
G-Cloud 15 Service Definition

Lot 3: Cloud Support

Parallel Data Intelligence

parallel

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Introduction

Parallel specialises in data driven software and support to encourage proactive, data led decision making. Parallel is the provider of Strata (formerly known as SHAPE) the trusted, evidence-based platform designed to help the NHS, blue light organisations, and public sector partners including local authorities, mayoral combined authorities, and government agencies plan services, estates, coverage, and resources with clarity and confidence, using data-led insight.

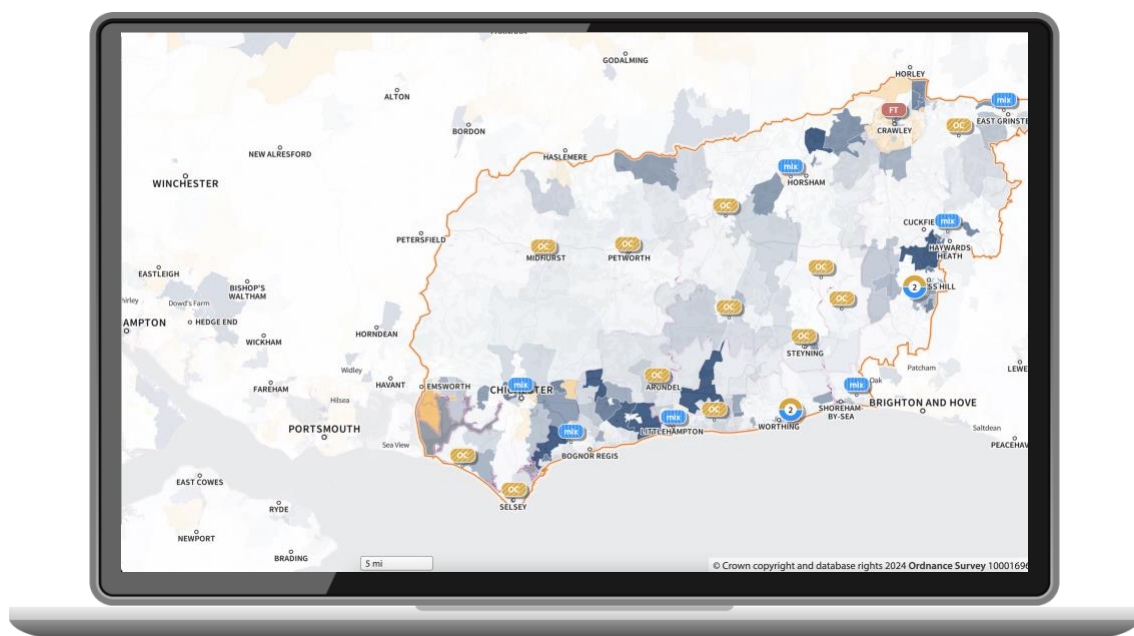


Figure 1 - Strata Platform

Service Overview

Parallel offers a holistic service for the design, implementation and support of data-driven software and data led digital solutions with tailored interactive mapping, analytics, customisable reporting and visualisations. Parallel understands the challenges within the public sector and how data driven solutions can support in making best use of finite resources. The organisation believes strongly in a user story led approach, using appropriate technologies to deliver usable and innovative solutions.

Our software provides valuable insight to inform service and estates planning along with complex project management. Parallel's software includes a range of tools and features, including:

- Multiple data overlays, inclusive of clients' own datasets
- Interactive multi-layered data mapping
- Intelligent data review
- Customisable data visualisation
- Custom business intelligence and KPI reporting with dashboard views

- Travel-time catchment analysis
- Population demographics from trusted sources such as ONS, Census and NHS Digital
- Trend and forecasting functionality

We work with healthcare providers and commissioners, property teams, education establishments, charities, blue light organisations and local and central government departments to provide digital solutions supporting more efficient public service delivery. We offer cloud services and support in the following categories:

