

Article

The night-time economy, UK: 2022

Explores the night-time economy, with a focus on understanding the people who work during the evening and night across the UK.

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Correction

17 March 2023 11:40

We have corrected an error in Figure 12. In the previous version, the Night-time cultural and leisure industry grouping and 24-hour health and personal social services grouping were mislabelled. This also affected the "Download the data" spreadsheet. This was because of human error.

3 November 2023 10:30

We have corrected an error in the 'Download the data' spreadsheet for Figure 19. In the previous version, the 'Proportion of population (%)' and the 'Proportion of employment (%)' headings were mislabelled. This was because of human error.

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1 . Main Points

- The total number of night-time workers fell from 9.5 million in 2016 to 8.7 million in 2022.
- In 2022, 15% of night-time workers worked from home compared with 25.1% of purely daytime workers.
- In 2022, 15.1% of employees in night-time industries were in low-paid roles, compared with 10.5% of employees as a whole; in the night-time cultural and leisure activities grouping, which includes restaurants, pubs and entertainment activities, this figure increases to 38.5%.
- The night-time cultural and leisure activities grouping has a relatively high number of workers aged 16 to 19 years (18.6%, compared with 3.0% of the workforce as a whole) and a significant number of people in elementary occupations (45.0%), including bar and restaurant staff and security guards.
- The night-time economy relies heavily on people born outside of the UK: between 2012 and 2022, the number of night-time workers born outside of the UK rose by 32.6% to 2.0 million; in the 24-hour health and personal services grouping of industries, this number rose by 69.1% to 0.5 million.
- While there are more night-time workers in urban areas than rural areas, both in absolute terms and as a proportion of an area's population, rural areas typically have a higher proportion of night-time workers in their workforce.

2 . Overview of the night-time workforce

The Labour Force Survey asks people:

Within your regular pattern of work is it usual for you to work:

- during the day
- during the evening
- at night?

Respondents interpret the meaning of day, evening and night, and can answer all that apply. In 2022, it was "usual" for:

- 4% of the workforce to work during the evening or night but not the day
- 23% during the evening or night and the day
- 73% to only work during the day

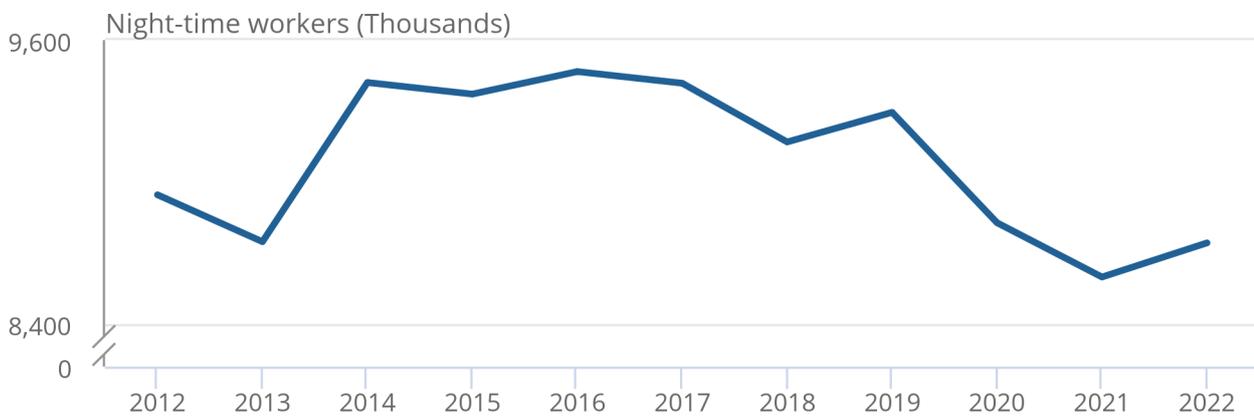
In this article, someone is deemed a night-time worker if they "usually" work either in the evening or the night, irrespective of whether they also "usually" work in the day. By this definition, 27% of the workforce, or roughly 8.7 million people, were night-time workers in 2022 (Figure 1), 700,000 fewer than in 2016.

Figure 1: The number of night-time workers fell by 700,000 between 2016 and 2022

Total number of workers for which it is "usual" to work during the evening or night, 2012 to 2022, UK

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Total number of workers for which it is "usual" to work during the evening or night, 2012 to 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2012-2022

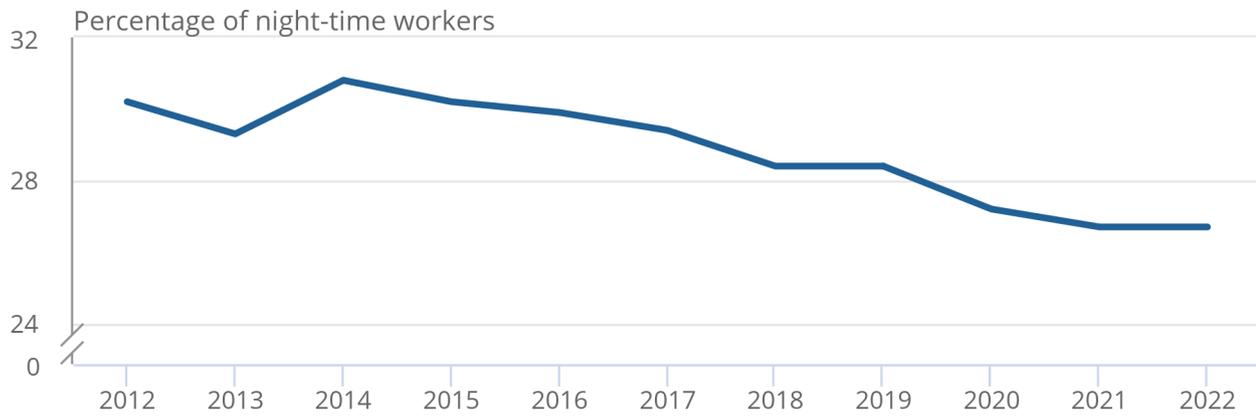
Alongside the decline in the number of night-time workers, the proportion of night-time workers has fallen (Figure 2), from a maximum of 30.8% in 2014 to 26.7% in 2022.

Figure 2: The proportion of night-time workers fell to 26.7% in 2022

Proportion of workers for which it is “usual” to work during the evening or night, 2012 to 2022, UK

Figure 2: The proportion of night-time workers fell to 26.7% in 2022

Proportion of workers for which it is “usual” to work during the evening or night, 2012 to 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2012 to 2022

3 . Gender and full-time and /part-time

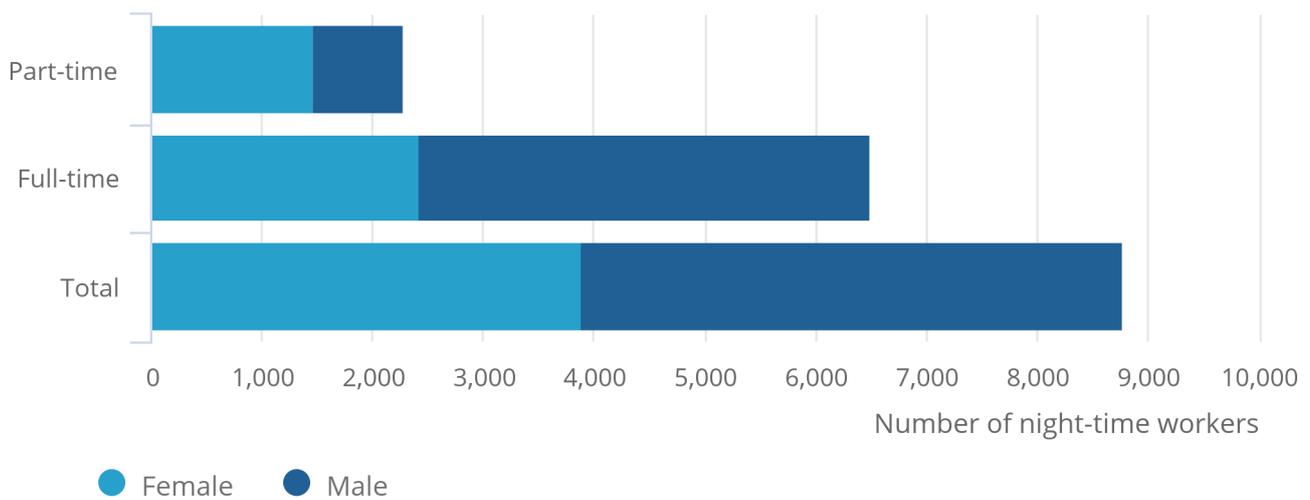
In 2022, almost 4.9 million (56%) night-time workers were male and almost 3.9 million were female (44%). In 2012, 58% of night-time workers were male and 42% female.

Figure 3: A higher proportion of night-time workers are male and work full-time

Total number of night-time workers by gender and full-time and part-time, 2022, UK

Figure 3: A higher proportion of night-time workers are male and work full-time

Total number of night-time workers by gender and full-time and part-time, 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

The overall number of night-time workers fell between 2012 and 2022. This was driven by the falling number of male night-time workers. Over the same period, the number of female night-time workers has risen.

