Recording Past and Present Land Use in Birmingham – the Historic Landscape Characterisation (HLC)

Part 2 – Data Visualisations

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Overview

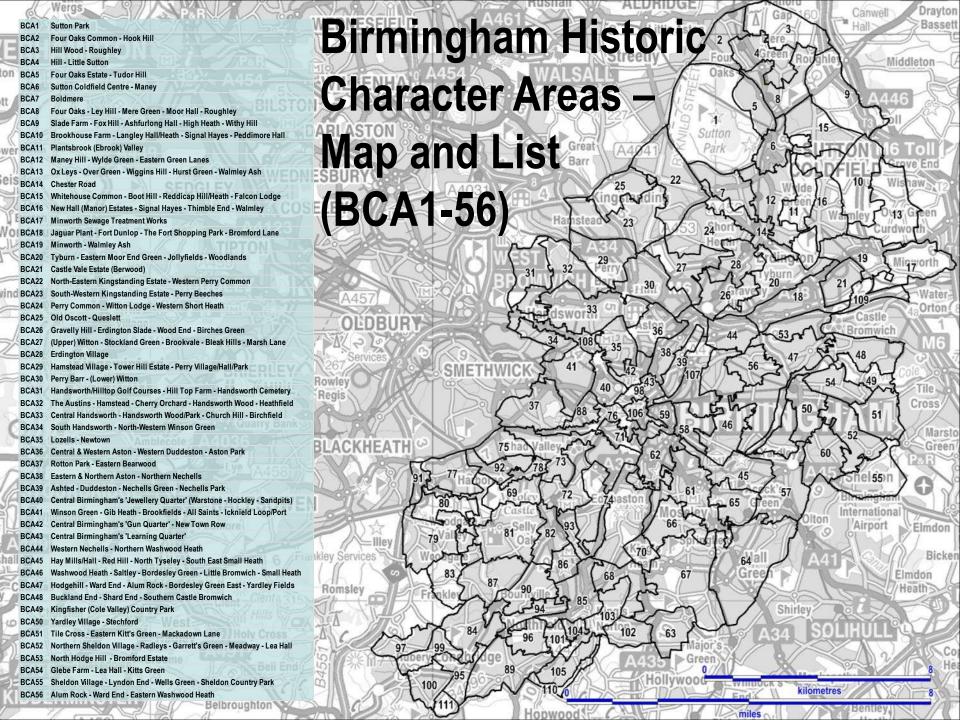
- Continuing from Part 1 Project Overview, this second presentation covering the Birmingham HLC and its uses, consists mainly of sequences of 'thematic timeslice' maps.
- The sequences illustrate the visualisation potential of HLC data and its ability to represent graphically various historic evolutions in an easy to understand, user friendly format, suitable for (almost) everyone, regardless of their level of previous knowledge of the subject matter.
- The 'timeslices' included in the slides, have been generated from the HLC database as thematic maps, using MapInfo GIS software, and aim to illustrate general or specific aspects of the historic development of Birmingham, as reflected by its land use changes captured by this HLC.

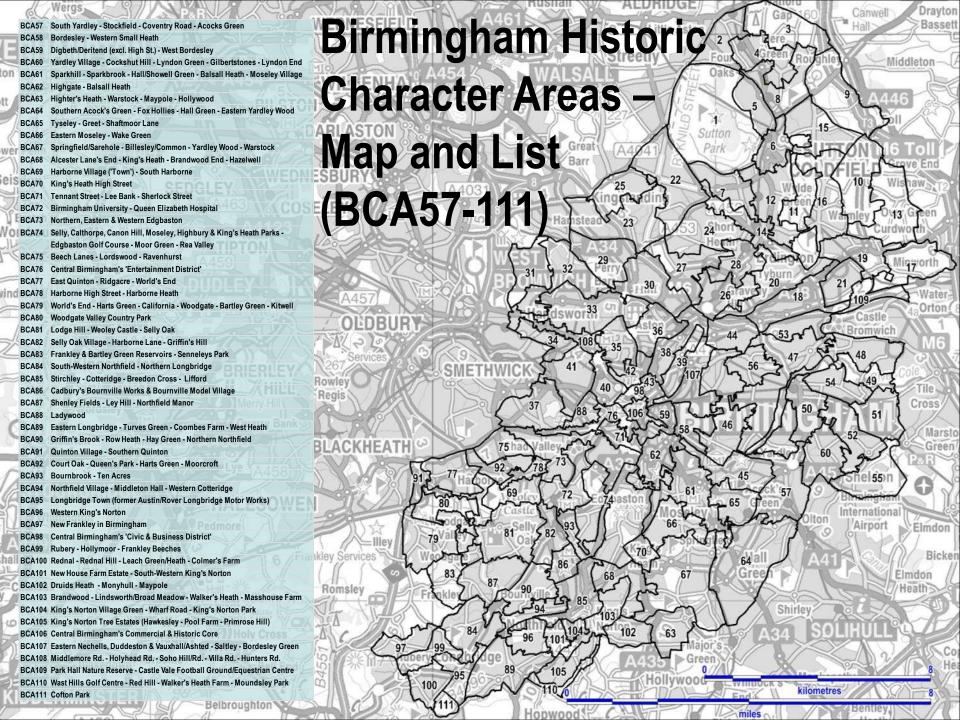
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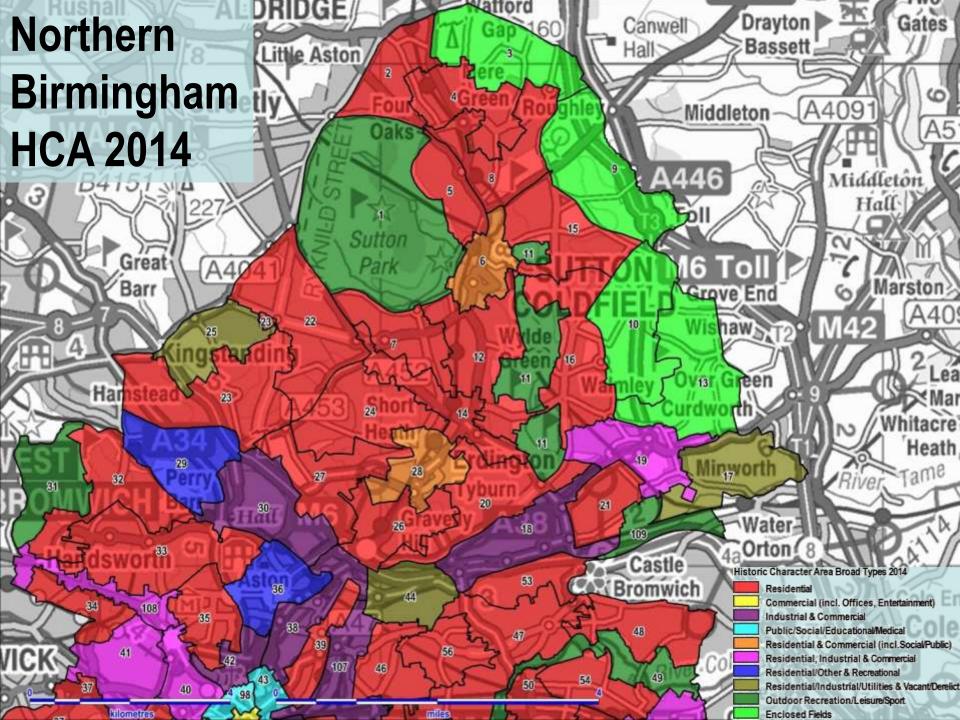
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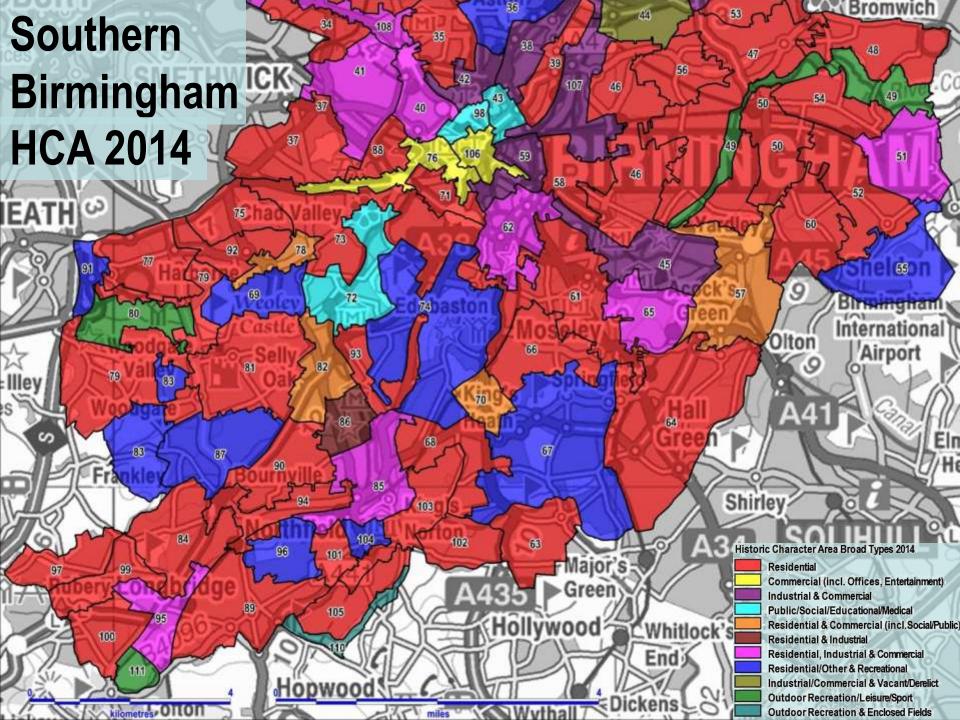
1. Birmingham Landscape Character Areas

- This displays the current (2014) predominant character of the 111 historic landscape character areas of Birmingham, using broad land use type data.
- A noticeable difference can be observed between the overall character of the character areas located along the Tame and northern Rea valley corridors down into Central Birmingham, and the neighbouring character areas to the north (including Sutton Coldfield), south and east which appear to be predominantly residential and/or recreational in their character.
- This is undoubtedly the result of differences in the historic landscape evolutions between these areas, that were captured by the original HLC records, from which the character areas were later on aggregated.









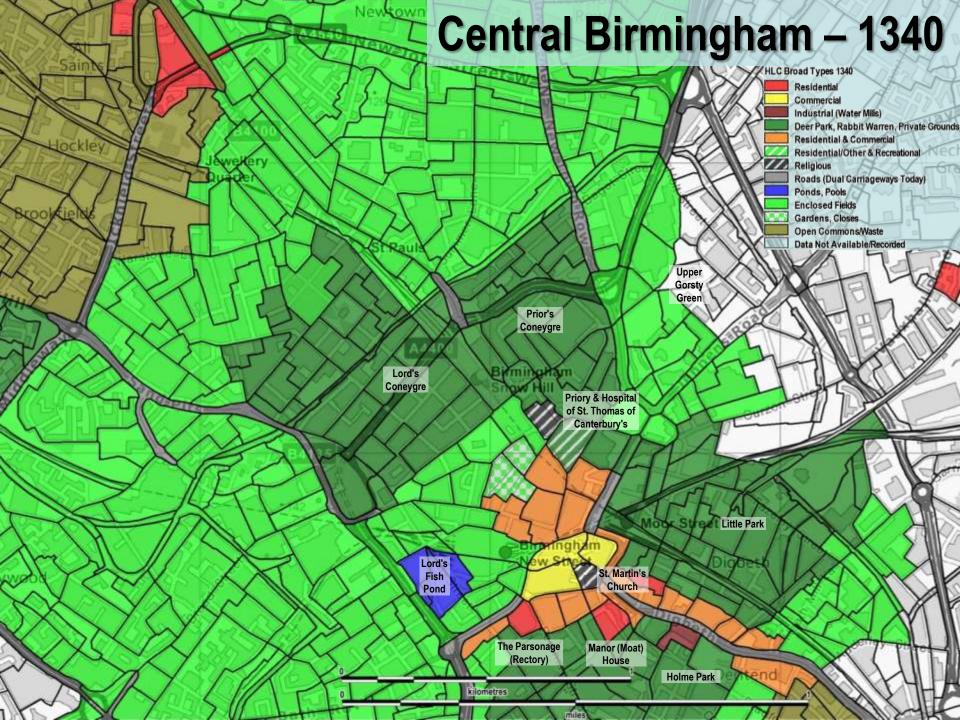
2. Seven Centuries of Landscape Evolution in Central Birmingham (1340-2014)

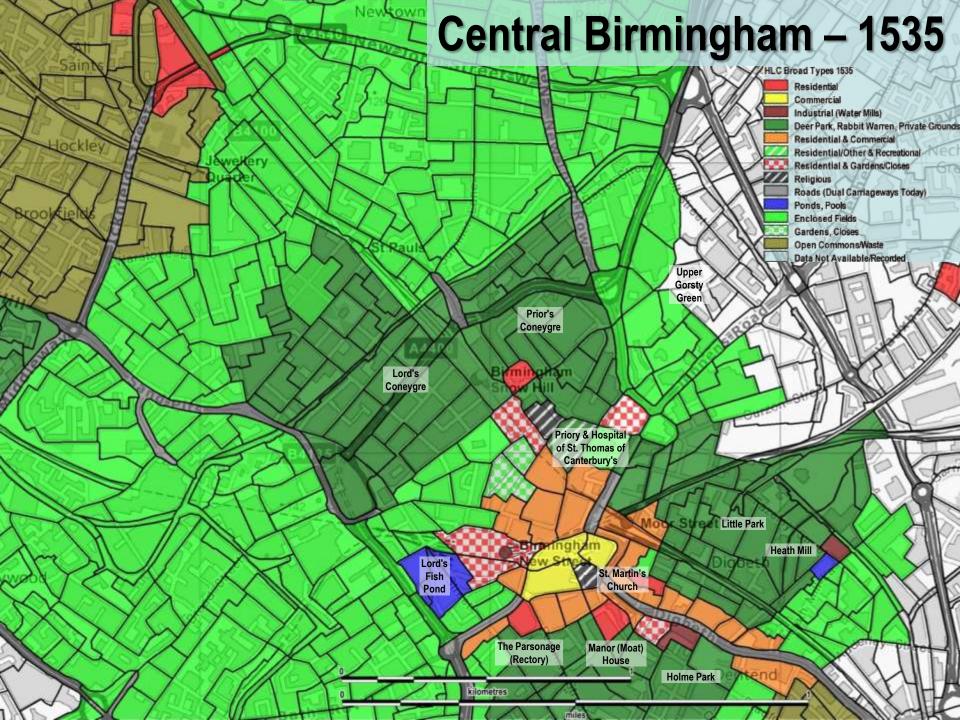
- This thematic map sequence aims to illustrate the evolution of the historic core of Birmingham and its surrounding areas, including Ladywood, Hockley, Digbeth and Deritend, and the Jewellery, Gun, Business, Entertainment and Learning 'Quarters'.
- The first two maps (1340 and 1535) are based on maps and plans of Medieval and Tudor Birmingham town/parish reconstructed by modern historians and thus the neighbouring Aston parish to the East is left blank while later maps rely on actual plans and maps of the city centre and its surroundings, from 1731 onwards, right up to the present day.

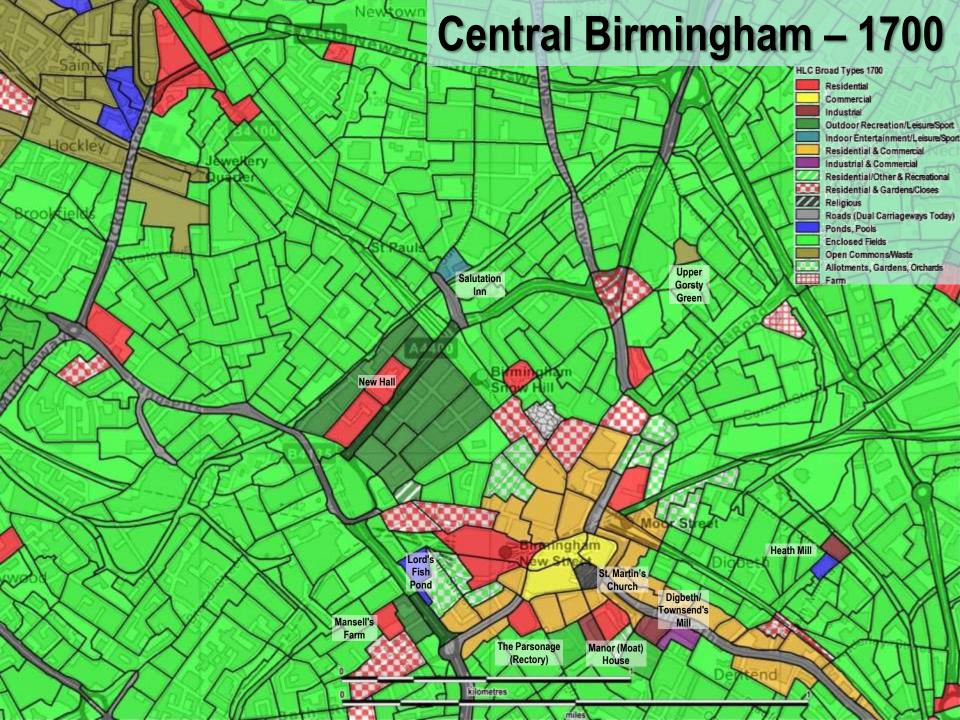
■ NOTE: The only roads recorded by the Birmingham HLC are the current dual carriageways – including their 'predecessors' along (part of) the same route – and also the motorways.

