West Midlands urban platformisation case study

# 1. West Midlands urban platformisation summary

Of the three case study areas, the West Midlands had the most ambitious and developed plans and projects for systemic/integrative platformisation in the landscape of urban transport and mobility. This has been led and facilitated by an extensive and varied programme of experimentation supported by Transport for West Midlands’ (TfWM) successful bid to become the first Future Transport Zone and a growing emphasis on in-house expertise in innovation and digital systems. Different projects within this have been orientated towards understanding how best to achieve ambitious targets of the new Local Transport Plan for decarbonisation and modal shift – including seeing platformisation as a tool for shaping mobility behaviour, most notably through the development of a public MaaS platform and infrastructure. Within this wider programme has been a growing emphasis on integration and municipal control over and through platformisation, reflecting on earlier experiments and experiences with commercial platforms and operators in the region (e.g. Whim, Nextbike, National Express, Uber). This purposive and strategic approach to urban platformisation sits within the ‘Reimagining Transport in the West Midlands’ core strategy, adopted in 2022, in which competing visions of municipalist, green and tech mobility futures are all part of the mix alongside ‘inclusive growth’. This marked something of a (sometimes explicit) break with the ‘business as usual’ approach to metropolitan growth which animated the 2016 ‘Movement for Growth’ LTP. In 2024, the West Midlands’ project looks potentially the most fragile and susceptible to the economic pressures and turbulence of recent years.

The centrepiece of the West Midlands’ urban platformisation story is the development of a bespoke, publicly controlled and branded MaaS platform intended to integrate multiple modes, built out from the existing Swift smart ticketing system as its back office. Capital investment in this project comes primarily through FTZ funding, and is expected to be launched in 2024 – though there have already been many delays. It comes after a 2018/19 trial with commercial MaaS operator MaaS Global/Whim, a model which TfWM ultimately rejected as unviable.

TfWM has also been extending control over the modular networks and elements of the ‘stack’ which will be incorporated within its MaaS system, including the publicly controlled West Midlands Cycle Hire (WMCH) scheme operated by Serco and Beryl (since 2021) – following the failure of the Nextbike scheme. Beryl’s more recent takeover of the Voi e-scooter trial (2023) was intended to enable further integrated experimentation across bike-share/e-scooters on a single platform, while cross-subsidising the bike-share scheme. The gradual move towards franchising the bus network is also part of this story, after it appeared that TfWM reached the limits of a partnership-based approach with monopoly operator National Express. Other aspects of platformisation include various FTZ experiments/trials such as DDRT (West Midlands On Demand with Via and WeDRT, Ring and Ride with Liftango, Tandem), mobility credits and mobility hubs.

Private forms of modular platformisation coexist, especially in Birmingham as one of the largest cities in the UK. Ride-hailing platform Uber launched in 2015, with Bolt its main competitor since 2021 across the region. E-scooter platforms Voi (2001-23) and Beryl (2023 to present) have operated primarily in Birmingham and Coventry. Alongside Google Maps, Citymapper and Moovit both operate private journey-planner/MaaS apps in the region since around 2015. The most significant episode of private platform integration has been the deep integration of local National Express buses into the Uber app in 2024 – adding to Uber’s earlier incorporation of National Express coach (as well as national rail) into its platform.

Key digital infrastructure controlled by TfWM includes the publicly owned Swift, an ITSO smartcard and account-based ticketing and payment system with over 250,000 active users, with key services provided by Euclid and Unicard. This will be expanded through the procurement of a front-end MaaS platform provided by Mobilleo. West Midlands Cycle Hire is also under public control, though its physical infrastructure and operation are currently under contract with Serco using the Beryl platform. On the ITS side, TfWM has a Regional Traffic Coordination Centre pulling in a range of data gathered from urban sensors and other sources. Cloud data storage and processing is provided by Amazon Redshift. Since 2018, TfWM has been insourcing data capability, following the end of a contract with Mott MacDonald.

The shift in broader transport strategy shaping platformisation has unfolded in the context of shifting local conditions. These include: (i) devolution, the election of a Conservative Mayor and new governance arrangements in which transport has become the unifying feature (and site of contestation) of a new spatial imaginary and project of geographical/territorial integration across a polycentric region; (ii) the growth and success of TfWM within this context as a locus of city regional capability and resources (from CRSTS and other funding) and vision-making; and (iii) the size and importance of the innovation unit within TfWM (especially in comparison to TfGM and TNE), after the successful bid for FTZ funding. It should be noted while having the most extensive and developed platformisation programme of the three case studies, it is not necessarily the most stable in comparison to Greater Manchester. The research threw up various challenges facing TfWM, including: (i) a less unified city region and tensions between constituent members of the combined authority; (ii) the impacts of various shocks on spending plans and policy priorities, such as the effects of covid and rising energy prices on the public transport network, the cost of living crisis and the financial problems/bankruptcy of Birmingham City Council; (iii) a deterioration of relations with National Express as the monopoly bus operator around MaaS and reluctance from the mayor to sanction franchising – and numerous delays to the rollout of MaaS.

In terms of organisational capacity and capability, TfWM is a large MTA in the English context with significant resources and approximately 750 employees (this is an estimate) – allocated over … between 2018 and 2023 (including CRSTS, BSIP, Active Travel Fund, BSOG, covid recovery funding, Transforming Cities Fund, ZEBRA, FTZ…).

£6.2bn investment (10 times pre-WMCA)

# 2. West Midlands governance context

The step-change of transport policy in the West Midlands since the late 2010s – and especially its emphasis on (platformised) integration – has been heavily influenced by devolution. While the West Midlands is more fragmented than Greater Manchester and devolution more recent, the process has also been rapid and the region has been very successful at ‘deal-making’ and funding settlements. Transport has been central to that process in terms of the substance of devolved powers and resources, political pledges by mayoral candidates and a regional project of territorial/geographical integration and local state-making. West Midlands Combined Authority (WMCA) was created in 2016 following its first devolution deal in 2015, recombining the seven former boroughs of the West Midlands County Council (Birmingham, Solihull, Coventry, Wolverhampton, Sandwell, Dudley and Walsall) which was abolished in 1986. In the intervening years, despite the gutting of local powers and abolition of WMCC in 1986, WMPTE continued to be governed at the regional level through the new WMPTA, made up of the seven authorities and former boroughs. WMCA took over the powers and functions of WM Integrated Transport Authority (formerly WMPTA until 2008) and Centro (formerly WMPTE) in 2016.

Conservative Andy Street won the first metro mayoral election in 2017, taking on additional powers. A second devolution deal was agreed in 2017, giving additional powers over local rail and more transport funding, followed by the more extensive 2023 ‘Trailblazer’ devolution deal (alongside GMCA) – which included the agreement longer term financial settlements, new fiscal levers, housing and regeneration funding and other elements [link]. As a result, WMCA is second only to GMCA in the depth of its devolution settlement to date. Street was re-elected in 2021 and is stood again in 2024 – but lost to the Labour candidate Richard Parker. Street was generally seen as instrumental in the West Midlands’ deal-making, as someone with access to Westminster as the leading Tory mayor in the country, especially when Theresa May was in power. While opposing policies like bus franchising (presumably on ideological grounds), he appears to have shown political pragmatism in marking out his autonomy from the national Tory party (e.g. on HS2).

Despite this, the West Midlands lacks the history of institutional cooperation and unity of Greater Manchester, and its boundaries and relationships are more contested. Devolution for example cut across three existing LEPs (Birmingham and Solihull, the Black Country, Coventry and Warwickshire) in its formation, and also includes ten non-constituent authorities on its borders. While Birmingham is the regional centre and has greater representation than other authorities, several crises – including the 2014 Kerslake Review [link] and introduction of financial special measures in 2023 [ref] – have diminished its influence, while Coventry appeared to have the strongest relationship with TfWM [link]. This accentuates the region’s geographical fragmentation, which is reflected in: (i) the polycentric vision of transport strategy; (ii) the goal of geographical integration through transport infrastructure development; and (iii) a relative power vacuum which seems to have enabled WMCA/TfWM to rapidly assume a rescaled leadership role.

