Improving the Mobile Networks in Greater Cambridge

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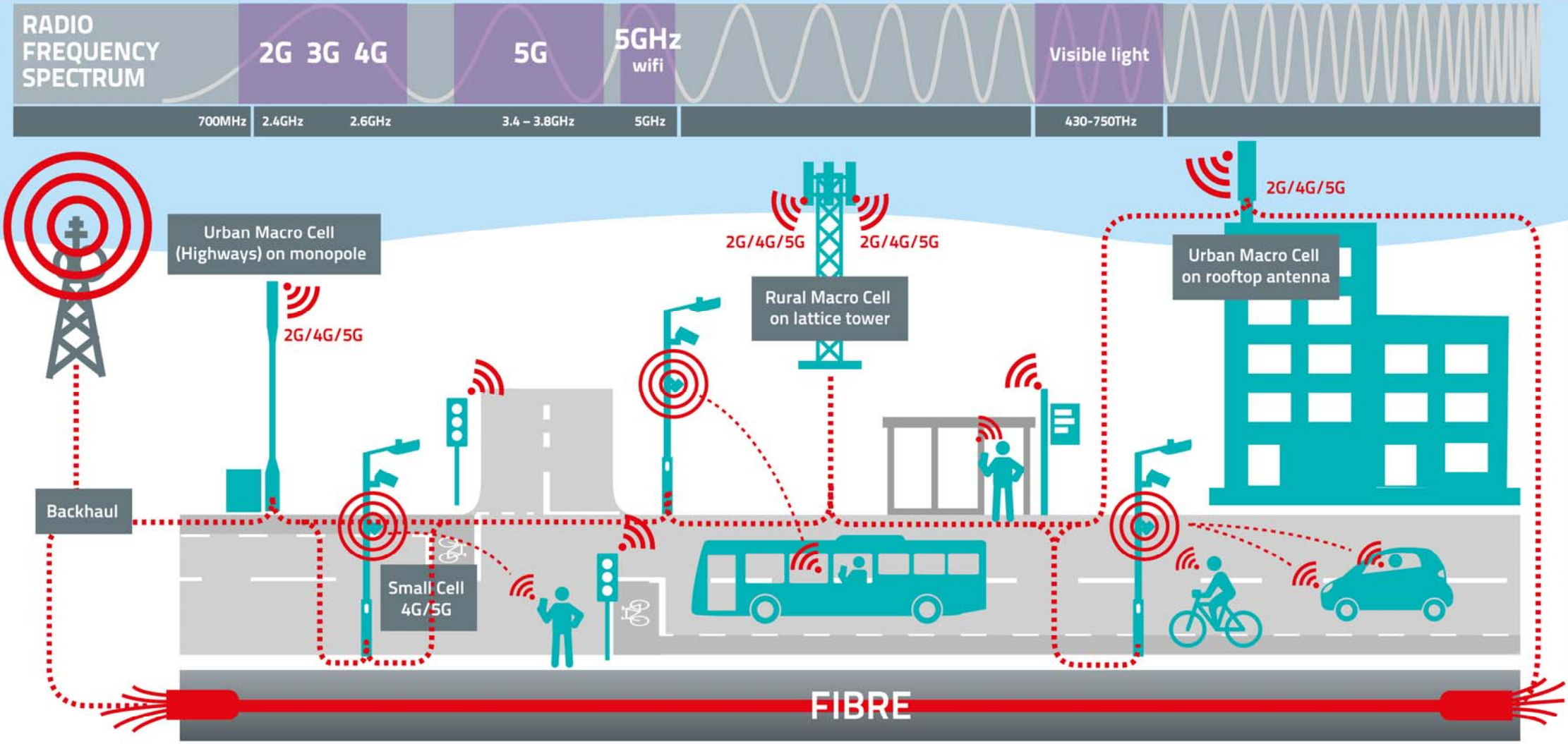
Connecting Cambridgeshire