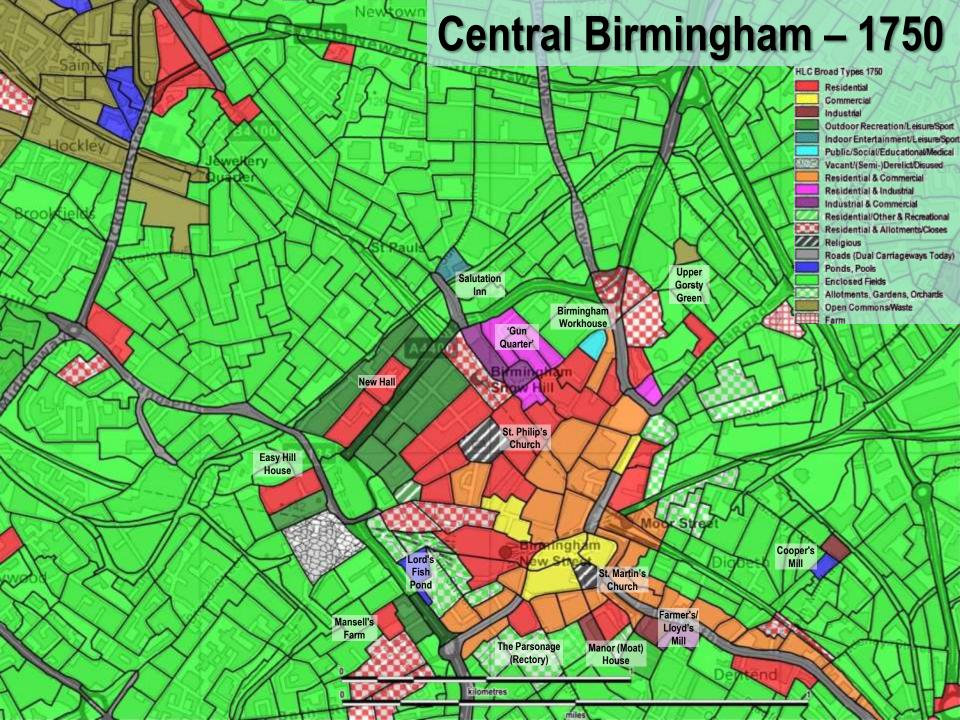
2. Seven Centuries of Landscape Evolution in Central Birmingham (cont'd)

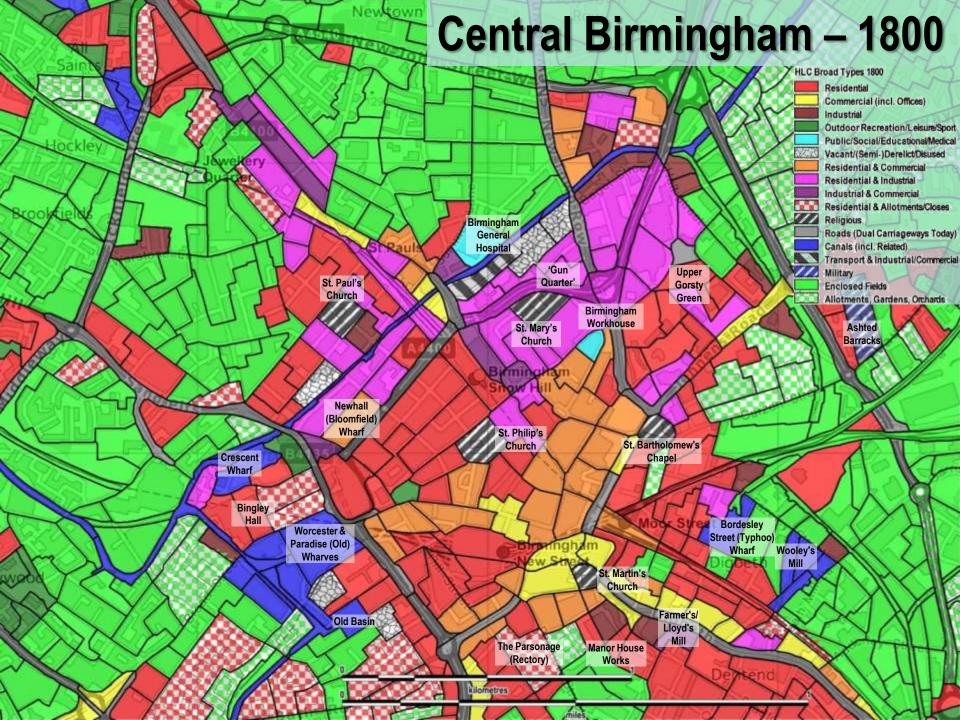
- Despite any limitations and inaccuracies, this sequence illustrates well historic evolutions of central Birmingham's landscape such as:
 - ➤ Its late Medieval landscape dominated by a mixture of enclosed fields, deer parks and rabbit warrens, commons and waste.
 - ➤ Its fast urban growth from the 1700s onwards, and the evolving ratio between residential, commercial and residential land uses.
 - The development and evolution of the Jewellery Quarter area's character, as reflected by changes in its dominant land use types.
 - The impact of the arrival of canals, railways and (later on) dualcarriageway roads upon the location and nature of industry, trade and housing located along, around and in-between them.
 - The huge post-war changes: the creation of Ring Roads and the Bull Ring, the decline of manufacturing and the disappearance of mixed industrial and residential areas (the 'slum clearance').