Devolution deals have led to the rescaling and consolidation of transport powers both down from national government and up from local transport authorities. TfWM obtained powers over buses (including franchising power), local rail (including the WMR franchise), local roads, active travel and smart ticketing. Devolution deals have also crucially involved the opening of new funding streams from central government to TfWM, including long-term settlements such as CRSTS. With new powers and the majority of funding, TfWM emerged as a key site of local state-building and contestation within WMCA. Our fieldwork seemed to show: (i) an emerging bureaucracy with growing capability (including new personnel); (ii) a significant step-change in the ambition and vision(s) for transport strategy (with green and tech imaginaries challenging ‘growth first’ agglomeration); and (ii) some tensions between this bureaucracy and the mayor and some local authorities.

# 3. West Midlands transport strategy and funding context

Since the creation of WMCA, the most notable feature of transport strategy in the region has been the break between ‘Movement for Growth’ LTP in 2016 and ‘Reimagining Transport in the West Midlands’, which was first released as a green paper in 2021 and adopted as the core strategy behind LTP5 in 2022. MfG represented a fairly conventional urban transport plan primarily concerned with facilitating agglomeration mobilities and economic growth, focusing on integration and efficiency. RTWM pivoted (especially in its consultation phase) towards a critique of ‘business as usual’, emphasising the need for dramatic modal shift and behaviour change in travel choices to address the growing social, environmental and economic costs of a highly car-centric region – especially transport emissions and congestion. In a new long-term vision, development is reframed as ‘inclusive growth’, with the pandemic marking a moment of change and opportunity (as opposed to a ‘car-led recovery’). In this context, platformisation is both an infrastructure for the integration of sustainable modes and a tool for experimentation – especially with behaviour change.

## Movement for Growth

The existing LTP was published in 2016 under the WMCA and TfWM brands, but was produced prior to the mayoral election and largely during the pre-devolution period. Its content and (limited) vision therefore largely reflected the pre-existing context and institutions, before significant powers, resources and organisational changes were in place. Although still the region’s statutory plan, most of our interviewees talked about MfG as a legacy document [link]. Its focus reflected the dominant imaginary of urban agglomeration and supporting population and economic growth of Birmingham and the wider region. Adopting a spatial hierarchy of priorities from the metropolitan to local scale, it is primarily concerned with maintaining mobility flows via highway interventions, traffic management and investment in rapid transit (including ‘Sprint’ BRT routes). While problems of congestion, transport emissions and transport inequalities are covered, these are very much treated as secondary issues, with limited ambitions attached to them. Despite the break made with MfG, it is worth noting the beginning of a digital strategy through strategy’s ‘smart mobility tier’ – described as the ‘glue’ of the future urban transport system (including mention of a personal mobility platform and MaaS).

## Reimagining Transport in the West Midlands: the Green Paper to LTP Core Strategy

In 2021, TfWM released the first iteration of RTWM as a green paper, which explicitly challenged the growth-first status quo, highlighting the model’s diminishing returns and rising social, environmental and economic costs. The green paper instead presents a bold vision of clean and inclusive urban mobility which actively contribute place-based development (despite lack of wider spatial development levers) modelled on the ‘Triple Access System’. A dramatic modal shift from private cars to sustainable travel is envisioned by 2041, while a combination of decarbonised infrastructure and demand management aims to reduce emissions by 70% by 2030. Spatially, the vision is of a polycentric ‘region of well-connected neighbourhoods’ organised around 15-minute neighbourhoods and a 45-minute region. The green paper pulls in ideas from wider social science research such as donut economics and nonlinear forms of technological change. Platforms and new forms of shared mobility (e.g. micro-mobility) play a major role in the vision by providing a seamlessly integrated (via MaaS) marketplace of alternatives – with the West Midlands as a key site of green mobility innovation and clean growth spurred by the FTZ (e.g. MaaS, mobility credits, mobility hubs. Overall, the vision presented touches strongly on green and tech-fix mobility imaginaries as challenging growth-first orthodoxy. Nevertheless, the strategy includes important caveats relating to different trajectories – based crucially on the devolution of more powers and national regulations which disincentivise private car travel.

While toned down and several of its more radical references are stripped out, much of the green paper made it through to the core strategy adopted in 2022. Since then, TfWM has published draft ‘Six Big Moves’ documents which add the most up to date detail to the overall vision and present the most up-to-date iterations of TfWM thinking: (i) Behaviour Change [link]; (ii) Accessible and Inclusive Places [link]; (iii) Walk, Wheel, Cycle and Scoot [link]; (iv) Public Transport and Shared Mobility [link]; (v) Safe, Efficient and Reliable Network [link]; (vi) Green Transport Revolution [link]. In addition, the LTP will be populated by four ‘Area Strategies’ produced by Birmingham, Coventry, Solihull and the Black Country.

## Other Strategy docs

There are a number of sub/supplementary strategies produced by TfWM which feed into Reimagining Transport in the West Midlands, including:

* TfWM (2022) Reimagining Transport in the West Midlands: Six Big Moves summary document (see also full versions of each)
* TfWM (2022) Commonwealth Games Transport Plan
* TfWM (2021) Reimagining Transport in the West Midlands: Green Paper
* TfWM (2020) Covid-19 Transport Action Plan
* Birmingham City Council (2020) Birmingham Transport Plan: A Bolder Greener Birmingham
* TfWM (2023) Network Resilience Plan and (2018) Congestion Management Plan
* TfWM (2021) Bus Service Improvement Plan
* TfWM (2021) Enhanced Partnership Plan (+2022 variation) and Enhanced Partnership Schemes (2021 + variation 001, 002, 003)
* TfWM (2018) Strategic Vision for Bus
* WMRE (2022) West Midlands Rail Investment Strategy 2022-2050
* WM Cycle/TfWM (2019) West Midlands Cycle Charter
* WM Cycle & Walk/TfWM (2019) West Midlands Cycle Charter Action Plan 2021-22
* TfWM (2017) A West Midlands Approach to healthy and active streets Evidence statement
* TfWM (2016) Draft West Midlands Freight Strategy Supporting our Economy Tackling Carbon
* TfWM (2018) West Midlands Regional Road Safety Strategy + refreshed (2023) version
* TfWM (2018) Connected & Autonomous Vehicles are the future West Midlands is leading the way Prospectus

Other key documents produced by WMCA include:

* WMCA (2016) *Making Our Mark: The West Midlands, the best region in the UK to do business* (strategic economic plan)
* WMCA (2022) *Plan for Growth*
* Birmingham City Council (2021) *Our Future City Plan*
* Andy Street Manifesto (2021) Let's Get Our Region Back on Track and Unleash Our Potential
* WMCA/HM Gov (2019) West Midlands Local Industrial Strategy
* WMCA (2020) #WM2041 (+ Five Year Plan 2021-26)
* WMCA (2020) Recharge the West Midlands: Kickstarting the West Midlands Economy - Our investment case to government
* WMCA (2020) Levelling-up the West Midlands: Our roadmap to community recovery and prospectus for government
* WMCA (2021) West Midlands Digital Roadmap
* WMCA (2021) Midlands HS2 Growth Strategy: The Defining Decade – The Midlands high speed path to recovery [updates 2015 Greater Birmingham & Solihull version]

Previous strategic transport plans

* WMCA (2016) Movement for Growth: The West Midlands Strategic Transport Plan (LTP4)
* See also Midlands Connect (2017) Midlands Connect Strategy: Powering the Midlands Engine
* Centro (2011) West Midlands Local Transport Plan: Making the Connections (LTP3)
* Centro (2006) West Midlands Local Transport Plan 2

## Funding context

Outside of London, TfWM was one of the most well-funded transport authorities in the UK during the period of study. A non-exhaustive list of funding streams includes:

* Tranforming Cities…
* CRSTS…
* FTZ…
* BSIP…
* BSOG/BSOG+
* Covid recovery…
* Active Travel Fund
* ZEBRA…
* Other innovation pots…

# 4. West Midlands’ geography and existing public transport system

The West Midlands is primarily urban, consisting of Birmingham as its large regional centre, medium-sized (Coventry, Wolverhampton) and smaller (Solihull, Sutton Coldfield) cities, and smaller towns and boroughs – and the more rural Meriden Gap separating Coventry from the rest of the region. The population is relatively poor, but wealthier areas include parts of Birmingham (centre and suburbs), Solihull, Sutton Coldfield and fringes of the Black Country. While Birmingham is its economic centre, the region is highly polycentric. Although reasonably well connected by transport infrastructure, the West Midlands’ urban fabric is heavily car centric.