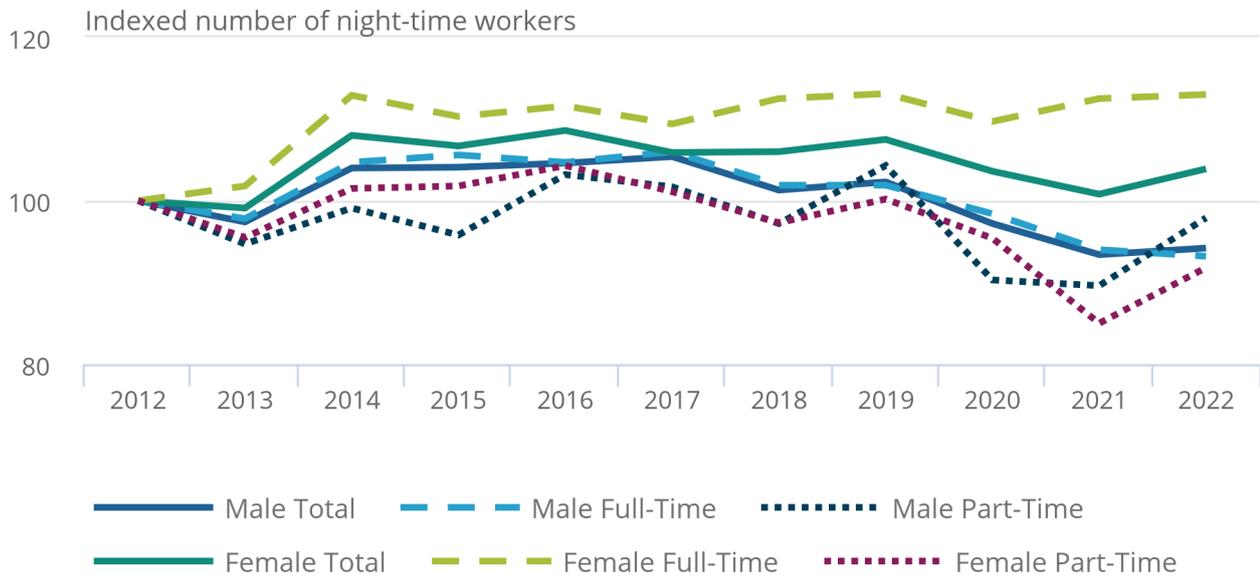
This increase in female night-time workers has been driven by an increase in female full-time workers. The number of female part-time night-time workers declined over the period.

Figure 4: The number of female night-time workers has increased over the last 10 years

Indexed total number of night-time workers by gender and working pattern, 2012 to 2022, UK, 2012=100

Figure 4: The number of female night-time workers has increased over the last 10 years

Indexed total number of night-time workers by gender and working pattern, 2012 to 2022, UK, 2012=100



Source: Office for National Statistics - Labour Force Survey, April to June, 2012-2022

4 . Industry

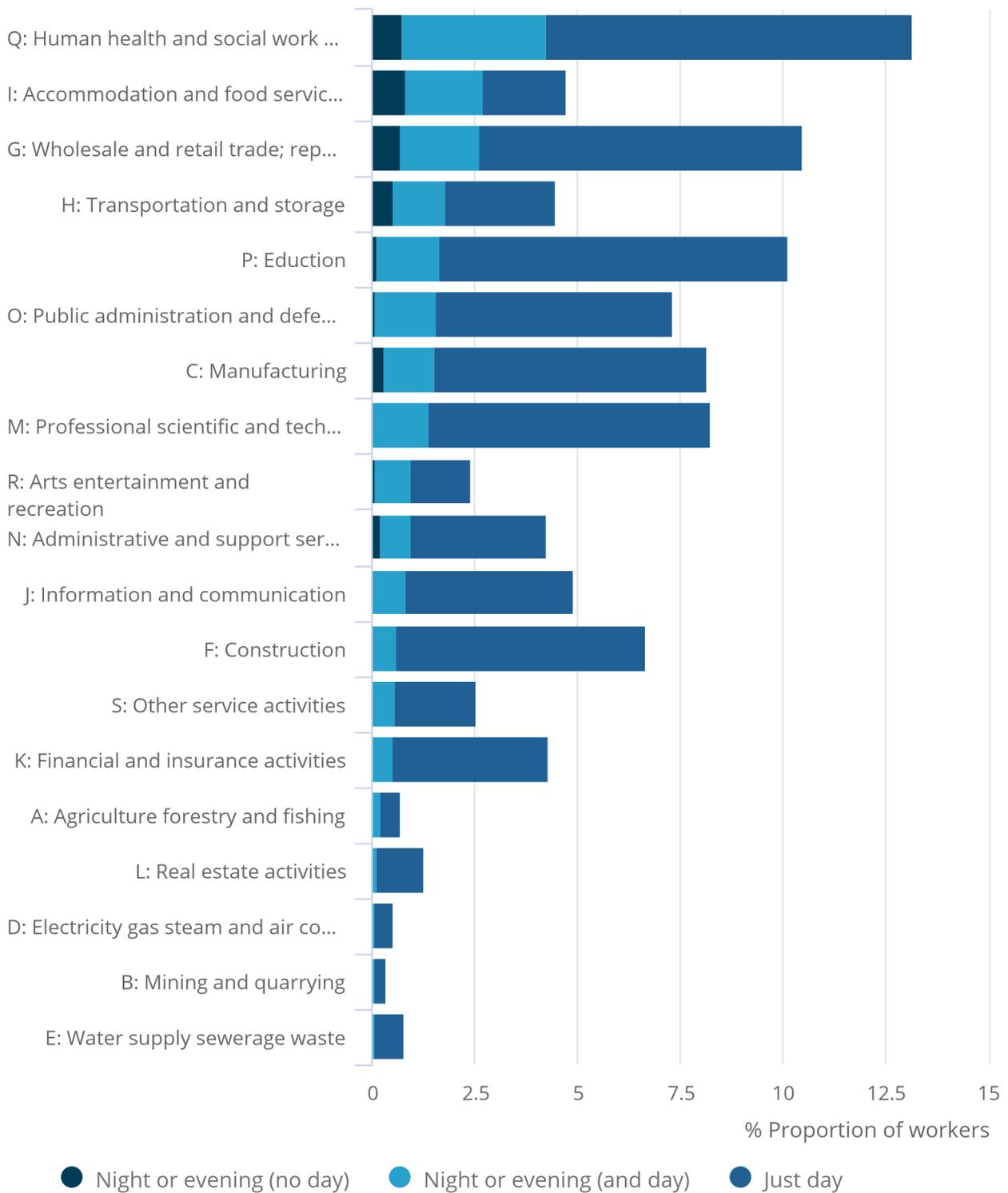
Nationally, the Standard Industry Classification (SIC) Section with the largest numbers of night-time workers is the human health and social work activities sector at 4.3% of the entire UK workforce (equivalent to 18.7% of all night-time workers). This is followed by accommodation and food service activities and wholesale and retail, where night-time workers make up 2.7% of all UK workers.

Figure 5: Human health and social work activities contain the largest number of night-time workers

Proportion of all workers by SIC section and time of day “usually” worked, 2022, UK

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Proportion of all workers by SIC section and time of day “usually” worked, 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

The proportion of night-time workers differs between industries. Nationally, accommodation and food service activities had the largest proportion of night-time workers (Figure 6). The arts, entertainment, and recreation industry is second. These groups include industries associated with nightlife, including pubs, bars and theatres.