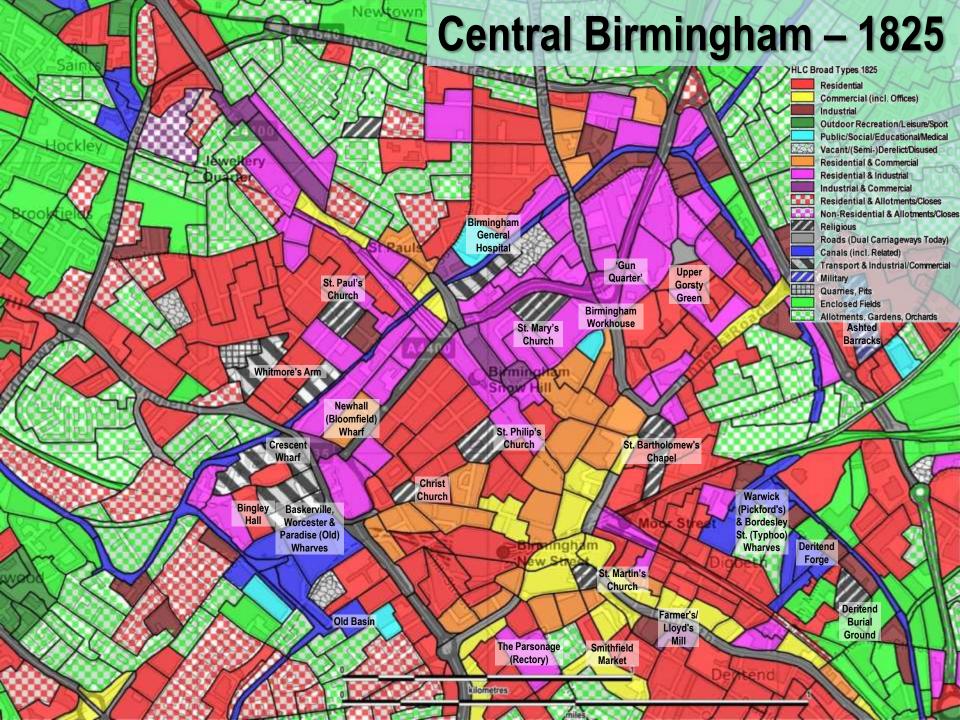


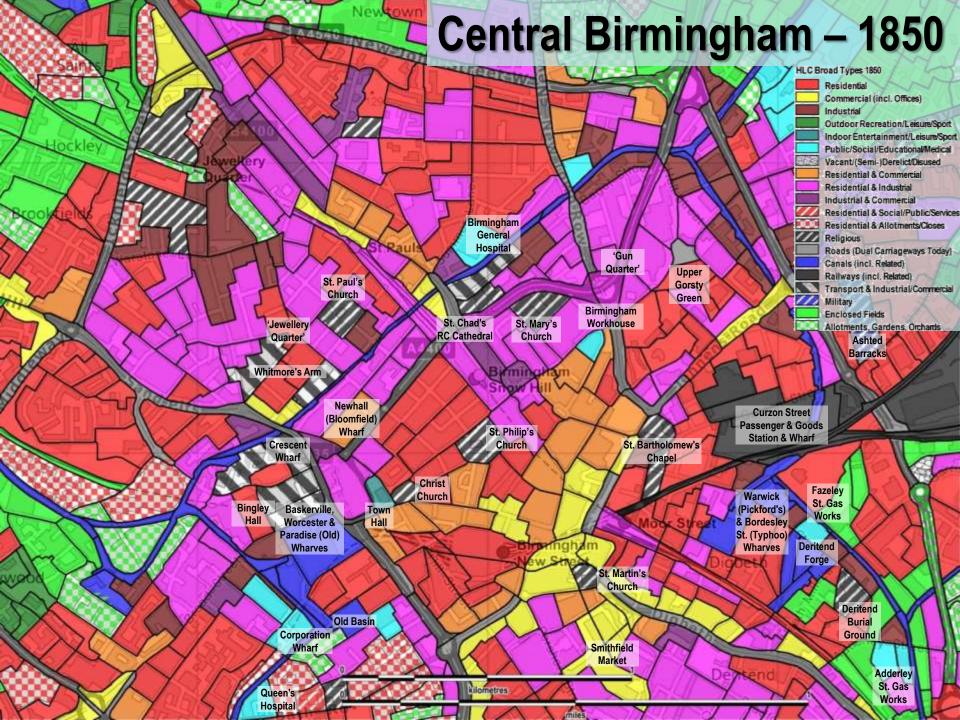


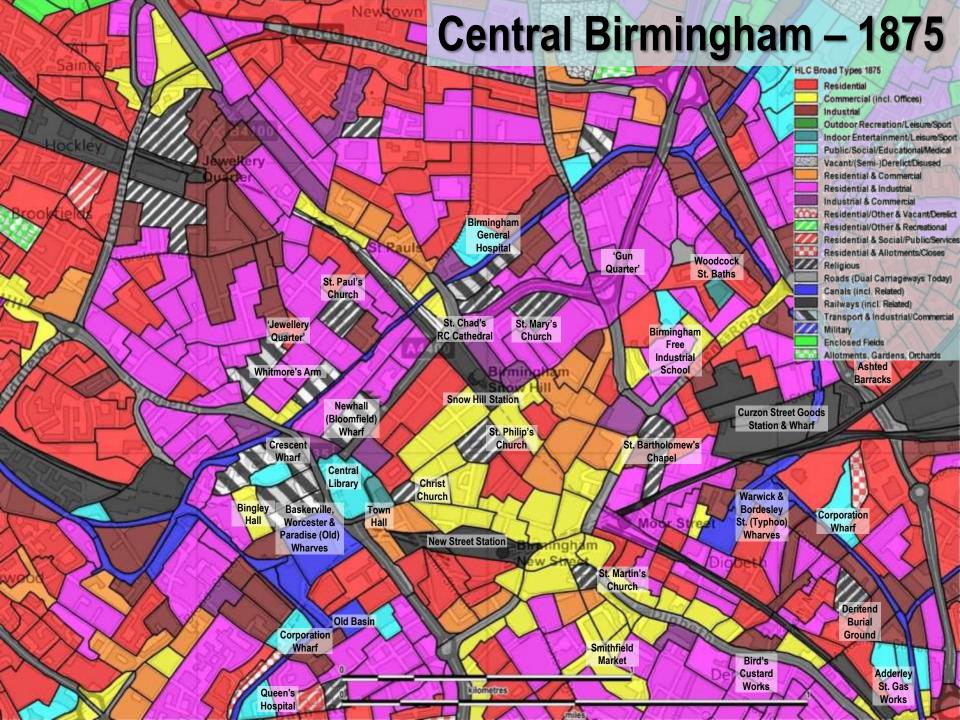


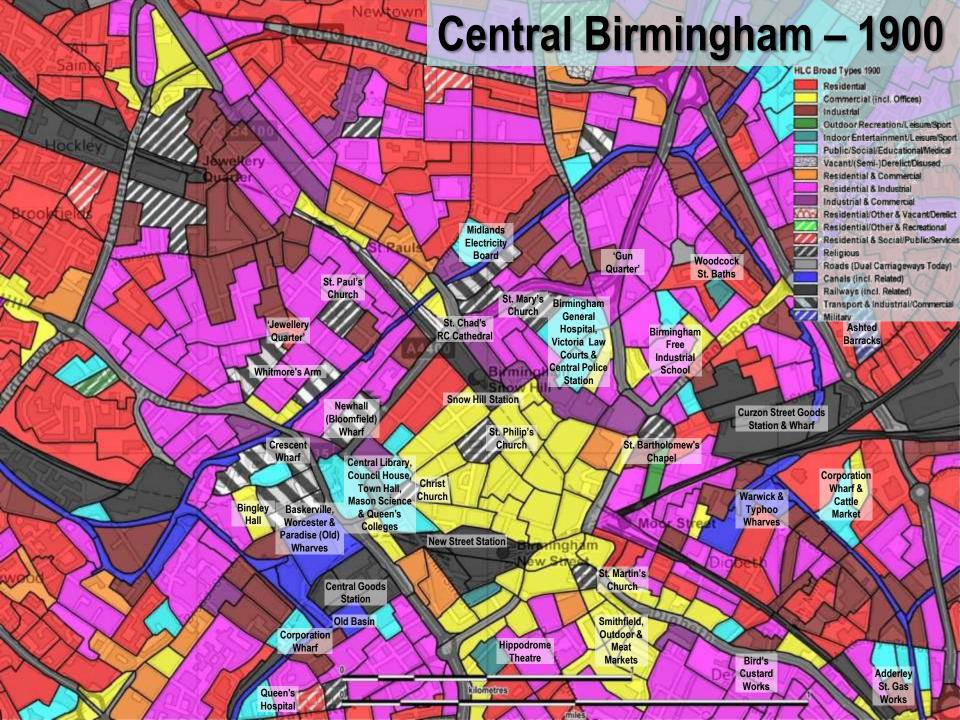


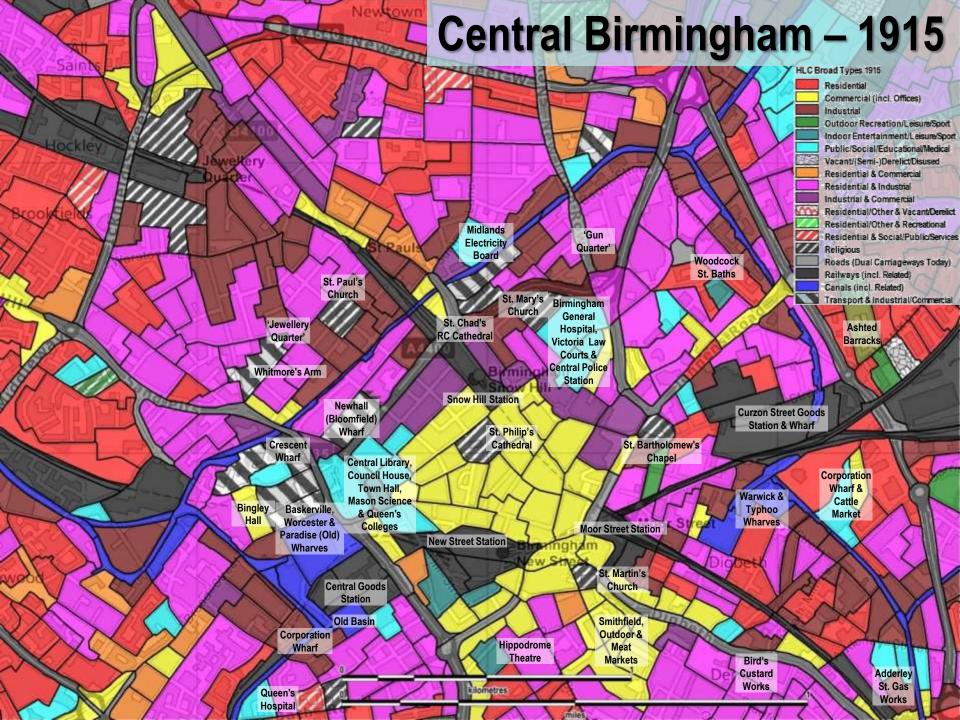


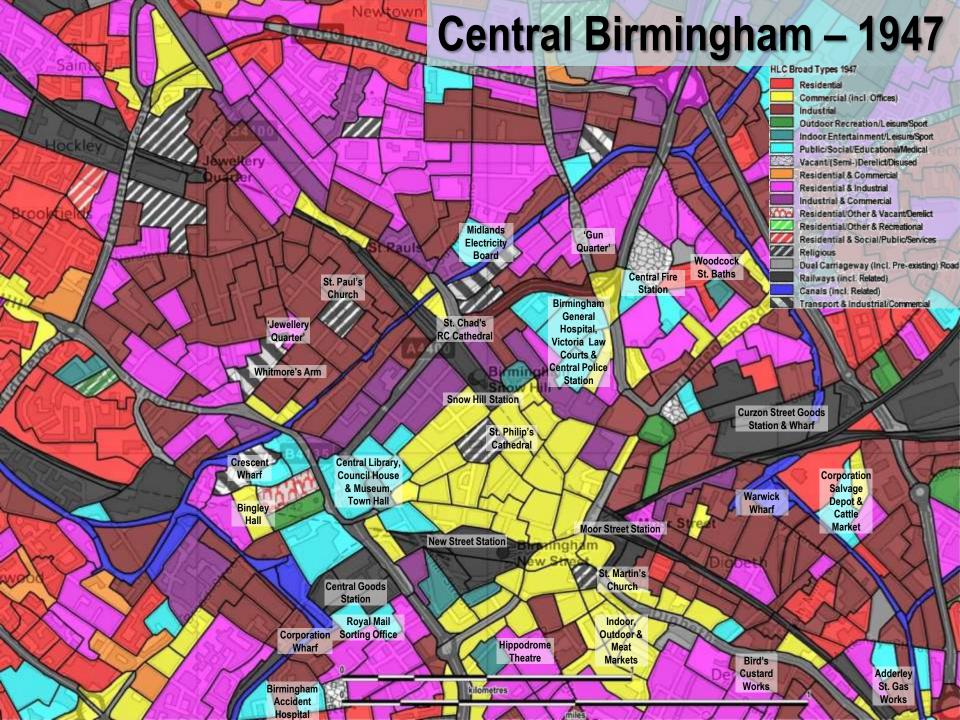


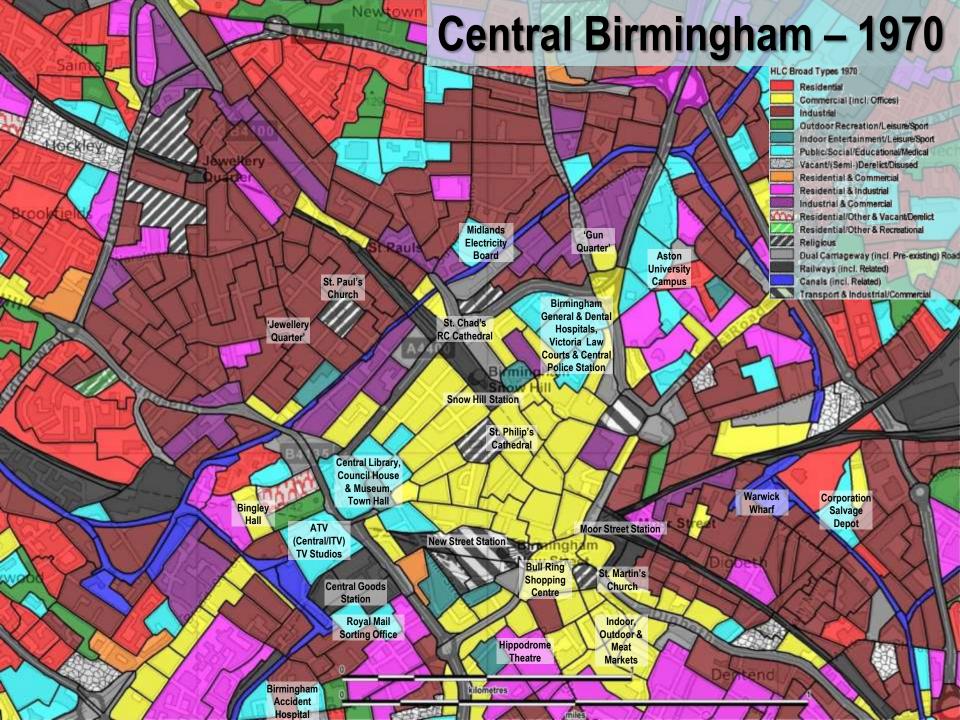


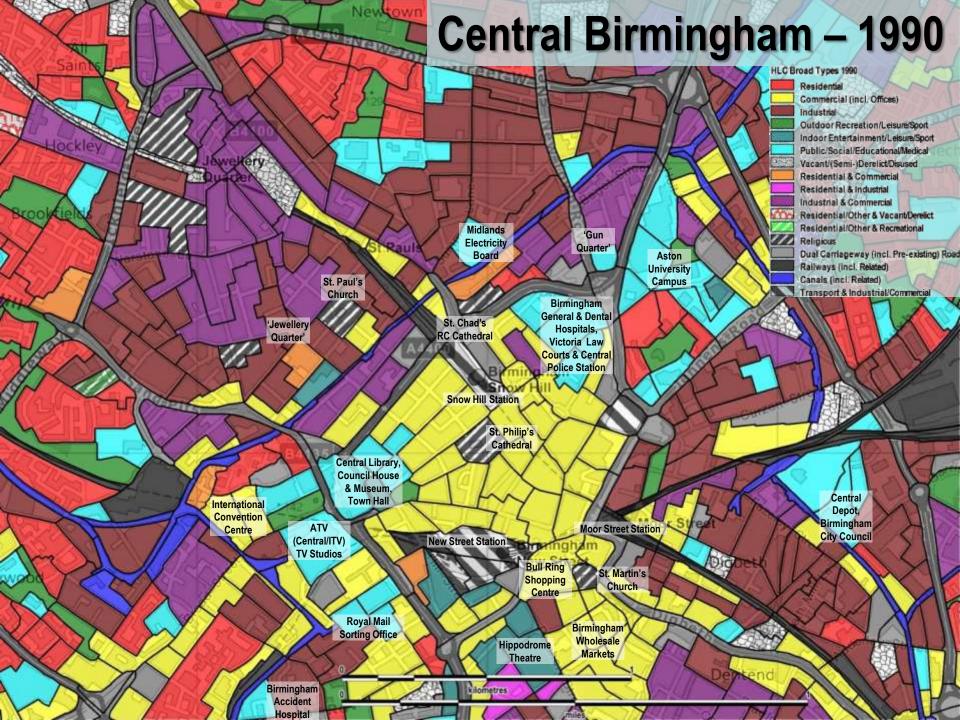


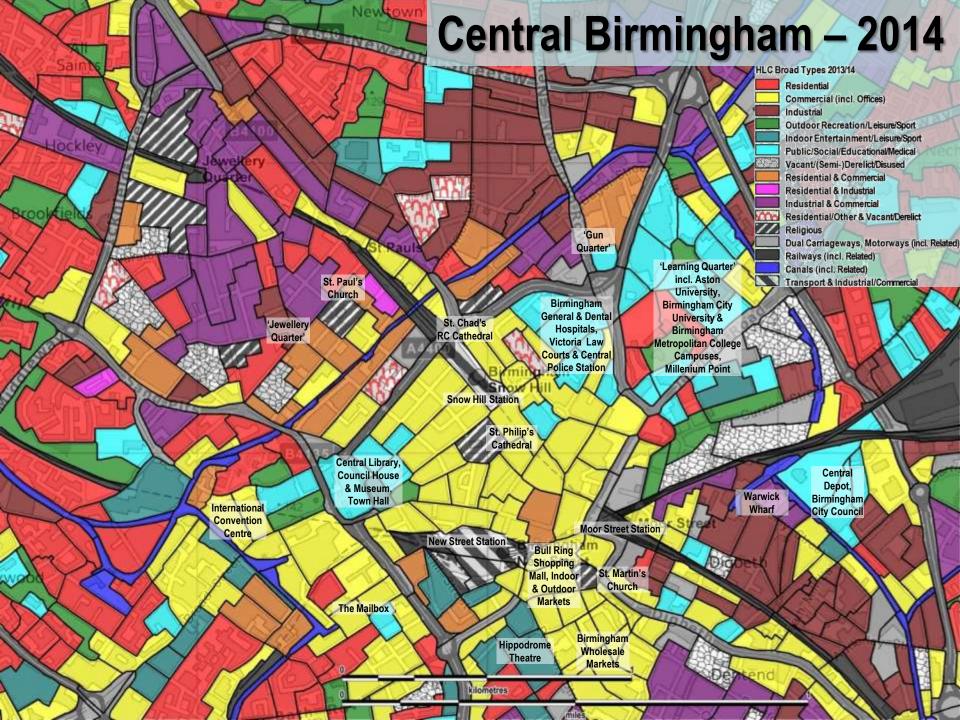










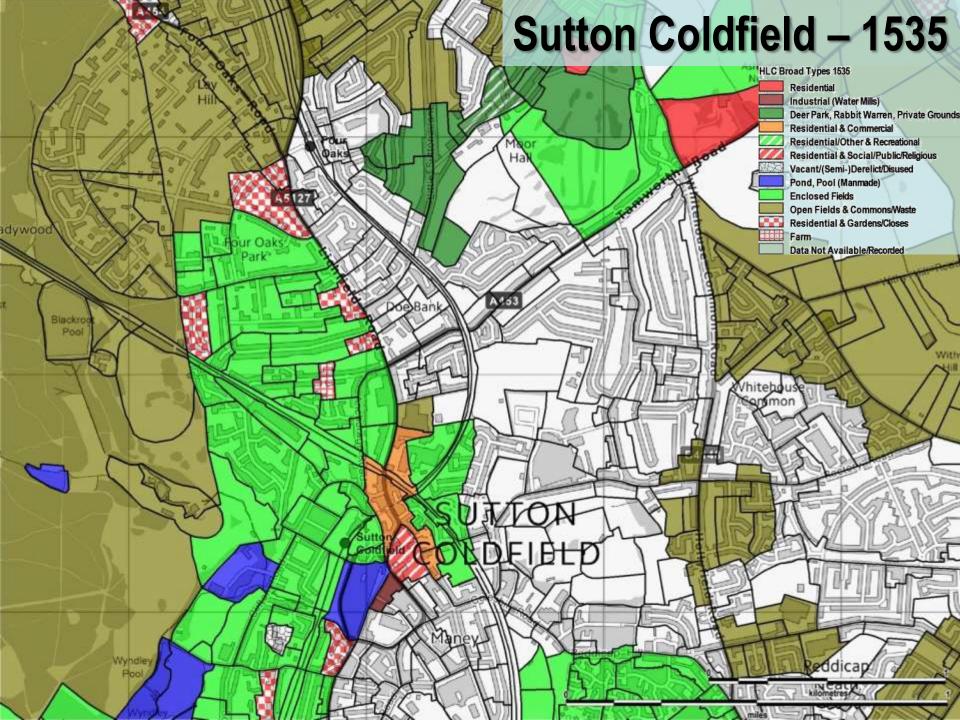


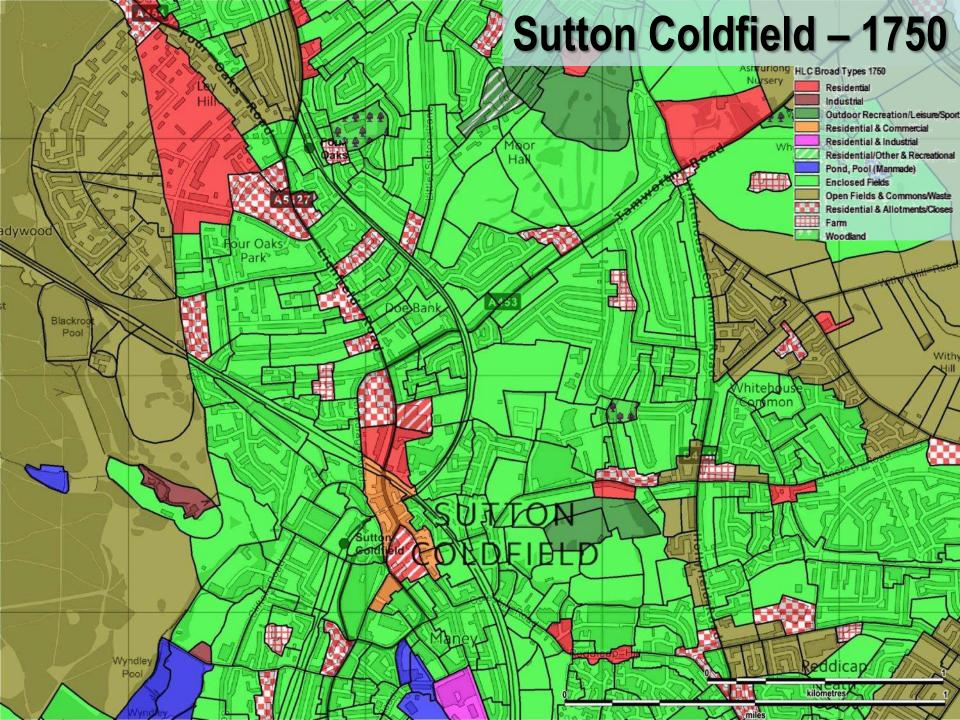
3. Five Centuries of Landscape Evolution in Central Sutton Coldfield (1535-2014)

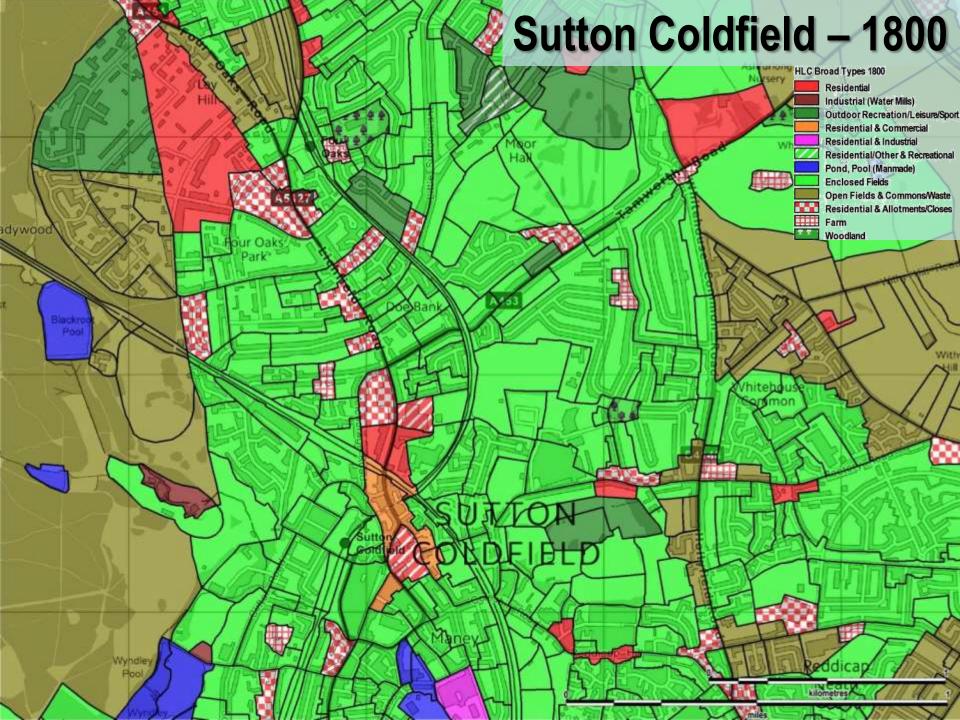
- This thematic map sequence aims to illustrate the evolution of the historic centre of Sutton Coldfield and surrounding areas mainly to the East and North, such as Doe Bank, Four Oaks, Ley Hill, Moor Hall, Whitehouse Common, Reddicap Heath, Maney and the eastern end of Sutton Park.
- The first map (1535) is entirely based on 'extrapolated' HLC data as no maps of Tudor Sutton Coldfield are available, either original or modern reconstructions, which also explains the areas left white.
- Later maps in the sequence rely on actual plans and maps of the city centre and its surrounds, from the 1750s onwards, right up to the present day.

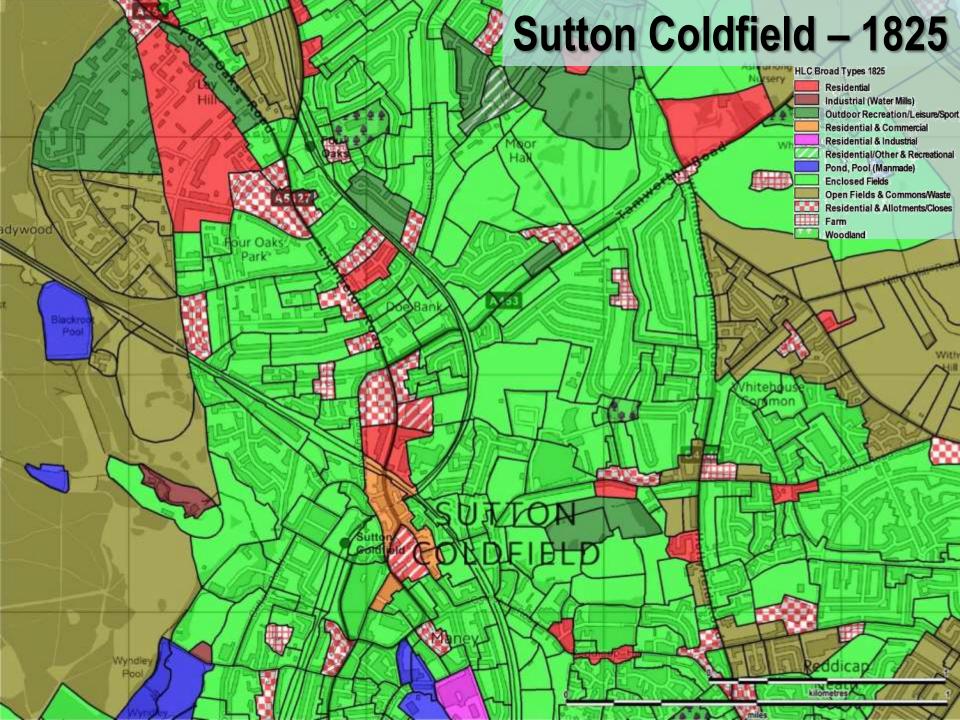
3. Five Centuries of Landscape Evolution in Central Sutton Coldfield (cont'd)

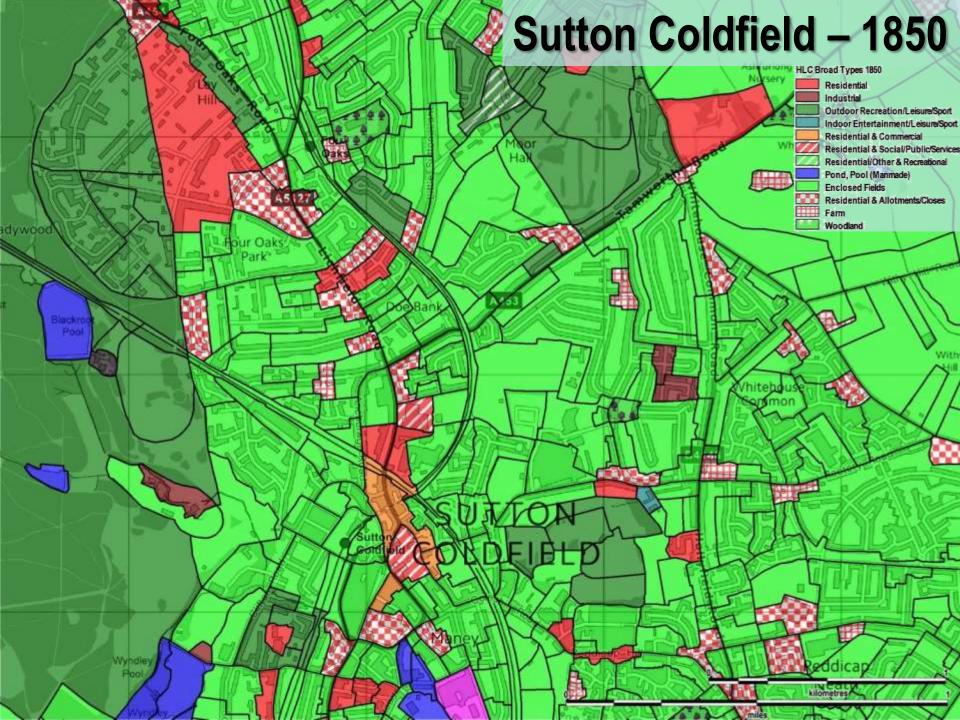
- Despite its limitations and inaccuracies, this map sequence illustrates well historic evolutions of central Sutton Coldfield's landscape such as:
 - ➤ A Tudor landscape of surviving commons and open fields, Moor Hall and its rabbit warren, Sutton Park and encroachments into it.
 - ➤ The gradual further encroachment into Sutton Park by Four Oaks Hall and its expanding parkland between 1677 and 1827.
 - ➤ The parliamentary enclosure of all the surviving commons in the mid-1820s, except for Sutton Park (due to its special legal status).
 - ➤ The post-1850 accelerated urban growth, as the railway arrives including the Four Oaks Park estate and the parallel evolution of Sutton Park towards a predominantly recreational character.
 - ➤ The massive post-1920 residential expansion giving the town its current character, expansion concluded for the area shown here with the post-1990 re-development of St. George's Barracks site.