Today, the region suffers particularly badly from high congestion and its associated costs, deteriorating road infrastructure, high car dependency combined with relatively low car ownership among poorer groups and low (even by UK standards) levels of active travel. In addition, transport planning at the regional level and especially in Solihull and Birmingham has for years been heavily tied to the development of HS2 – both in terms of economic opportunities for development but also the projected growth in population and pressure on existing infrastructure. These growing pressures (as well as decarbonisation targets) have contributed to the significant pivot in recent years towards reducing private car use in the region and expanding public transport provision and integration – while devolved transport powers have also become an avenue for pursuing regional/geographical integration and a ‘London-style’ public transport system.

## West Midlands Metro and Coventry Very Light Rail

The West Midlands has an urban light rail/tram system wholly owned and operated by TfWM. West Midlands Metro only operates a single route between Birmingham and Wolverhampton – despite original proposals in the 1980s for between 10 and 15 lines, and powers given via Parliament in 1989/90 for a three-line network to be built. By 1997, Centro had accepted that it could not fund Lines 2 and 3, but eventually opened Line 1 in 1999. Midland Metro was first operated by Altram, a joint venture of John Laing, Ansaldo, and National Express. After its partners withdrew, National Express took over full operation in 2006 through to 2018 under the banner National Express Midland Metro. Since then, the rebranded West Midlands Metro has been operated Midland Metro Ltd – a wholly owned subsidiary of WMCA. Over time, Line 1 has been gradually extended in phases in 2015, 2019 and 2022. Two new branches are currently under construction: (i) the Wednesbury to Brierley Hill Metro Extension which connects Dudley; and (ii) the Birmingham Eastside Metro Extension, with future plans for an East Birmingham to Solihull Metro Extension ultimately connecting the network to Birmingham International and the HS2 Interchange [link].

During the pandemic, patronage on West Midlands Metro fell to lows of 13 percent of typical levels. WMCA was allocated £9.4m for the period 17 March 2020 to 19 July 2021 from the Light Rail Revenue Restart Grant (LRRRG) and up to £2.97m for the period 20 July 2021 to 5 April 2022 from the Light Rail & Tram Recovery Grant (LRTRG). By November 2023, patronage had surpassed pre-covid levels, with additional trams introduced during peak times to meet demand. Back in October 2022 however, local politicians had said the Metro extension projects looked increasingly unaffordable in the context of the economic pressures of high inflation, rising costs, energy prices and interest rates [link] – a claim repeated in March 2023 despite an additional £60m award towards completion of the Wednesbury to Brierley extension from DLUHC through the Deeper Devolution Deal [link]. In October 2023, the cancellation of HS2 phase 2 saw a further £100m promised to WMCA for the metro and for development work at Arden Cross, next to the HS2 Interchange Station – with Andy Street claiming the full extension was back on track as a result.

Announced in 2018, Coventry has also been moving to develop its own Very Light Rail system – an integrated public transport network designed as a cheaper alternative to traditional light rail/tram infrastructure. VLR is badged as a major local innovation project which will cost £189m and be part of Coventry’s ‘green industrial revolution’, being developed in partnership with the VLR Innovation Centre in Dudley. The project – currently in its technology testing phase – is supported by WMCA/TfWM, Andy Street and opposing mayoral candidates. The project seems uncertain however, after it was reported in early 2024 Coventry City Council was having difficulty in getting DfT to allocate and release money to progress the project, and had failed in an early 2023 bid for £36.8m – though they had been allocated £15m for further testing. DfT officials were reportedly unconvinced that VLR has significant benefits over expanded bus services, while the leader was critical of DfT holding back the project with ‘bureaucratic hoops’ [link]. The full story here is not quite clear – as was discussed at the UTG meeting we attended at TfL in April 2024.

## West Midlands bus network

The defining feature of the West Midlands bus network has been the dominance by National Express (NX) as a monopoly operator. National Express West Midlands (NXWM) and National Express Coventry (split off as a separate brand) are the privatised descendants of West Midlands Travel, the municipal bus company which was in public ownership for five years after deregulation until a management and employee buyout in December 1991 – and its merger with National Express in April 1995. The BSIP stated that in 2019/20, NXWM covered 89% of mileage and 93% of journeys – with the rest operated by Diamond, Arriva, Stagecoach, First and 19 other small operators. Interviewees put its market share in 2022 at somewhere between 85% and 95%. This unusual context has shaped the governance of bus services significantly as discussed below, which became increasingly fractious in recent years in the struggle for control over public transport.

Interviewees at TfWM described it as a double-edged sword, giving the operator significant negotiating power due to lack of credible alternative partners, while also simplifying governance in certain senses (including efforts to integrate different modes) – with other operators largely falling in line with decisions accepted by NXWM. The relationship between TfWM and NXWM (and their predecessor brands) was described as changing over time. One interviewee described it as aggressive and extremely combative at the start of the 2010s, giving way to a cooler (if still not very cooperative) dynamic and eventually a closer partnership after the success of Swift. At the time of interviews, several TfWM officials described the relationship as harmonious in comparison to other regions, but flagged the likely return of fractious relations as central government covid relief funding came to an end with significant service cuts anticipated. This deterioration of the relationship has since come to pass in relation to planned service cuts, fare increases and funding, exacerbated by wider tensions about platform integration with TfWM’s MaaS app and the operator’s autonomy, and moves towards franchising.

A few figures (non-exhaustive):

* BSIP funding (2022): £88m (of which £40m allocated to prop up threatened routes in 2023)
* BSIP+ funding (2024): £16.5m (another £10.5m announced in September 2023 may by part of this)
* Network North Plan money redirected from HS2 for WM bus improvements (2023): £33m
* CRSTS allocation for improving Birmingham cross-city bus routes (Sep 2023): £70m
* CRSTS allocation for contactless TOTO for WM buses (2022): £18m
* Annual subsidy for socially necessary services (2023/24): £16.3m (up from £15.5m previously)

### Challenges facing the network

Over the past decade, the bus network has faced numerous challenges. Bus patronage in the region fell to as low as 10% during the first lockdowns. By August 2021, it had risen to 65%. In 2023, WMCA said that bus patronage in the region was at 90% of pre-covid levels [link] – with Traffic Commissioner data showing 74m fewer journeys than the pre-pandemic year. In referrals to the national Subsidy Advice Unit in October 2023 over its proposed £74.4m West Midlands Bus Recovery Grant Scheme (designed to support services until December 2024), TfWM reported that only about 50% of the network was commercially viable in the aftermath of covid and the cost-of-living crisis [link].

NXWM itself was struggling. In 2022, it was revealed a planned merger between National Express and Stagecoach had been abandoned – with Stagecoach instead opting to be bought by a German infrastructure fund [link]. This appears to have created further uncertainty for NXWM, who indicated during interviews that the company was facing serious financial challenges in the post-covid and inflationary economic context – specifically the effects of the driver shortage on services and rising costs of wages [link].

During the research, there were numerous claims about the extent of cut services in the West Midlands since 2011. In 2018, data from the Traffic Commissioner showed the region had lost over 1,500 routes since 2012/13. A network review concluding in December 2022 apparently saved 26 of 39 threatened services – partly by increasing the public subsidy WMCA was providing for socially necessary services [link]. One Labour party report claimed that the West Midlands had lost two thirds of its services between 2011 and 2023 – more than any other area [link]. This was disputed by the CPT and TfWM as misleading [link], with other estimating a drop in mileage covered at around 20% since 2013 across the West Midlands conurbation [link]. Yet even if falling coverage had been less dramatic than claimed by Labour, the end of covid funding threatened a major crisis.