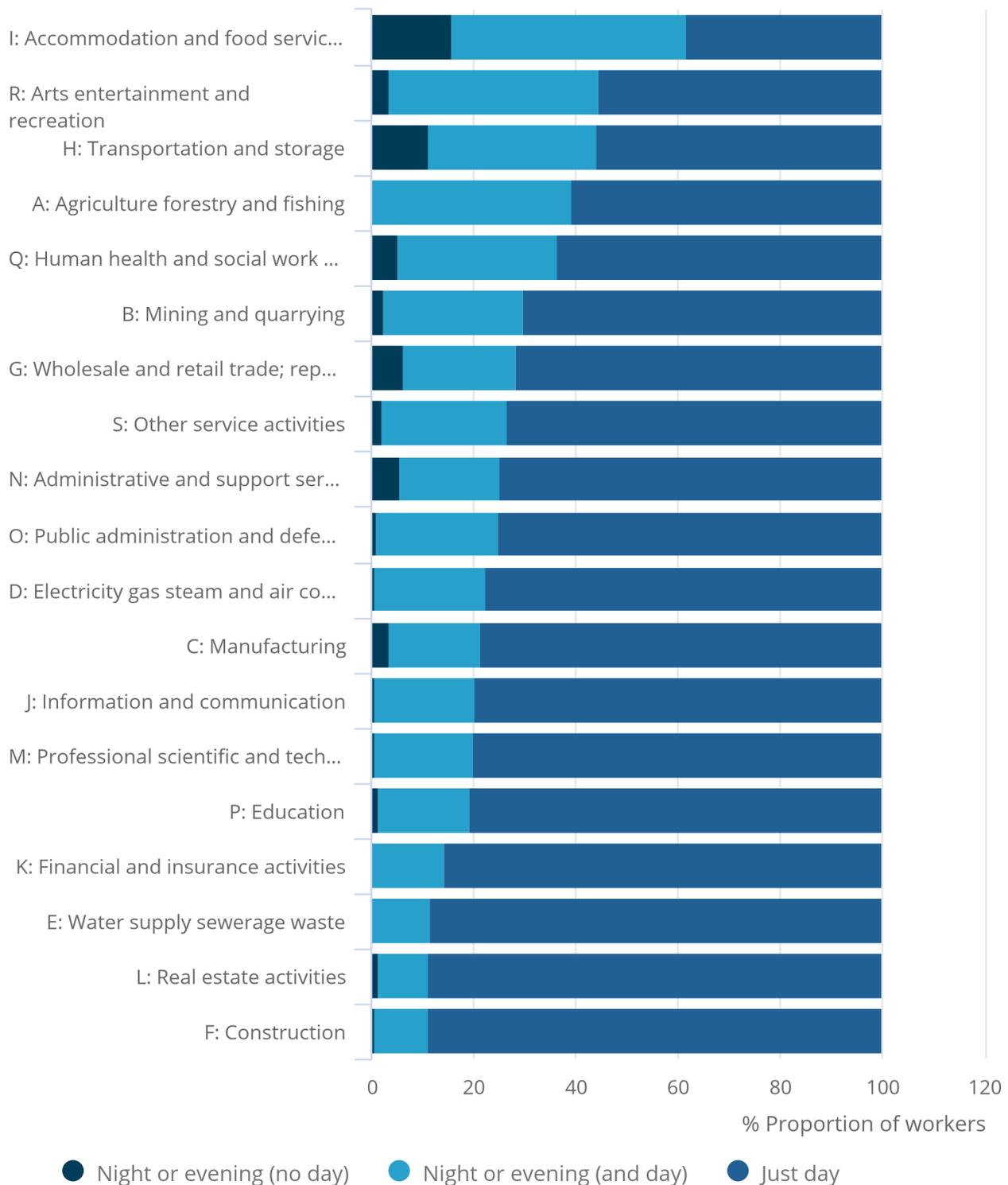
The night-time economy includes many other industries with transport and storage, agriculture, forestry and fishing, and human health and social care all having over 30% of night-time workers. For sectors in which workers only work in the evening or night, this share is highest in accommodation and food service activities, followed by the transport and storage sector.

Figure 6: Accommodation and food service activities contain the largest proportion of night-time workers

Proportion of workers in 2022 within Standard Industrial Classification (SIC) section by time of day "usually" worked, 2022, UK

Figure 6: Accommodation and food service activities contain the largest proportion of night-time workers

Proportion of workers in 2022 within Standard Industrial Classification (SIC) section by time of day "usually" worked, 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

5 . Night-time industry groupings

To explore the night-time economy, this article has adopted the four night-time industry groupings of industries created by the Greater London Authority:

- night-time cultural and leisure activities
- activities which support night-time cultural and leisure activities
- 24-hour health and personal social services
- activities which support wider social and economic activities

All other industries are grouped as - predominantly daytime industries.

[Section 16: Data sources and quality](#) explains how these groupings were created and which industries are included.

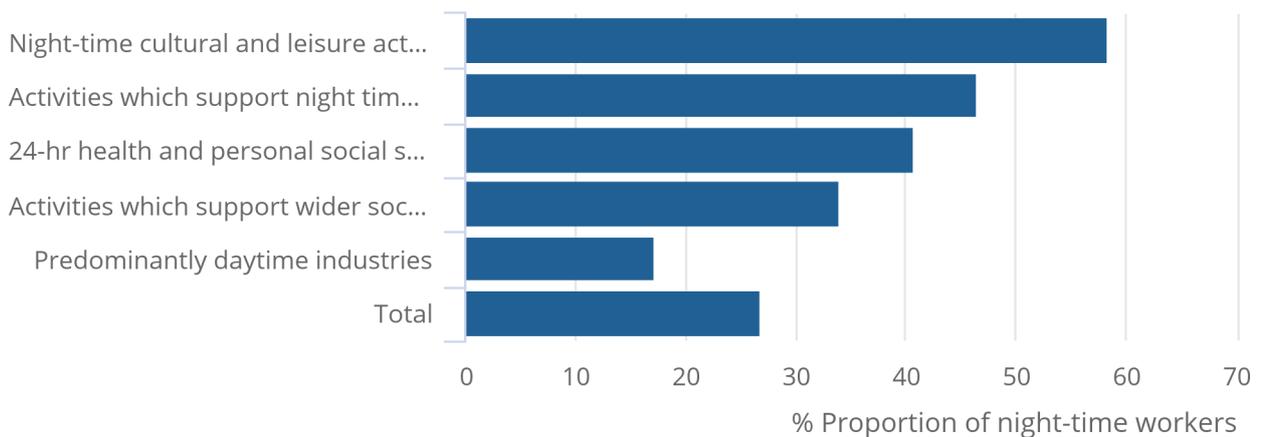
In 2022, the group with the highest share of night-time workers was the night-time cultural and leisure activities group (58.3%). The predominantly daytime industries group has the lowest share at 17.1%.

Figure 7: The night-time cultural and leisure activities industry grouping has the highest proportion of night-time workers

Proportion of night-time workers within each industry grouping, 2022 , UK

Figure 7: The night-time cultural and leisure activities industry grouping has the highest proportion of night-time workers

Proportion of night-time workers within each industry grouping, 2022 , UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

In total, 60% of all night-time workers in 2022 are assigned to one of the four night-time industry groupings, as shown in Figure 8. The other 40% of night-time workers work in industries which are predominantly daytime industries. Therefore, while it is useful to focus on important night-time sectors such as culture or leisure and health, it is worth remembering there are also night-time workers spread across many other industries.

Figure 8: 60% of all night-time workers work in night-time industries

Proportion of all night-time workers by industry grouping, 2022, UK

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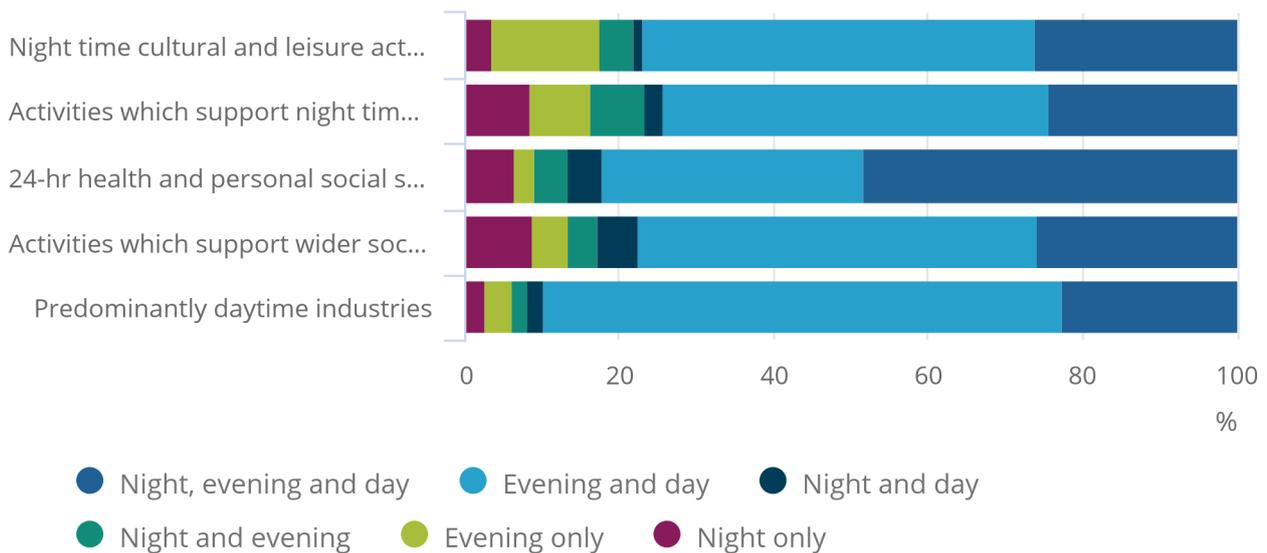
The night-time cultural and leisure activities and activities which support night-time cultural and leisure activities groupings have a higher proportion of night-time workers that only work during the evening and/or night (Figure 9). The 24-hour health and personal social services grouping had the highest proportion of people that worked across the day, evening, and night.

Figure 9: The majority of people that “usually” work during the evening or night also “usually” work during the day

Breakdown of night-time workers within each industry grouping and time of day usually worked, 2022, UK

Figure 9: The majority of people that “usually” work during the evening or night also “usually” work during the day

Breakdown of night-time workers within each industry grouping and time of day usually worked, 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

6 . Occupations

The most represented major occupation group amongst night-time workers is professional occupations (23% of all night-time workers). This is a result of the number of workers in this group as a whole; a relatively small proportion are night-time workers, as shown in Figure 10.