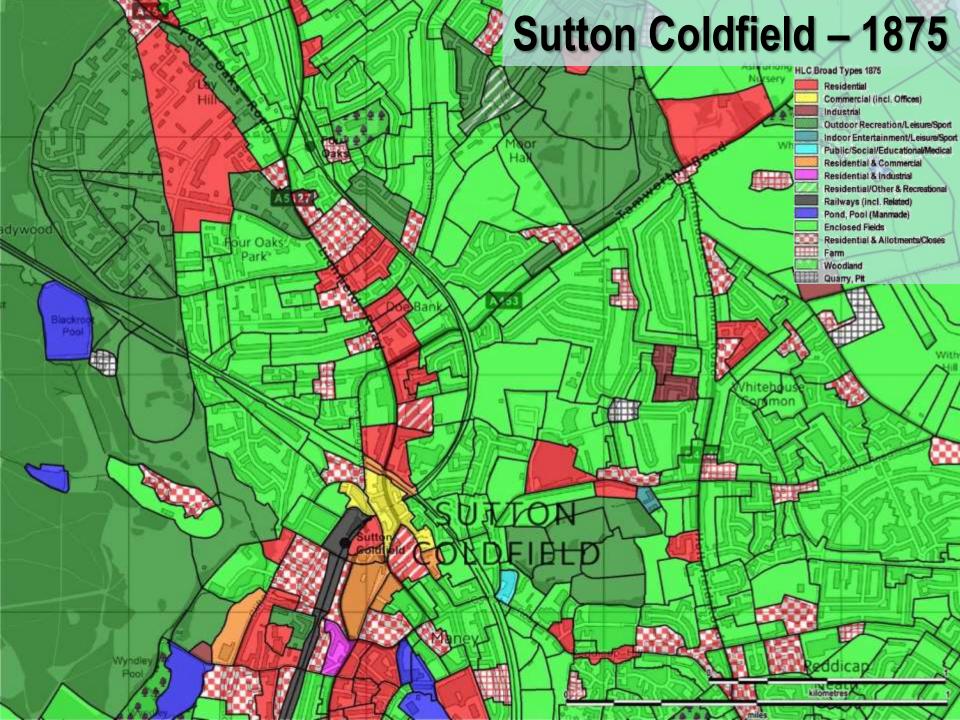


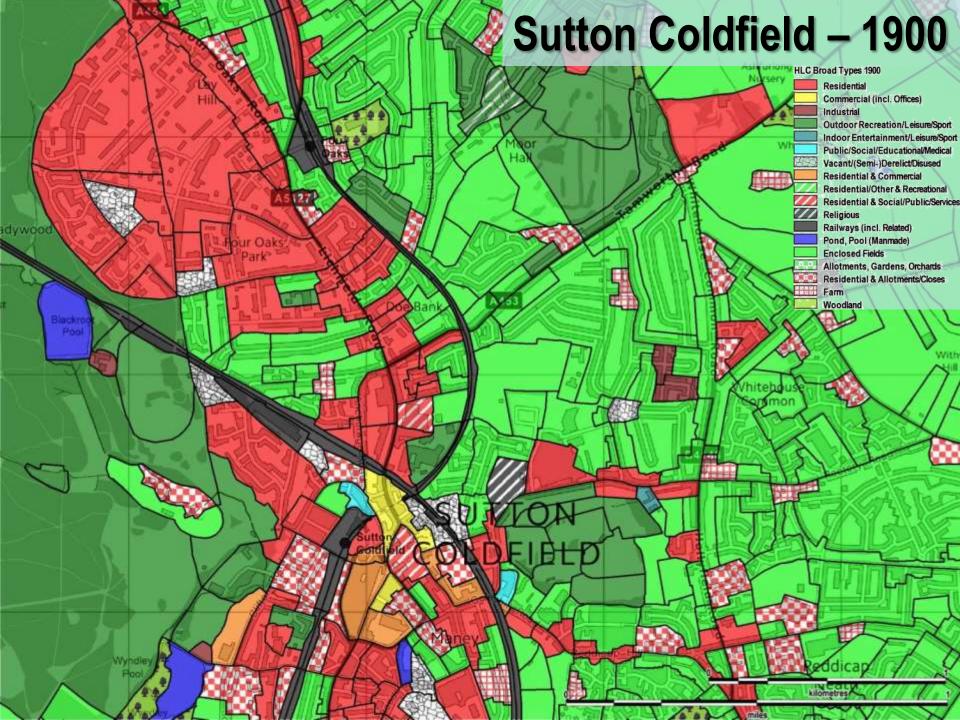


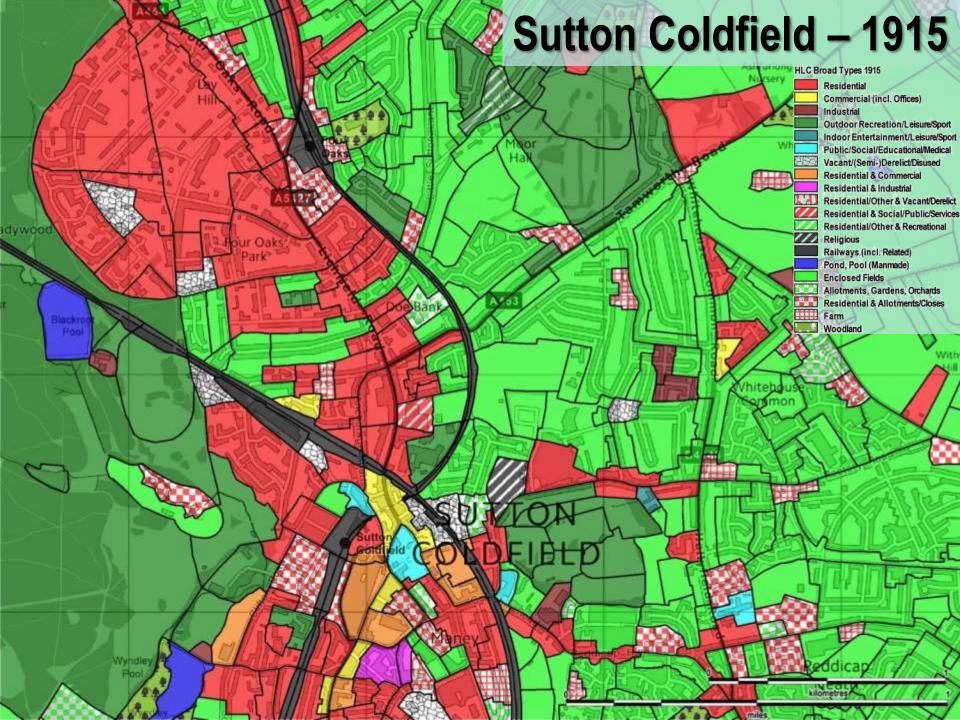


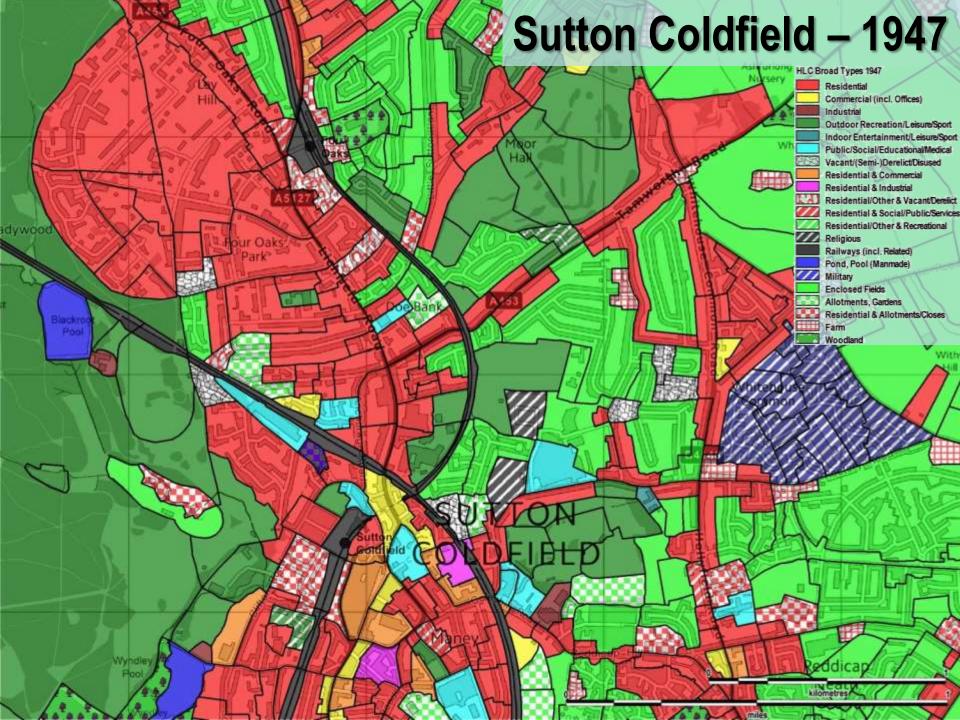


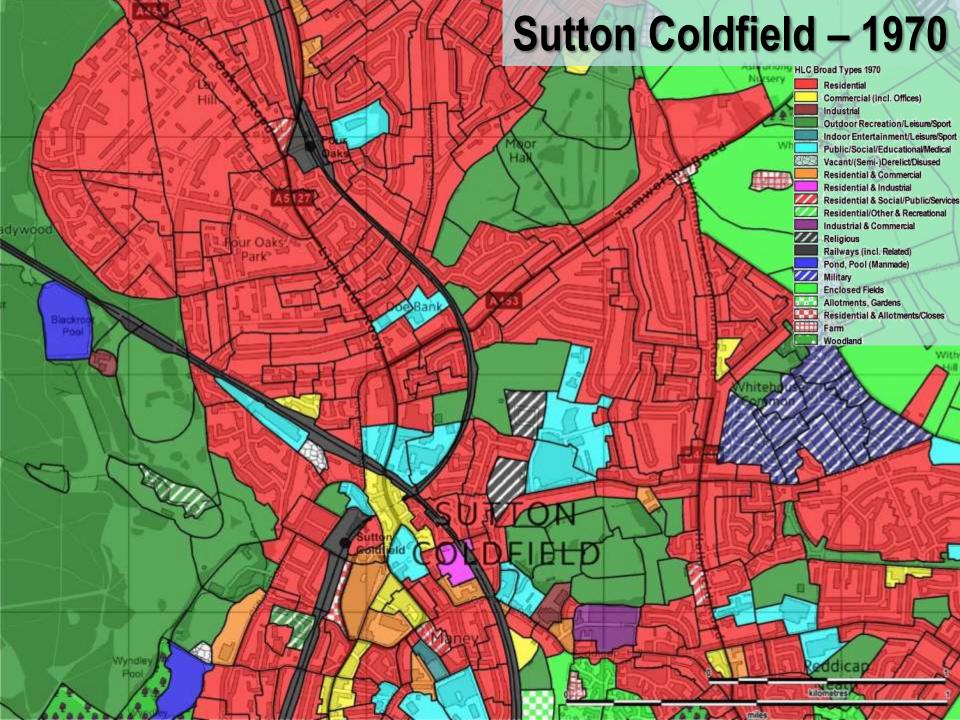


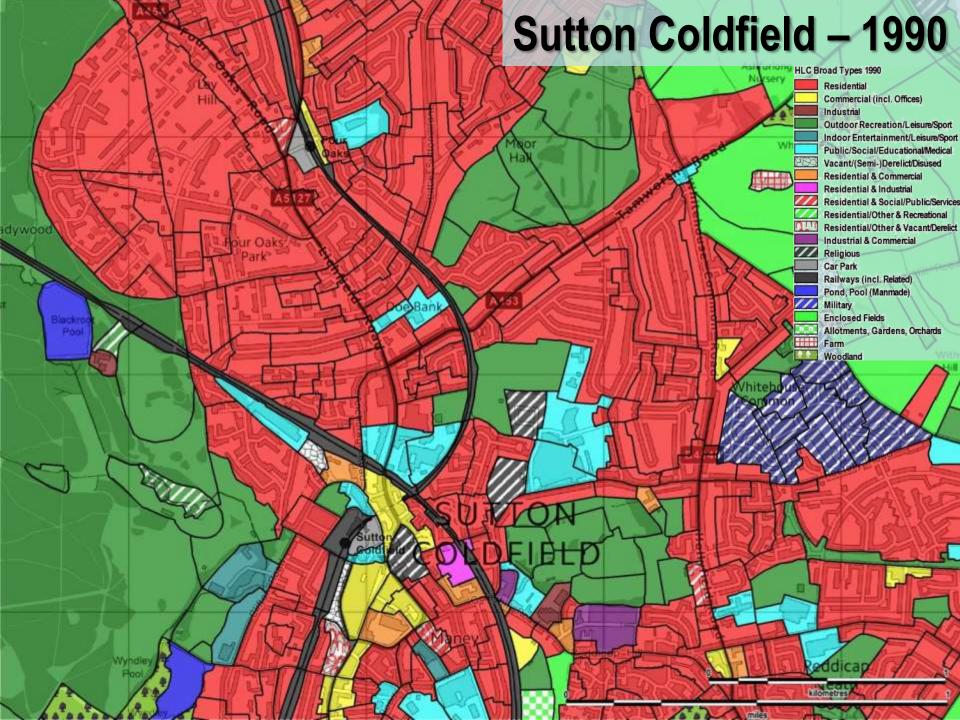


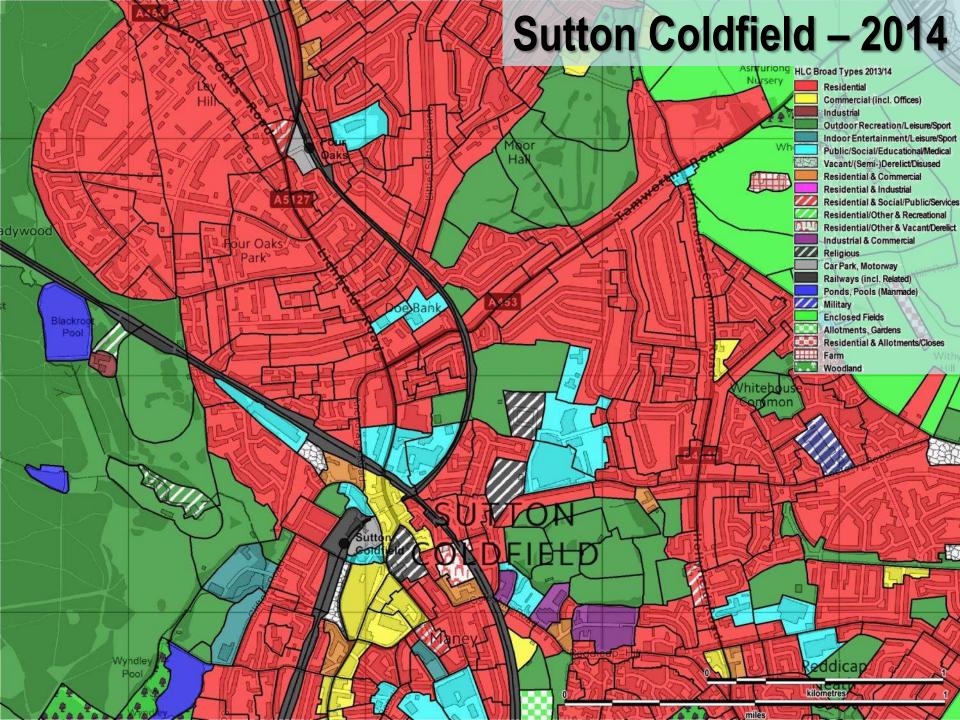










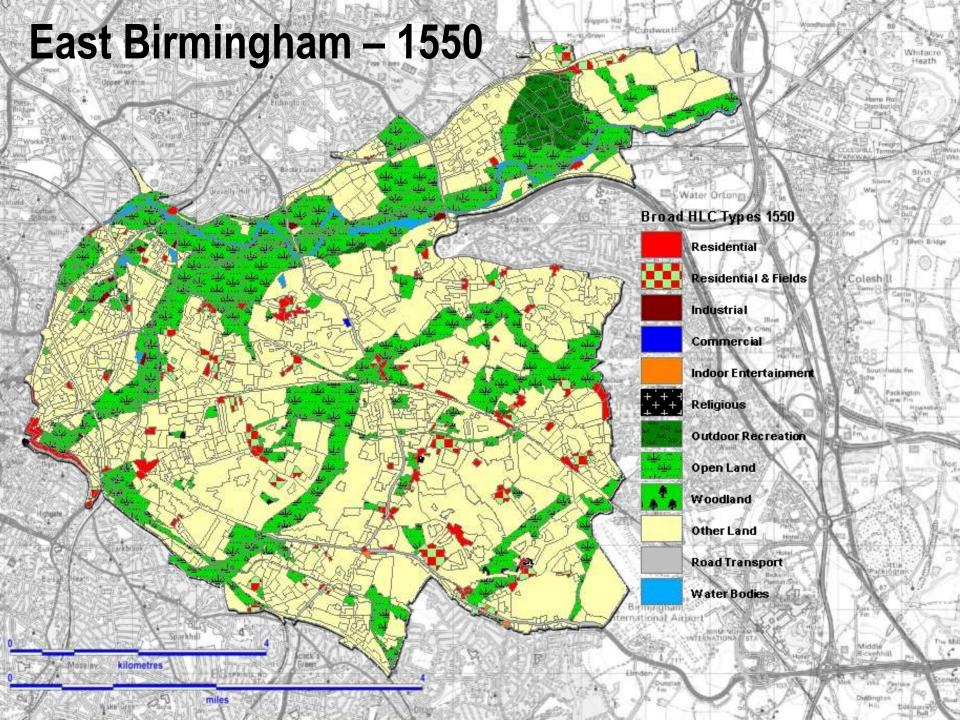


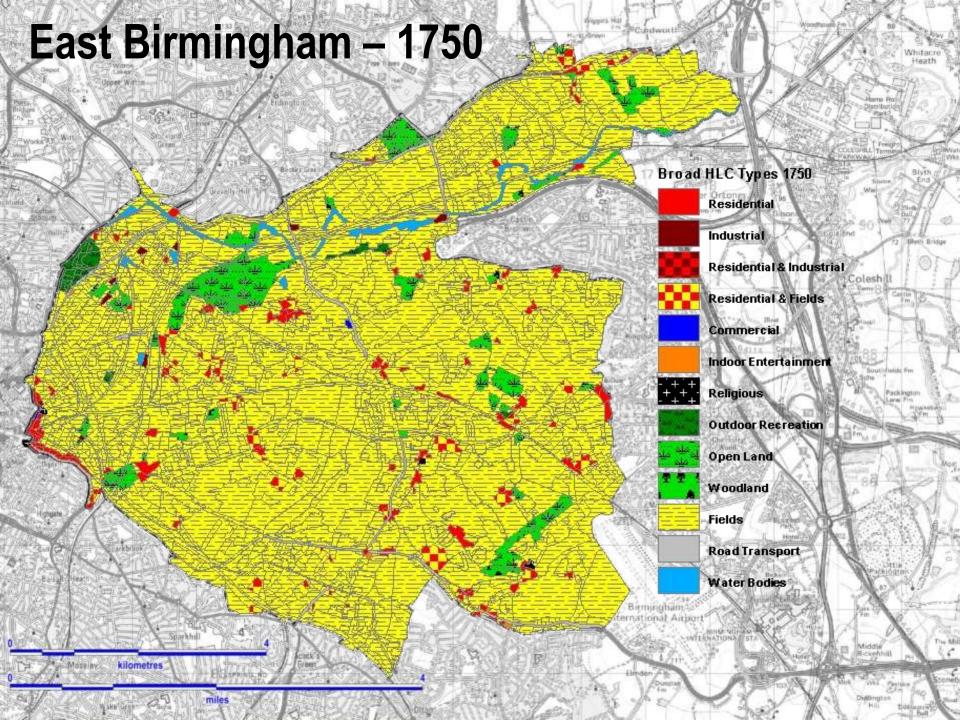
4. Four-and-a-Half Centuries of Landscape Evolution in Eastern Birmingham (1550-2012)