connecting CAMBRIDGESHIRE

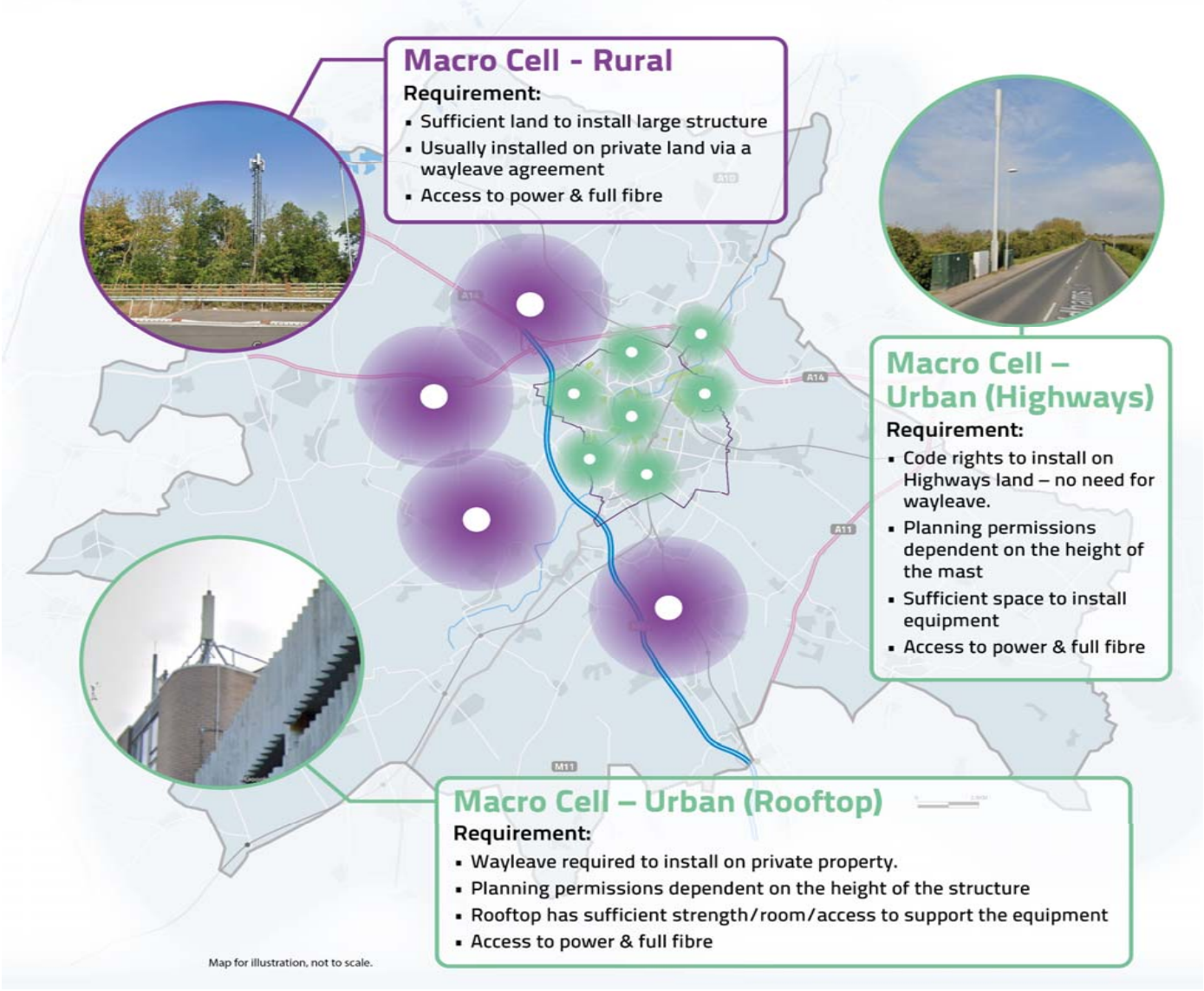
Driving digital connectivity for Cambridgeshire & Peterborough

Extending mobile infrastructure to underpin future digital connectivity



How mobile networks will use macro and small cells to improve rural and urban connectivity enabled by full fibre.