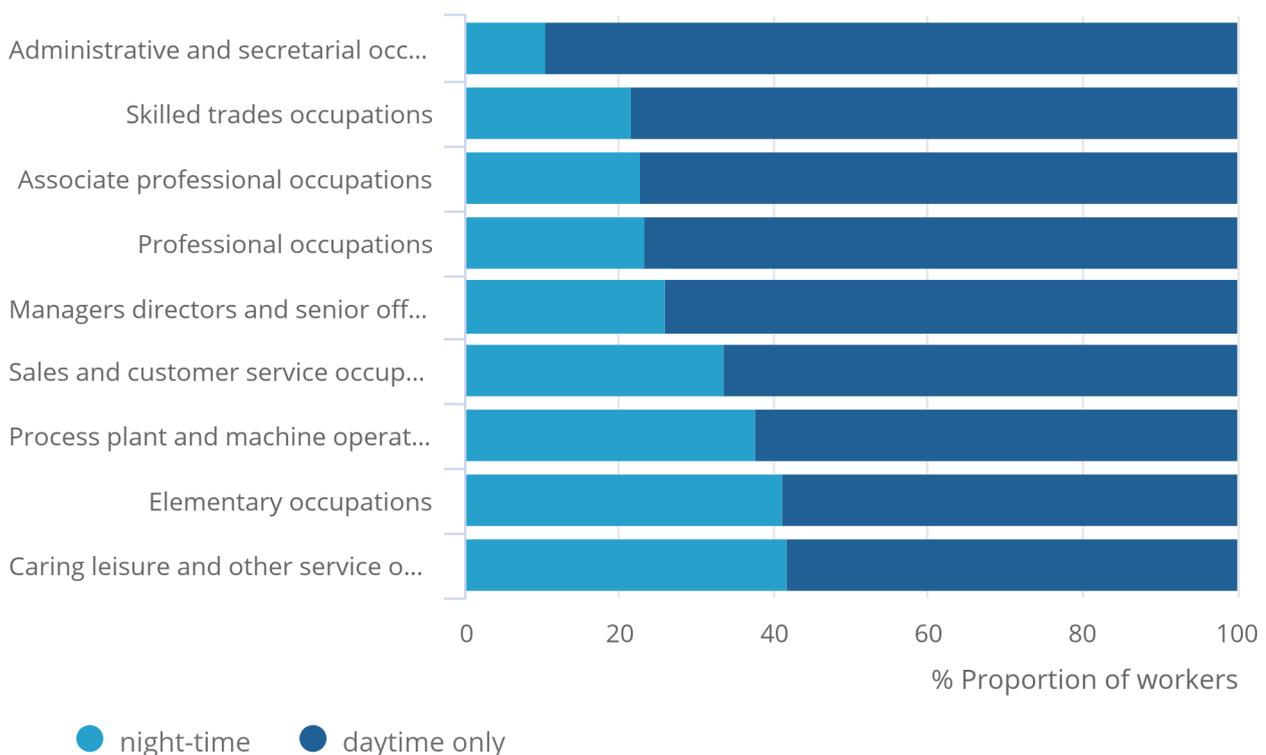
Elementary occupations and caring, leisure and service occupations are the second and third most represented occupations (15% and 13% of all night-time workers, respectively). There are also only two occupation groups in which over 40% of workers within those occupations work during the evening or night.

Figure 10: Over 40% of workers in elementary and caring, leisure and service occupations are night-time workers

Breakdown of night-time workers by occupation grouping, 2022, UK

Figure 10: Over 40% of workers in elementary and caring, leisure and service occupations are night-time workers

Breakdown of night-time workers by occupation grouping, 2022, UK



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

Each of the five industry groupings has a different most dominant occupation (Table 1). Almost half of all night-time workers in night-time cultural and leisure activities are in elementary occupations, this includes bar staff, waiters and waitresses, and security guards.

The majority of night-time workers in 24-hour health and social care are in either caring, leisure and other service occupations, including nursing auxiliaries, or professional occupations, including nurses and doctors.

Despite a relatively low number of night-time workers in sales and customer service occupations in total, this is the most represented occupation in the activities which support night-time cultural and leisure activities grouping, which includes some parts of retail.

Table 1: Nearly half of night-time workers in the night-time cultural and leisure activities grouping are in elementary occupations

Breakdown of night-time workers within each industry grouping by occupation grouping, UK, 2022

Standard occupational classification (SOC) major group	Night time cultural	Support night time cultural	24-hr health and personal	Support wider economy	Predominantly daytime industries
Administrative and secretarial occupations	3.6%	4.2%	2.3%	2.2%	5.4%
Associate professional occupations	13.7%	1.8%	15.5%	16.5%	11.5%
Caring, leisure and other service occupations	4.1%	3.7%	38.7%	11.5%	6.6%
Elementary occupations	45.1%	13.9%	4.8%	15.0%	7.9%
Managers, directors and senior officials	9.7%	7.1%	4.0%	8.0%	13.6%
Process, plant and machine operatives	1.9%	25.2%	0.3%	20.2%	6.2%
Professional occupations	1.7%	2.8%	32.3%	14.4%	34.7%
Sales and customer service occupations	6.7%	38.1%	1.1%	2.9%	6.3%
Skilled trades occupations	13.6%	3.0%	1.0%	9.5%	7.8%
	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Office for National Statistics - Labour Force Survey, April to June 2022

Notes:

1. The number of night-time workers varies slightly between breakdowns because of handling of missing data. See [Section 16: Data sources and quality](#) for more information.

7 . Age

Workers in the night-time cultural and leisure activities and activities which support night-time cultural and leisure activities groupings tend to be younger with a high share of those aged under 24 years. By contrast, 24-hour health and personal services have fewer 16 to 24-year-olds than average, but substantially more 25 to 44-year-olds; this is possibly a result of long training periods for medical staff.

Figure 11: Over 40% of night-time workers in night-time cultural and leisure activities are under 24

Proportion of night-time workers within each industry grouping by age group, 2022, UK

Download the data

[.xlsx](#)

8 . Place of birth

In 2022, workers born outside of the UK made up 23.1% of night-time workers compared with 17.8% of daytime workers. Between 2012 and 2022, the number of night-time workers born in the UK fell from 7.4 million to 6.8 million, while the number born outside of the UK rose by 32.6%, from 1.5 million to 2 million.

During this period, the 24-hour health and personal social services grouping saw a 69.1% increase in the number of workers born outside of the UK to 0.5 million, while the number of UK-born workers in this grouping fell 4.0% to 1.3 million.

Only in the night-time cultural and leisure activities grouping did the number of night-time workers born in the UK increase.

Figure 12: The number of night-time workers born outside the UK increased by more than 30% over the last 10 years

Indexed number of night-time workers by whether they were born in the UK or not, 2012 to 2022, UK 2012=100

Download the data

[.xlsx](#)

9 . Working from home

Between 2012 and 2019, night-time workers were relatively more likely to work from home than daytime workers. Over this period, the percentage of night-time homeworkers rose from 4.7% to 5.8% and for purely daytime homeworkers rose from 3.0% to 4.4%.

However, in 2020 and following the start of the coronavirus (COVID-19) pandemic, this shifted and night-time workers have since been less likely to work from home. In 2022, 15.0% of night-time workers (1.3 million) and 25.1% of purely daytime workers (6.0 million) worked from home.

The predominantly daytime industry grouping has consistently had the highest proportion of homeworkers, both in relation to night-time and daytime workers.

The night-time cultural and leisure activities and activities which support night-time cultural and leisure activities groupings have both only seen a slight increase in the number of night-time homeworkers, despite notable increases in homeworking for purely daytime workers in those industries.

Figure 13: Since 2020, a lower proportion of night-time workers work from home compared to daytime workers

Proportion of workers working from home by type of worker, 2012 to 2022, UK

Download the data

[.xlsx](#)

10 . Subnational night-time workforce

Broadly, the number of night-time workers in countries and regions in the UK are relative to the populations and workforce in those areas. For example, London, South East and North West, which have the biggest populations and workforces as a whole, also have the highest number of night-time workers.

Figure 14 shows the proportion of regional workforces that are night-time workers. Figure 15 shows the number of night-time workers proportional to the region's population. The relative rankings can differ because of the effects of commuting and the number of daytime jobs that exist in an area. For example, London has a substantially above average number of night-time workers working in the region proportional to its population, partly because of the level of inward commuting. However, London also has a very high share of jobs in daytime industries, which means that the proportion of its workforce who are night-time workers is actually below average.