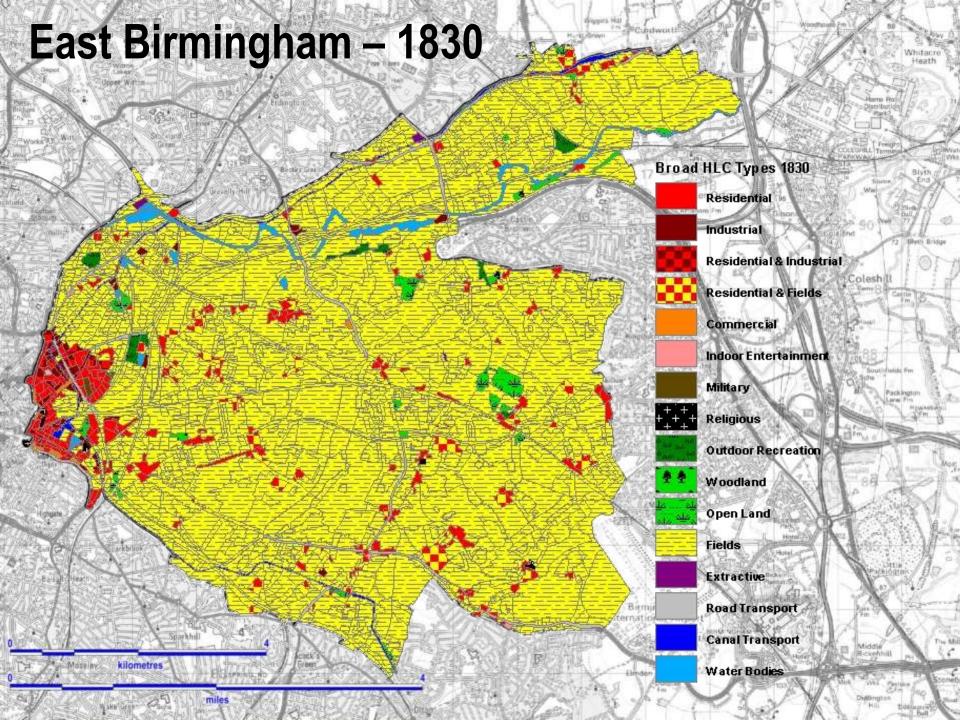
- This thematic map sequence was generated from a customised selection of individual HLC types (sub-types). It only covers the area characterised during the first year of the Birmingham HLC (2012), a substantial area (over 5,900 ha) nevertheless, stretching from Digbeth and Aston in the west, to Minworth in the north-east, and Sheldon and South Yardley to the south-east.
- The first map (1550) is entirely based on 'extrapolated' HLC data, as no Tudor era maps of this area are available, either originals or modern reconstructions; this also explains the areas marked 'Other Land'.
- The second map (1750) relies on a mixture of 'extrapolations' and the 1750s maps of the Aston parish by John Tomlinson. All the later maps are based on data captured from actual maps of the area, right up to the present day.

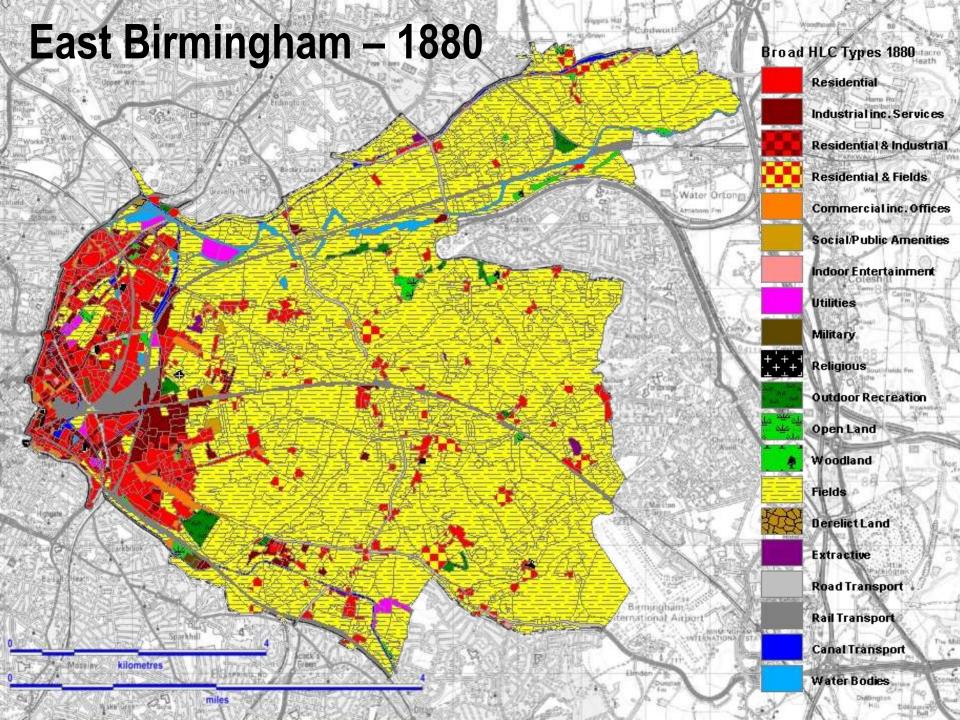
4. Four-and-a-Half Centuries of Landscape Evolution in Eastern Birmingham (cont'd)

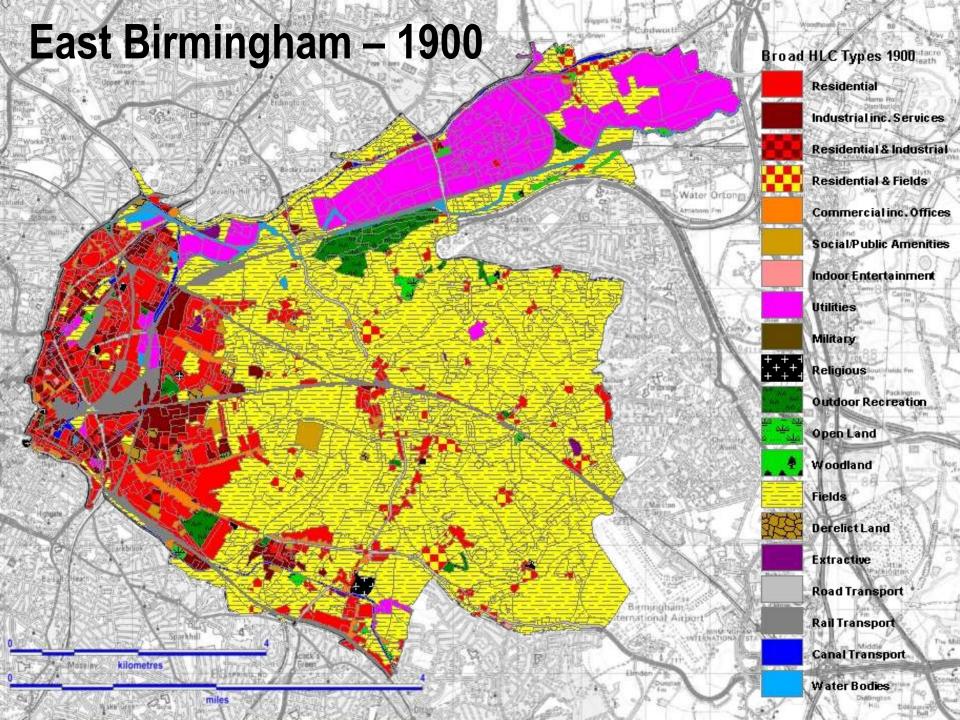
- Despite its limitations and inaccuracies, this map sequence illustrates well historic evolutions of Eastern Birmingham's landscape such as:
 - ➤ A Tudor landscape of scattered settlements, surviving open land (commons and strip fields) and Park Hall's New Park in Minworth.
 - ➤ The gradual enclosure of this open land (completed by the 1830s), dis-emparkment of New Park and creation of Aston Park (1620s).
 - The relentless expansion of Birmingham's built-up land from the 1700s onwards, until it gradually 'swallows up' the entire area.
 - The impact of canals and railways upon the location, rate and character of this urban expansion eastwards.
 - The gradual conversion of any surviving areas of farmland into gardens/allotments and various outdoor recreational spaces.
 - ➤ The 'sudden' massive expansion of sewage farms along the Tame after 1880 and their equally fast 'retreat' into the Minworth corner.

