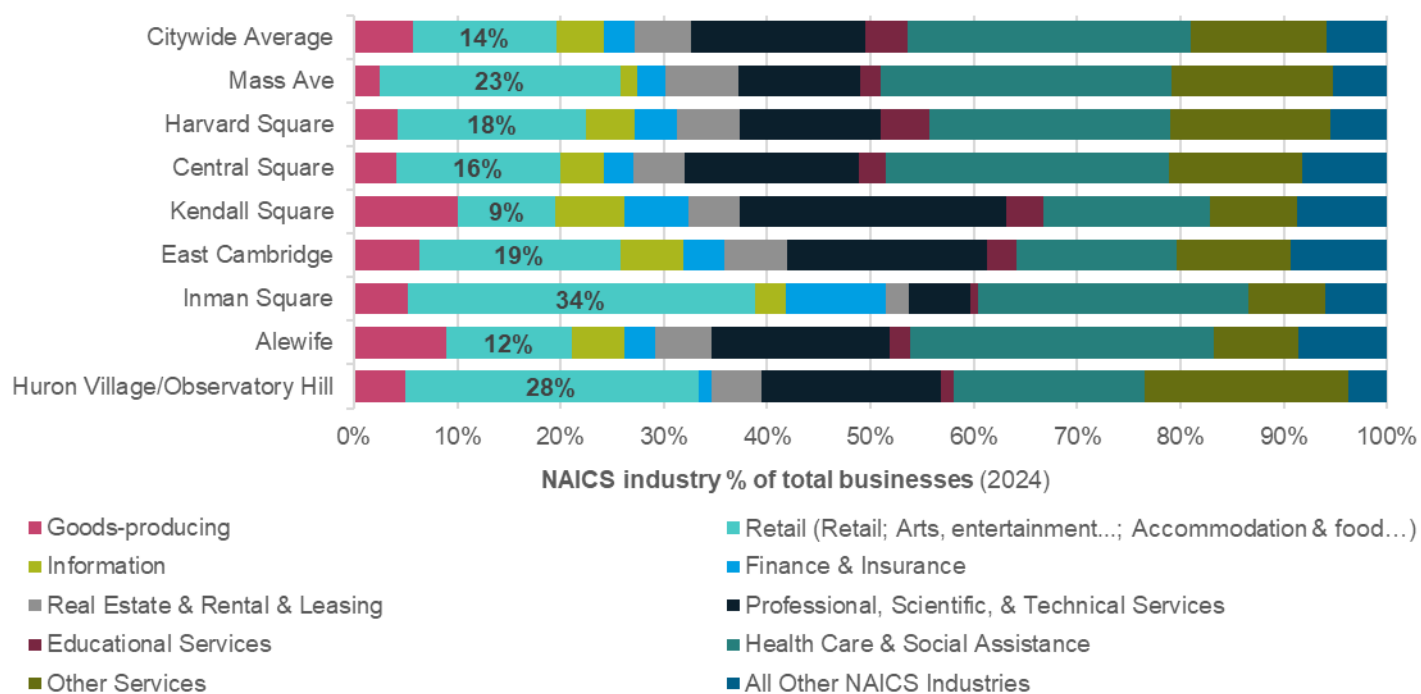
Source: Data Axle US Business database.

Note: Retail business tenant defined as any retail business active and operational in Cambridge, including non-ground floor and home-based businesses. Retail industries defined using NAICS ([available here](#)).

1.2. District Profiles

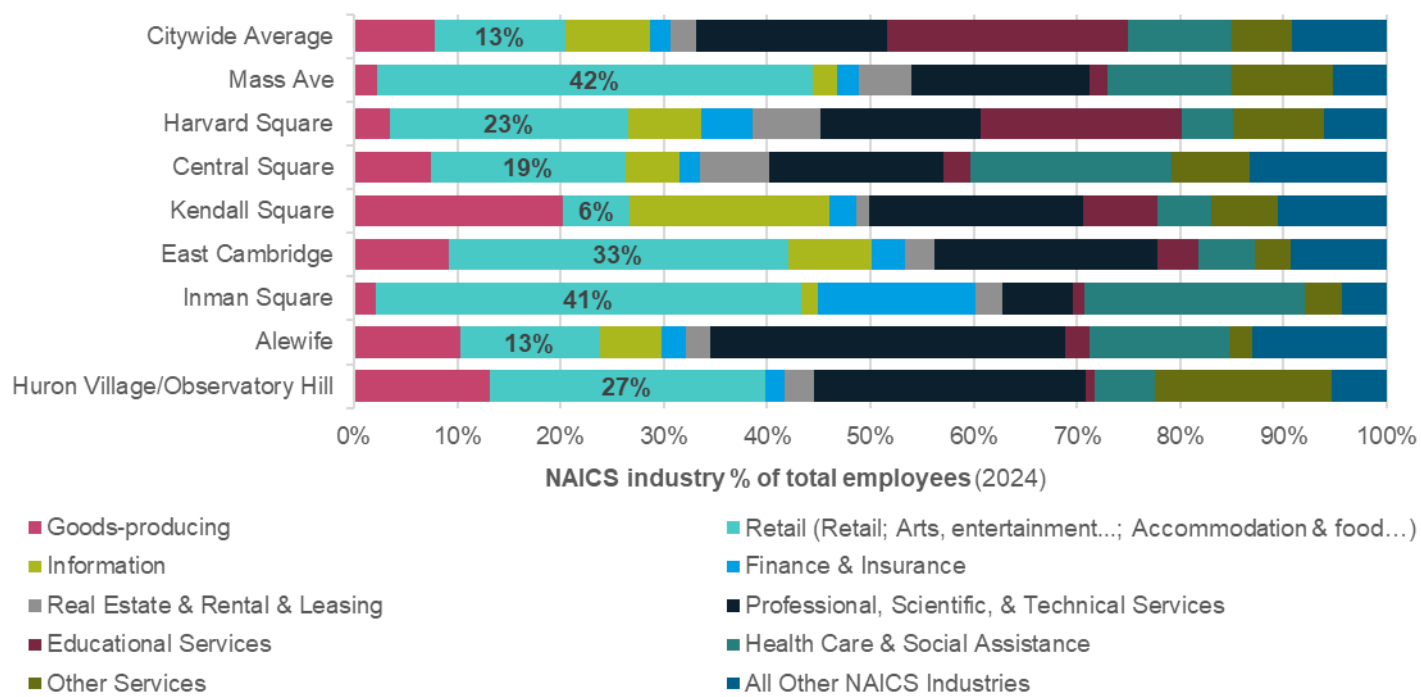
Business Environment

Figure 1.2.1 Business tenant mix by NAICS industry, 2024



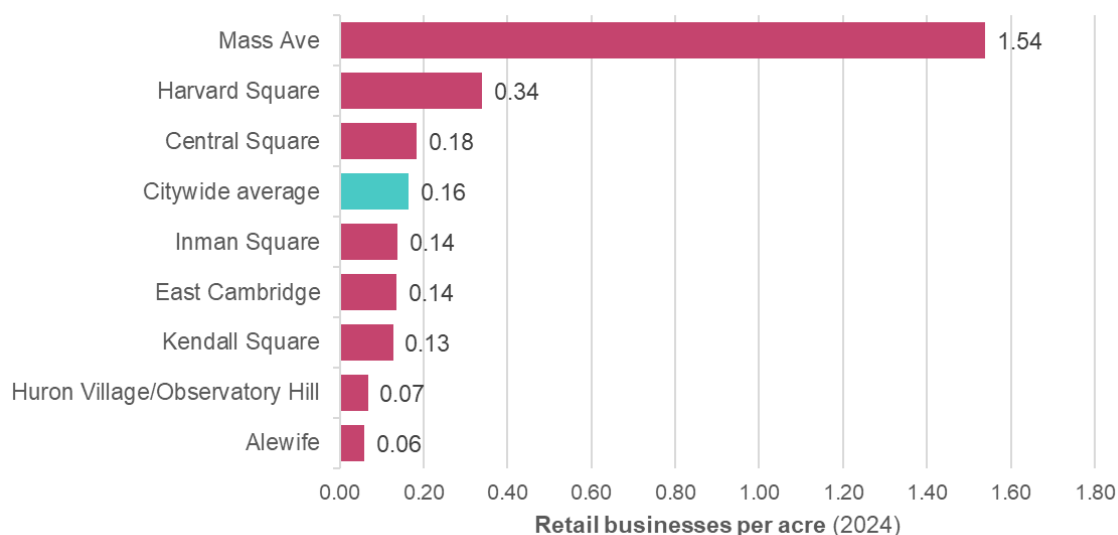
Source: Data Axle US Business database.

Note: Business tenant defined as any business active and operational in the district, including non-ground floor and home-based businesses. Industries defined using NAICS ([available here](#)).