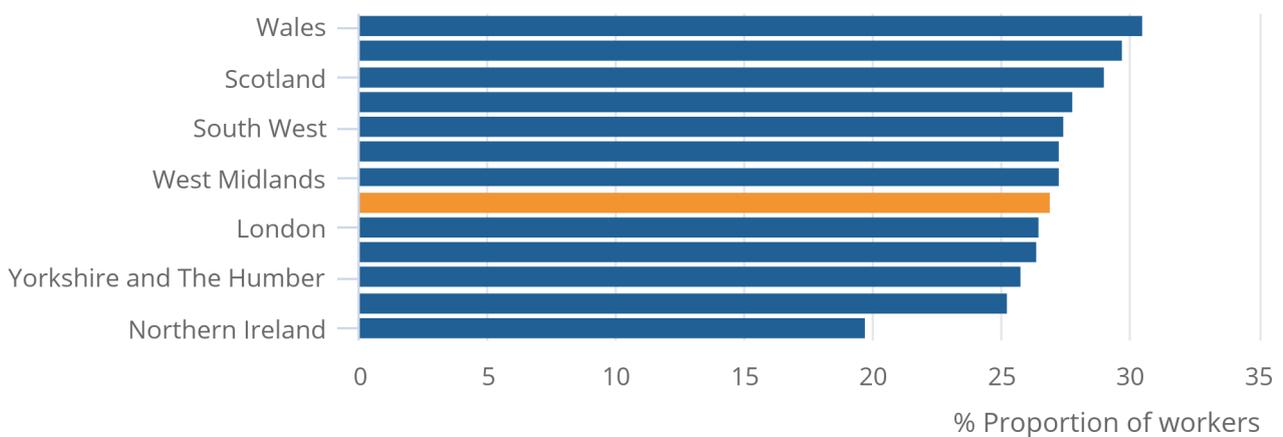
Wales and Scotland both have a relatively high proportion of night-time workers and a high number of workers relative to the countries' population (and inversely a relatively lower proportion of daytime only workers). The opposite is true of Northern Ireland.

Figure 14: Over 30% of workers in Wales are night-time workers

Proportion of workers that are night-time workers by country and region, 2022, UK

Figure 14: Over 30% of workers in Wales are night-time workers

Proportion of workers that are night-time workers by country and region, 2022, UK



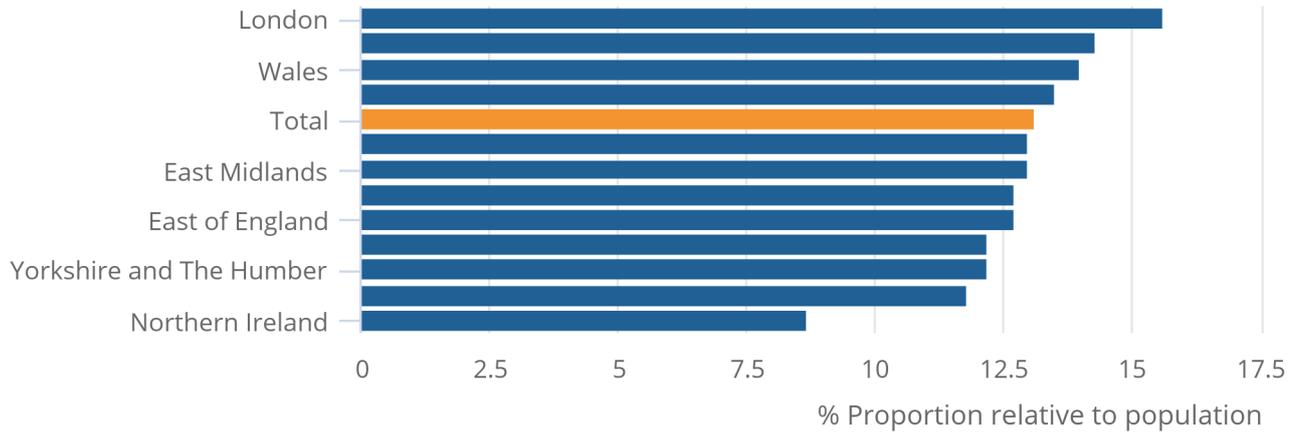
Source: Office for National Statistics - Labour Force Survey, April to June, 2022

Figure 15: London has the highest proportion of night-time workers relative to its population

Proportion of night-time workers relative to population by country and region, 2022, England

Figure 15: London has the highest proportion of night-time workers relative to its population

Proportion of night-time workers relative to population by country and region, 2022, England



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

Of all night-time workers in England:

- 68% work in predominantly urban local authorities
- 19% work in predominantly rural local authorities
- 13% work in mixed rural-urban local authorities

This is roughly the same as the proportions of all workers in England based in those local authorities.

Figures 16 and 17 show predominantly rural local authorities have a high proportion of night-time workers relative to their workforce, but that predominantly urban areas have a higher number of night-time workers relative to the number of people that live in the area.

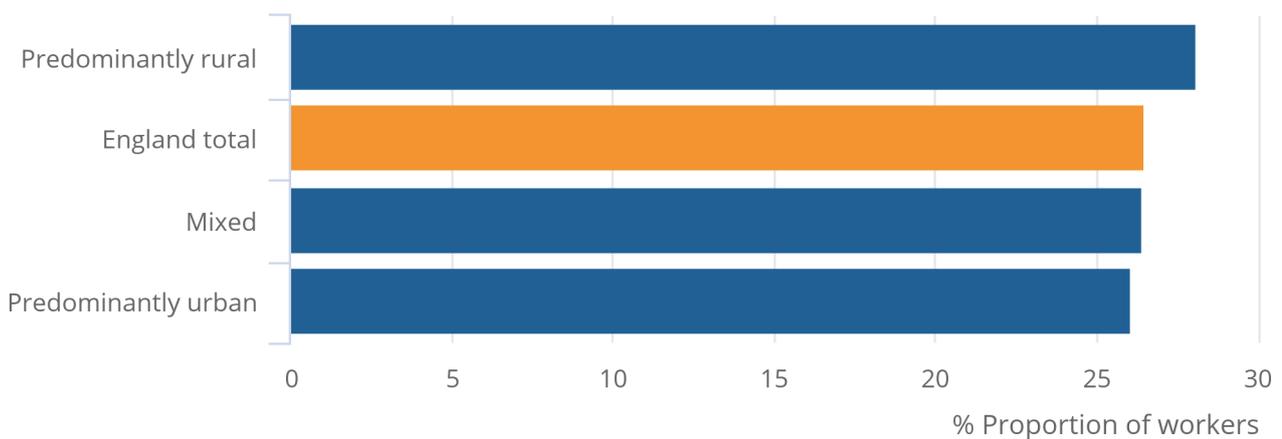
This suggests, while in absolute terms there are more night-time workers in urban areas and more night-time workers relative to the size of the local population, night-time workers remain an important part of the local workforce in more rural areas.

Figure 16: There is a higher proportion of night-time workers in predominantly rural local authorities

Proportion of workers that are night-time workers in England by broad local authority rural-urban classification, 2022, England

Figure 16: There is a higher proportion of night-time workers in predominantly rural local authorities

Proportion of workers that are night-time workers in England by broad local authority rural-urban classification, 2022, England



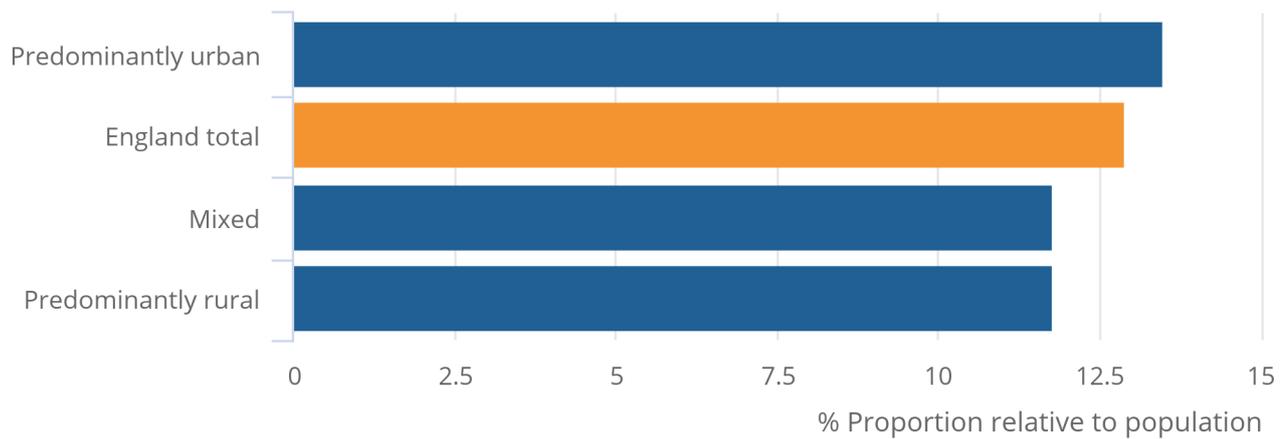
Source: Office for National Statistics - Labour Force Survey, April to June, 2022

Figure 17: There is a higher number of night-time workers relative to the population in predominantly urban areas

Proportion of night-time workers relative to population by broad local authority rural-urban classification, 2022, England

Figure 17: There is a higher number of night-time workers relative to the population in predominantly urban areas

Proportion of night-time workers relative to population by broad local authority rural-urban classification, 2022, England



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

There is some slight variation between different types of local authorities across the four night-time industry groupings (Figure 18). For example, there is a relatively high concentration of night-time workers in the cultural and leisure activities grouping of industries in urban local authorities compared with rural local authorities.

In the 24-hour health and personal services grouping, the share is highest in urban with minor conurbation and urban with town and city (but not urban with major conurbation). This suggests this grouping is most important proportionately in towns and smaller cities.