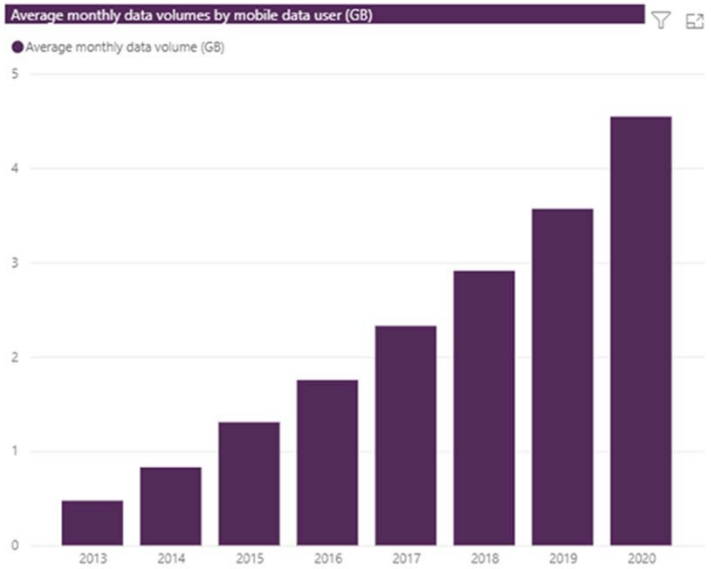
Key concepts in Mobile infrastructure design:



Why we need improved connectivity:

3 Key changes in mobile data landscape:

- The physical landscape is changing
- Data demand is increasing
- 5G enabled new technology, processes & opportunities
  - ❑ Healthcare & Emergency Services
  - ❑ Rural
  - ❑ Home, Business & The Workplace
  - ❑ Transport
  - ❑ Environment & Climate Change

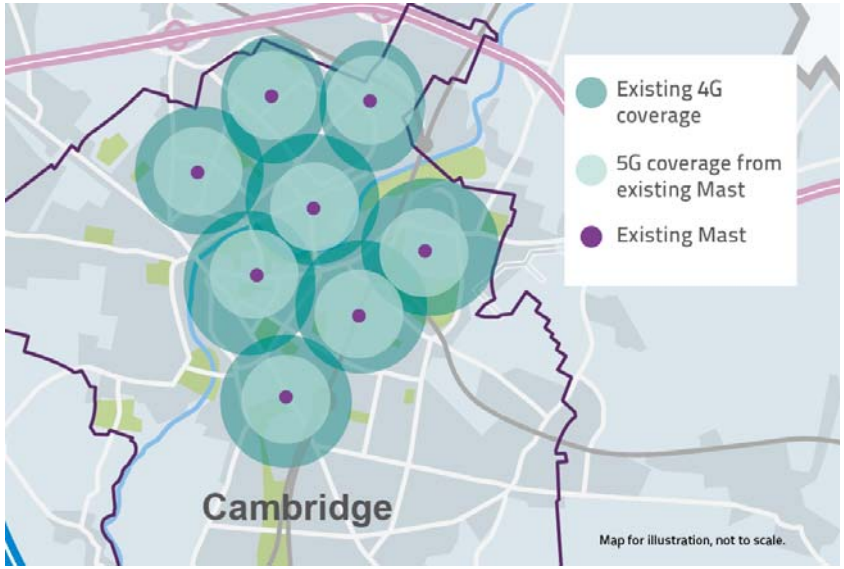


Source: Ofcom / operators Note: Includes estimates where Ofcom does not receive data from operators.