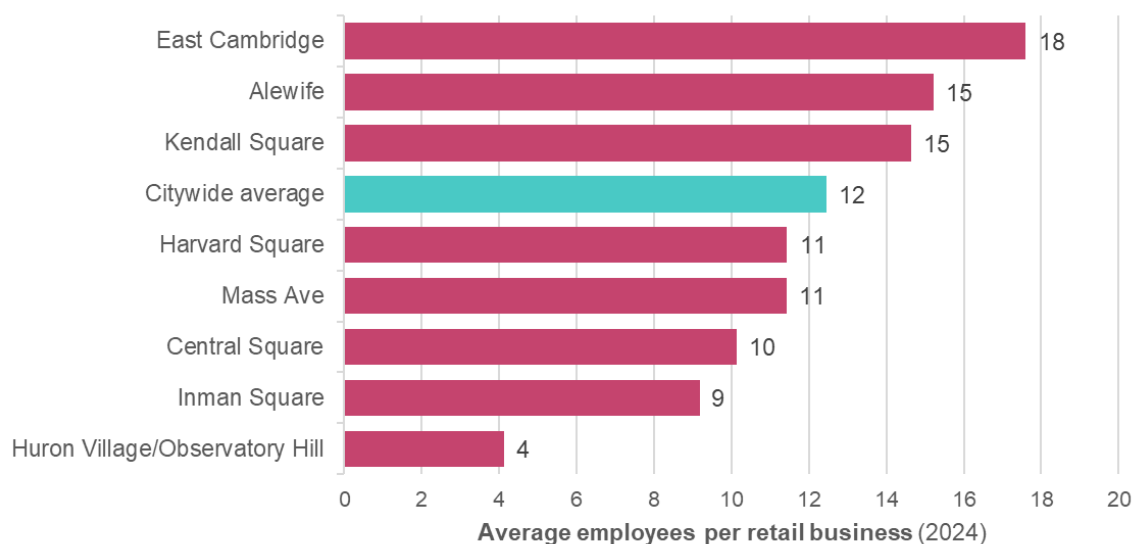
Figure 1.2.2 Employee breakdown by NAICS industry, 2024

Source: Data Axle US Business database.

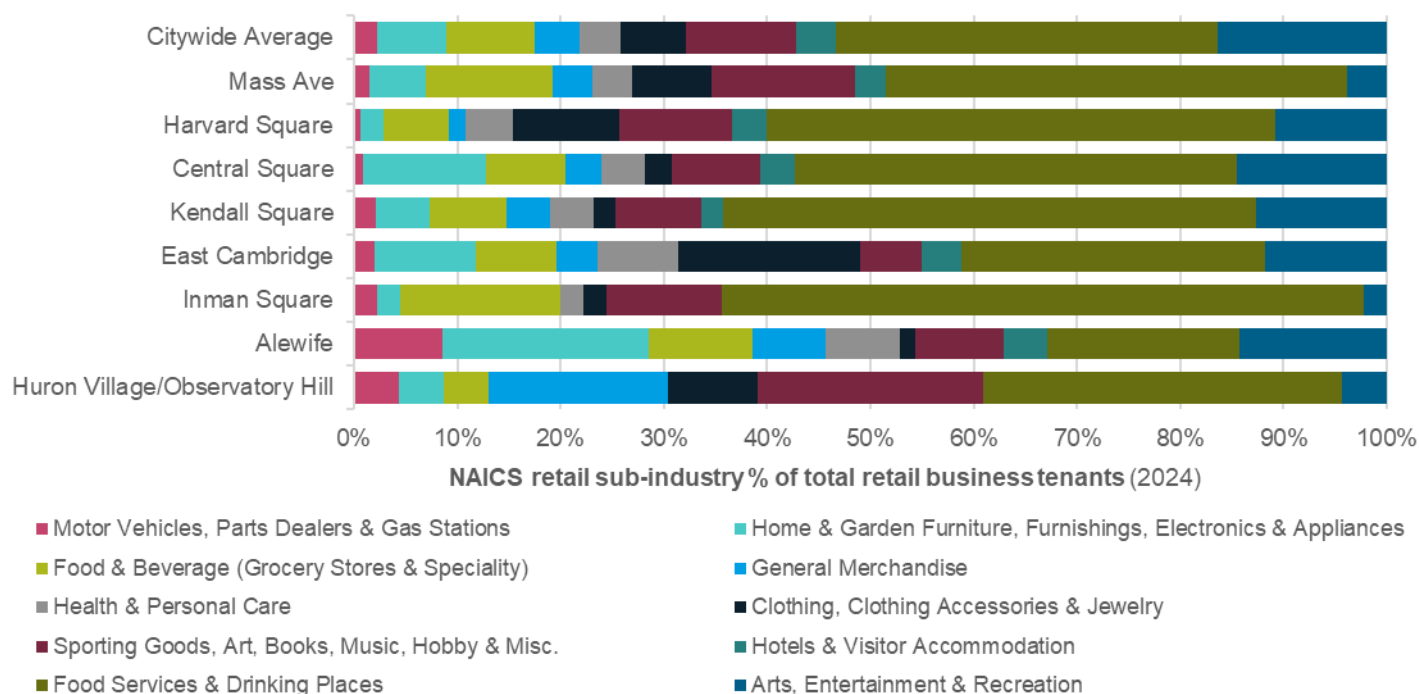
Note: Employees include both full-time and part-time, as well as self-employed persons and sole proprietors. Industries defined using NAICS ([available here](#)).

Figure 1.2.3 Retail business density, 2024

Source: Data Axle US Business database.

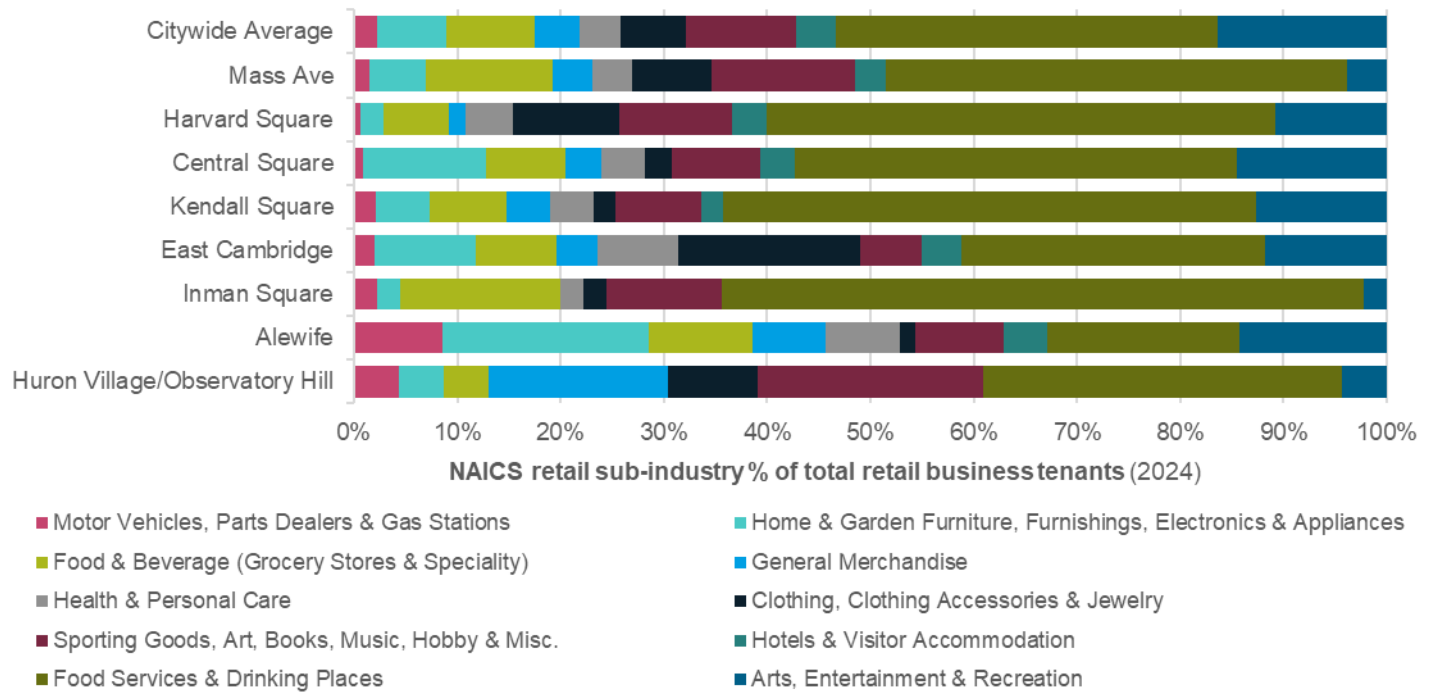
Figure 1.2.4 Average employees per retail business, 2024

Source: Data Axle US Business database.

Figure 1.2.5 Detailed retail business tenant mix by NAICS retail sub-industry, 2024

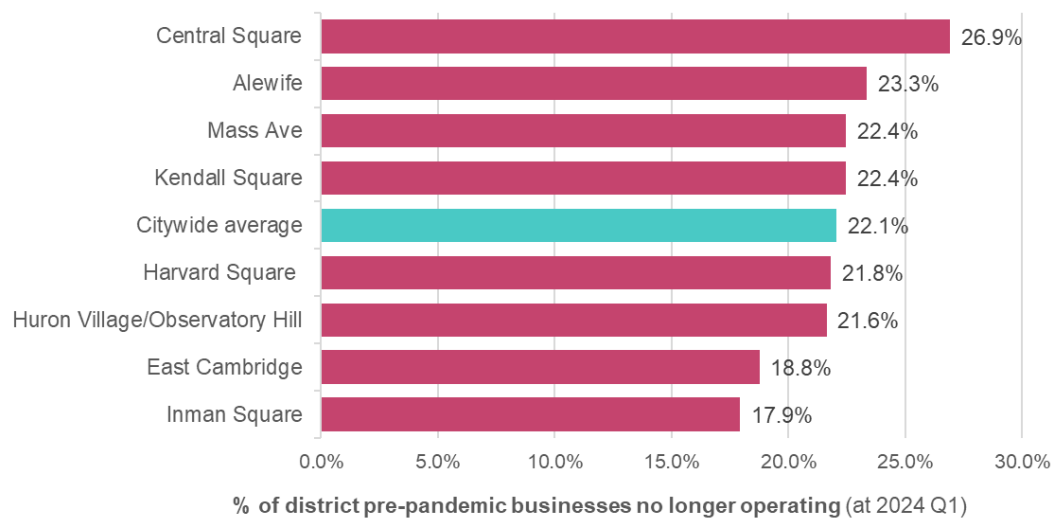
Source: Data Axle US Business database.