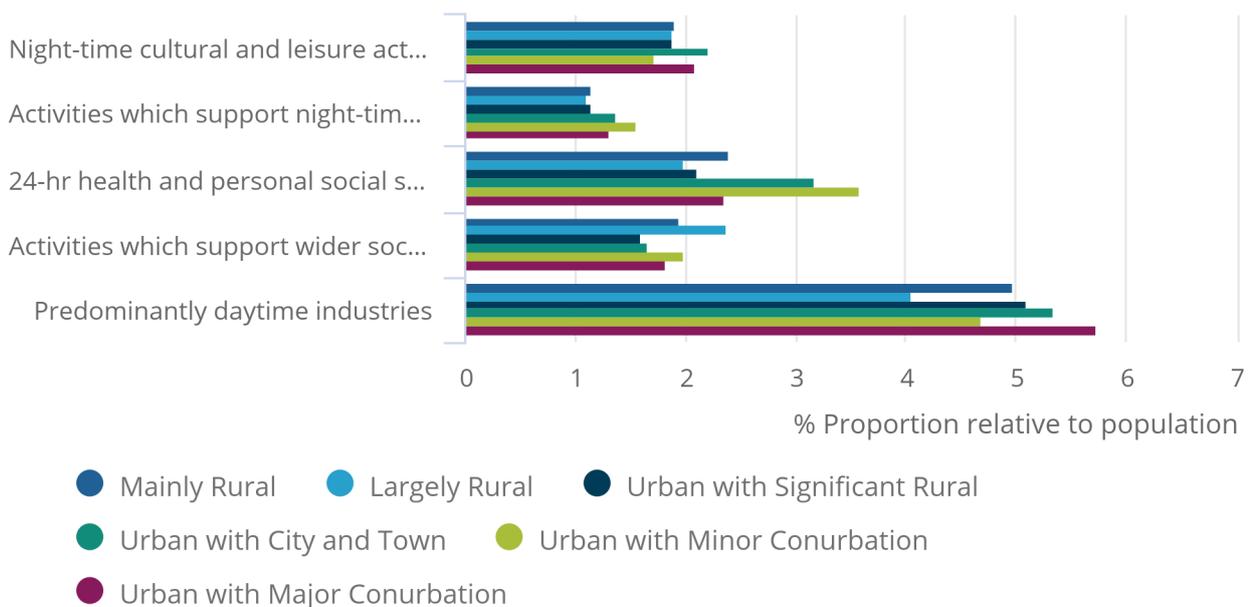
Overall, however, adding across all industry groupings, the level of difference between different types of local authorities is fairly small, suggesting there is a significant night-time economy across all areas, irrespective of its level of urbanity.

Figure 18: There is a significant night-time economy across all urban and rural areas

Proportion of night-time workers relative to population by industry groupings and local authority rural-urban classification, 2022, England

Figure 18: There is a significant night-time economy across all urban and rural areas

Proportion of night-time workers relative to population by industry groupings and local authority rural-urban classification, 2022, England



Source: Office for National Statistics - Labour Force Survey, April to June, 2022

11 . The number of employees in night-time industries in your area

The Inter-Departmental Business Register (IDBR) allows for a granular exploration of employees in specific areas and by specific industry groupings. The IDBR does not differentiate between workplaces that operate during the day or night. However, the four night-time industry groupings discussed in this article can be used to identify which workplaces, (which are based on local units), and subsequently employees, are more likely to operate during the night.

Using our map you can explore the change in the number and concentration (relative to the workforce and local population) of employees in night-time industries in every local authority between 2012 and 2022.

Figure 19: Explore the change in number and concentration of employees in night-time industries in your area

Number of employees in night-time industries, proportion of employees in night-time industries, number of employees in night-time industries proportional to population, by local authority, 2012 to 2022, UK

Notes:

1. This chart shows employees working in night-time industries. This includes all employees, both those that work during the day and during the night, within these industries.
2. Night-time industries are those in which an above average proportion of workers are night-time workers (workers which “usually” work during the evening or night).
3. In 2015, the Inter-Departmental Business Register (IDBR) extended the coverage of businesses to include a population of solely Pay As You Earn (PAYE)-based businesses that were previously excluded because of a risk of duplication. At UK level, 105,000 businesses were added in 2015.
4. These data are based on matching postcodes in the IDBR to the National Statistics Postcode Lookup and therefore may differ slightly from other publications using this data.
5. IDBR employment data are updated from administrative sources (His Majesty's Revenue and Customs (HMRC) PAYE and Value Added Tax (VAT) records) and Office for National Statistics (ONS) surveys and may differ from other sources.

Download the data

[.xlsx](#)

12 . Low and high pay in night-time industries

The annual survey of hours and earnings (ASHE) dataset allows for analysis of pay by industry. It is not possible to identify night-time workers specifically in ASHE data, therefore this analysis considers average pay for all workers (whether daytime or night-time) within industries with a relatively high share of night-time workers.

Employees in night-time industries are more likely to be low earners. In 2022, 10.5% of all employees were low paid. This figure rises to 15.1% for employees in all night-time industries and to 38.5% for employees in the night-time cultural and leisure activities grouping. However, only 5.4% of employees in 24-hour health and personal services industries are low earners.

Employees in night-time industries are also less likely to be high earners. In 2022, 23.7% of all employees were high paid, as opposed to 16.1% of employees in night-time industries.

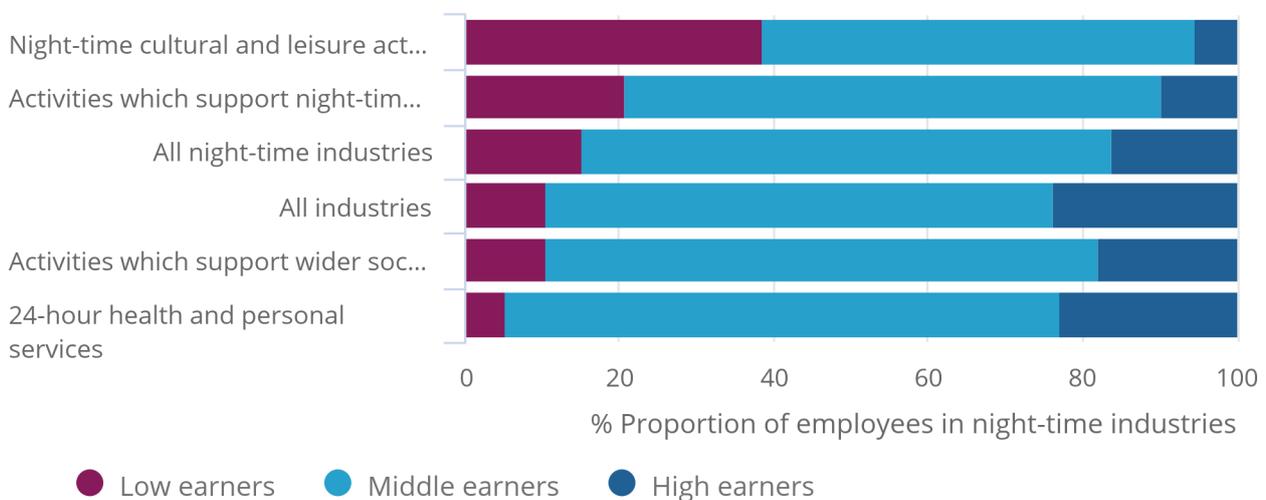
Female employees in night-time industries are more likely to be low paid (Figure 21).

Figure 20: Employees in night-time industries are more likely to be low earners and less likely to be high earners

Breakdown of earnings of employees within each industry grouping, 2022, UK

Figure 20: Employees in night-time industries are more likely to be low earners and less likely to be high earners

Breakdown of earnings of employees within each industry grouping, 2022, UK



Source: Office for National Statistics - Annual survey of hours and earnings (ASHE)

Notes:

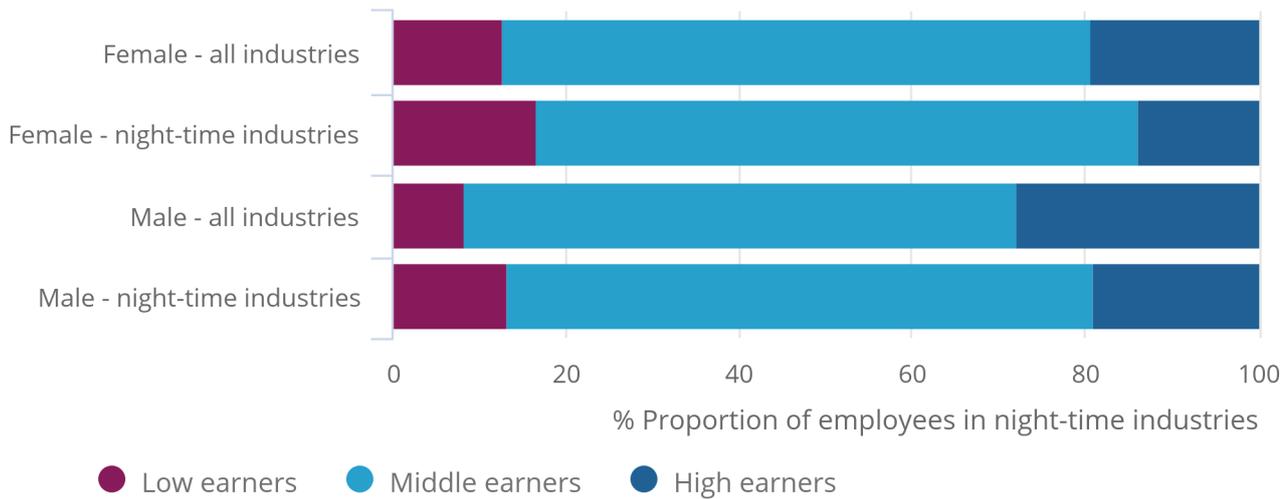
1. Estimates for 2022 data are provisional. Employees are on adult rates, pay is unaffected by absence unless furloughed. Low pay is defined as the value that is two-thirds of median hourly earnings and high pay is defined as the value that is 1.5 times median hourly earnings.