Network Infrastructure improvements and the role of the Local Authority:

Mobile Network Operator improvements:
Significant investment to:
- Increase capacity of 4G networks
- Deliver a nationwide 5G network

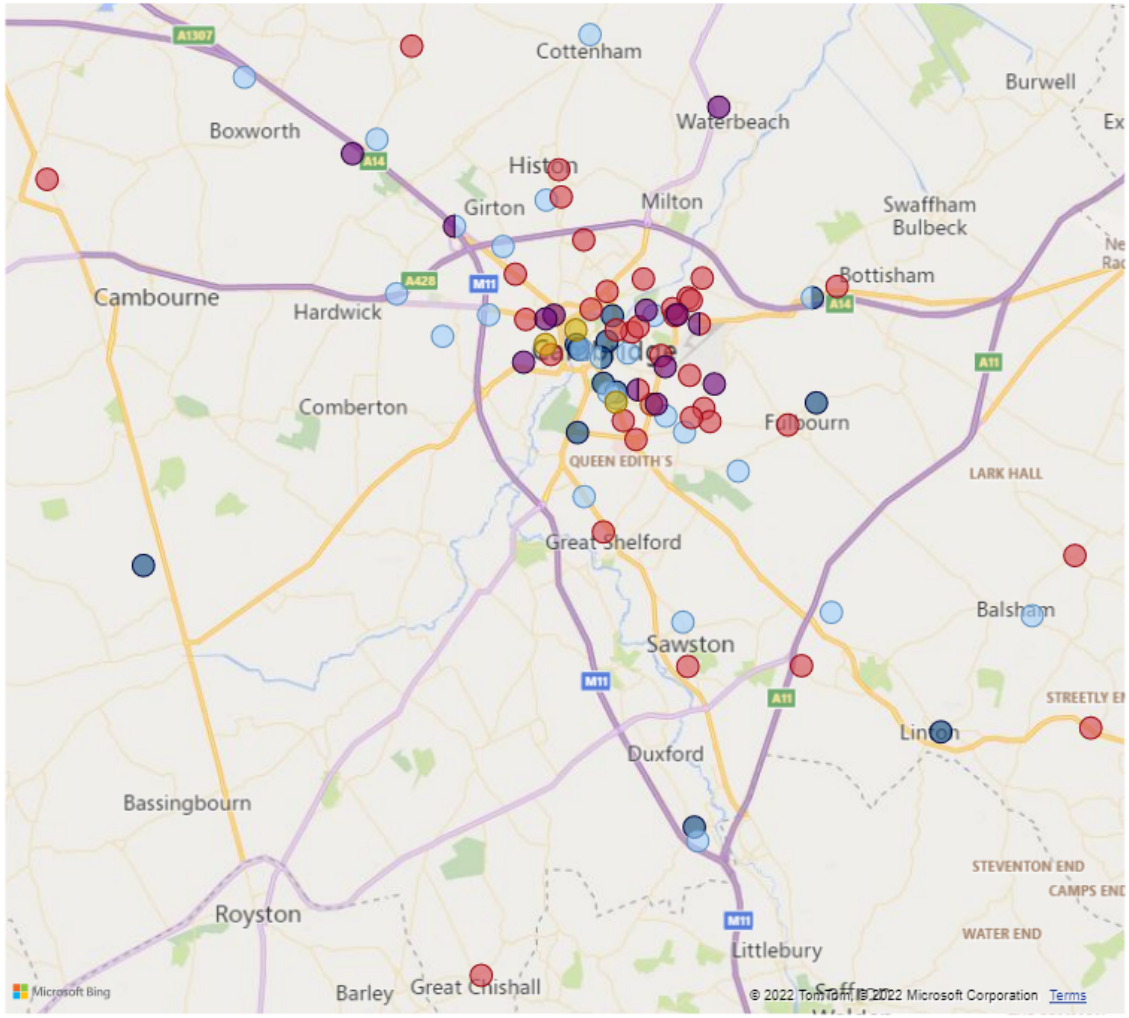
Small Cells:
- "Hotspot" locations
- Deployable under code powers
- Deminimis under planning
- PFI Contract issue