Note: Retail business tenant defined as any retail business active and operational in the district, including non-ground floor and home-based businesses. Retail industries defined using NAICS ([available here](#)).

Figure 1.2.6 Detailed retail employee breakdown by NAICS retail sub-industry, 2024

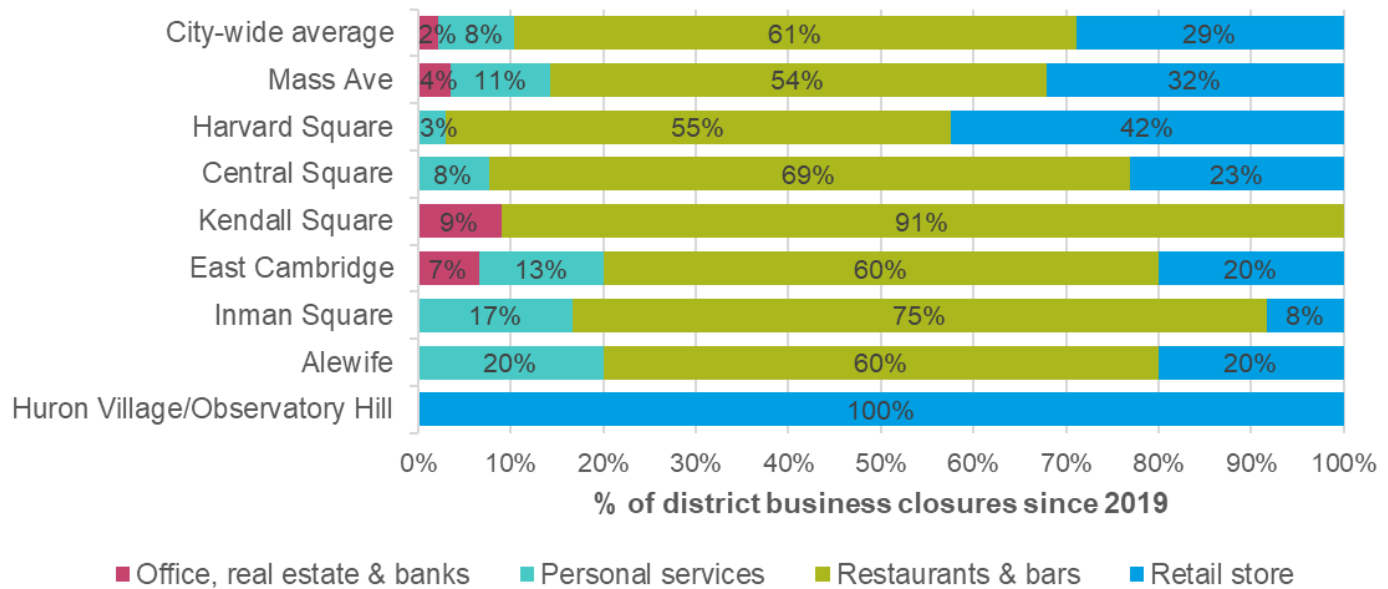
Source: Data Axle US Business database.

Note: Employees include both full-time and part-time, as well as self-employed persons and sole proprietors. Retail industries defined using NAICS ([available here](#)).

Figure 1.1.7 Proportion of district ground floor businesses active pre-pandemic no longer operating, as of March 2024

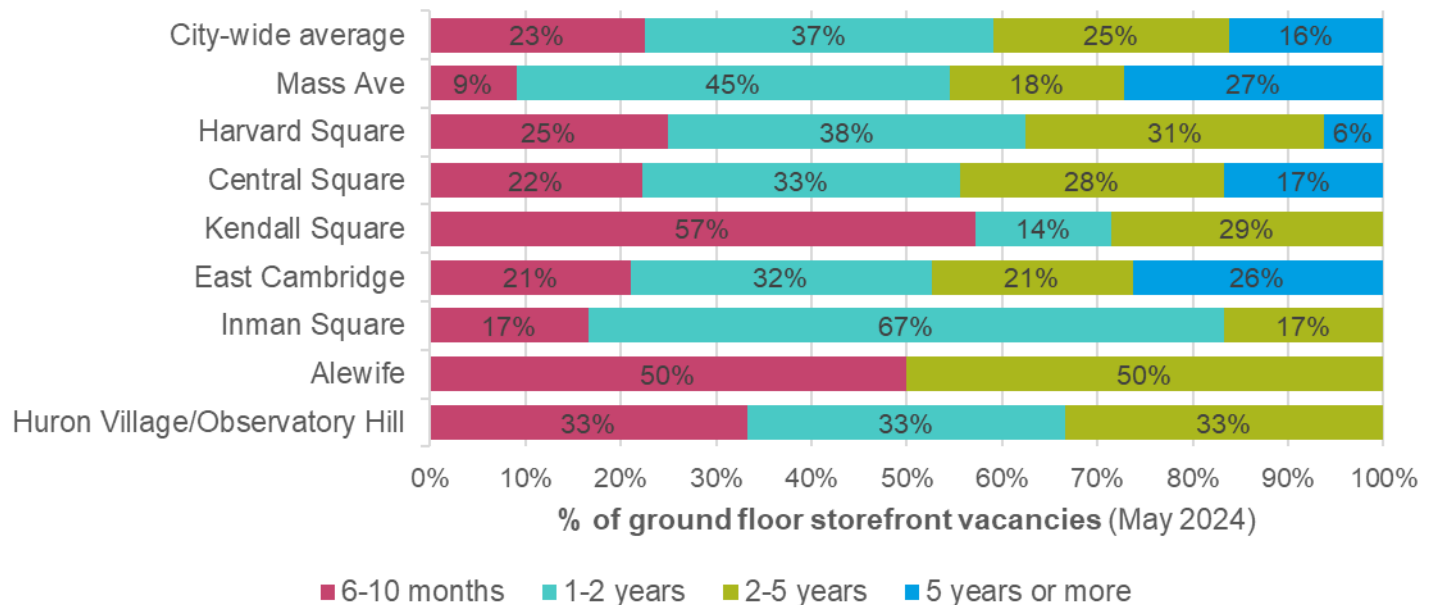
Source: Cambridge Economic Opportunity and Development Division.

Note: Pre-pandemic businesses defined as those open and operating in 2019. Data only includes ground floor, storefront businesses.

Figure 1.2.8 Proportion of district ground floor business closures by industry, since 2019

Source: Cambridge Economic Opportunity and Development Division.

Note: Data only includes ground floor and storefront businesses that closed between 2019 and March 2024.

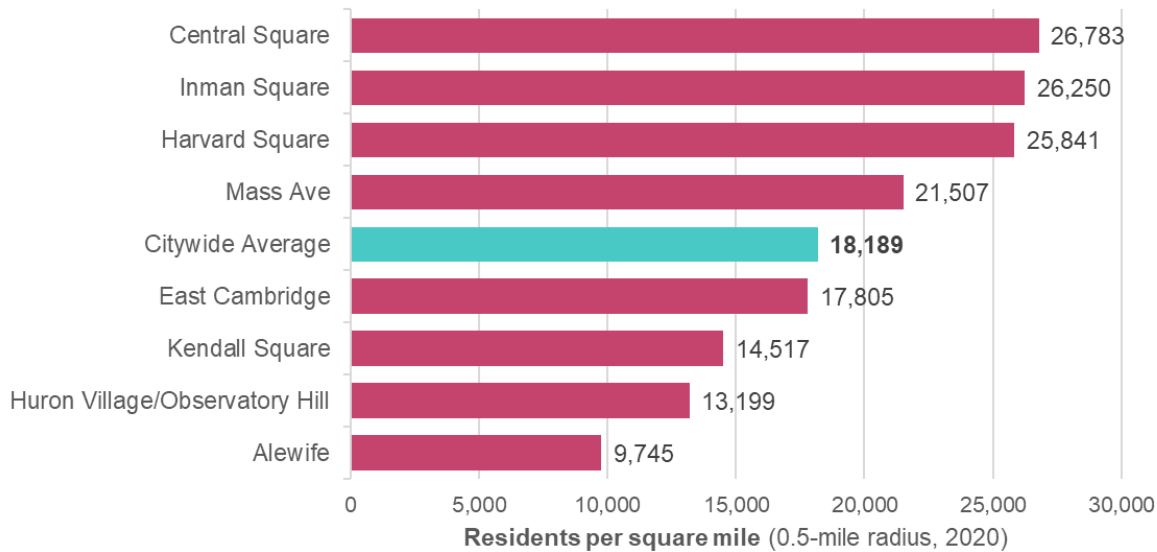
Figure 1.2.9 District ground floor storefront vacancies by vacancy length, May 2024

Source: Cambridge Economic Opportunity and Development Division.

Note: Data only includes ground floor, storefront vacancies. Vacancy length as defined by CoStar Group. A vacant storefront is defined as those actively leasing, for sale, leased pending occupancy, or under redevelopment.