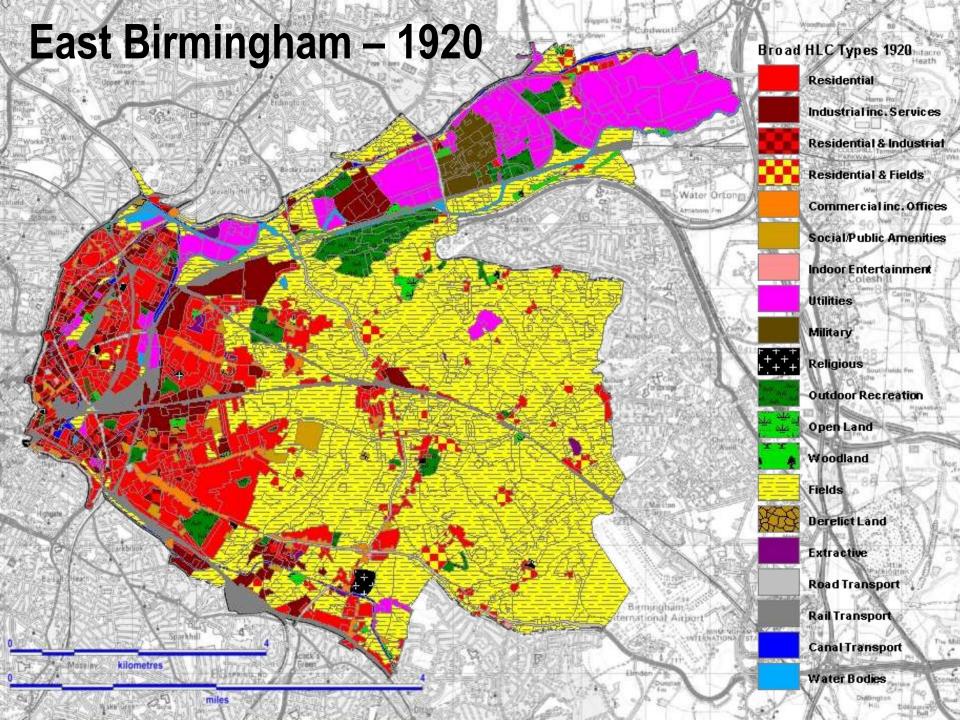


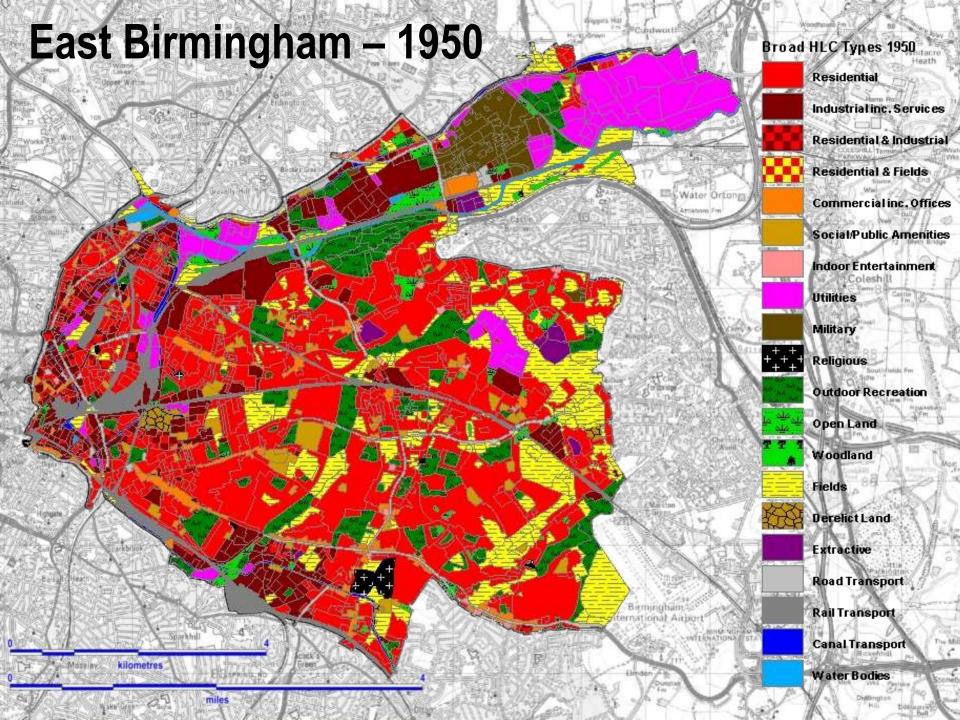


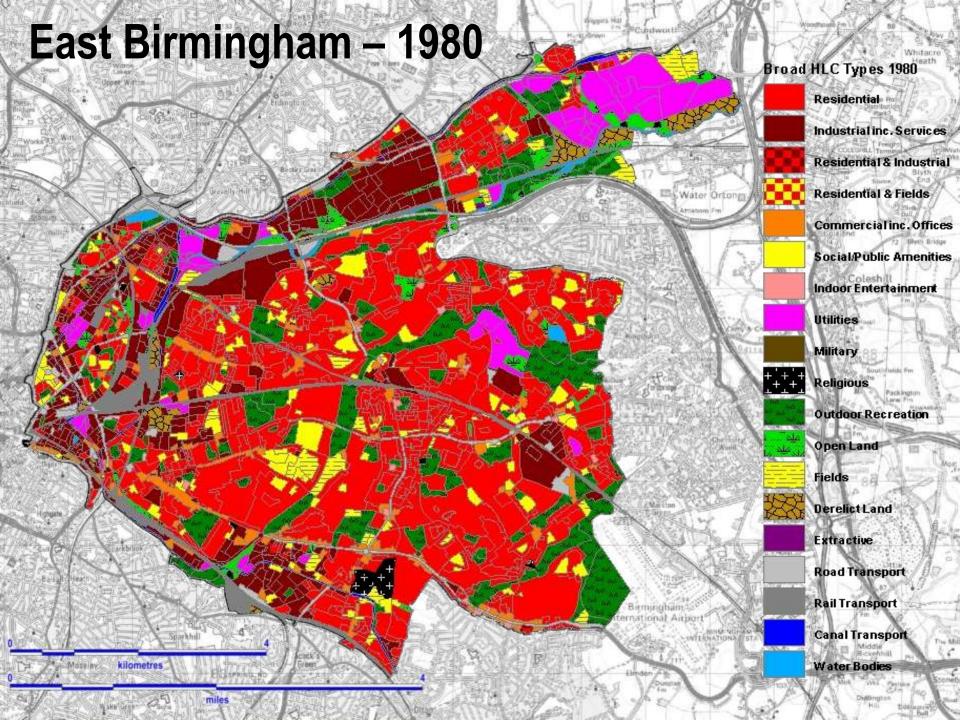


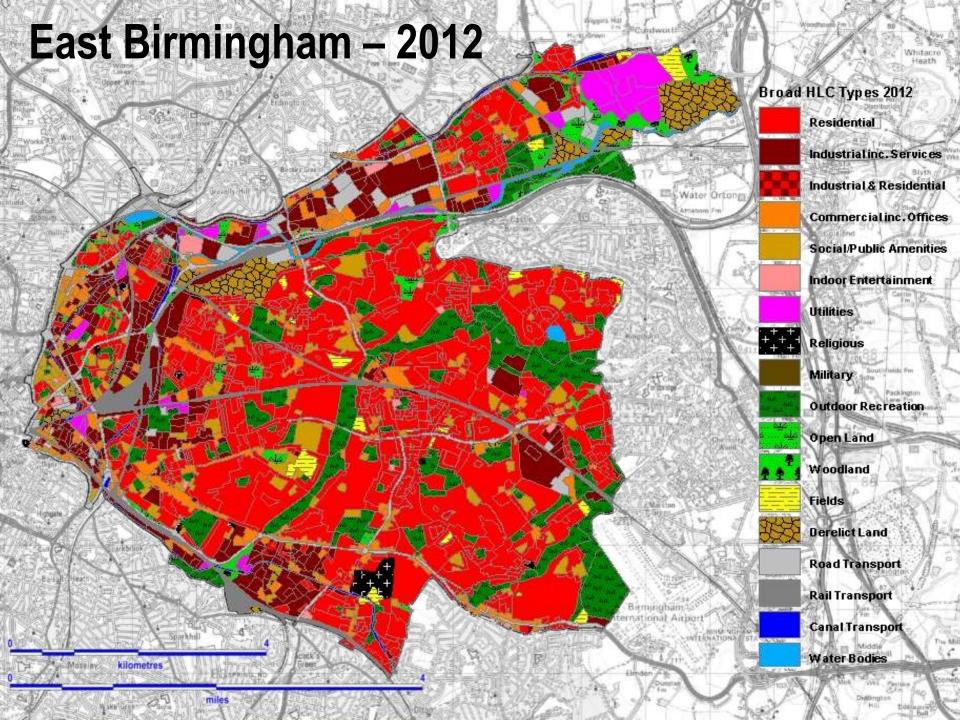










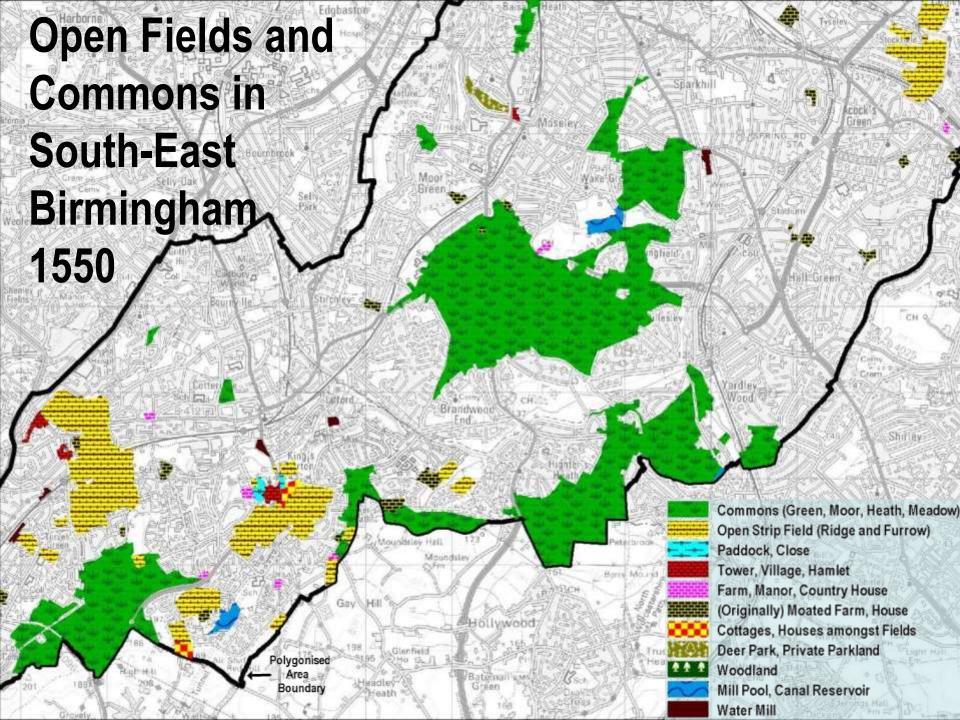


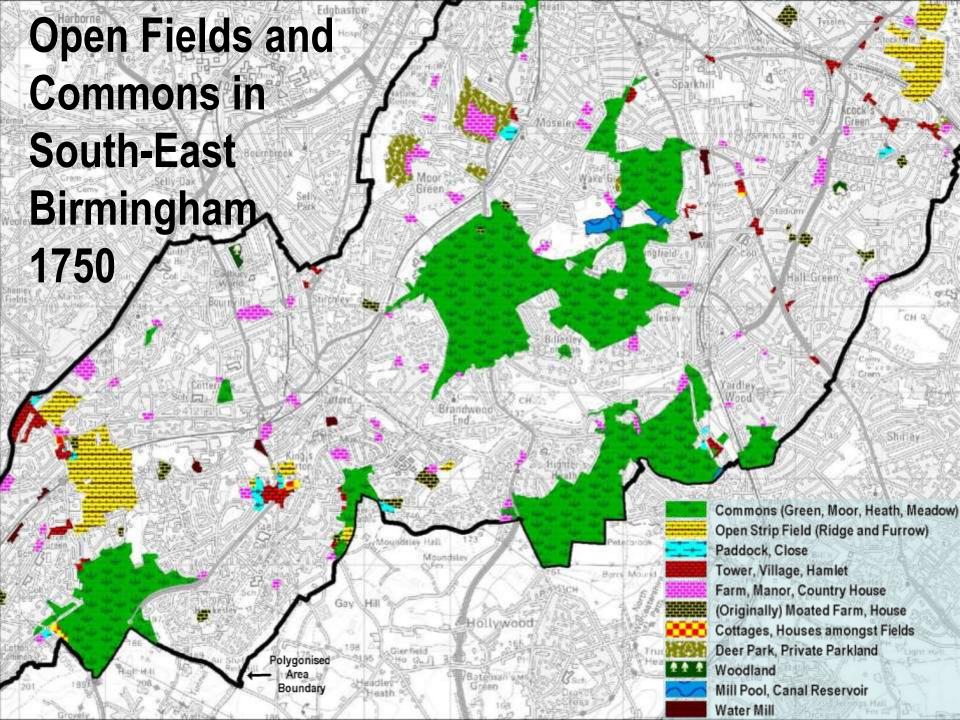
5. The Enclosure of Open Commons and Strip Fields in South-East Birmingham (1550-1830)

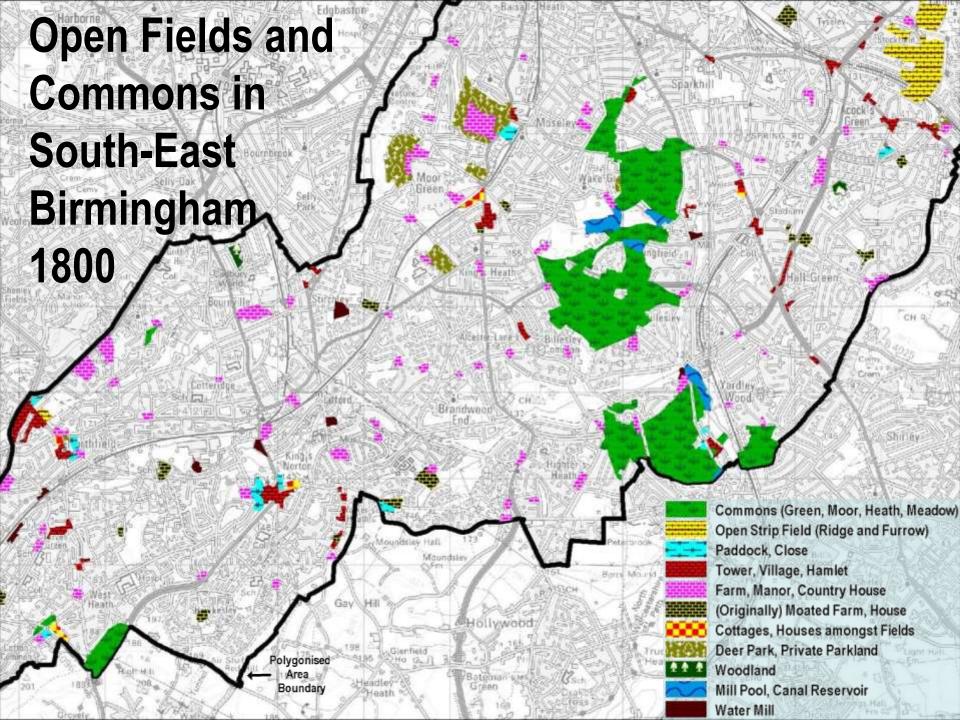
- This thematic map sequence was generated from a custom selection of recorded individual HLC types (sub-types), and it aims to illustrate the gradual enclosure of the open commons/waste and strip fields, which survived in the historic parishes of Yardley, King's Norton and Northfield in South-Eastern Birmingham, right up to the early 19th c.
- The first three maps (1550, 1750 and 1800) are largely based on extrapolated HLC data, as no contemporary detailed maps of the three parishes exist, either as historic originals or modern reconstructions, apart from a modern attempt at mapping the 1772 enclosure of King's Norton's commons, using documentary sources.
- The 1830 map is based on data captured from existing 1840s tithe maps (and the Yardley enclosure map) and so the land use types it depicts are more accurate.

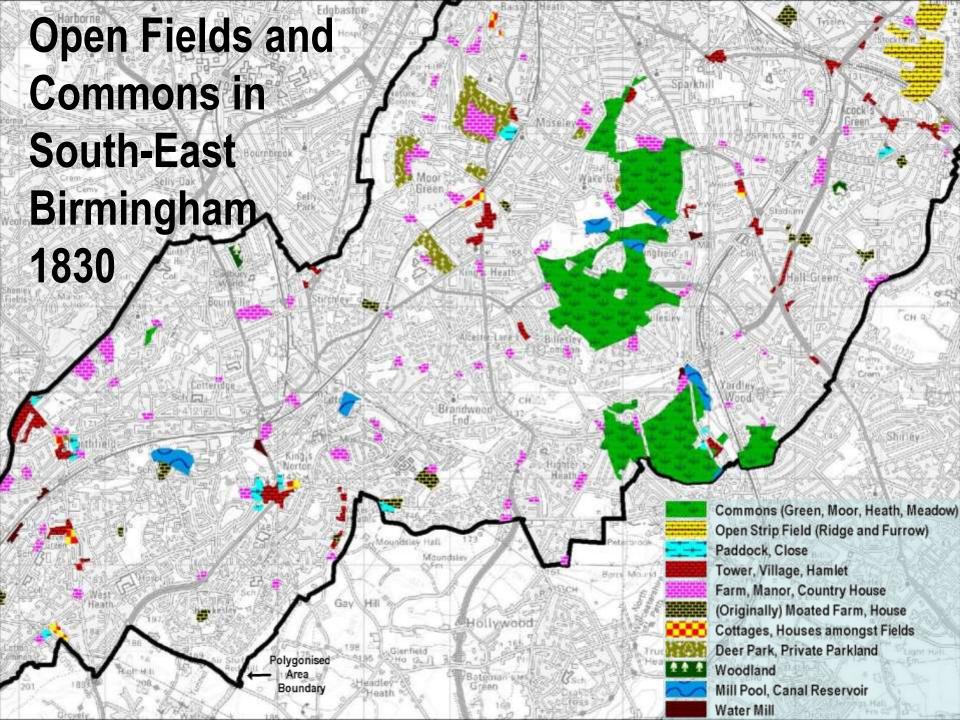
5. The Enclosure of Open Commons and Strip Fields in South-East Birmingham (cont'd)

- Despite its limitations and inaccuracies, this map sequence illustrates well historic evolutions of South-East Birmingham's landscape such as:
 - ➤ A Tudor landscape of surviving open commons/waste and strip fields, small scattered settlements and moated halls/farms.
 - ➤ The gradual enclosure of the remaining open land, completed in King's Norton parish in 1772, in Yardley in 1833, and more gradually in Northfield (which lacks a parliamentary enclosure act).
 - ➤ The development of substantial country houses and surrounding parkland at Moor Green Hall, Moseley Hall and Park (1630s) and King's Heath House (post-1775).
 - The growth of settlement centres along the main roads turnpiked during the 18th c. (e.g. Bristol Road, Stratford Road).



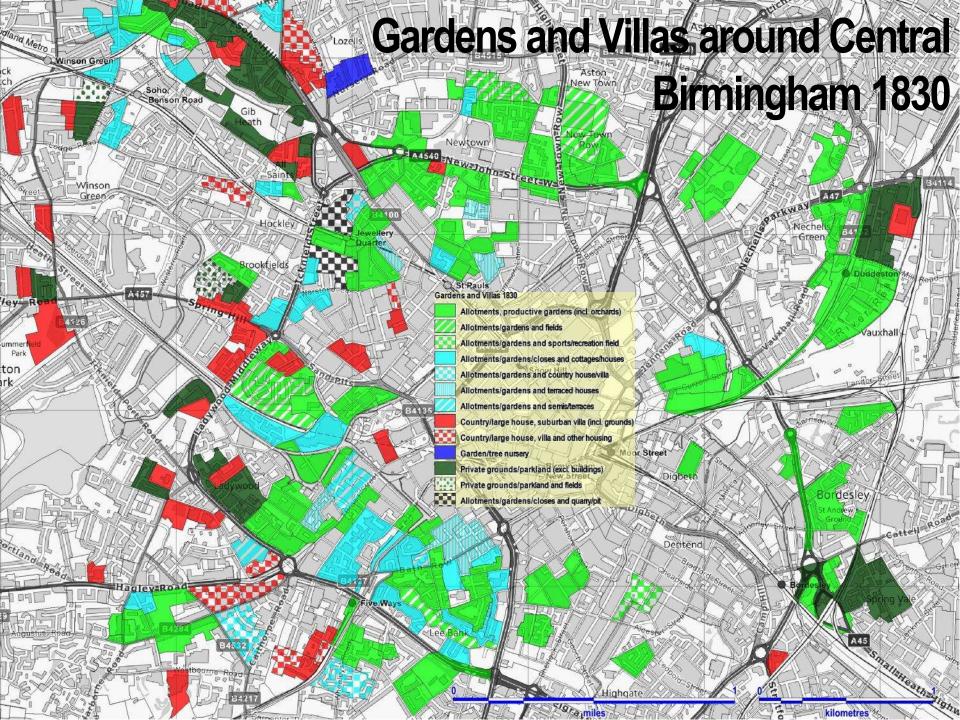


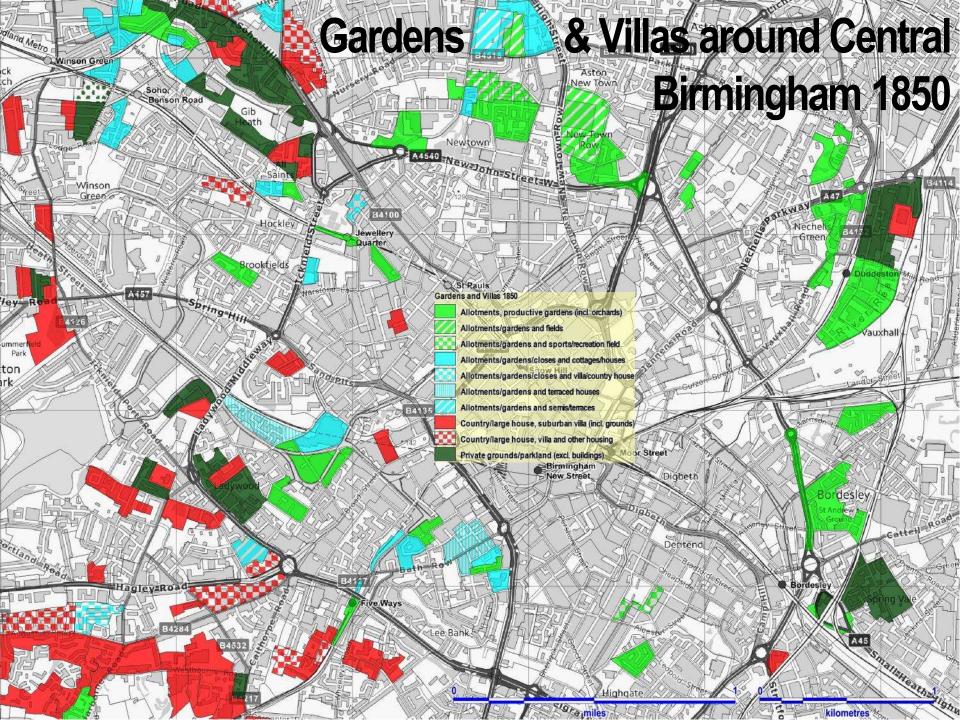


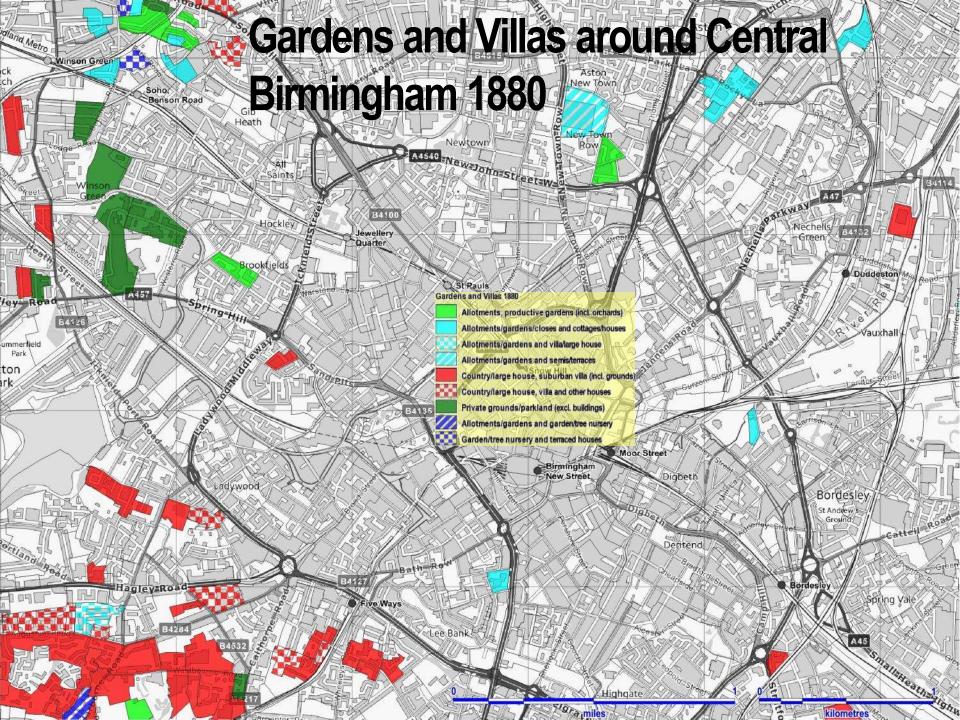


6. Allotment Gardens, Country Houses and Villas around Central Birmingham (1830-1880)

- This thematic map sequence was generated from a custom selection of recorded individual HLC types (sub-types), and it aims to illustrate how the 'halo' of productive/allotment gardens and suburban villas/country houses surrounding the city centre in the early 19th c. were gradually being swallowed up by the outward expansion of the built-up areas of Birmingham (housing and industrial) in the following decades.
- The 1830 and 1850 data comes from the detailed 1828 and 1855 plans of Birmingham surveyed by Pigott Smith. Besides the disappearance of working gardens, country houses and their grounds (Soho, Ladywood and Duddeston House) and villas from areas close to Birmingham itself, the 1880 map also shows along its western edge, the expansion of the suburban villas and large detached houses in northern Edgbaston, and the emergence of the extensive grounds around the New Birmingham Workhouse (today's City Hospital) and the Birmingham Mental Asylum.





