

# Office work: from laptop to land use

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## Where is the office?



Anchored to people, paper, equipment – typewriter, desk, building  
Therefore fixed ‘working’ hours – when offices are ‘open’.

## Where is the office, and what is office work?

Not the paperless office

Not home working

Reduction of post

Fixed phones

New ways of storing paper (away)

For some people, there is greater **variety**

hot desking

'flexible' employment

'flexible' hours..

working **on the move**, in **different locations**

(laptop, wireless, smart phones)

Email: always on; on everywhere.....

<http://notable.ca/this-is-how-much-time-the-average-worker-spends-per-week-on-email/> (October 2015)



Email takes 'average' of 13 hours or 28% of working week.

## Average square footage per person targets have declined steadily

### Square Footage per Person Targets

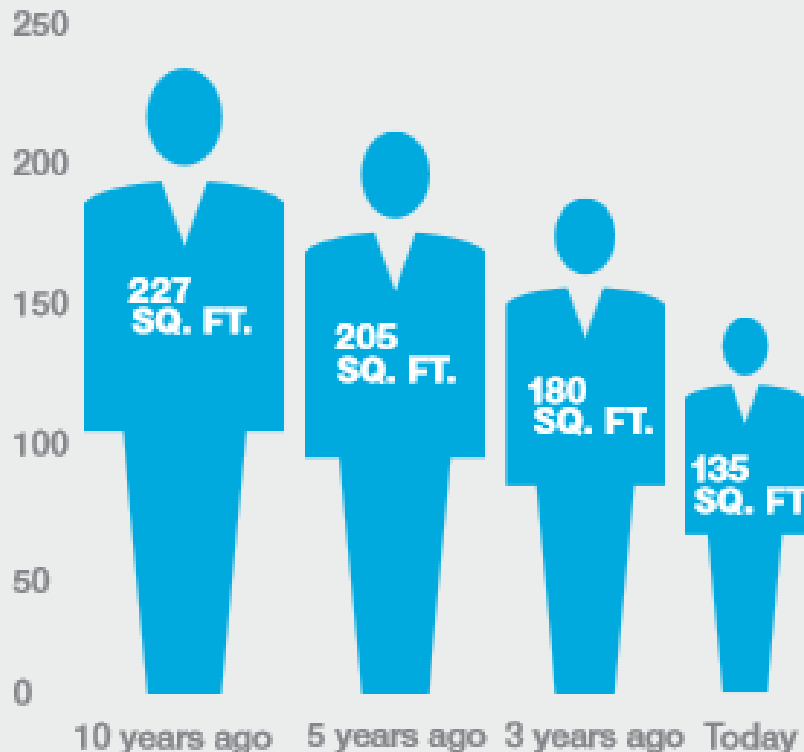


Figure 2. Square footage per person targets have declined an average of 10% in each of the time intervals we studied. *Note: Participants were asked to provide square foot per employee targets for today, and over the past 3, 5, and 10 years. The square footages shown are the statistical mean of participant responses.*

## The office is changing

And so is non domestic energy demand

The general rule of thumb is to allow anywhere between 125 and **225** usable square feet of office space per person.

average office costs per square foot per month in London **£52.50** (2016)