Market Demand

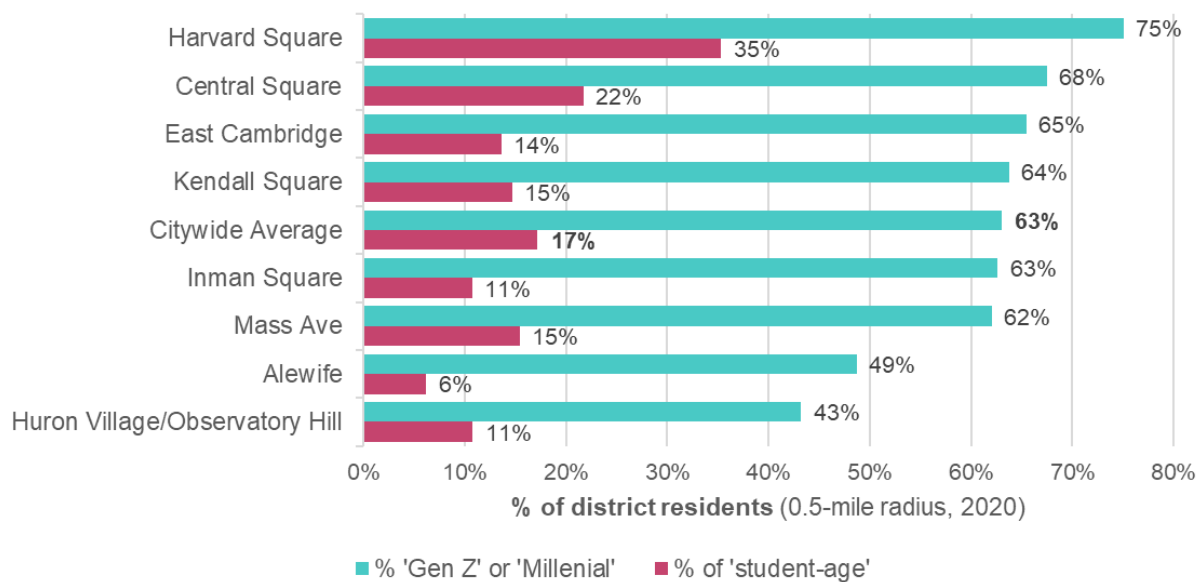
Figure 1.3 Resident population density, 2020



Source: U.S. Census Bureau 2020 Census.

Note: Calculated using a 0.5-mile district radius.

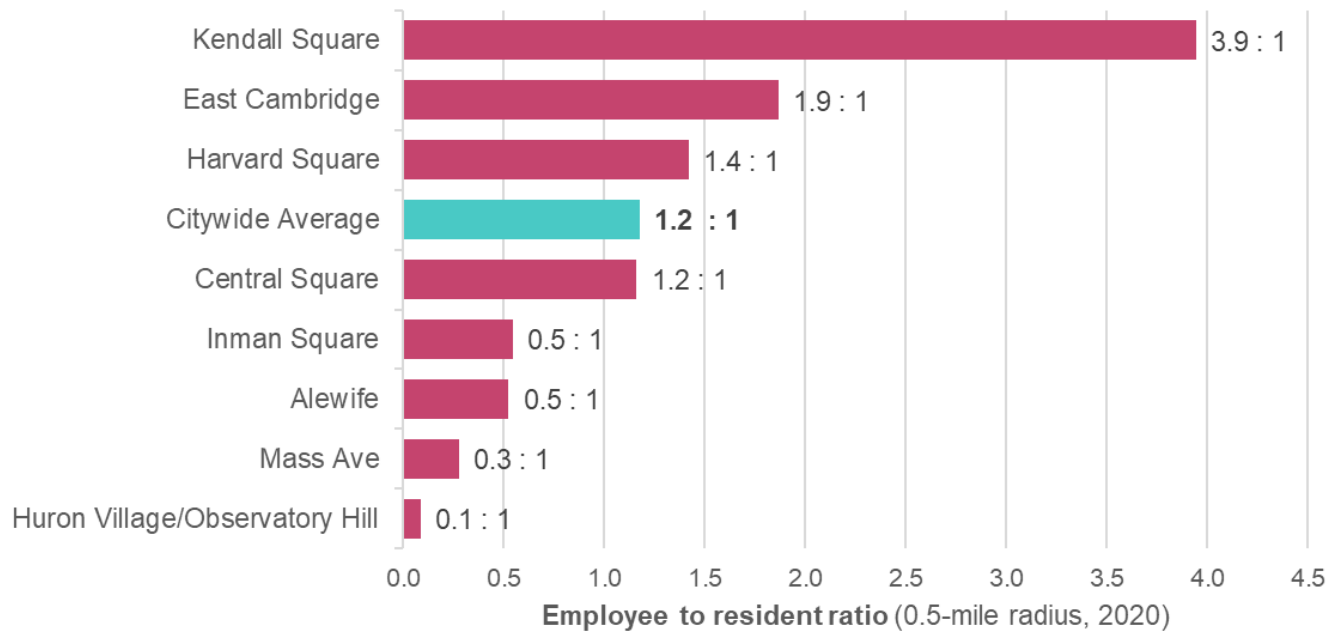
Figure 1.3.1 Resident population age profile, 2020



Source: U.S. Census

Bureau 2020 Census.

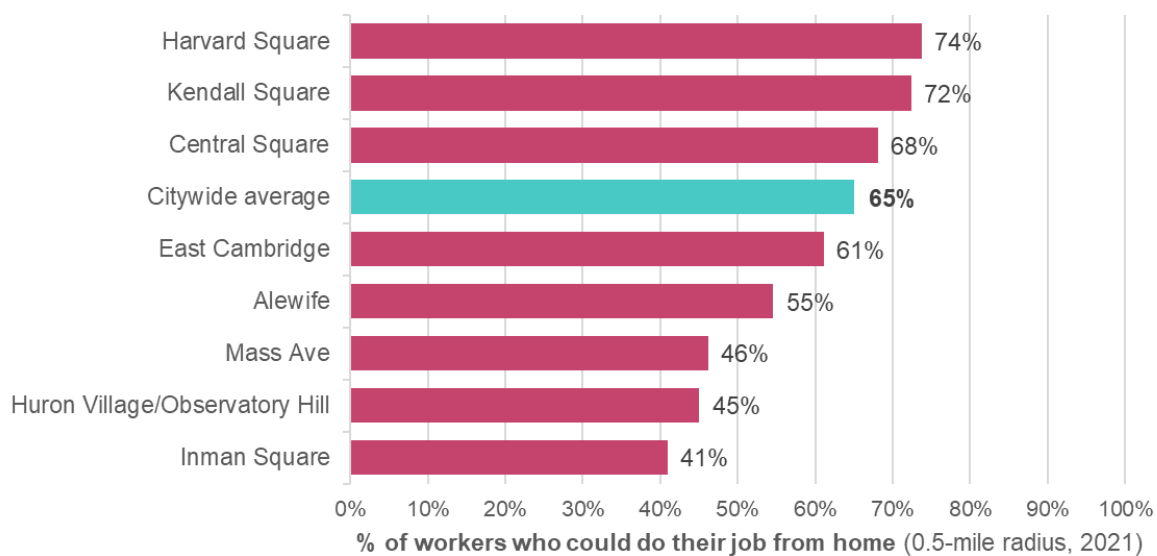
Note: Calculated using a 0.5-mile district radius. 'Gen Z' defined as 12-27 years, Millennial' as 28-43 years, and 'student-age' as 18-24 years.

Figure 1.3.2 Employee to resident ratio, 2020

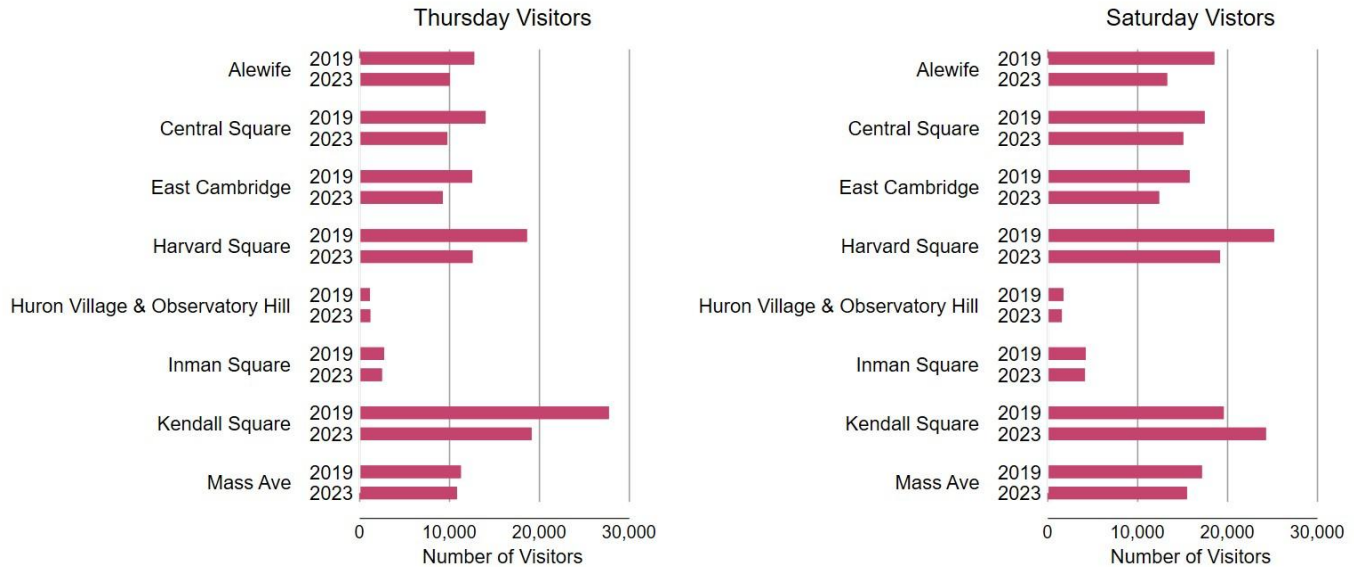
Source:

US Census Bureau Longitudinal Employer-Household Dynamics (via OnTheMap, for employees) U.S. Census Bureau 2020 Census (for residents).