In June 2023, NXWM announced planned ticket price rises of 12%, including day tickets from £4 to £4.50 and equivalent for weeklies etc. – and mooted pulling out of the government’s £2 single fare scheme [link]. Although it was announced in December 2023 that this would not happen [link], Andy Street was forced in the meantime to abandon a pledge made at Tory conference in October 2022 that bus fares would not increase during the cost-of-living crisis – admitting nearly half the network would otherwise be at risk. He also stated that a significant amount of public funding would also be needed to prop up the NXWM network as covid grant funding was wound up. One report seemed to attribute him as saying it would protect against needing for public control and franchising [link]. In September 2023, it was announced that £40m of the WM’s £88m BSIP funding would be used to prop up NXWM and Diamond routes – who claimed about a third would otherwise be lost.

### Bus reform and franchising

In July 2019, WMCA announced a regulatory review of the bus network to explore different options from voluntary partnership to franchising [link]. Rather than going down the franchising route, TfWM established the country’s second Enhanced Partnership, a second iteration of which was agreed in June 2022 [link]. The EP includes various partnership agreements between TfWM and operators about management of key routes, maintenance of fares and commitments to various infrastructure projects (e.g. bus priority lanes and BRT Sprint routes). The EP formed the basis of the successful BSIP bid which netted the region £88m.

TfWM interviewees were largely unified (and more or less bullish) in their support for franchising. While the Enhanced Partnership and possibility of franchising gave some additional leverage, public control was described as strategically important – especially for network planning and public transport integration (‘Project Fuse’ and MaaS) – for TfWM’s more ambitious objectives [link]. One senior official described extending control over the buses as ‘vital’ and justified when private bus companies’ income was roughly 50% coming from public funding (not verified) and still being paid out in dividends – despite declining services. They described (in mid-2022) seeing franchising as ‘inevitable’ and the way the wind was blowing, with covid and its aftermath making the case much stronger. One interviewee claimed that even the Tory leader of Solihull was privately in favour, admitting that deregulation had failed [link].

While recognising the risks involved, the key barrier noted by TfWM officials was the political opposition of Andy Street – the ultimate decision-maker – despite him never publicly ruling it out. They therefore described a cautious process of persuasion, carrying out preliminary business case assessments, while allowing GMCA to lead the way and absorb the risks and costs of being first mover. However, others talked about the political divisions across the region – with (Labour-run) Black Country councils particularly worried about ongoing financial commitments and risks [link].

Our NXWM interviewee described franchising (which they strongly opposed despite being likely beneficiaries of contracts given their infrastructure footprint and experience) as a threat regularly used against the operator [link]. They expressed resignation that it would happen in the next few years given the shift in local powers and funding a growing TfWM seemed able to attract – despite their stated scepticism that TfWM could become an effective operator [link].

Against this background of a network and operator facing serious problems and growing public subsidy – and NXWM pulling back from involvement in WM MaaS (see below) – it was announced in February 2023 that WMCA would begin a full franchising assessment [link]. More recently, it was reported that WMCA’s franchising assessment was ongoing and would be complete in 2024 – with the mayor (after the election) making the final decision in June 2024 [link]. In May 2024, Labour candidate Richard Parker won the election, pledging to bring begin the franchising process immediately.

### Resistance to public platform integration

TfWM faced particular problems with integrating NXWM into platform integration projects – from Swift to Whim to the MaaS platform still under development. These are noted in the next section. With respect to MaaS, the bus operator was highly critical, badging it as one of a number of ‘vanity projects’ funded by national government [link]. Their main stated problem was loss of control of the ‘customer relationship’ – in this context the mediating platform facilitating direct communication with the user, personalised offers, etc. While they said data was an important aspect of this, controlling the mediating infrastructure was more so. They also claimed TfWM’s desire to build out Swift and extend control was unnecessarily complicated and over-engineered, making the project very time-consuming for partners as well as unattractive to the top MaaS providers.

It was claimed in off-the-record conversations with TfWM officials at industry conferences in early 2023 that NXWM had substantially pulled out of the MaaS project sometime the previous year. This appeared to be about the passing of control of in-app ticketing and fares to TfWM as the MaaS controller.

NXWM’s stated preference in interview was for a far more open ecosystem of evolving relationships between commercial operators, modes and integrators with the bus network as the centrepiece [link] – i.e. an arrangement which suited the operator as dominant mass transport provider. They saw their successful integration with Uber and discussions with Voi (before its exit from WM) in this light. In interview, they also described part of the rationale for the Uber integration was thinking about how to connect the peripheries of the network where bus services (including DDRT) are unprofitable, which NXWM is unwilling to subsidise. TfWM meanwhile is actively experimenting with DDRT as part of a single public transport network [link].

## Local rail

Through devolution deals, there has been some extension of control over rail in the West Midlands through the creation of the West Midlands Rail Executive in 2017. WMRE is a public body and non-profit company jointly owned by 16 regional municipalities including those in WMCA and others (Herefordshire, Shropshire, Staffordshire, Telford and Wrekin, Warwickshire, West Northamptonshire, Worcestershire). With DfT, it oversees the West Midlands Rail franchise, specifying and managing the contract, and the regional rail investment strategy [link] – although it does not own or operate trains, stations (TOCs) or rail lines (Network Rail) itself. In 2023, the Trailblazer Devolution Deal included agreement for prioritising the facilitation and development of fully integrated multi modal fares and ticketing through Swift and TOPO pay-as-you-go infrastructure pilots in the West Midlands, as well as further local public transport infrastructure integration in partnership with Great British Railways Transitions Team [link]. The first pilots with TOPO on trains using Swift began in February 2024 [link].

# 5. West Midlands platformisation and public transport development over time

## Integrated ticketing

### SWIFT smart ticketing system (2012)

* Centro/TfWM pay-as-you-go ITSO smartcard launched in 2012 following 2011 trial, developed by SYSTRA on existing multi-operator nNetwork system. Swift covered the Centro/WM county area as it was then, initially for 10 of 40 bus operators, but not including the monopoly operator NXWM. NXWM joined the scheme 18 months later after significant resistance and a legacy of conflict between NXWM and Centro – which led to all other operators accepting Swift. WM Metro (then also under NX) also joined in 2013, followed by local train services in 2016 (with £620k funding from DfT) – though complicated and partial process due to governance arrangements and fragmentation of infrastructure and operators [link]. After initial challenges and a slow start, one interviewee claimed the Swift took off and became popular with operators and by 2022 had one million accounts including 250,000 regular users, and accounted for one in three public transport journeys – so is widely seen as the most successful ITSO scheme outside of London [link]. Since its inception, one interviewee claimed (in mid-2022) TfWM had spent around £24m on Swift. Unicard and Euclid won the contract to operate ticketing system for TfWM in 2016.
* Swift comes in various forms, currently including Swift photocard (for season tickets), physical and mobile PAYG Swift card, itself being phased out by Swift Go (account-based ticketing). Child and student cards were introduced in 2016. The original PAYG operated as a physical payment card which could be topped up via machines, across 1,000 Payzone retail outlets by 2014, and online and via an app from 2015. This laid the groundwork for online Swift accounts and transition to account-based ticketing down the line – with the introduction of Swift Go in 2020, which brought in daily and weekly capping across (most) bus and tram networks [link], with Swift Go linking to a user account and bank card. In 2018, Swift also partnered with Google Pay and ITSO Transit Hub to enable mobile ticketing/payment through Android integration of Swift on Mobile/ITSO on Mobile/Yotra Ltd and Google Pay. In 2019 Swift began exploring use as a payment mechanism for other modes, including WM Cycle Hire (from 2021) and parking in a small number of areas (from 2022) – with the argument made that it would help gather data on car users which could help encourage sustainable alternatives. Other modes (e.g. e-scooter) were also planned. The TfWM (Swift) app was launched in June 2021 offering ticketing and payment, RTI, account management – described as a first step towards Mobility as a Service [link]
* Swift also provides the ticketing and back-office systems for some of the smaller bus operators in the West Midlands. The bus ticketing options available through Swift at the time of interviews was quite confusing – there were individual operator products and multi-operator tickets (sold at a premium) available through Swift [link]. One interviewee seemed to say that Swift was also the effective back-office for the bus companies’ smart ticketing products [link]. Another mentioned the Chinese Wall between NX’s and Swift’s customer data [link]. Via its BSIP, TfWM moved to implement its ‘bonfire of the bus tickets’ to simplify the number of bus tickets available in the region from 3,000 down to six [link], and in 2023 successfully removed the premium charged for multi-operator tickets [link].
* Swift was involved in an EU-funded MobiWallet project 2014-16 – designed to improve Network West Midlands journey planner and integrated fare management and mobile ticketing via Swift back office [link]
* In 2018, Swift was expanded to include Redditch and Cannock, and Milton Keynes and Hereford in 2020.