Figure 21: Female night-time workers are more likely to be low earners and less likely to be high earners than males

Breakdown of earnings of employees within night-time industries by gender, 2022, UK

Figure 21: Female night-time workers are more likely to be low earners and less likely to be high earners than males

Breakdown of earnings of employees within night-time industries by gender, 2022, UK



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

Notes:

1. Estimates for 2022 data are provisional. Employees are on adult rates, pay is unaffected by absence unless furloughed. Low pay is defined as the value that is two-thirds of median hourly earnings and high pay is defined as the value that is 1.5 times median hourly earnings.

13 . In-person spending during the night

Anonymised and aggregated card payments data provided by Revolut, using a snapshot of time-stamped spending between Monday 7 November and Monday 14 November 2022, provides the opportunity to investigate spending patterns by time of day.

Within this spending period, the restaurant and groceries groups account for 42% and 22% of spending between 6pm and 6am ("the night"), respectively. This is followed by shopping (12%), transport (9%), travel (8%) and entertainment (2%). Merchants not captured by these groups make up 5% of night-time spend.

In total, night-time spending during this period accounted for a third of total spend. In the restaurant, travel and entertainment groups night-time spending is above this average and only in the restaurant group did over half of spending happen at night.

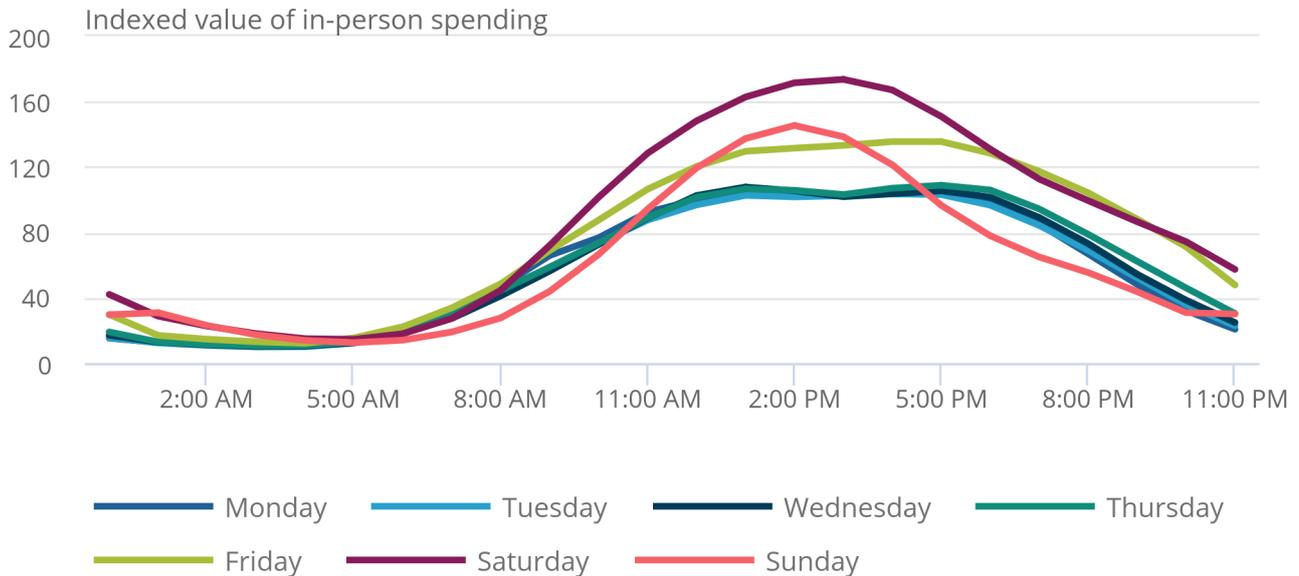
While the night-time workforce is spread across different industries, these data suggest the majority of night-time spending happens within the night-time cultural and leisure activity and activities which support night-time cultural and leisure activities groupings.

Figure 22: A third of total spend occurs at night-time with higher values of night-time spending over the weekend

Value of in-person spending across each day of the week, UK, 7 to 14 November 2022 , Monday 12pm=100

Figure 22: A third of total spend occurs at night-time with higher values of night-time spending over the weekend

Value of in-person spending across each day of the week, UK, 7 to 14 November 2022 , Monday 12pm=100



Source: Revolut

Notes:

1. Totals based on instore spending only.
2. Revolut customers tend to be younger and more metropolitan than average, therefore these data are not necessarily representative of overall UK consumer spending trends.
3. Not all card payment data are processed at the time in which a card is used. Where possible, data have been cleaned to remove mass processing of data in the middle of the night.
4. Data are smoothed using a simple moving average across three hours.
5. Time is based on Coordinated Universal Time (UTC).
6. Revolut cards can be used abroad which may have a small effect on results.
7. Data are indexed so spend at Monday 12pm is equal to 100.

Figure 23: 42% of spending between 6pm and 6am was in the restaurant group

Proportion of spend by merchant category groups throughout each hour of the day averaged across weekdays and weekend, UK, 7-14 November 2022

Notes:

1. Totals based on instore spending only.
2. Revolut customers tend to be younger and more metropolitan than average, therefore these data are not necessarily representative of overall UK consumer spending trends.
3. Not all card payment data is processed at the time in which a card is used. Where possible, data has been cleaned to remove mass processing of data in the middle of the night.
4. Data is smoothed using a simple moving average across three hours.
5. The weekend hourly average between the hours of 6pm and 5am is based on transactions across Friday night (Friday 6pm-Saturday 5am) and Saturday night (Saturday 6pm-Sunday 5am). The weekend hourly average between 6am and 5pm (the day) is based on transactions across Saturday and Sunday between 6am and 5pm.
6. Time is based on Coordinated Universal Time (UTC).
7. Revolut cards can be used abroad which may have a small effect on results.

Download the data

[.xlsx](#)

14 . The night-time economy data

[Night-time workers. UK](#)

Dataset | Released 24 January 2023

National and regional breakdowns of night-time workers by industry groupings, gender, working patterns, age groups, time of day usually worked, place of birth (UK or outside the UK), and whether or not they work from home.

[Employees working in night-time industries. UK](#)

Dataset | Released 24 January 2023

Breakdown of employees working in night-time industries by industry grouping and local authority district.

15 . Glossary

Night-time economy

For this publication, the Office for National Statistics (ONS) has adopted the definition of 'night' to include everything between 6pm and 6am, and the definition of night-time economy to relate to all activities that happen during this period. This definition has previously been used by the ONS and the Greater London Authority, among others.

Night-time workers

Night-time workers are identified through the Labour Force Survey and are people who "usually" work during the evening and/or during the night (irrespective of whether they also work during the day). See the Data sources and quality section for more information.

Night-time industry and industry groupings

Night-time industries are industries in which an above average number of people work during the night. The five industry groupings used in this analysis include four night-time industry groupings and one daytime industry grouping. See the data source and quality section for more information.

Employees in night-time industries

It is not possible to directly identify night-time workers in the inter-departmental business register (IDBR) or annual survey of hours and earnings (ASHE). Therefore, analysis in these sections is for all workers who work in industries classified as night-time industries. See the data source and quality section for more information.

Rural-urban classification

The rural-urban classification is used to distinguish areas on the basis of how rural or urban they are. In the case of local authorities, there are six categories:

- Mainly Rural (80% or more of the population resides in rural areas)
- Largely Rural (Between 50% and 79% of the population resides in rural areas)
- Urban with Significant Rural (Between 26% and 49% of the population resides in rural areas)
- Urban City and Town
- Urban with Minor Conurbation
- Urban with Major Conurbation

Low pay

Low pay can be defined as less than two-thirds of the median hourly pay.

High pay

High pay can be defined as over one and a half times the median hourly pay.

Revolut

Revolut is a financial technology company offering licensed financial services.