Note: Calculated using a 0.5-mile district radius.

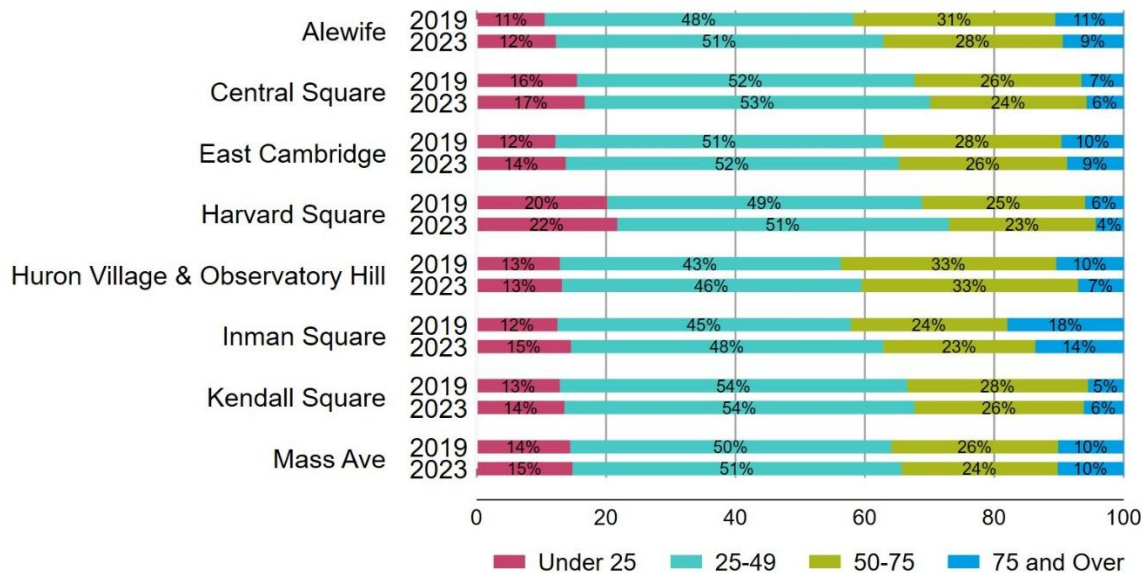
Figure 1.3.3 Proportion of workers that could work from home, 2021

Source: Estimated by applying U.S.-level NAICS industry ratios for remote working (from Dingel & Neiman's research paper [here](#)) to district industry workforce data from US Census Bureau Longitudinal Employer-Household Dynamics (via OnTheMap).

Figure 1.3.4 District visitor numbers on a typical weekday (Thursday) and typical weekend day (Saturday), 2019 and 2023

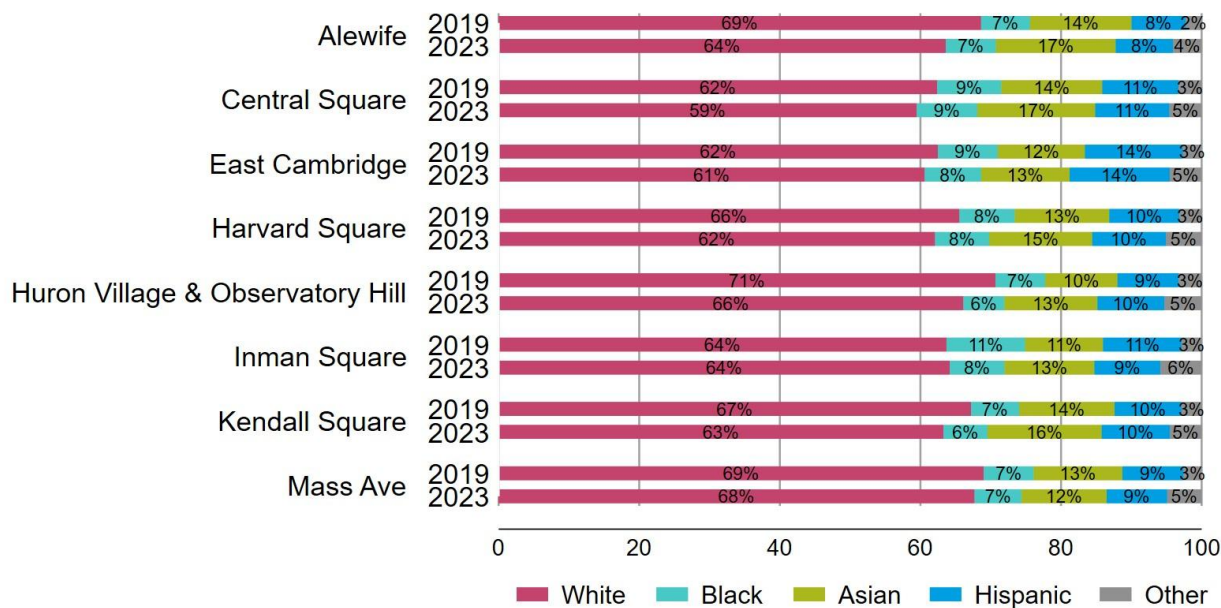
Source: Replica Spend Data.

Note: A visitor is defined as an individual that visited the district at any point during the sample period.

Figure 1.3.5 Age profile of district visitors (on a typical weekday and weekend combined), 2019 and 2023

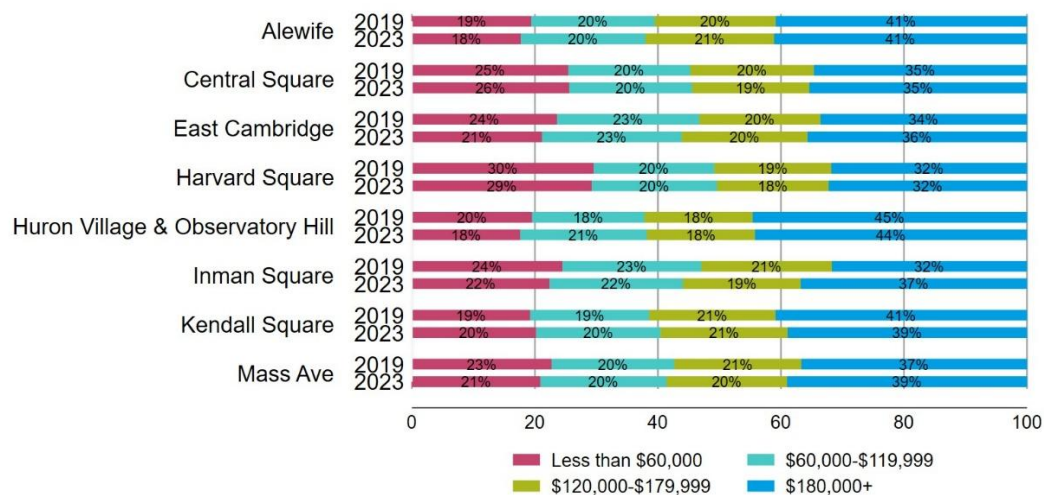
Source: Replica Spend Data.

Note: A visitor is defined as an individual that visited the district at any point during the sample period.

Figure 1.3.6 Race profile of district visitors (on a typical weekday and weekend combined), 2019 and 2023

Source: Replica Spend Data.

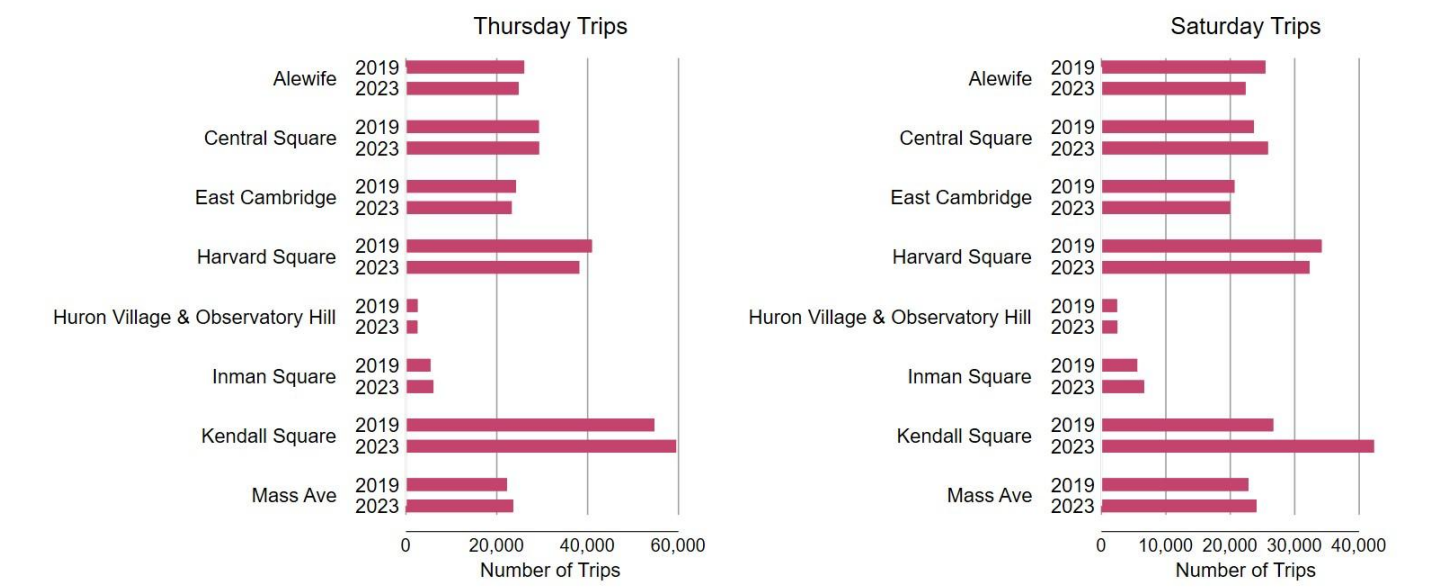
Note: A visitor is defined as an individual that visited the district at any point during the sample period.