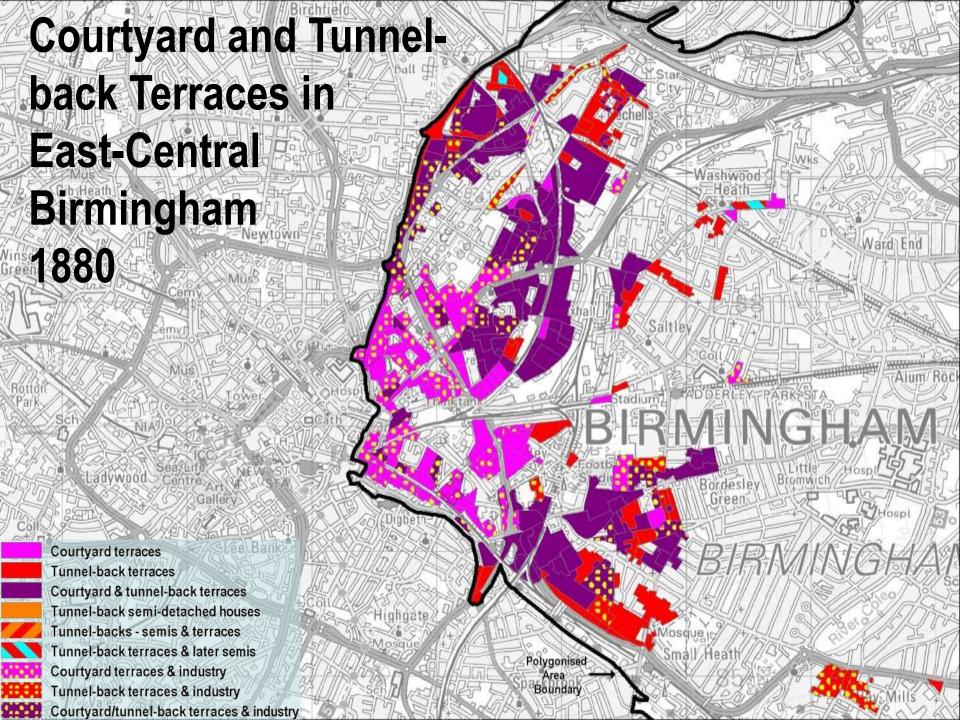


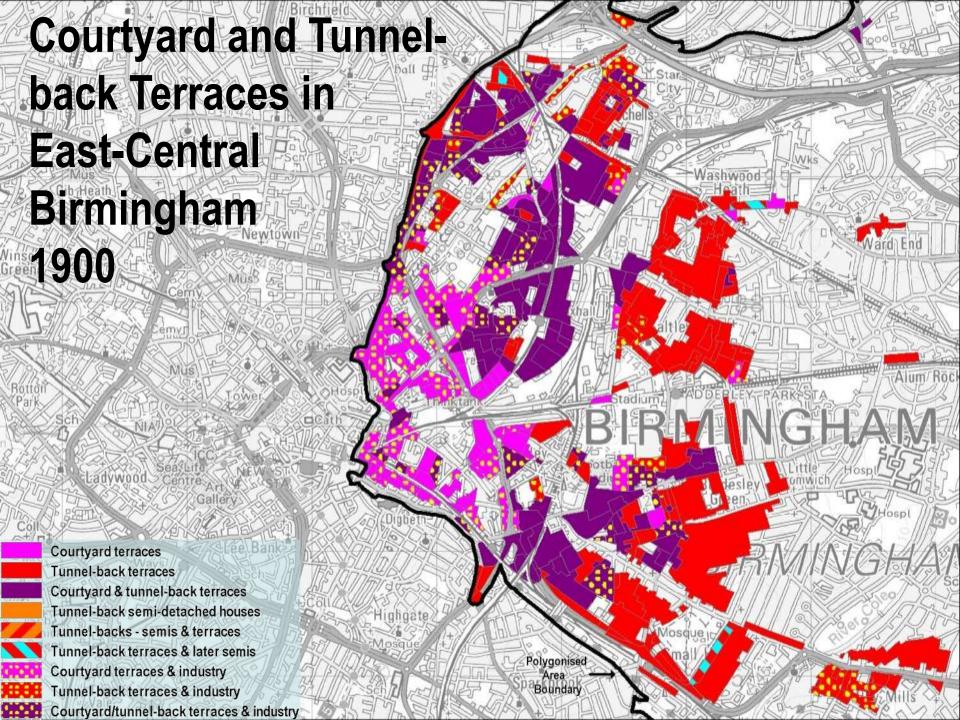
7. The Evolution of Victorian and Edwardian Age Terraces in East-Central Birmingham (1880-2013)

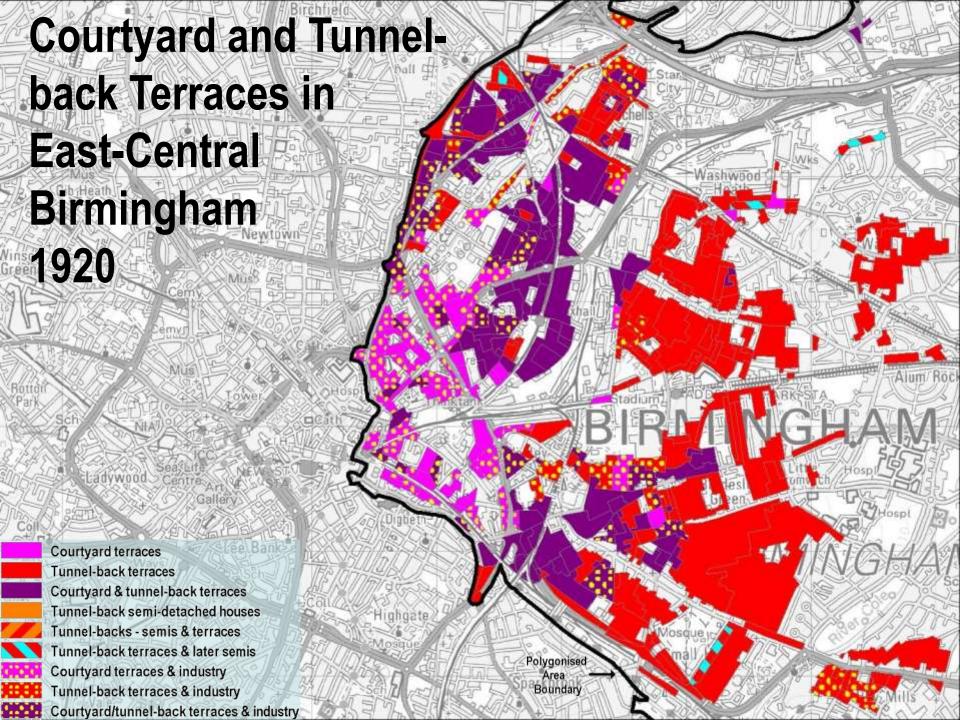
- This 'thematic' map sequence was generated from a customised selection of individual HLC types (sub-types) and it only covers the area characterised during the first year of the Birmingham HLC (2012).
- It aims to illustrate the evolution of the two main types of 19th c. working class housing built in Birmingham: courtyard and tunnel-back terraces. 'Courtyard' terraces which included the much maligned 'back-to-backs' have completely disappeared from Birmingham as a result of post-war 'slum clearance' (with one notable exception), while a significant number of 'tunnel-backs' still survive throughout the city.
- All the maps in this sequence are based on data captured from actual maps of the area, right up to the present day.

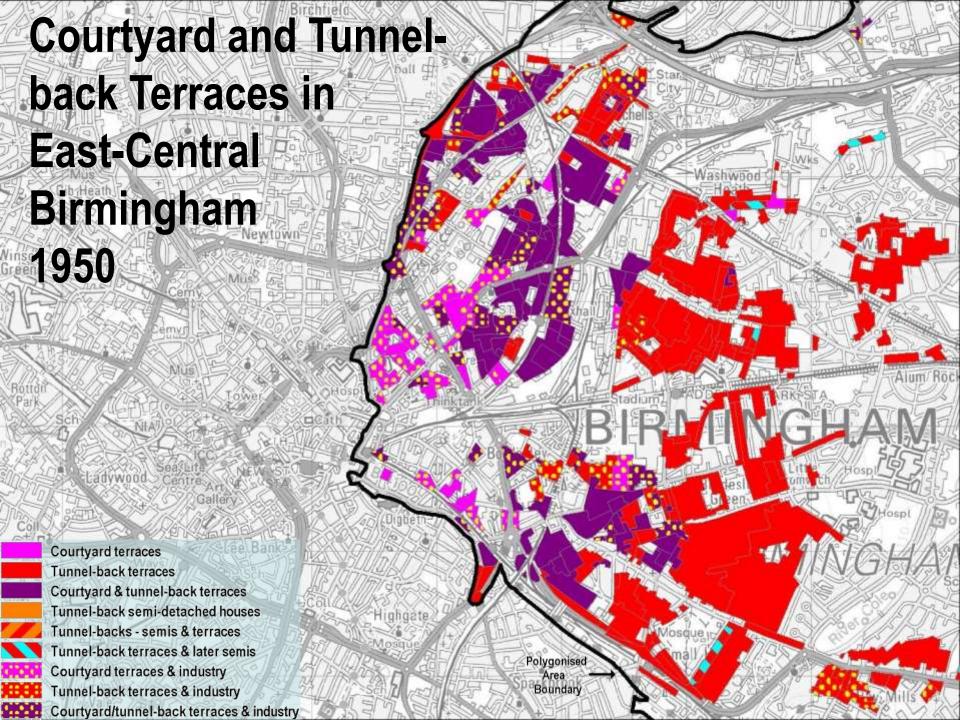
7. The Evolution of Victorian and Edwardian Age Terraces in East-Central Birmingham (cont'd)

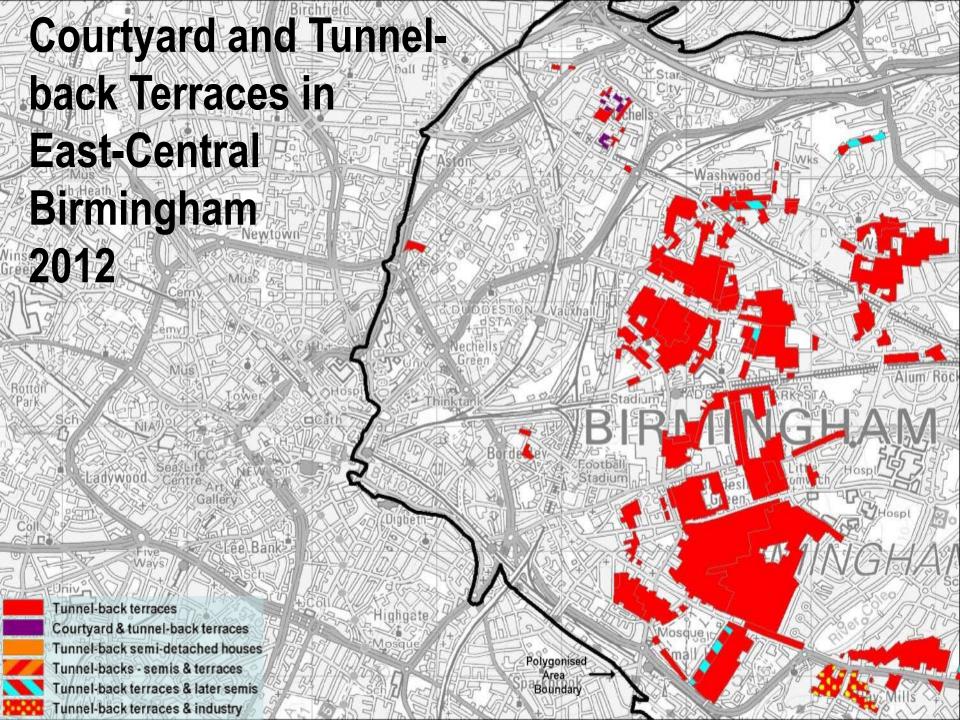
- Despite its limitations and inaccuracies, this map sequence illustrates well the evolution of East-Central Birmingham's 19th c. terraces:
 - ➤ To start with (1880) 'courtyard' terraces on their own or mixed with 'tunnel-back terraces' or industrial premises predominate in this area, especially along its earlier built western edge.
 - ➤ As the building of 'back-to-backs' had been banned in Birmingham since 1876, later maps show only 'tunnel-back' terraces expanding eastwards until 1915, after which they also are not built any more.
 - The 'clearance' of the courtyards starts after 1920 and amplifies after 1950, until all have been eliminated; any 'tunnel-back' terraces that were mixed amongst them, also disappear as a result of this.
 - Furthermore, post-war re-development also eliminates the mixture of terraces and industry that was characteristic of so many Victorian and Edwardian working class neighbourhoods.











8. The Evolution of Vehicle Manufacturing in East-Central Birmingham (1900-2013)

- This thematic map sequence was generated using MapInfo in 2013 from a custom selection of individual HLC types (sub-types) captured during the previous year and as such it only covers the Birmingham area characterised by Dec 2012.
- The sequence aims to illustrate the evolution of vehicle manufacturing in East-Central Birmingham, where a lot of this sector was (and still is) based. This sector included the manufacture (and repair) of railway carriages and wagons, bicycles and motorbikes, cars and vans, as well as various components and spares for them (e.g. tyres, engines and lights), and even aircraft (during World War Two) and related parts.
- All the maps in this sequence are based on data captured from actual maps of the area, right up to the present day, and also from additional online research, but dating accurately when industrial facilities started, closed down or changed production profile is not always possible.

8. The Evolution of Vehicle Manufacturing in East-Central Birmingham – the Early Years

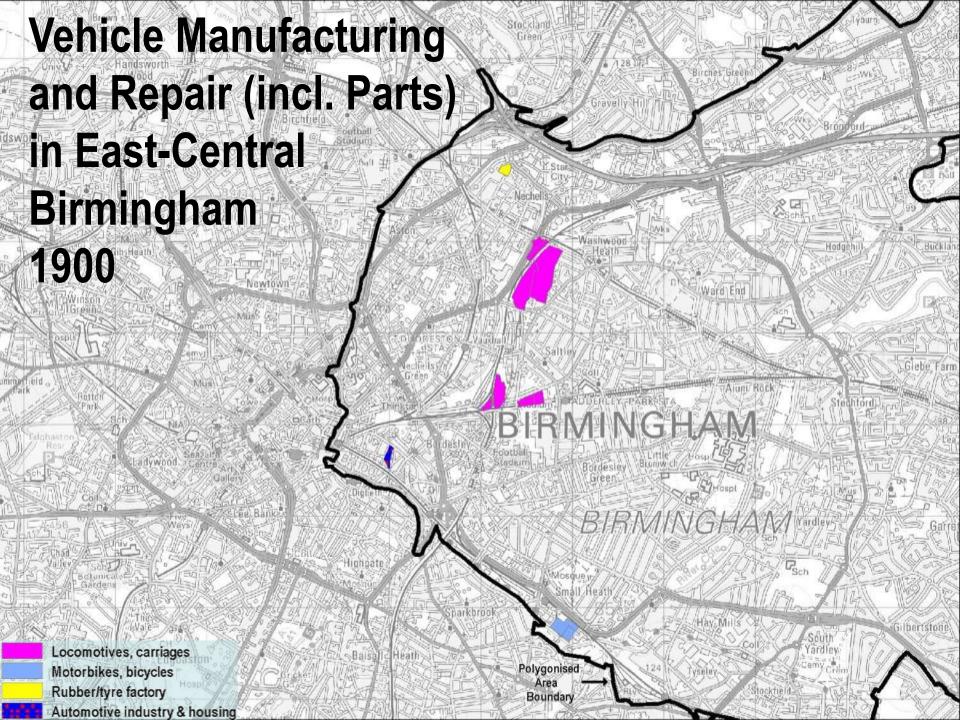
- In 1900, this sector consisted largely in this area, of 3 railway carriage and wagon works: Saltley (1845 to 1962), Midland at Landor Street (post-1853 to 1912) and Britannia at Adderley Park (1853 to 1908).
- By 1915, the new automotive industry was expanding fast, producing:
 - ➤ Bicycles and motorbikes at BSA's Small Heath Works (1908-10 to 1957-73), cycle components at Perry's Tyseley Works (1913 to 1962, later on motor accessories until 2004 as Tenneco-Walker UK).
 - Cars and commercial vehicles at Wolseley's Adderley Park Works (1901 to 1972).
- In the manufacture (and repair) of railway vehicles, the Washwood Heath Works (1912 to 2005, later Metro-Cammell and then Alstom) replaced the Landor Street site, while the Adderley Park Works were taken over (by 1912) by the Wolseley Motor Co.

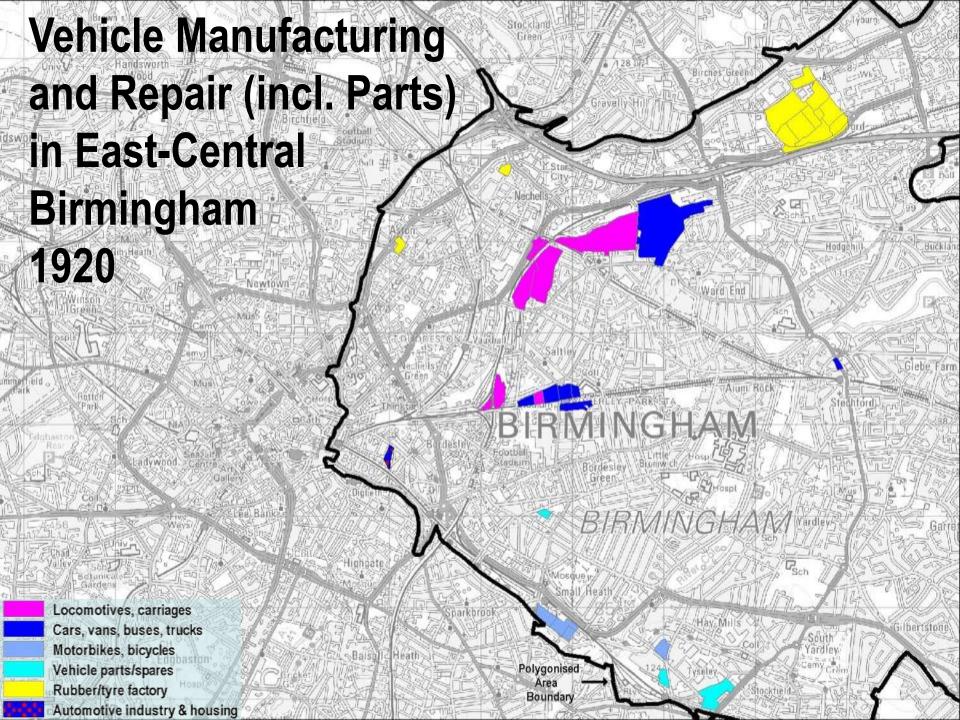
8. The Evolution of Vehicle Manufacturing in East-Central Birmingham – the Glory Years

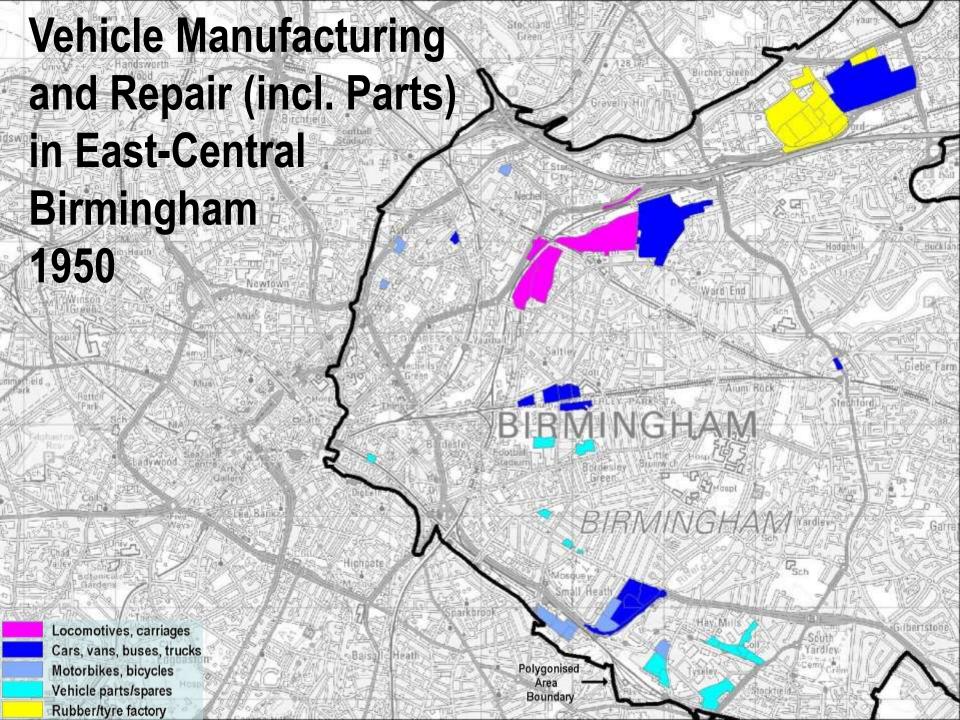
- The inter-war years saw a massive increase in the automotive sector:
 - ➤ Bicycles and motorbikes at CWS (Co-operative)'s Federal Works (1918-20 to 1960s) and BSA's Waverley Works (motorbikes from 1921, bicycles after 1945 until to ca. 1957-73).
 - Cars and commercial vehicles at Wolseley's Ward End (Washwood Heath) Works (1919 to 2009, as LDV) and Singer Motors' Small Heath Works (1926-27 to post-1956).
 - Tyres at Dunlop's Fort Dunlop plant (1917 to ca. 1985-90), bicycle tubes at Reynolds' Hay Hall Works (1917-20 to 2007) and motor accessories at Wilmot Breeden's Tyseley plant (ca. 1928 to 1978).
- By the 1950s, the automotive sector reached its peak in this area, with the arrival of the Castle Bromwich car body/assembly plant (1945 to this date, as Jaguar) and the nearby Hardy Spicer & Co.'s Chester Road automotive accessories works (1957-59 to this date, as GKN Driveline).