Revolut merchant groups

Revolut analysis is based on six groupings of merchants, which are listed below with examples of the types of merchants included:

- entertainment - theatres, membership clubs, tourist attractions, cinemas
- groceries - grocery stores, supermarkets, bakeries, dairy product stores
- restaurants - restaurants, cafes, bars, nightclubs
- shopping - clothes shops, department stores, souvenir shops, duty free
- transport - service stations, taxis, buses, railways
- travel - resorts, airlines, hotels, motels

Labour Force Survey

The Labour Force Survey (LFS) is a survey of households living at private addresses in the UK. Its purpose is to provide information on the UK labour market which can be used to develop, manage, evaluate and report on labour market policies. Our [Labour market overview, UK: January 2023 bulletin](#) provides more detail on the data.

Inter-Departmental Business Register

The Inter-Departmental Business Register (IDBR) is a list of businesses registered for Value Added Tax (VAT) and/or Pay As You Earn (PAYE). It is the main sampling frame for business surveys carried out by the Office for National Statistics (ONS) and other government departments.

Annual Survey of Hours and Earnings

The Annual Survey of Hours and Earnings (ASHE) is the most comprehensive source of information on the structure and distribution of earnings in the UK. ASHE provides information about the levels, distribution and make-up of earnings and paid hours worked for employees in all industries and occupations.

16 . Data sources and quality

The "night-time economy" and how we measure it

There is no precise definition as to what period of time is covered by the "night-time economy". In line with other literature on the topic, in this article the night-time economy refers to activity that takes place between 6pm and 6am.

Most traditional data sources and statistics are not time-stamped. In this article, firstly, where possible we use data sources with direct evidence on night-time trends. Secondly, where this is not possible, we have identified industries which are most likely to have night-time activity.

This article expands on analysis conducted by the Greater London Authority (GLA) in its 2018 "London at Night" report. In particular, the groupings of night-time industries are adapted from that output.

Labour Force Survey

Within the Labour Force Survey, the variables USUWRK1, USUWRK2 and USUWRK3 identify whether a respondent's "usual work pattern" include:

- (1) during the day
- (2) during the evening
- (3) at night

This question underpins the definition of night-time workers and industries. It is a non-core question and is only asked once a year, specifically in Quarter 2 (Apr to June). It is therefore not possible to account for daylight savings time or seasonal differences.

In general, if respondents from one quarter are non-respondents in a subsequent quarter then data are carried forward from the previous quarter. However, if the question was not asked in the previous quarter there is no data to bring forward. In such cases data are uplifted to account for the non-respondents. [Volume 1: Section 12 of our Labour Force Survey user guide](#) provides more detail. It is assumed that relevant non-respondents have the same distribution as respondents allowing estimates to be uplifted. This process can lead to differences when totaling multivariate breakdowns.

The LFS also includes a population weighting, so the survey can be used to create population-wide estimates.

GLA Economics, with the support of the Night-Time Commission Data and Research Group, created a methodology for identifying night-time industries based on the LFS. The methodology uses the USUWRK1, USUWRK2 and USUWRK3 variables. LFS respondents can select all that apply. There are no fixed definitions of what constitutes the day, the evening or the night, and respondents interpret which apply to them. Respondents whose usual work pattern includes either working in the evening or during the night are considered night-time workers. This includes employees and the self-employed.

We first identified the proportion of the total workforce that are night-time workers and secondly identified night-time industries as those which have a proportion of night-time workers above average. However, the industries must have a sufficiently large sample size of 30 or more night-time workers. In this case, we used 2019 to identify night-time industries before the coronavirus (COVID-19) pandemic. Night-time industries are based on 3-digit Standard Industrial Classification (SIC) codes.

Each night-time industry was then grouped into one of four night-time industry groupings, which include the following:

Night-time cultural and leisure activities

- Hotels and similar accommodation (SIC07: 551)
- Restaurants and mobile food service activities (SIC07: 561)
- Event catering and other food service activities (SIC07: 562)
- Beverage serving activities (SIC07: 563)
- Private security activities (SIC07: 801)
- Creative; arts and entertainment activities (SIC07:900)
- Gambling and betting activities (SIC07: 920)
- Sports activities (SIC07:931)
- Amusement and recreation activities (SIC07: 932)

Activities which support night-time cultural and leisure activities

- Retail sale in non-specialised stores (SIC07: 471)
- Retail sale of food; beverages and tobacco in specialised stores (SIC07: 472)
- Retail sale of automotive fuel in specialised stores (SIC07: 473)
- Retail trade not in stores; stalls or markets (SIC07: 479)
- Passenger rail transport; interurban (SIC07: 491)
- Other passenger land transport (SIC07: 493)
- Holiday and other short-stay accommodation (SIC07: 552)
- Security systems service activities (SIC07: 802)

24-hour health and personal social services

- Provision of services to the community as a whole (SIC07: 842)
- Hospital activities (SIC07: 861)
- Other human health activities (SIC07: 869)
- Residential nursing care activities (SIC07: 871)
- Residential care activities for mental retardation; mental health and substance abuse (SIC07: 872)
- Residential care activities for the elderly and disabled (SIC07: 873)
- Other residential care activities (SIC07: 879)
- Social work activities without accommodation for the elderly and disabled (SIC07: 881)

Activities which support wider social and economic activities

- Animal production (SIC07: 014)
- Mixed farming (SIC07: 015)
- Support activities to agriculture and post-harvest crop activities (SIC07: 016)
- Processing and preserving of meat and production of meat products (SIC07: 101)
- Processing and preserving of fruit and vegetables (SIC07: 103)
- Manufacture of dairy products (SIC07: 105)
- Manufacture of bakery and farinaceous products (SIC07: 107)
- Manufacture of other food products (SIC07: 108)
- Manufacture of pulp; paper and paperboard (SIC07: 171)
- Manufacture of articles of paper and paperboard (SIC07: 172)
- Printing and service activities related to printing (SIC07: 181)

- Manufacture of basic chemicals; fertilisers and nitrogen compounds; plastics and synthetic rubber in primary forms (SIC07: 201)
- Manufacture of rubber products (SIC07: 221)
- Manufacture of plastics products (SIC07: 222)
- Manufacture of domestic appliances (SIC07: 275)
- Manufacture of motor vehicles (SIC07: 291)
- Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers (SIC07: 292)
- Manufacture of air and spacecraft and related machinery (SIC07: 303)
- Manufacture of medical and dental instruments and supplies (SIC07: 325)
- Manufacture of gas; distribution of gaseous fuels through mains (SIC07: 352)
- Wholesale of food; beverages and tobacco (SIC07: 463)
- Freight transport by road and removal services (SIC07: 494)
- Sea and coastal freight water transport (SIC07: 502)
- Passenger air transport (SIC07: 511)
- Warehousing and storage (SIC07: 521)
- Support activities for transportation (SIC07: 522)
- Other postal and courier activities (SIC07: 532)
- Motion picture; video and television programme activities (SIC07: 591)
- Television programming and broadcasting activities (SIC07: 602)
- Photographic activities (SIC07: 742)
- Veterinary activities (SIC07: 750)
- Temporary employment agency activities (SIC07: 782)
- Activities of call centres (SIC07: 822)
- Other education (SIC07: 855)
- Activities of other membership organisations (SIC07: 949)
- Other personal service activities (SIC07: 960)

In this analysis, all industries not assigned to one of the night-time industry groupings are grouped as predominantly daytime industries.

Inter-Departmental Business Register

The Inter-Departmental Business Register (IDBR) is used to support statistical work across government. However, beyond this group of registered businesses, there are some low turnover non-employed businesses which are not included.

The employment information on the IDBR comes mainly from the Business Register Employment Survey (BRES). This survey is based on a sample of enterprises, therefore we have used estimates from previous returns and other ONS surveys. For the smallest units, either Pay As You Earn (PAYE) jobs or employment imputed from Value Added Tax (VAT) turnover is used.

The IDBR does not include information on when a business operates or when its staff work. Therefore, it is not possible to directly identify night-time employees. The IDBR does include SIC codes, so it is possible to identify businesses and employees which work in a night-time industry and are more likely to be night-time workers.

Annual Survey of Hours and Earnings

Like the IDBR, it is not possible to directly identify night-time employees through the Annual Survey of Hours and Earnings (ASHE). However, it is possible to identify night-time industries and therefore identify employees more likely to work in a night-time industry.

Revolut

Revolut are a relatively new card issuer and these data are not necessarily representative of overall UK consumer spending trends. Revolut debit card holders tend to be more urban-based and younger than the typical UK consumer. See our [Using Revolut cardholder data to derive real-time indicators of consumer spending QMI](#) for more information.

17 . Related links

[Job quality in the UK - analysis of job quality indicators: 2021](#)

Article | Released 16 December 2022

Analysis of eight job quality indicators to understand the quality of work across the UK, using reweighted data from the Annual Population Survey (APS) for 2021.

[Economies of ale: pubs in the time of COVID-19](#)

Article | Released 8 June 2021

Pubs were among those businesses forced to close during restrictions introduced to halt the spread of the coronavirus (COVID-19). In their own words, landlords shared their experiences of the effect of lockdown on their businesses.

[Coronavirus and its impact on UK hospitality: January 2020 to June 2021](#)

Article | Released 19 July 2021

Analysis of the hospitality sector during coronavirus (COVID-19) with a focus on the most recent easing of restrictions in spring 2021. Includes details of how the sector has performed and the future of employment in hospitality.

18 . Cite this article

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