Figure 1.3.7 Household income status of district visitors (on a typical weekday and weekend combined), 2019 and 2023

Source: Replica Spend Data.

Note: A visitor is defined as an individual that visited the district at any point during the sample period.

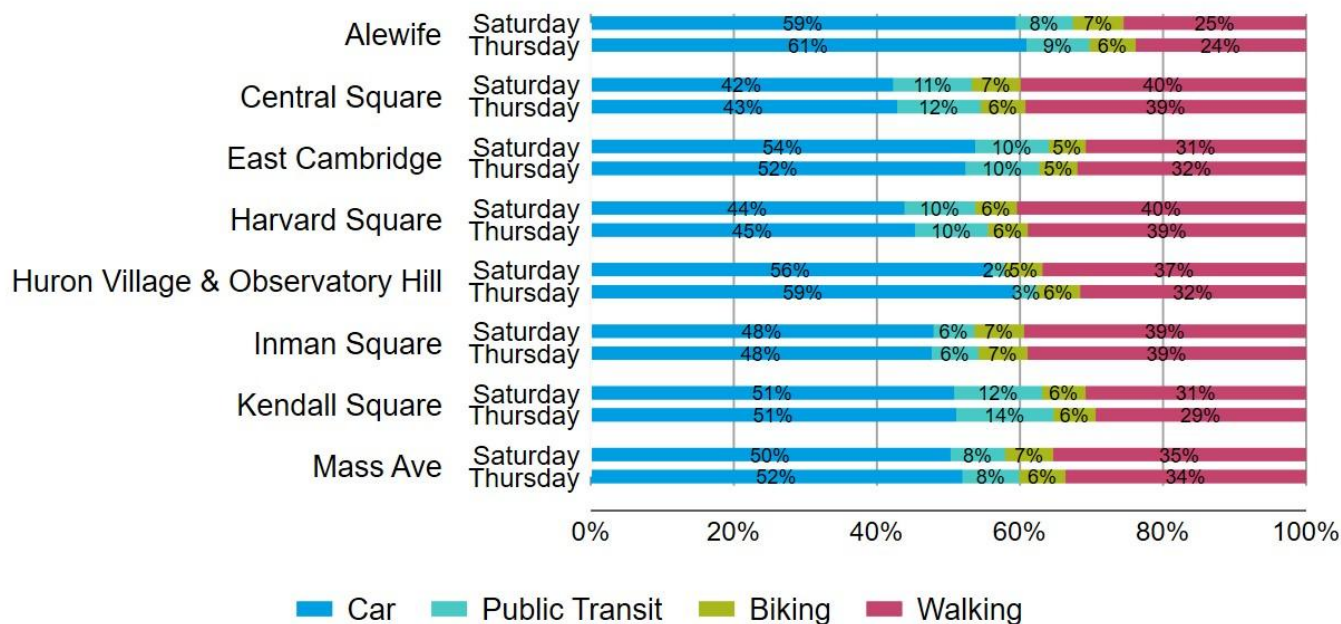
Figure 1.3.8 District visitor trip numbers on a typical weekday (Thursday) and typical weekend day (Saturday), 2019 and 2023



Source: Replica Spend Data.

Note: A trip captures an individual visitor’s movement from one place to another. For example, a visitor might travel to the district to visit a grocery store then walk across the street to grab a coffee; this example would count as one visitor who made two trips in the district.

Figure 1.3.9 Mode of transport of district visitor trips on a typical weekday (Thursday) and typical weekend day (Saturday), 2023



Source: Replica.

Note: A trip captures an individual visitor's movement from one place to another.

Figure 1.24 Average travel time of district visitor trips (on a typical weekday and weekend), 2019 and 2023



Source: Replica.

Note: A trip captures an individual visitor's movement from one place to another. Travel time refers to time taken to travel for trips endings in the district.

Physical Environment

Figure 1.2 Massachusetts Avenue district physical environment (map design by Agency)

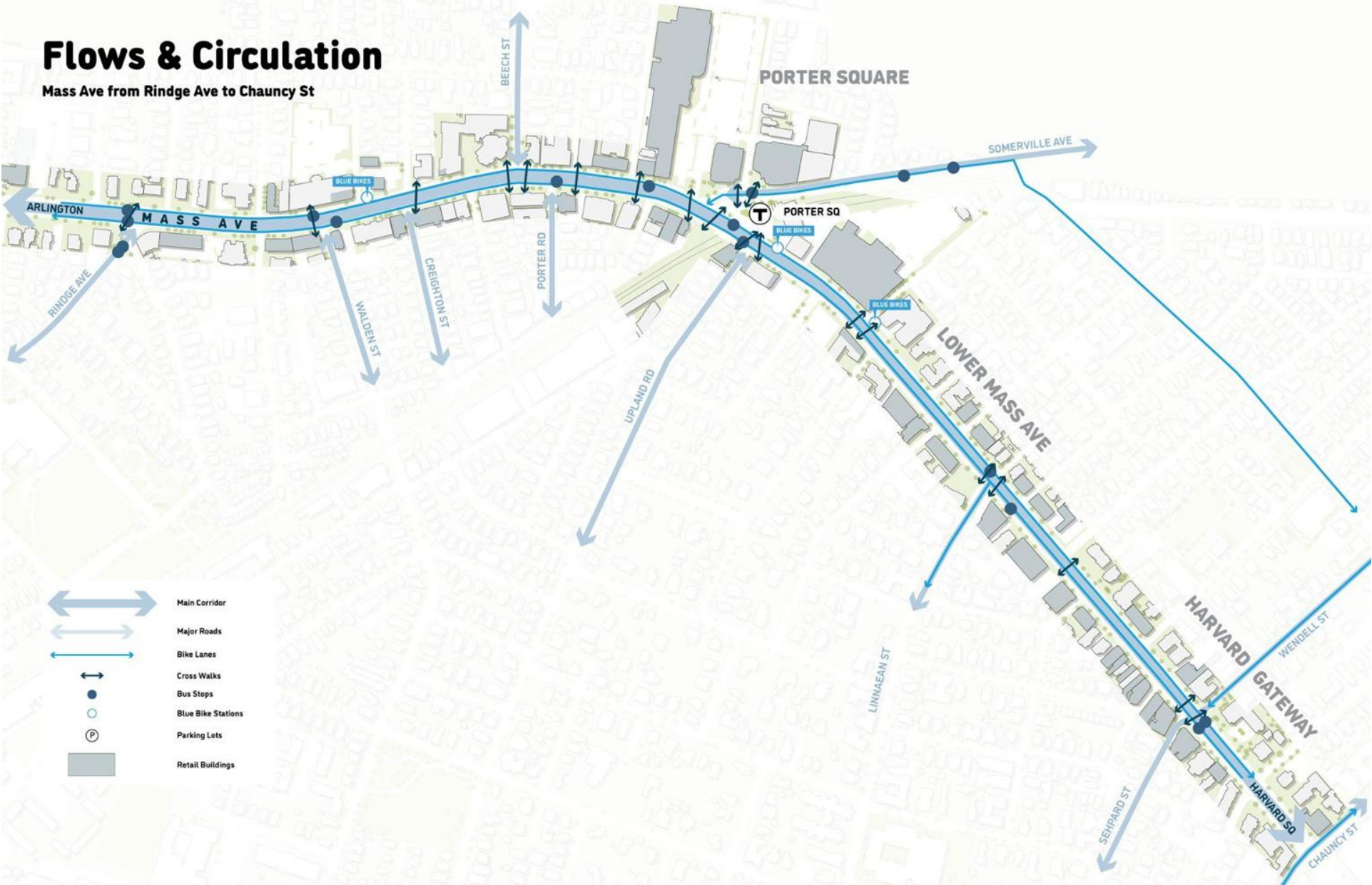


Figure 1.3 Kendall Square district physical environment (map design by Agency)