### Other public transport integration projects

A key issue in the West Midlands (and illustrative of other areas) is that while tap-and-cap works on Swift, there is a different system for multi-operator nBus tickets, and contactless systems across different operators will further fragment the ticketing/payment landscape.

* Project Coral – led by Big Five bus operators in partnership with DfT, TfWM and Midlands Connect to develop a multi-operator smart ticketing and national back-office solution for multi-operator contactless ticketing across bus and tram services. The solution will be made available to LTAs across England (outside of London). TfWM is key partner in new Integrated Ticketing Advisory Forum [link]. This seems likely connected to the announcement in September 2022 of a £18m project to develop ‘tap and cap’ contactless system across WM – funded through CRSTS – which will operate independently of Swift and extend beyond the region to other commuting areas [link].
* Project Fuse – a separate project led by TfWM with Mott MacDonald and Arup to determine the barriers and opportunities of creating a truly integrated public transport system [link]. It identified 11 areas: 1) Network with all local destinations reachable 2) One ticket (all services including DRT/new mobility solutions) 3) Easy-to-understand network 4) Easy transfer between all services 5) One brand 6) Reliable speed 7) Easy to access the vehicle 8) Accessible stations and stops and comfortable vehicles 9) Network efficiency and affordability 10) Public feedback and customer care 11) Passenger safety, security, and health [link].

## Mobility-as-a-service

### Atkins report for WMITA/TfWM on MaaS (January 2016)

* Report commissioned by WMITA (pre-TfWM) to explore challenges and provide recommendations for developing a MaaS system for the West Midlands – during the Movement for Growth era.

### Whim/MaaS Global trial (2017-19)

* TfWM took this recommendation forward and entered an MoU with MaaS Global in 2017 for trial scheme to run between April 2018 and April 2019. Catapult Transport Systems was also a partner, but the scheme had no public funding and the Whim platform was to operate purely as a commercial product.
* Whim ran as a parallel product to Swift (which didn’t include an app at the time), and offered monthly passes (£99 or £349), and offered planning, booking and travel through the Whim app. Passes were supposed to enable travel on buses, West Midlands Metro (operated by NX at the time), Gett taxis, Enterprise Car, Sixt car rental (unverified if all these were actually available in reality). Nextbike and National Rail (through OnTrack Retail) were also supposed to be added later.
* The Whim experiment was generally not seen as successful in TfWM (lack of control, brand recognition/uptake, money for scaling) or by MaaS Global (financially difficult as pure commercial product). Ultimately, Whim failed to reach many users. One interviewee said MaaS Global found integration of fragmented networks particularly difficult, and the app didn’t work very well as a result, and often had to be combined with a physical Swift card. Interviewees said Whim’s upfront payment subscription-based product was unattractive to users and wasn’t cheaper than ordinary tickets – partly because they didn’t have commercial relationships agreements with operators, and had to buy tickets from them. National Express were particularly unwilling to cooperate with MaaS Global and allow discounted bus tickets through the app, worrying about loss of customers. Booking taxis/ride-hailing services was also described as not working very well, partly due to the small service area.
* By the time the research was coming to an end in March 2024, MaaS Global declared bankruptcy [link] – something of a milestone for the decline of commercial B2C MaaS platforms – with its technology then acquired by Dutch MaaS platform umob [link].

### West Midlands MaaS platform (2024 onwards?)

* Despite the failure of the Whim trial, TfWM decided to continue pursuing MaaS, and put developing a West Midlands MaaS platform at the centre of its successful £22m Future Mobility Zone bid in October 2018 – with funding available through to March 2023.
* TfWM announced in February 2021 it was looking for a front-end MaaS product and was launching a tender. The successful bidder would provide front-end system and API to integrate with and build on top of the existing in-house Swift ticketing/payment infrastructure – with Swift converted into a back-end account-based ticketing system, containing all existing customers and data.
* Interviewees described key elements of the redesigned plan for MaaS as including public control of the platform with TfWM acting as the ‘system conscience’ and ‘honest broker’ at the centre of the system. TfWM would be able to bring in other mobility service providers, starting with bus, tram and rail, extending to West Midlands Cycle Hire and shared e-scooters (Voi at the time, now Beryl), and hopefully car-share and ride-hailing (though these were described as trickier due to lack of leverage over them). The other side of public control was about being able to actively influence user travel behaviour and contribute to the reduction of private car use and sustainable travel (including walking or not traveling).
* The contract was initially approximated as a five-year, £5m contract, with option to extend in 1- or 2-year increments for another 4 years [link] – amended in July 2021 to 30 months for £2m(?) [link]. Interviewees noted that the MaaS system would ultimately need to pay for itself or operate with minimal subsidy [link]. The February 2021 procurement call details key stipulations of the tender, including control over the back-end systems, commercial relationships and mode/operator integrations, pricing, tickets and data [link]
* One interviewee described the proposed West Midlands MaaS system as the largest and most ambitious MaaS project in the world (and a significant gamble) [link]. Two of our MaaS operator interviewees described the tender as extremely complex, noting the number of bespoke features, degree of control/ownership stipulated by the tender. Trafi described the tender as commercially unattractive and decided against bidding on this basis of the design’s rigidity and likeliness of high costs and implementation difficulties – preferring instead partnerships where they could offer their off-the-shelf product rather than a highly managed contract [link]. Siemens Mobility also declined to bid. We think Moovit was one of the final three bidders (alongside Mobilleo and one other), with the interviewee raising some similar concerns as Trafi had – but they weren’t explicit that they were talking about West Midlands [link].
* During the research, TfWM awarded the contract to Mobilleo/FleetonDemand sometime in 2021/22, but its official announcement was repeatedly delayed – eventually made public in July 2023 (well after interviews were complete). The press release promised users would be able to plan journeys, receive live travel information, book and pay for all local transport options – including buses, trains, trams, e-Scooters, walking, cycle hire, taxis (interviewees mentioned this too [link]), Demand Responsive Transport (DRT), car rental, car club and parking through the app. Other partners included consultants Arcadis (providing behaviour change advice), Brompton Bike Hire and Enterprise Rent-A-Car and Car Club, ITO World (real time public transport data), Euclid and Unicard (integration with Swift), and local authority and transport operators. National Express were not mentioned by name.
* When speaking to people at TfWM in the 6-9 months after interviews at industry conferences, the continued delays were often ascribed to getting legal signoff on the announcement and the technical ‘plumbing’ for the system in place. Perhaps most important was National Express pulling out of part of the deal, specifically in relation to relinquishing control of in-app ticketing and setting of fares to TfWM as the MaaS controller. They stated concern about ‘losing control of the customer’ [link] through integration with MaaS [link], which was also mentioned from the TfWM side in relation to their refusal to integrate with Whim in 2018 [link]. It seems plausible this has influenced WMCA’s decision to move forward with its plan to introduce franchising to the bus network.
* On the TfWM website, it is stated that the app will begin its launch in 2024 [link]. A presentation in March 2023 said similar, with MVP and beta testing in 2023 [link].

Overall, the shift in the vision and thinking around MaaS in the West Midlands has been significant. As with Greater Manchester, this project was contingent on winning FTZ funding – but in this case TfWM was successful. There are a few key documents which give overviews, diagrams and chart the progress of the MaaS vision and project. After experimenting with Whim as a commercial MaaS operator, TfWM went all in on developing a publicly controlled platform. Platformisation through MaaS was at the centre of extending control over and integrating public transport and other (new) modes – and by extension the system through which a territorial project of geographical integration was being pursued. Control was framed as being constituted through the platform, but it was also clear over time that TfWM recognised they would need to extend their control over individual modes and networks (e.g. buses, scooters, bikes) to aid integration and govern them together as a system. It’s worth noting that in the early days of the project, MaaS was seen primarily as a tool for demand management to aid TfWM’s ambitious decarbonisation and modal shift targets in its LTP – priorities which were gradually overtaken during the economic/cost of living crisis which peaked in 2022/23.