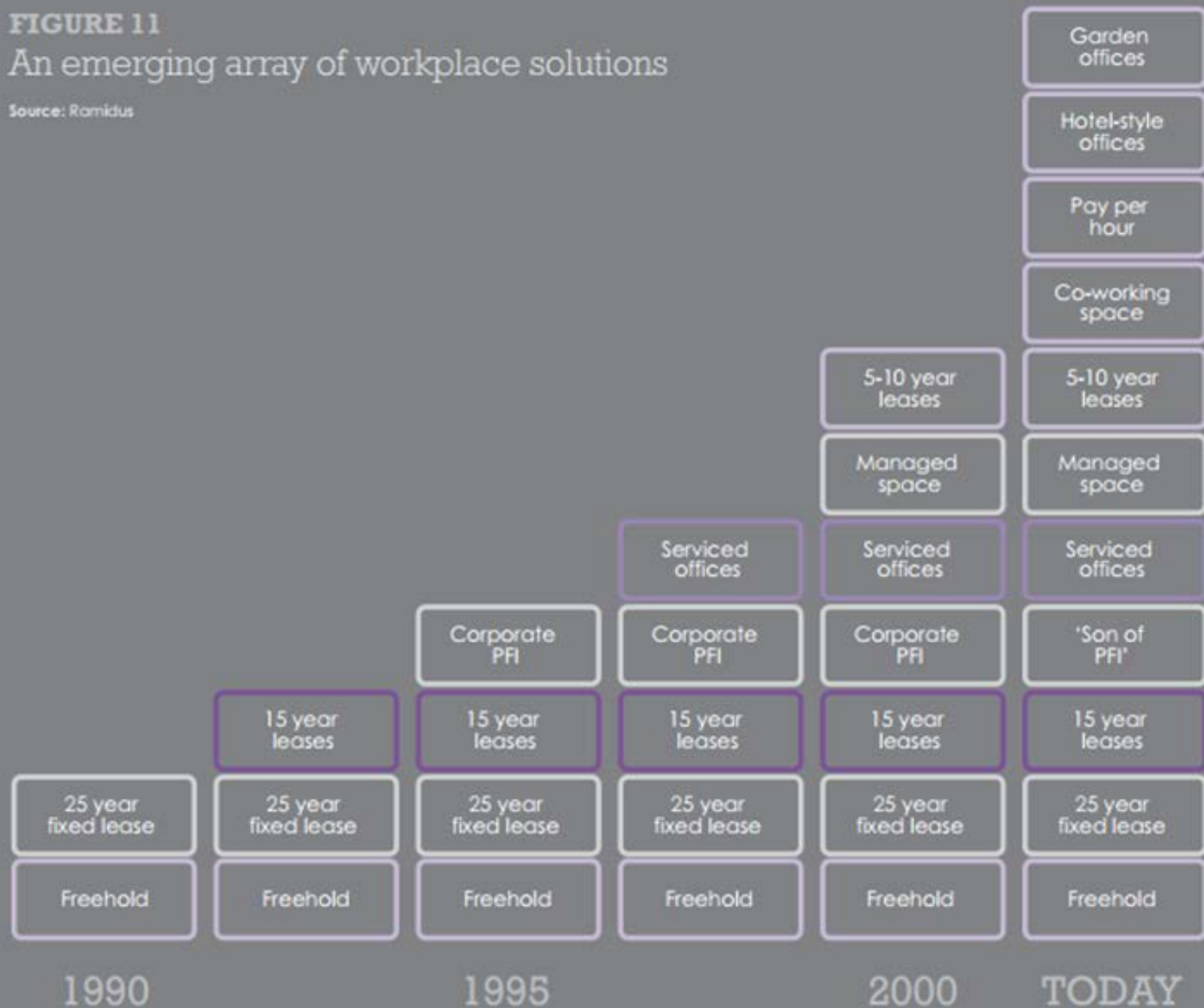
£45,000 per person per year

£9,600 per person per year

**Unoccupied about 40-50% of the time**

**FIGURE 11**  
An emerging array of workplace solutions

Source: Ramidus



## There are multiple places in which office work takes place



<http://www.techworld.com/news/personal-tech/heathrows-3000-power-sockets-make-it-europes-gadget-friendly-airport-3608989/>

Heathrow is among the best with 3,050 plug sockets across the departure lounges in its five terminals, or roughly one for every two of the 6,250 passengers using them at any moment in time.



## There are changing combinations of space, time and equipment

Office property market

Servicing (out of the centre)

Data and mobile/email traffic

Equipping of 'third' spaces:  
trains, hotels...



## Lifestyle | Food and drink

[Recipes](#) | [Beer](#) | [Wine](#) | [Healthy eating](#) | [Restaurants](#) | [Pubs and bars](#) | [Wine shop](#)

★ Lifestyle > Food and drink > Food and drink features

### Free wifi and comfy seats: London's best cafés to work in



## There are new connections between infrastructures, appliances and practices

no internet, no work

Tethering: to the office

Detethering: from the office



Laptops+mobile wireless enable new forms of office work, and require/sustain different infrastructures.

Laptops condense/integrate and are portable – **when tied to relevant networks/internet.**

**Where is the infrastructure now?**





## Office work and energy implications:

The use and lifecycle of ICT at home or work; or somewhere else.

Multiple impacts on other processes, forms of energy use, e.g. travel patterns

Long-term developments, e.g. urban development

The need for remote but reliable data servers and systems.

**Where, when, how and by whom is office-work-related energy demand reconfigured?**

## Non-energy policies with energy outcomes

- Digital government
- Broadband, e.g. universal service obligation
- Smart metering
- Planning
- Economic growth ...but of what form?