- | | |
|--|--|
| • Analytics | • Healthcare analytics |
| • API connectors and interface engines | • Healthcare management |
| • Business intelligence | • Machine learning and artificial intelligence |
| • Website build | • Procurement |
| • Decision support | • Project collaboration |
| • Content management system (CMS) | • Project management |
| • Contract management | • Reporting and dashboards |
| • Data mining, analysis tools and analytics | • Workflow |
| • Data visualisation | • Workforce analytics |
| • Digital asset management | |
| • Geographic information systems and mapping | |

Service Definition

Service features

- Interactive mapping and data visualisation incorporating clients own data
- Customisable reporting with flexible import, export and live feed options
- Preloaded with NHS, ODS, Census and ONS data
- Integration with existing systems and linked datasets using APIs
- Live chat integration, resource centre and helpdesk
- Data dashboards, flexible user generated reports, strategic decision-making tools
- Capability for multiple data geometries and user defined boundaries
- Dynamic multi-mode travel time catchment calculation, display and population analysis
- KPI reporting, data export, integration with preferred BI tools
- Efficient data capture, editing and workflow and automation

Service benefits

- Data-driven strategic decision making for health, service-planning and estates
- Collaboration and sharing of geographical information with partner organisations
- Seamless integration creating a single source of truth, identifying efficiencies
- Flexible reporting dashboards for user-defined data visualisation and export
- Extensive population, health and property intelligence through multiple data overlays
- Maximising productivity through automated workflow and project management

- Efficient data capture through user-friendly interfaces
- Flexible data import formats, live feeds and data editing modes
- Powerful travel-time analysis for single and multiple sites and services
- Customisable features, display with holistic and enriched insight

Expertise and Capacity

Parallel's team includes experts in software development, stakeholder engagement and registered practitioners in business case development and project management. Our developers work across a broad range of programming languages and development frameworks and have extensive knowledge in public service delivery. We are specialists in mapping and data visualisation, dashboard reporting systems and customisable digital solutions, particularly for clients within the NHS, blue light organisations, and public sector partners including local authorities, mayoral combined authorities, and government agencies.

Since Parallel's establishment technology platforms have been modernised and software integrations have evolved keeping our software current for optimised end user experience. The rapid rise of the capabilities of online mapping over recent years and the demand for artificial intelligence and machine learning along with API functionality has seen Parallel's team support client requirements. The current project portfolio ranges from small, short term local projects to national projects for large organisations including NHS England and Cabinet Office. We also have recurring annual projects where we provide ongoing hosting, support and system maintenance.

Software and Service Capability

Single Source of Truth



Figure 2 - Strata Platform Single Source of Truth

We specialise in software creation that provides a collaborative workspace, bringing multiple parties and disparate datasets together to create a single source of truth in one accessible platform. The software we deliver is designed for effective workflow and contract management ensuring resource efficiency is maximised and it is also used for ongoing data collection exercises. A user-friendly interface is provided allowing efficient and appropriate information sharing.

"Although we had a good handle on our estate data before, Strata has been a digital innovation for us."