The shift away from commercial MaaS systems reflected a wider trend, with private MaaS companies nearly all pivoting away from B2C business models and towards B2G service provision contracts with transport authorities (or B2B with large businesses). Yet even among the FTZ areas, the TfWM project does seem the most ambitious in terms of public control over a bespoke platform system – rather than buying an off-the-shelf product – and this was widely perceived (inside and outside TfWM) to be something of a risk in terms of sufficient capability/expertise, costs and commercial viability. The long delays prior to launch – combined with financial constraints facing WMCA – suggest the system will face considerable challenges.

### Other commercial MaaS/journey-planning platforms operating in the West Midlands

* Google Maps launched public transport links to its app in 2014, and multi-modal journey-planning app today includes partial integration of West Midlands Cycle Hire via Beryl and Bolt ride-hailing (i.e. location and journey-planning) in addition to rail, tram and bus. Google Wallet/Pay offers various forms of mobile ticketing and payment.
* Citymapper launched in Birmingham around 2015 (date unverified) and offers multi-modal mapping and journey-planning – with a service area that today stretches across the West Midlands and includes Nottingham. The platform includes partial integration with West Midlands Cycle Hire. In 2023, Citymapper was bought by Via Transportation, the platform operator of West Midlands On Demand DDRT, and soon launched its Citymapper for Cities product – in a clear effort to transition away from a purely commercial B2C business model.
* Moovit also launched its MaaS and multi-modal journey-planning app in 2015, which is available across the West Midlands, offering bus, rail and tram travel as well as walking, cycling and car routing.
* Since April 2024, National Express West Midlands buses have been available through Uber, with ticket purchase integration facilitated by Masabi [link]. This follows the integration of National Express coach services into Uber Travel [link]. Via its launch of ‘Local Cab’ in the West Midlands, Uber has also integrated a number of local taxi firms into its platform ecosystem.

## Data integration and capability

During the period of research, the building of in-house capability around data capture and use was a key theme. This included the development of the overarching data insights team, the human intelligence team (fine-grain mosaic work on personas etc.), the building out of the publicly owned Swift infrastructure for MaaS and the consolidation of urban traffic management through the Regional Transport Coordination Centre (RTCC). Although we only got a flavour of this some elements are captured below through a couple of interviews:

* TfWM ‘in-sourced’ their transport data contract for transport modelling and business case development in 2018, taking over a contract from Mott MacDonald. Since then, data insight has been funded through the seven local authorities and now through CRSTS and infrastructure development via capital investment (e.g. Transforming Cities Fund, FTZ, West Midlands 5G, Commonwealth Games). The data insight team describes its role as data stewardship, providing access to and capability to use transport data for operational, performance monitoring, strategic planning and research purposes. Our interviewee described the wider project of building in-house capability as an important element of local state-building [link]. Today, TfWM’s so-called ‘data engine’ consists of cloud-based data warehousing and analytics provided by AWS Amazon Redshift and SageMaker [link]. Our interviewee described the infrastructure as evolving from a more clunky and overambitious system (for the money they had at the time) tied primarily to ITS infrastructure, to something more useful which brings in data from a range of sources and partners – such as transport open data and data-as-a-service aggregators and providers (e.g. Waze, ITO World, Inrix), transport and mobility platform operators (rail, tram, bus), urban sensor networks, police, etc. [link]. Swift data is another source, and the Swift analytics team has recently been amalgamated under the Data Insights team. The PowerPoint [link] and interview [link] elaborate the different elements and functions of this stack, and various challenges.
* In addition to this, TfWM has invested in an ambitious ‘human intelligence’ project, building up a fine-grained geospatial population segmentation and travel personas down to street level as a resource for informing strategic planning and behavioural change interventions. This draws in Experian, survey and Swift data. The project and its various uses are described in some detail in interviews with the project leader [link] and one strategic director [link].
* An area we did not cover in the West Midlands was ITS associated with urban traffic management – although as in many areas, TfWM appears to have been more ambitious in this area than Greater Manchester and the North East. Funded by the Transforming Cities Fund, the Regional Transport Coordination Centre (RTCC) was opened in late 2019, to aggregate traffic control centre information, monitor and manage congestion, major events and incidents at regional level. It was badged as a ‘single hub’ for TfWM and local transport authorities, agencies, emergency services and bus, rail and tram operators.

## Micro-mobility

### Pre-Nextbike (2015-17)

* As part of the West Midlands Cycling Charter adopted in 2015 aimed at increasing cycling trips by 2023 by 5%, WMCA agreed to investigate a bike-share scheme – made a priority action of West Midland’s Physical Activity Strategic Framework ‘West Midlands on the Move’ and a commitment of Movement for Growth in 2016 [link].
* In 2017, WMCA commissioned ITP to produce a ‘West Midlands Bikeshare Feasibility Study’ – with the brief of exploring options for a no-cost bikeshare scheme for the West Midlands, and included an open day attended by seven potential suppliers (including Mobike and Ofo).
* The recommendations of the study were for a single docked bike-share scheme (warning against the unknowns of dockless schemes at the time) of 3,000-9,000 vehicles, with the need for sponsorship of £1m-3m per year to cover revenue shortfalls. Birmingham city centre, Wolverhampton city centre, in the polycentric centres of the Black Country, Coventry centre and suburbs and Solihull town centre and NEC were suggested as areas of potential high demand.
* The WMCA board accepted the recommendations and put out a zero value tender for a single WM scheme of 3,000-5,000 docked bikes (reflecting the ongoing – at the time – problems with Mobike and Ofo in other cities), with the condition that the operator would need to integrate with Swift. WMCA and TfWM pushed for a single scheme and operator, as opposed to different operators in each city and town – as part of a ‘region building’ logic to the organisation of transport networks.

### Nextbike docked bike-share scheme (2018-19)

* In 2018, it was revealed that German bike-share company Nextbike had won the tender, committing to full rollout of the scheme at no cost to WMCA, and (according to Nextbike) the only bidder willing to run a scheme beyond Birmingham. Nextbike was at the time one of the more established scheme providers in the world, claiming to operate in over 200 locations worldwide. The contract stipulated that Nextbike would ultimately provide 5,000 bikes and 500 docking stations, beginning with 2,000 in Birmingham, Coventry and Wolverhampton, followed by 3,000 more in phases that will also include Walsall, Sandwell, Dudley and Solihull by September 2019.
* To fund the scheme, Nextbike were required to raise sponsorship of £2.6m, but this never materialised. By mid-2019, only 25 bikes were available as part of a trial in Wolverhampton. They had also failed to progress an integration with Swift. In August 2019, WMCA terminated the contract on the basis of non-delivery of the scheme, announcing that a new provider would be sought. One interviewee described how despite a strong sales pitch and relationship development, they claimed to have soon discovered Nextbike had only three UK-based staff.
* In 2021, Nextbike was bought by German e-scooter platform Tier Mobility as the micro-mobility market began to consolidate. Facing financial uncertainty itself as venture capital became scarce and interest rates rose, Tier merged with competitor Dott in early 2024. Nextbike re-established itself as an independent operator in May 2024.