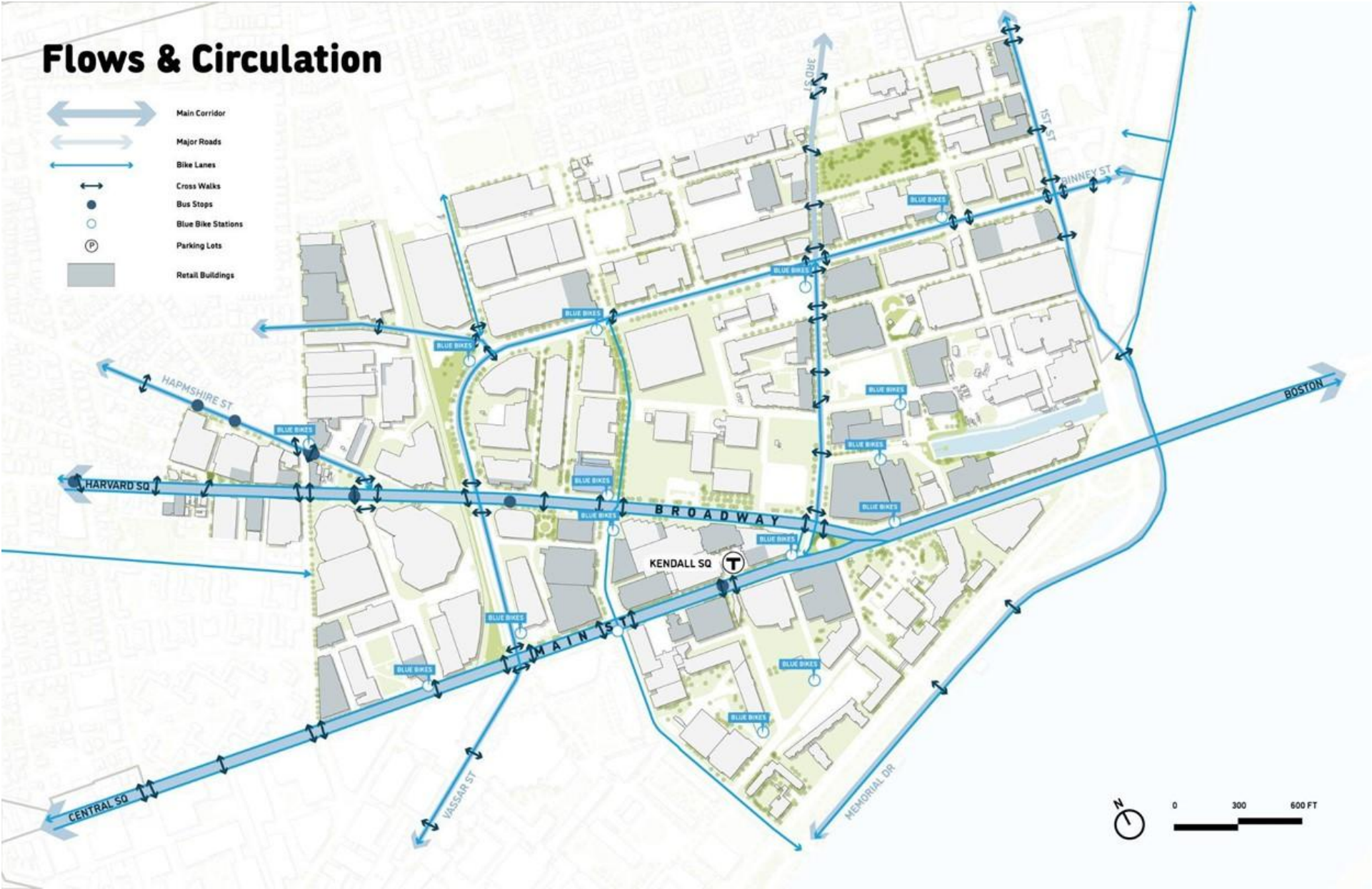


Figure 1.4 East Cambridge district physical environment (map design by Agency)

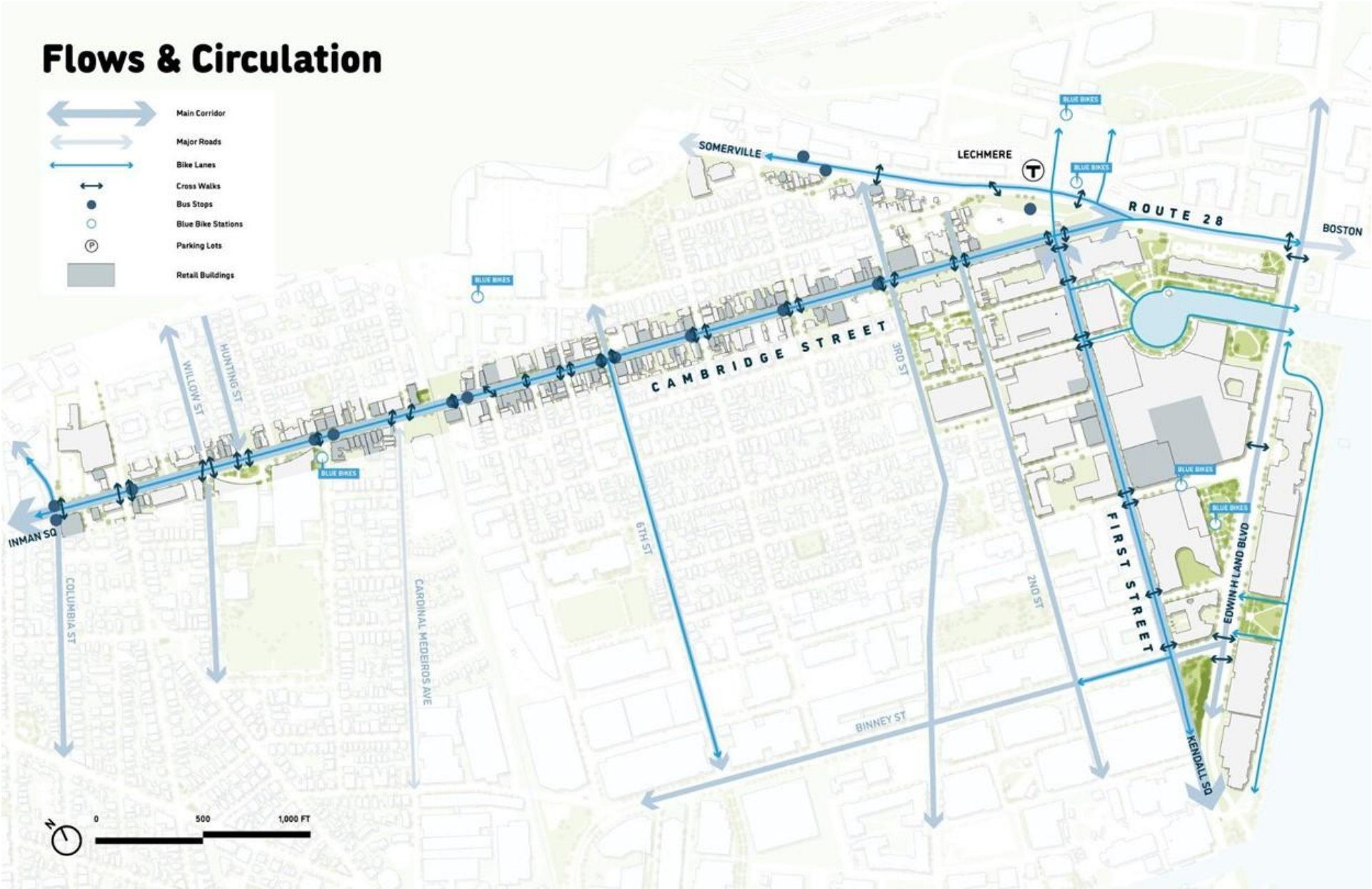


Figure 1.13 Inman Square district physical environment (map design by Agency)