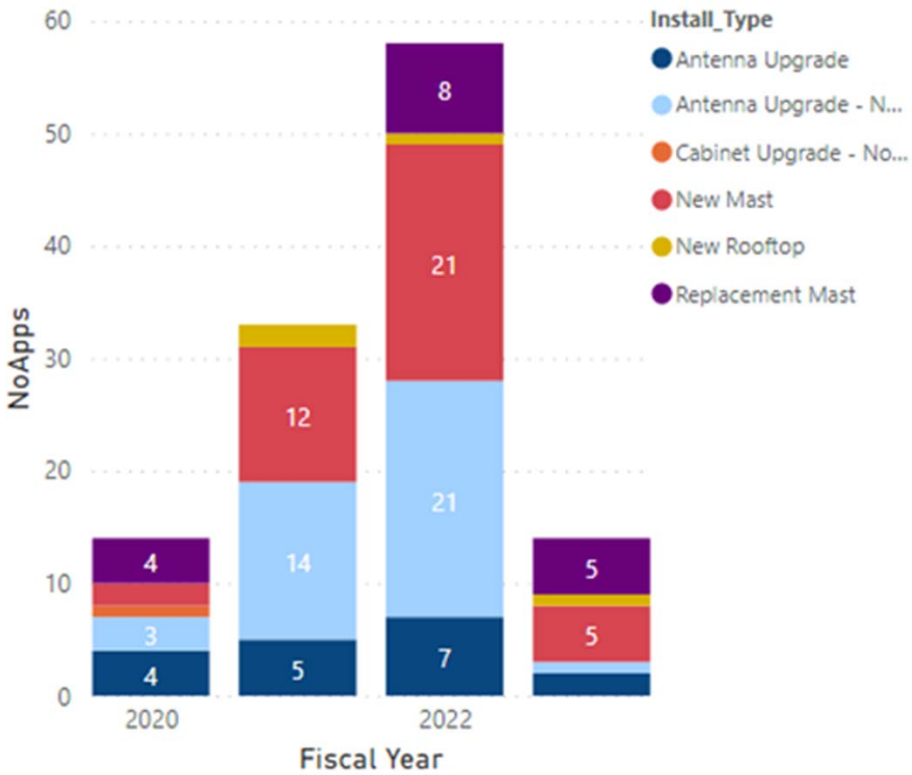
5G Networks:
- Not always deployable on existing infrastructure:
  - ❑ Different antenna
  - ❑ Shorter wavelength
  - ❑ 2G/3G/4G networks
- Planning permission issue

MNO Investment in Greater Cambridge – All Planning Applications:

Map of All Mobile Planning Applications



Number of Applications by year

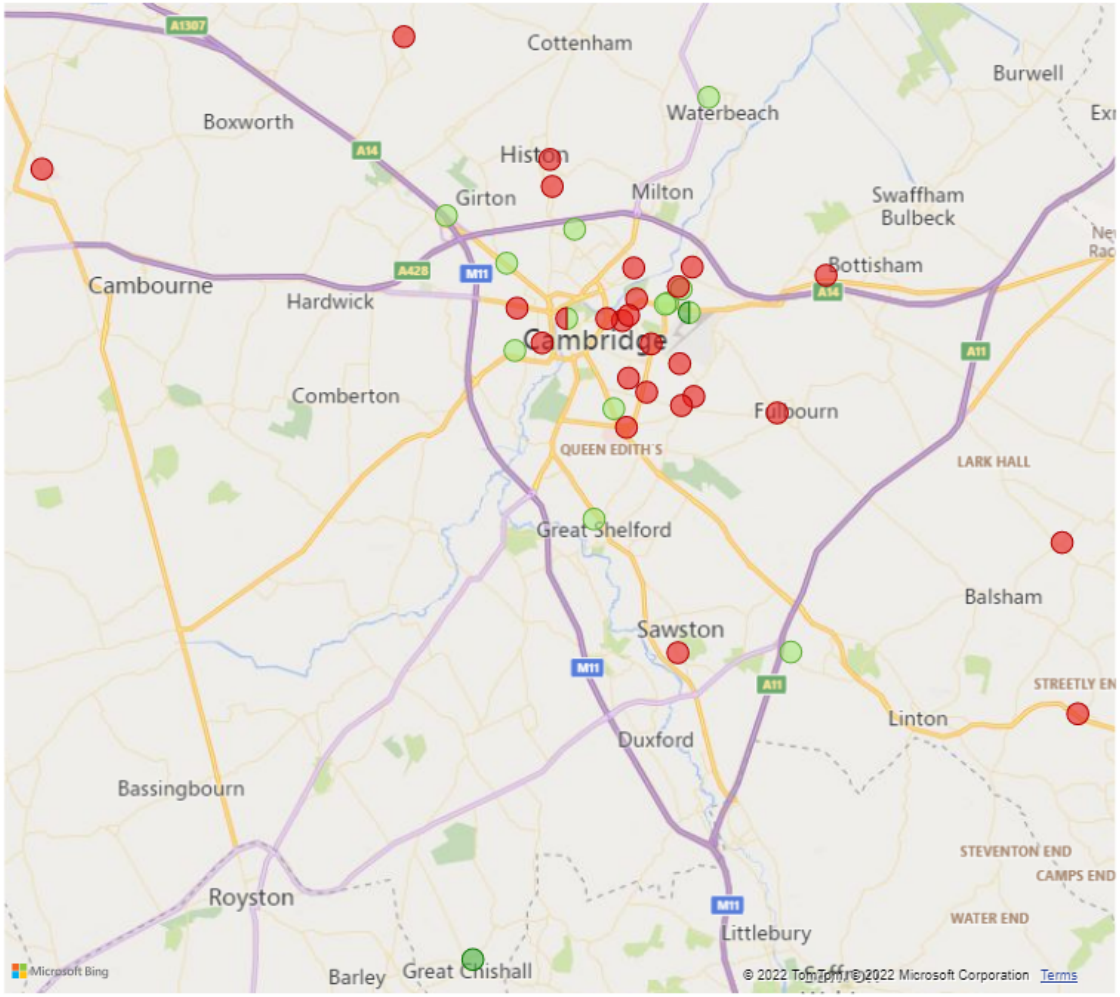


Number of Applications by Operator

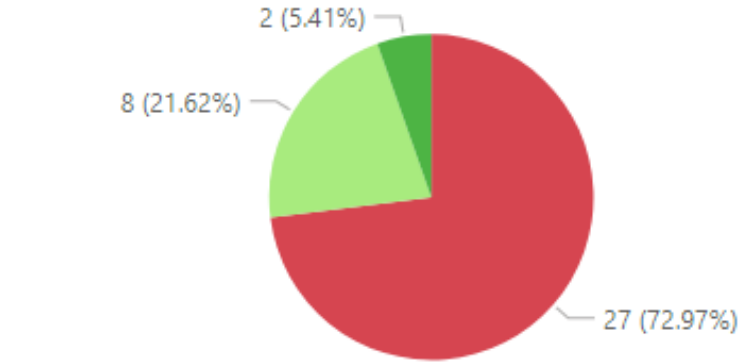
District	EE	O2	O2/Vod	Three	Three/EE	Vodafone	WIG	**Total**
GC	4	23	8	37	27	18	2	**119**
Total	**4**	**23**	**8**	**37**	**27**	**18**	**2**	**119**

MNO Investment in Greater Cambridge – New & Replacement masts:

Map of New & Replacement Masts by planning outcome



Status of Application



Mobile Coverage Support:

- Increased engagement
- Planning Resource
- Benchmarking
- Pilots
- National planning legislation changes
- 5G factsheets