### West Midlands Cycle Hire with Serco/Beryl (2021 to present)

* As a direct result of the fiasco with Nextbike and the limited control TfWM had been able to exercise, WMCA’s constituent authorities were persuaded that a bike-share scheme and infrastructure needed to be publicly funded and owned. Interviewees highlighted the mutual learning between TfWM and TfGM as they launched similar schemes, but noted that to maintain buy-in from all the authorities across the polycentric WM, the scheme was designed to have a presence in each area (unlike in GM), with Birmingham and Coventry given the bulk of bikes – and intended to cross-subsidise other areas which would not be profitable [link]. According to one of its lead architects, the scheme was designed with the purpose of ‘region building’ [link]
* In July 2020, WMCA approved a £15.9m budget for a new procurement process for a West Midlands public bike-share scheme, scaled back to 1,500 bikes (including 150 e-bikes), to operate over a five-year period. An initial outlay of £5m from the Transforming Cities Fund was agreed for buying and rollout infrastructure, system setup etc. In December it was announced that the contract had been awarded to Serco and Beryl, who entered a joint bid as operator and software provider respectively, based on an existing partnership in London – where Serco had long-term experience running the large-scale London Santander public bike-share scheme since 2010. The governance arrangements were substantially different, with the newly branded West Midlands Cycle Hire set up as a publicly owned scheme. TfWM is the strategic and commercial decision-maker, with Serco operating the scheme under a fixed service agreement – providing the bikes, day-to-day system management and maintenance. TfWM retains full ownership of data is generated by Beryl and Serco.
* The bikes were introduced in phases, with the first batch entering Wolverhampton in May 2021, followed by Birmingham – with the full 1,500 in service by August 2021. By March 2024, there were 195 physical and 10 virtual docking stations across the region. According to interviewees, performance of the scheme was reported as most successful in Coventry of the three major centres, while Wolverhampton underperformed.
* As part of TfWM’s wider plan for integrating modes, the bike-share scheme was integrated with Swift payment – meaning a Swift card or account could be used to pay for the bikes. Cycle hire stations were also a key element mobility hub trials funded through FTZ money, although it was unclear if these had progressed beyond one or two prototypes by 2024.
* Financially, the scheme has faced serious problems over time [link]. While one interviewee explained that the scheme was not expected to break even during its initial five-year period (with money set aside to cover a shortfall), TfWM has struggled to find a suitable sponsor. Another interviewee explained that the economic environment made this aspect of the business plan much harder, and indicated that approaches had been made by fossil fuel companies, but these were not viewed as appropriate in the context of TfWM’s decarbonisation agenda [link]. In March 2024, it was reported that the scheme was facing a projected deficit of £6.7m by the end of contract in October 2025 – £2.1m above the £4.6m in reserves WMCA had set aside for poor financial performance. It had lost around 300 of its total 1,500 strong fleet to theft and vandalism since its launch – and had reached a low point of only 783 bikes available in October 2023. WMCA confirmed that it would not be buying new bikes to replace those lost, and that costs of repairs had increased eightfold April-June 2023 compared to the previous year. Up until October 2023, repairs had cost WMCA £166k (in addition to £100k from Serco) and was projected to increase another £150k to repair another 283 bikes over the next four months [link]. WMCA was asked to approve an additional £2.1m to maintain the scheme in its existing configuration through to the end of October 2025 – with other options presented as redeploying most or all of the fleet to Birmingham and Coventry (from Sandwell, Stourbridge, Solihull, Walsall, and Wolverhampton), or full termination of the scheme.
* Noted in the proposal above was the promise of a new regional micro-mobility strategy ahead of the October 2025 contract end, including a strategy for re-procurement which would leave WMCA with less financial liability for the scheme – and the leveraging of a ‘more financially viable’ e-scooter scheme to cross-subsidise the more expensive bike-sharing offering [link].
* As with GM Cycle Hire, WM Cycle Hire represented a significant shift in governance arrangements compared to the previous ‘no cost’ bike-share scheme – with the emphasis squarely on public control as seen as a prerequisite for a scheme that would be both commercially viable and accountable to WMCA and the mayor. However, as in GM, TfWM has faced serious challenges, and at time of writing (April 2024) appears to be in a precarious position.

### E-scooter trials with Voi and Beryl (2020 to present)

* In September 2020, Swedish platform Voi won the tender to operate the West Midlands e-scooter trial as a no cost scheme. Reports said that the trial was particularly ambitious and would ultimately allow 10,000 scooters to be deployed across the region, but it never reached this scale. The trial launched with 200 in Birmingham and 200 in Coventry. In December 2020, 25 scooters were added to the West Brom area of Sandwell too, later increased to 35. The Birmingham scheme – described as the anchor city – was expanded four times, and by May 2022 Birmingham City Council reported that 1,500 scooters were in operation across an 80km2 area and had been used for 1.13m rides [link]. The scheme operated out of a single warehouse with 40-50 staff. While operational, Voi was expected to integrate with Swift and eventually the MaaS scheme, but this was never achieved, with interviewees in TfWM indicating an unwillingness on Voi’s part. The though was involved in mobility hub trials, including a small-scale experiment at Warwick University.
* Voi was launched in 2018 and by December 2021 had been valued at over $1bn after several rounds of VC funding totalling $430m – and was reported to be readying a move to go public. It was one of the largest e-scooter companies in the world. Nevertheless, it made losses of €81.4 million in 2021, and one interviewee from a rival company claimed Voi was losing two dollars for every dollar coming in 2022 [link]. Since the inflationary economic crisis beginning in 2022 however, Voi has been through several rounds of cost-cutting and layoffs in its search for profitability – including 35 staff in June 2022, 130 (or 13%) in late December 2022 [link]. Its share valuation fell by 63% in January 2023 [link], but the company claimed to be closing in on EBITDA profitability in early 2024, while cutting another 120 jobs (12%) [link]. At the time of writing (April 2024) Voi claimed to operate in over 100 cities, but while it said in 2022 that it had 70% of the UK market, it has lost many of those trial areas since, including the West Midlands and West of England metro areas. It should be noted that the smaller Beryl – which replaced Voi as the local operator in the West Midlands – continues to report high levels of debt and after-tax losses of £4.2m in both 2022 and 2023, despite continued growth in revenues, which may threaten the viability of both cycle hire and scooter schemes in the future.
* Since the start of the scooter trials in England, Voi has produced a few reports intended to improve its brand image and recognition and shape policy – including reports purporting to evidence its positive impact on local high streets, the local economy and sustainable travel [links], as well as a brochure emphasising e-scooters’ role in 15-minute cities [link].
* According to interviewees, the Voi trial was widely viewed as something of a failure in the industry [Neuron] and never broke even in the West Midlands. In mid-2022 Birmingham was seeing 40% and 250% fewer rides per vehicle than comparable in comparable cities of Liverpool and Bristol with the same operator [link]. The scheme was reported to face various operational and legitimacy problems, including issues with geofencing, safety concerns, street clutter and users riding on pavements. Coventry halted its city centre trial in its first week (later relaunching on Warwick University campus), while the Black Country and its demographic, political and infrastructural context was described as particularly problematic. Sandwell was the only area to accept scooters, and decided against renewing the trial in December 2022 (after 18,000 rides had been taken on its 35 scooters) with one interviewee saying that they had ‘had enough politically’ [link]. Most seriously, the trial became controversial after two high-profile accidents involving under-age riders in December 2022 and February 2023, the first of which saw a 12-year-old killed after crashing into a bus, and a 16-year-old almost killed by a collision with a car [link].
* In the summer of 2022, TfWM decided to carry out a reprocure for the scheme, after the third DfT extension to the e-scooter trials to June 2024. When Voi’s contract ended in March 2023, no winner had been announced and the scheme was paused with scooters removed from the streets [link]. While it was never made explicit and denied publicly, the relationship between TfWM and Voi appeared increasingly fractious. During the retendering process, the CEO of CoMoUK released a public letter criticising local authorities for adding revenue-sharing conditions to e-scooter concessions – as a move likely to make schemes unviable. TfWM was one of the targets of this letter, with one operator claiming that 40% of the tender was weighted on revenue sharing [link Neuron]. The Voi interviewee said that revenue sharing would ‘kill’ their commercial model. Another interviewee complained that TfWM had already been too keen on squeezing Voi for profits, but never did as the scheme never broke even [BCC].
* In April 2023, it was announced that the concession had been awarded to Beryl – the firm already embedded in the WM ecosystem through the WM Cycle Hire scheme. Beryl began operating in August 2023 with 200 vehicles and a further 700 to be deployed in central Birmingham and its surroundings in September 2023. By March 2024, this figure was actually 800 in total – therefore significantly fewer than under Voi [link]. Unlike the Voi scheme, scooter docks and parking bays were introduced to minimise street clutter. E-scooters were available through the Beryl app – allowing users to choose between bikes, e-bikes and e-scooters. According to interviewees in 2023, it had been a toss-up between Voi and Beryl, and that TfWM would seek to take advantage of having a single micro-mobility operator, the data produced and its existing partnership with Beryl and Serco to experiment with different geographical and modal configurations of bikes and scooters (including understanding how the different modes relate and compete with/cannibalise each other) – as they searched for a viable business model for maintaining shared micro-mobility provision across the region [link]. A March 2024 report to the WMCA board noted that TfWM had agreed a 12.5% revenue share with Beryl, projected to raise £50k per annum to subsidise the bike-share scheme.
* Unlike in Greater Manchester, the marginality of the e-scooter trial has been less about geographical marginality or lack of interest from TfWM, and more about the changing priorities and trajectory of platformisation in the region. The trial’s (and original operator’s) status as a private and modular form of platformisation came into tension with TfWM push for greater integration, regulatory control and revenue sharing. The switch from Voi to Beryl – a firm generally seen as more amenable to a public-private model of governance – seemed to encapsulate this shift. However, as with the cycle hire scheme, the future remains uncertain, given the combination of a wider context of economic and industry turbulence, the legislative impasse in the UK and deeper challenges of commercial sustainability for public/shared micro-mobility.