Craig Boyles, Estates Programme Manager, Norfolk and Waveney ICB

Collaboration and Integration

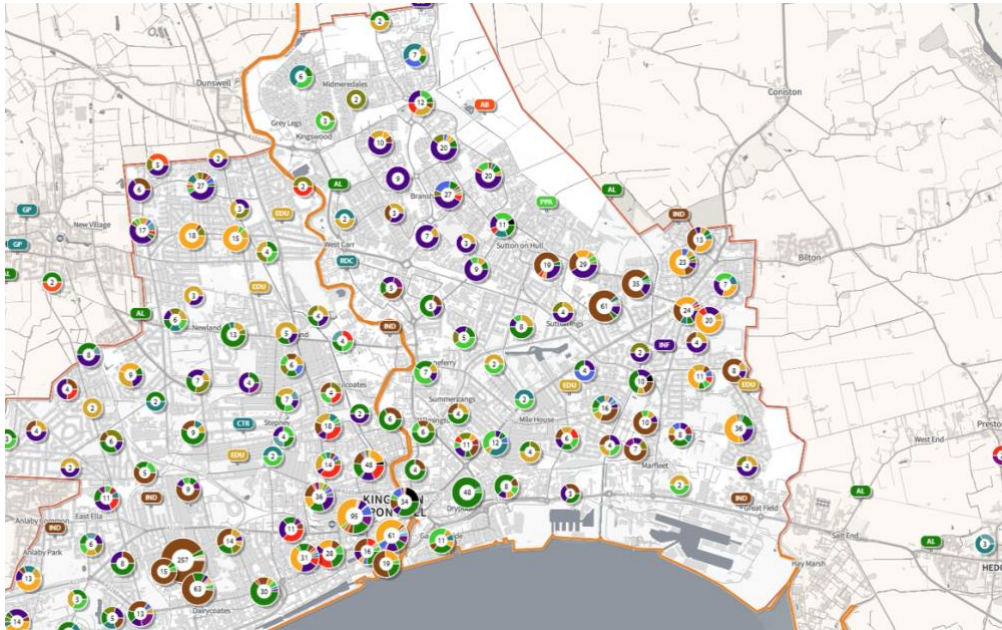


Figure 3 - Strata Platform One Public Estate

Public Sector Organisations can work collaboratively on effective solutions across organisational boundaries to support a strategic approach to capital investment plans and public estate maximisation and utilisation.

"Using Strata for our One Public Estate (OPE) programme has catalysed major service transformation for the region, helping us to consider the integration of public services."

Gemma Aked, One Public Estate Manager, Hull City Council

Data Editing, Management and Storage

Currently viewing visible locations from the map

Enhanced Fields Only [Export records](#)

GP Practices 132 Practices	NHS Property Services 48 Premises	Community Health Partnerships 0 Main Locations	NHS Trust Provision 340 records 19 organisations	Independent NHS Provision 150 records 39 organisations	Enhanced Fields Completion 65 % 14 Enhanced fields	Classification Status 90 % 606 out of 673
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Filter Locations
Select a type or organisation

Search in records
Search by name, address, postcode and ID code [Open in ICS Atlas](#)

Unique Location Selector

- Abbey Wood Medical Practice
1 record
- Aradbury Family Health Centre
2 records
(1 ignored record)
- Aradbury House Surgery
2 records
(1 ignored record)
- Aradbury Surgery
1 record

194 unique locations

Selected Locations Records

Show as locations Show as records Hide ignored

Enhanced Fields Only Classification Activity Location Occupation Tenure Revenue Opening Rooms Building Sustainability Survey Backlog/Forward Maintenance

Flag/Comment

ID Code	Name, type and organisation	Responsibility/Ownership	Occupier	Incidental/Sessional Use	Ignore	Primary Care	Acute
000005	Abbey Wood Medical Practice Single GP practice Shared Health Group 5		✓			✓	

Figure 4 - Data Management Workflow

Editing tools provide clients with the capability to edit, manage, upload and store their own data and information files, either at individual record level within the map environment or within tabulated views of multiple records to maximise productivity. Full audit records of changes are maintained. Outside of data editing mode there is the ability to lock down access to sensitive information as appropriate with varying levels of user permission levels as necessary.

"It's revolutionised the way we work, and means we can make decisions with confidence, knowing we've got all the facts available."

Andy Hadley, Head of Primary Care Estates and Digital Transformation, Staffordshire and Stoke-on-Trent ICB