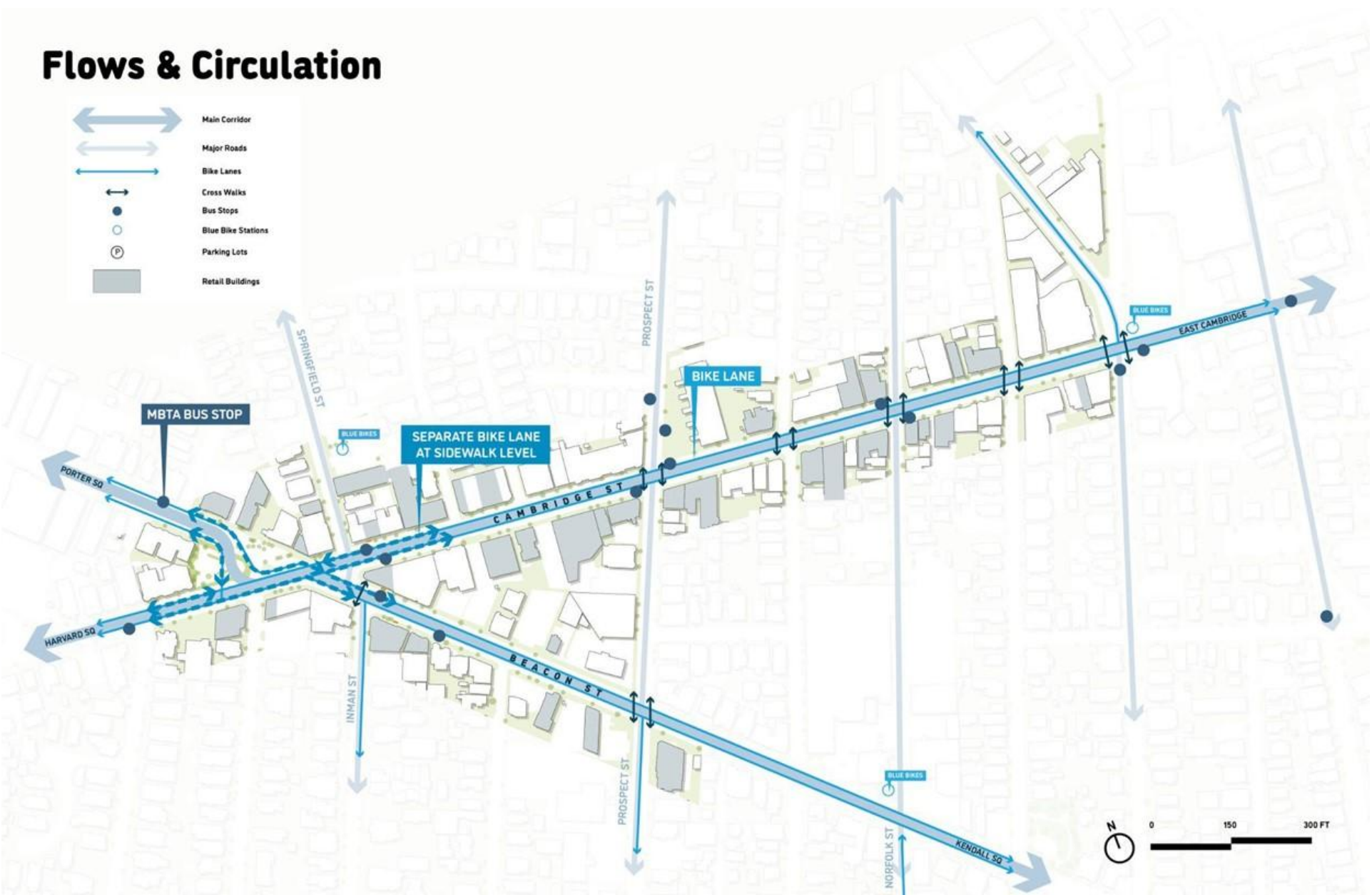


Figure 1.14 Harvard Square district physical environment (map design by Agency)

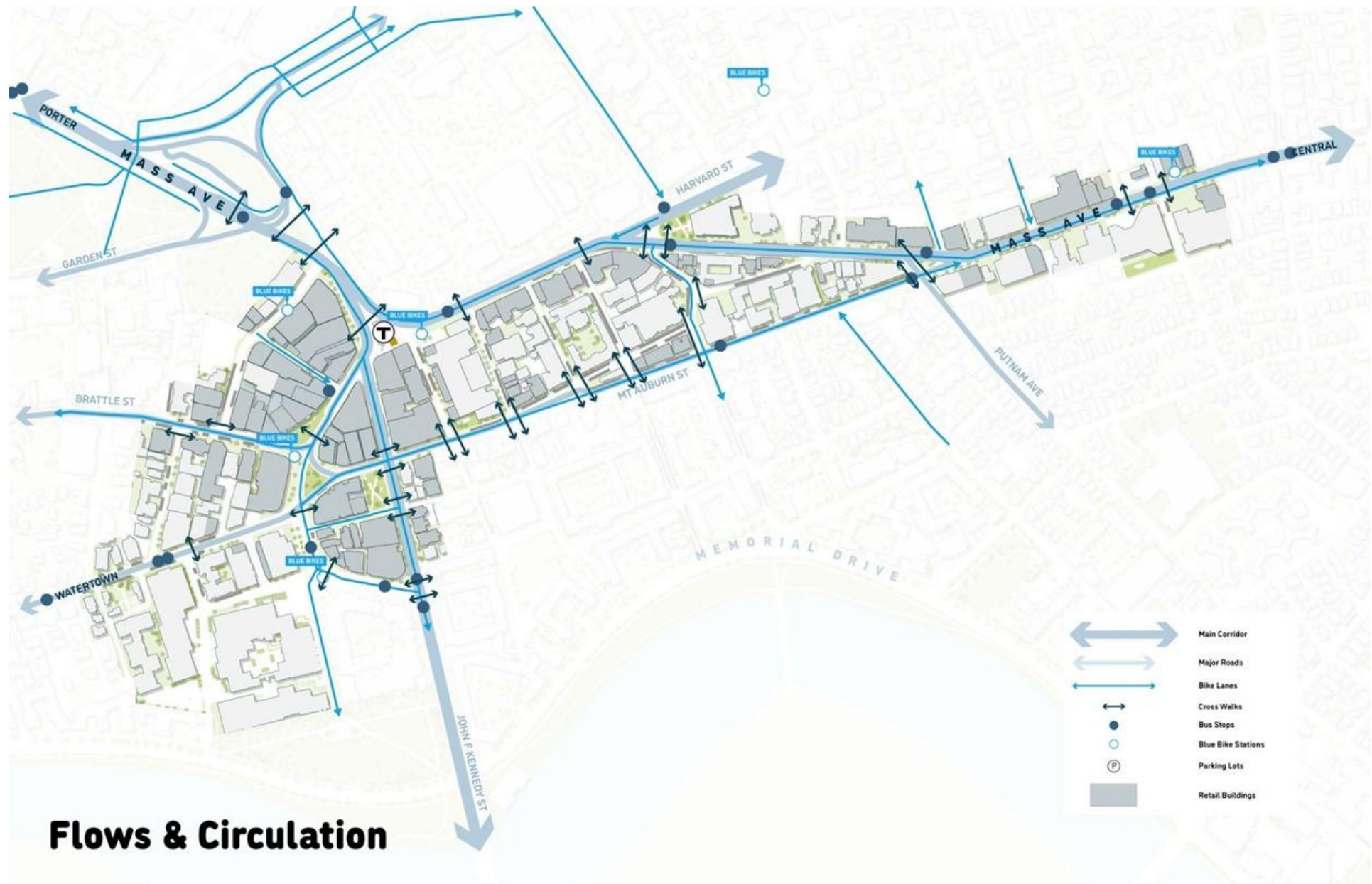


Figure 1.5 Huron Village and Observatory Hill district physical environment (map design by Agency)

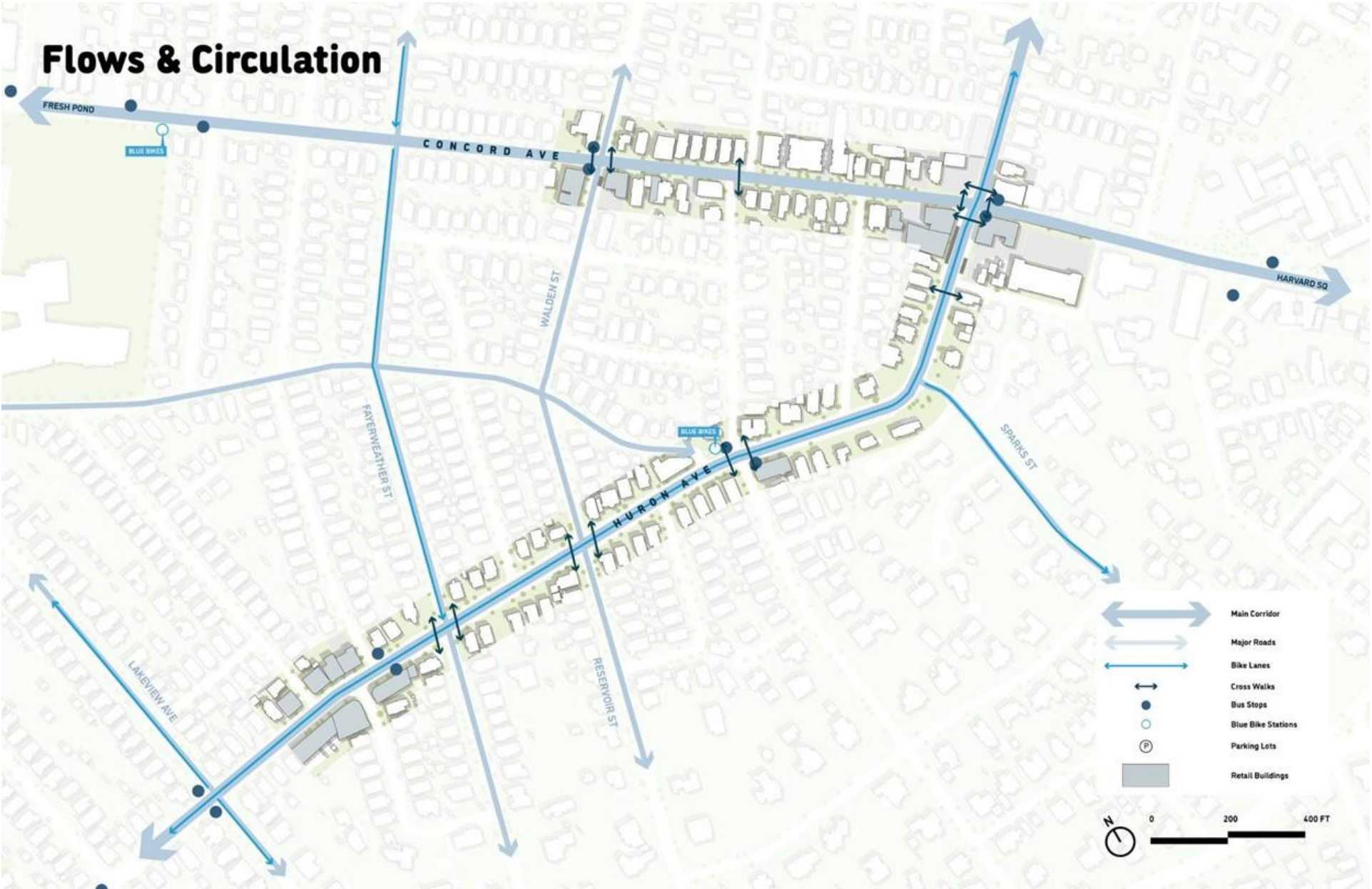


Figure 1.6 Central Square district physical environment (map design by Agency)