## Other mobility platforms in the West Midlands

### Ride-hailing (2015 onwards)

* Uber first entered Birmingham in 2015, before spreading to other parts of the West Midlands, with licenses initially granted by Birmingham and Wolverhampton councils. Wolverhampton’s licensing arrangements with Uber have been controversial. By 2017 there was major friction between local councils in the region, with Wolverhampton accused of watering down license requirements as a way of generating revenue – allowing Uber to undercut regulations and fares in Coventry (where the company was operating unlicensed) and Solihull [link]. Similar issues were reported in neighbouring Warwickshire in 2023 [link]. In 2022, Uber agreed partnerships with a number of taxi firms in the Black Country to become part its ‘Local Cab’ system (facilitated by the Autocab platform) option – which enables users to book taxis with other local operators through the Uber app, extending Uber’s influence over the local private hire market and bringing more local firms into its own ecosystem [link]. In April 2024, tickets for local National Express West Midlands buses also became available through the Uber app, with integration facilitated by Masabi [link]. This major local integration appears to pre-empt and rival TfWM’s MaaS app, and follows the integration of national National Express coach services into Uber Travel [link]. TfWM interviewees described Uber as broadly unresponsive to them.
* Black cab booking platform Gett (now with VW as a major investor) entered the West Midlands, launching in Coventry in 2015. Indian ride-hailing platform Ola was also reported as launching across the region in 2019, licensed for both black cab and private hire services. Gett and Ola entered a corporate partnership in 2020, but there is very little information about their scale and reach in the region – although Gett’s website still lists Coventry as an area of operation, and Ola announced it was opening a £100m technical facility in Coventry for building EVs in Coventry in 2022. xooox reportedly launched in 2019, but folded in 2020. In 2021, Bolt also entered the West Midlands, launching in Birmingham and Wolverhampton, followed by Walsall and Solihull, with Dudley and Sandwell planned for the future [link].
* There has also been wider platformisation of taxi market – sees new software companies such as iCabbi, Autocab (acquired by Uber in 2020), Cordic and Karhoo providing similar platform-based booking and comparison services for and across traditional taxi firms.

### Car-share and car clubs (mid-2010s onwards)

* Car clubs are very marginal in the West Midlands. Enterprise has a few car clubs across Birmingham and Coventry, operating since 2015 – and was preceded by Birmingham City Car Club. Enterprise were heavily involved in the FTZ mobility credits scheme in Coventry, and have become a partner in the development of the West Midlands MaaS platform. The other major car club Co-Wheels has operated in the region since 2013, with all its clubs located in Birmingham.
* Following a joint report with Steer, Bolt were in protracted discussions and negotiations with Black Country Transport over trialling a free-floating car club. Although both sides were keen, the scheme was eventually shelved due to long bureaucratic delays within BCT [link]. Car-share start-up Karshare was briefly active in Coventry and Birmingham in 2021, before folding the following year. Various carpooling/lift-sharing platforms (e.g. BlaBlaCar, Liftshare, Jambusters) are also available, but very marginal.

### Public transport platforms

Existing public transport networks have also been gradually digitised/platformised since the late 2000s, with a mix of public and private systems (subcontracted to different providers).

* Mobile ticketing on WM Metro was trialled in 2018 with ITSO Travel Hub and compatible with Google Pay and Wallet. This was extended to local rail in 2020. As far as was we know, EMV contactless has not been introduced yet and is part of the longer TOPO project intended to cover bus, tram and rail across the region. As well as the TfWM app (formerly Swift), there is a MyMetroApp-West Midlands Metro app (developed by CGI) which seems to have succeeded a previous West Midlands Metro app (Xibis). West Midlands Trains Ltd uses Rambus smart ticketing solution in stations (since 2018 after taking over the franchise) and the Trainline platform for its WMR: Train Tickets & Times app (also used by LNER).
* For NXWM, the main bus operator, contactless machines (enabling use of bank cards, mobile, smart watches, cash and Swift smartcard), on-board tech and back-office services are provided by German firm INIT began to be introduced across NXWM buses in 2016. Upgrades were rolled out in 2018/19 with ‘Level 2’ EMV accreditation given to INIT’s open loop account-based ticketing system. According to INIT at the time, digital ticketing accounted for 64% of journeys by this point, with 20% of onboard fares paid by contactless card or phone. Mobile ticketing was introduced from 2016 too, beginning with a student-based trial with digital ticketing platform Masabi. Masabi created NXWM’s mTicket app underpinned by it JustRide platform. In partnership with INIT, mobile ticket QR scanning capability was rolled out across the whole network by 2023. All kinds of tickets (including multi-operator) are available as mobile tickets. NXWM’s deep integration with Uber is enabled through the Masabi JustRide platform (which is different to its coach travel integration with Uber via booking platform Omio). Masabi also works with Moovit, who provide their branded journey planner on the NXWM website. NXWM have a partnership with Cityswift to provide real-time bus capacity information. Back in 2018, the company was also involved in a trial with Remix (now owned by Via) – using the platform to improve network planning and development.
* Across the other bus operators with small market share, platformisation is fragmented. According to project mapping work in 2022 (possibly not all accurate), Ticketer is used by Diamand, First and Arriva, while Stagecoach uses Vix Technology. Other platforms and software companies provid a range of services and products, including mobile ticketing, journey-planning and maps, real-time info and timetabling, network planning and mobile apps – including Corethree (First, Arriva), Rise Digital Media (Diamond/Rotala), HaCon (Arriva), Optibus (Stagecoach), Trapeze (Arriva, Stagecoach) – while others have been developed in-house (e.g. First [link]). One of our interviewees seemed to suggest that some of the smaller operators use Swift as their back-office.
* In 2019, National Express Accessible Transport took over the West Midlands Ring & Ride (the largest of its kind in the UK) and Travel Assist school services in Birmingham, after former nonprofit operator ATG fell into administration. In 2022 a phased digitalisation of the services across Birmingham and the Black Country has been contracted to Australian DDRT platform Liftango, to create customer and driver apps designed for community transport [link]
* As part of the FTZ, DDRT service West Midlands on Demand (WMoD) has been operating in the Coventry and Warwick University area with Via as the platform operator in partnership with WeDRT (now WeMove), TfWM and Coventry Council. The service launched in April 2021 with four vehicles and was funded primarily with FTZ funding, with additional money from Warwick University and an S106 [check/link]. The service expanded on two occasions, including through a trial [link] and then full merging with the local Ring & Ride service – growing the fleet to 14 vehicles [link]. Interviewees from TfWM, Coventry Council and Via were all broadly positive about the scheme, but emphasised the necessity of fine-tuning fleet management and need for longer term subsidy beyond the trial period if it was to prove viable [link]. Public authority interviewees also emphasised its experimental status and consideration of DDRT as part of an integrated single network [link]. TfWM has become the sole funder of WMoD since late 2023, with service areas beyond the WMCA border removed [link].

### Other mobility platform experiments

* As part of an FTZ funded trial, TfWM and Warwick University initiated Choose Your Way Warwick, which included taxi aggregator Tandem (on-demand taxi sharing), Betterpoints (app supplier), WM Cycle Hire (cycle operator), WMoD & Via (DDRT operator), Liftango (car sharing operator), Enterprise (car club operator) [link]