Multi-Dimensional Data Visualisation

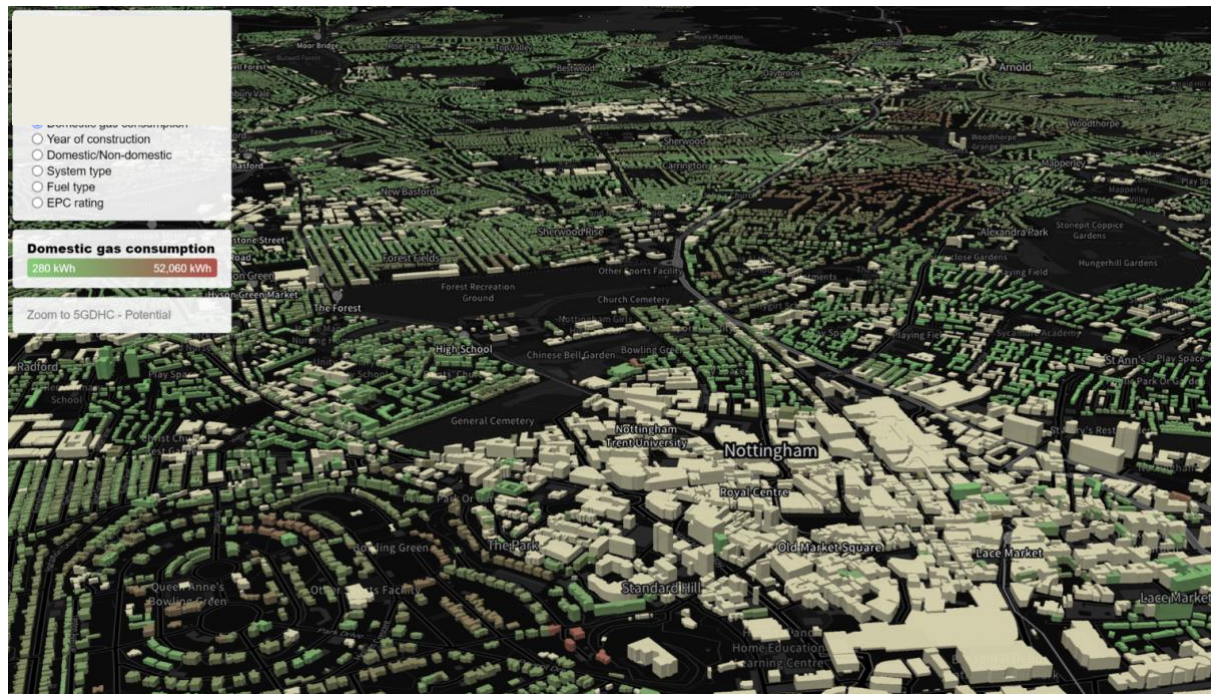


Figure 5 - 3D Modelling of Domestic Energy Consumption

Organisations can visually analyse their data and create maps in different dimensional formats to support business case or national report submissions. Complex datasets can be displayed in a clear way for informed and efficient analytical assessment:

With over 40 trusted national sources, Parallel brings together population, demographic, service provision, activity and estates decisions information into a single, consistent, map-based view which can be enhanced with client data to support their requirements.