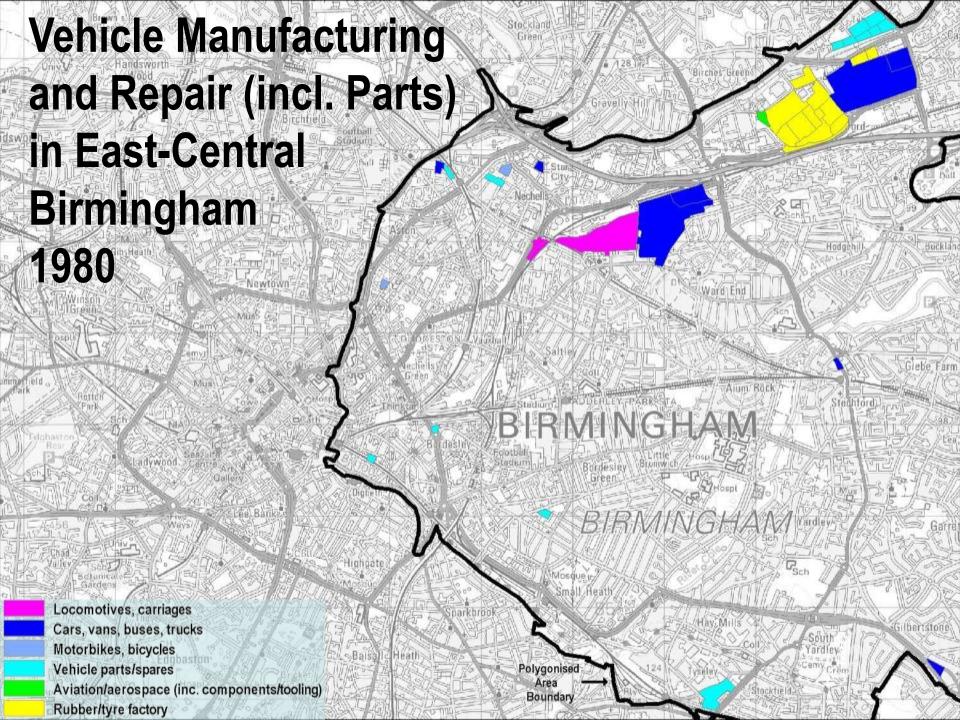
8. The Evolution of Vehicle Manufacturing in East-Central Birmingham – the Decline Years

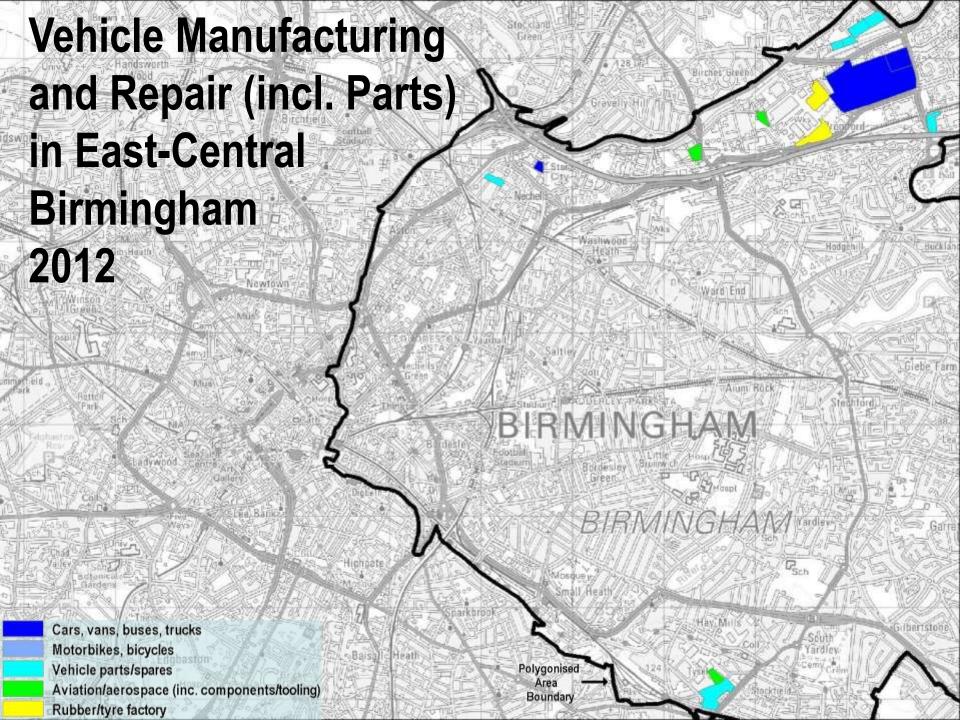
- After 1960, the vehicle manufacturing sector enters into decline, so by 1980, the only surviving significant industrial sites in this area were:
 - > Railway: Metro-Cammell's (later Alstom) Washwood Heath plant.
 - ➤ Automotive: Jaguar's Castle Bromwich car plant, British Leyland's (later LDV) Washwood Heath (Ward End) van plant.
 - ➤ Parts and accessories: Fort Dunlop tyre plant, Reynolds Tube's Hay Hall Works (cycle tubes), GKN Driveline's Chester Road automotive accessories works and Tenneco-Walker's Tyseley exhaust factory.
- The decline continued so that by 2014, the Jaguar and GKN Driveline plants were the only significant automotive facilities left in this area.
 - ➤ Dunlop Aircraft Tyres is a small remnant of the huge Fort Dunlop site, Reynolds Tube moved to a new site in 2007, while Tenneco-Walker is now only a parts wholesale warehouse (since 2004).





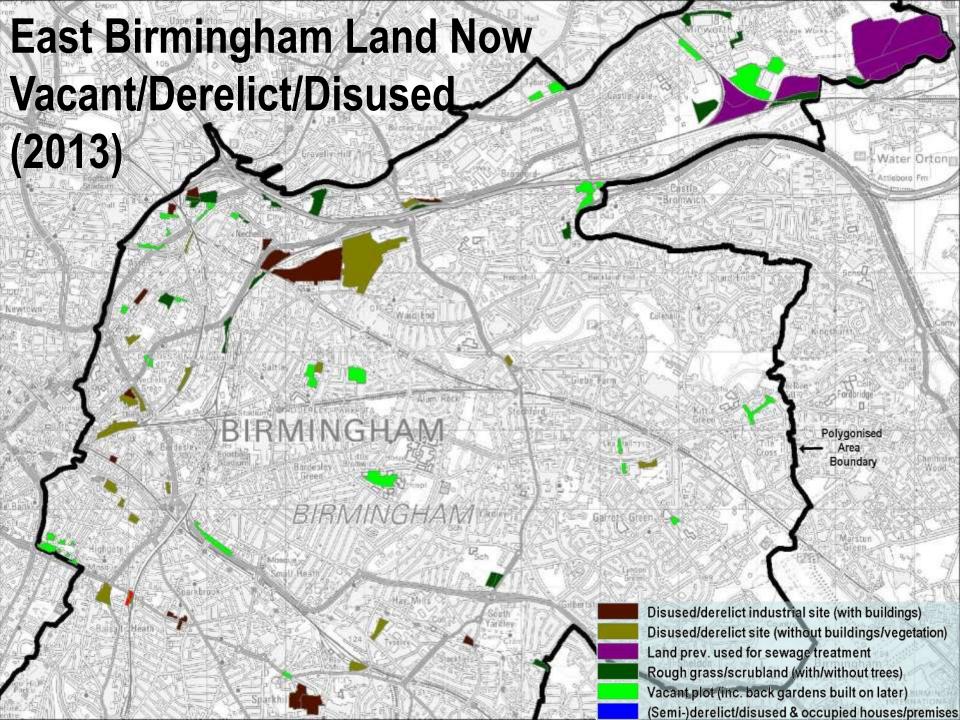


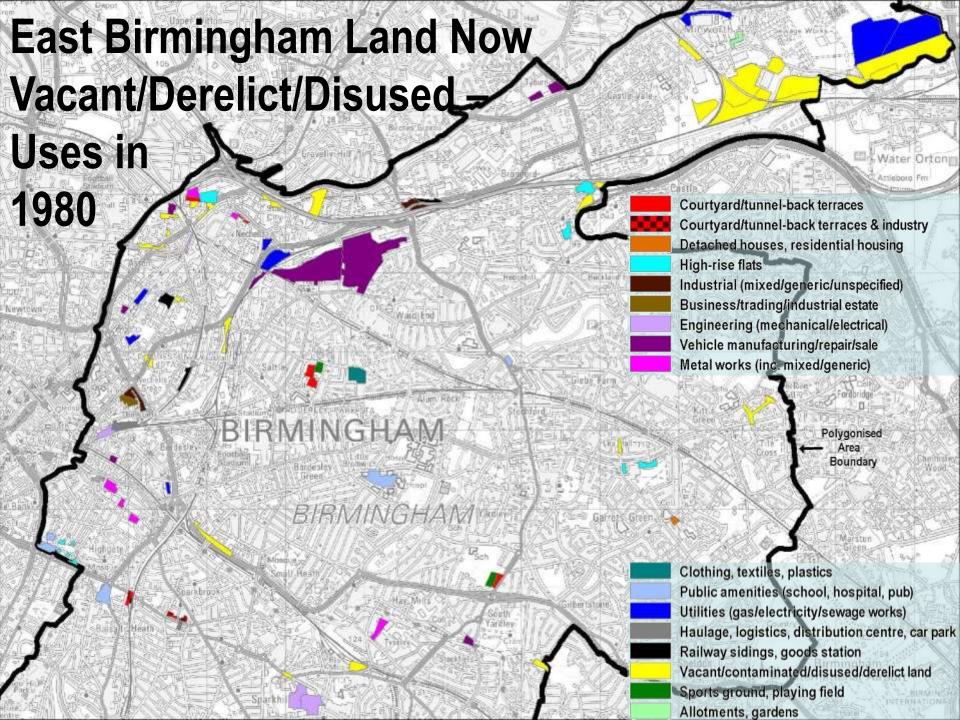


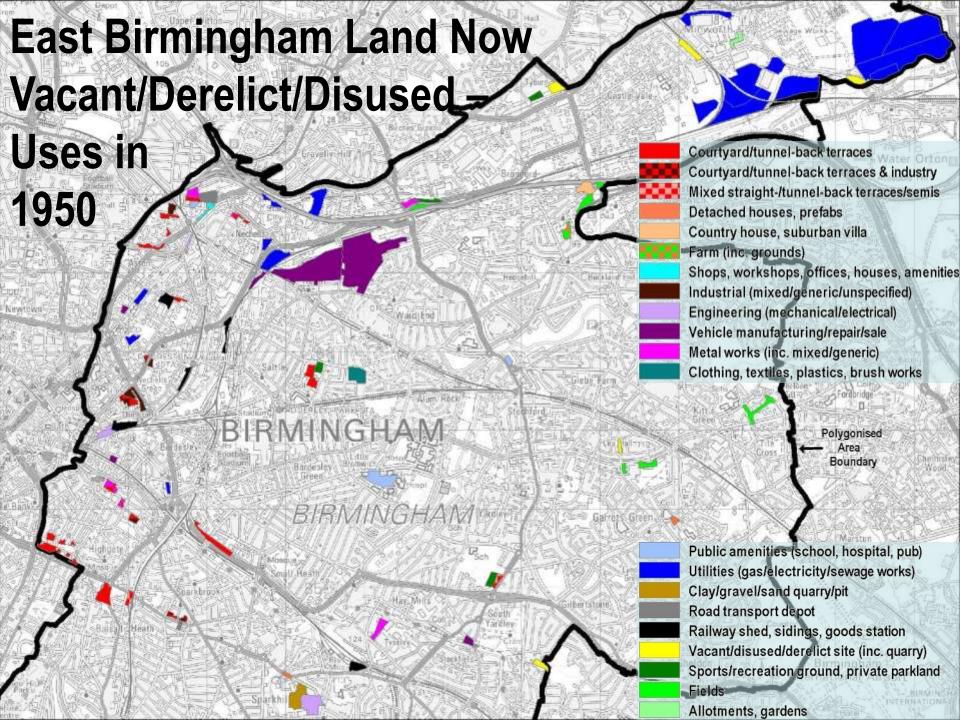


9.Previous Uses of Land Currently Vacant/(Semi-) Derelict/Disused in East Birmingham (1950-2013)

- This thematic map sequence was generated from a custom selection of individual HLC types (sub-types). Using reverse chronological order, it aims to illustrate the past uses of land recorded by the Birmingham HLC as being currently vacant/underused or (semi-)derelict/disused including contaminated land. Most of such land was previously either:
 - > filter/sludge beds of the Minworth sewage treatment plant;
 - > utility sites (e.g. Washwood Heath Gas Works);
 - industrial premises, some very large (e.g. LDV and Metro-Cammell/Alstom in Washwood Heath, or Lucas Battery Works in Sparkhill).
- All the maps in this sequence are based on data captured from actual maps of the area, right up to the present day, and also from additional online research, but dating accurately when e.g. factories or utilities closed down and their site became derelict, is not always possible.





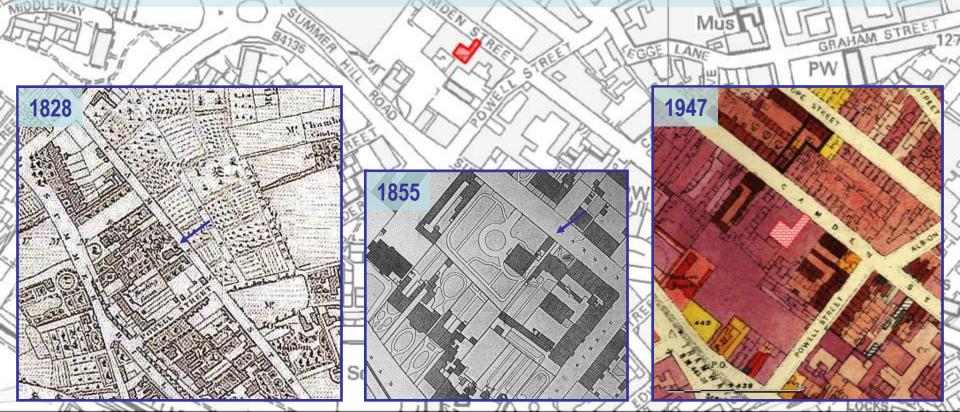


10. The 'Story' of Two Jewellery Quarter Sites

- While HLC output is best 'seen from a distance' as a rule, the captured data and accompanying maps can also help 'tell the story' of individual sites of historic interest, even where there is not much left to see today. And the 'Jewellery Quarter' area (Hockley-Warstone-Sandpits) has seen many such land use changes over the last quarter of a millennium.
- The square of Heaton House rising from the middle of a (now derelict and inaccessible) industrial site, as shown on modern aerial photos and its depiction on Pigott Smith's 1825 and 1855 maps as a small suburban villa looked unusual enough to invite a closer look during the recording of the Birmingham HLC.
- The number and variety of historic land use changes witnessed by this site containing in 2013 a hotel (Travelodge), offices (MADE) and a pub, while part of it was still vacant encapsulates perfectly how HLC data can even be used to tell the 'story' of an individual site.

Heaton House, 121-37 Camden St. (in HBM4522)

- (One of) the last surviving suburban villa(s) in the Jewellery Quarter, Heaton House was built around 1795-1805 and is first clearly depicted (with its coach house and grounds) on Pigott Smith's plan of 1828.
- By the 1880s its grounds were encroached by courtyard terraces and industry, and by the 1890s the house and coach house became part of a factory and stayed that way until c. 2000 when both became derelict.



Travelodge Hotel & MADE Offices, Charlotte St., (HBM4551) 1778 1839 1947 1855 1955 & Art. G

Note: The 1778 and 1839 maps shown are both © Mapseeker.co.uk

Travelodge Hotel & MADE Offices, Charlotte St.

THE STREET STREET	III ID L SHIOOS, SHOI	1 1/2
HLC UID Name	3/1/ / / / / / / / / / / / / / / / / / /	Locks
HBM4551 Travelodge & MADE, Charlotte St.	. (E) - Newhall St. (S) - Newhall Sq.	
Broad Type	HLC Type	Confidence
Commercial (inc. Offices, Retail, Wholesale)	Offices & hotel/inn	Certain
Period 1998 AD to 2006 AD	Gd/	
Previous Types Previous Broad Type GRAHAM STREET 127m		$\langle \langle \rangle \rangle \rangle$
Elicitoda Dioda Typo	Previous HLC Type	Confidence
Indoor Entertainment	Museum, art gallery	Certain
1951 AD		1/3//
Birmingham Museum of Science & Industry - closed in 1997. Also incl. Invicta aluminium foundry.		
Industrial (inc. Trading, Services, Storage)	Metal surface coatings (exc. paint)	Certain
1902 AD to 1910 AD		
Elkington & Co. Ltd. silver electro	pplating works - extends over most of the site.	(A) /2/01
Industrial (inc. Trading, Services, Storage)	Electroplating works & canal wharf	Certain
1838 AD to 1840 AD	Incl. saw mill.	
Industrial (inc. Trading, Services, Storage)	Works/warehouse/depot/trading & canal wharf	Certain
1809 AD to 1815 AD	Whitmore's Arm canal built in 1809.	1111
Vacant, Derelict, Disused Land	Vacant plot (incl. back gardens built on later)	Certain
1780 AD to 1805 AD	ON THE POWER STATE OF THE POWER	
Enclosed (Farm) Land	Irregular, piecemeal enclosure	Certain
1540 AD to 1699 AD	Part of New Hall estate after 1560. Museum	7
Outdoor Recreation	Medieval deer park, rabbit warren (coneygre)	Probable
1066 AD to 1539 AD	Lord's Conevare.	1/63

Liby

Area (Hectares)

1.19