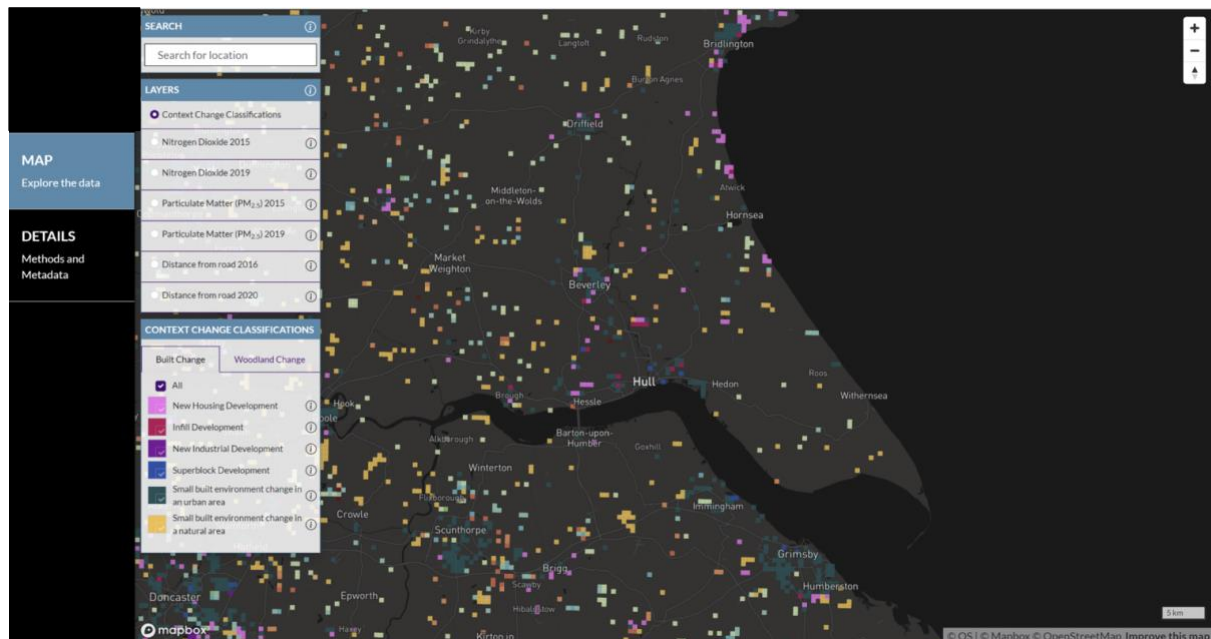


Figure 6 - Impact on Built Environment

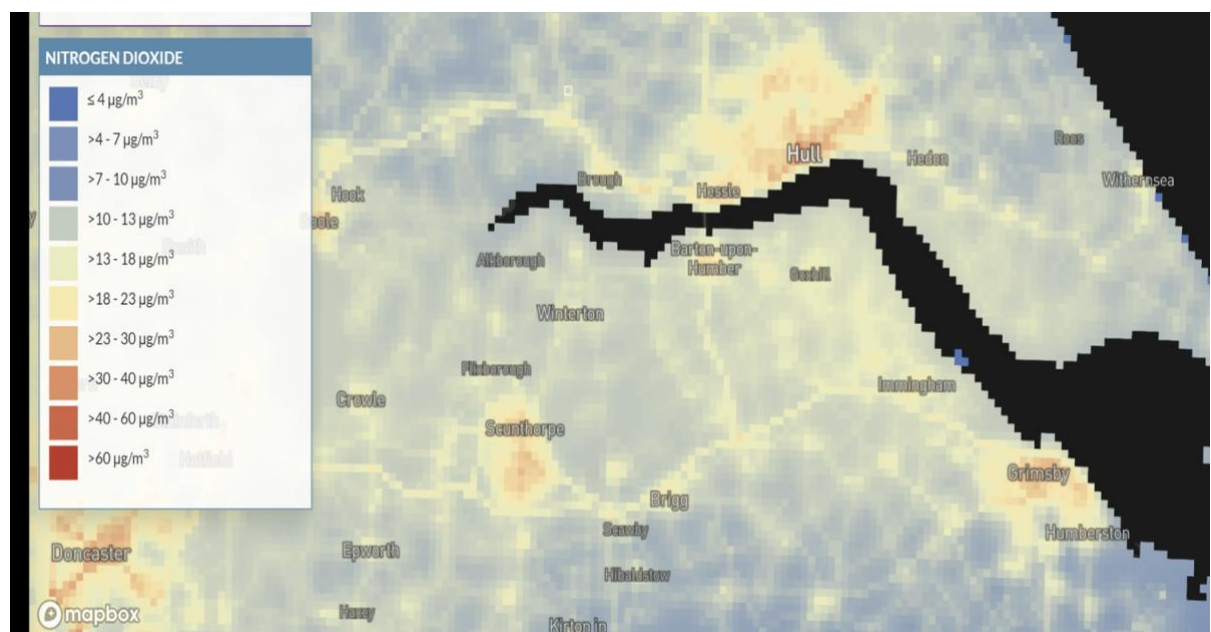


Figure 7 - Environmental Data Display

Modern, mapping technologies are used to deliver visualisations to users. Components can be integrated into existing client environments, a standalone self-contained integration, or a fully-fledged client-branded independent application.

Visualisations can be generated as interactive points, polygon areas or boundaries, heatmaps or 3D rendered objects rendered with layering of boundaries and geodata to provide enhanced data analysis.

"Being able to bring everything together and visualise it on a map makes it much easier to understand and allows us to identify our innovators who are making the most of their resources,

and those who need extra support. It really makes us confident that we can make decisions for the future that will really matter."

Nick Germain, Primary Care Manager, NHS South Yorkshire ICB

Travel Time Catchment Calculation and Routing Options

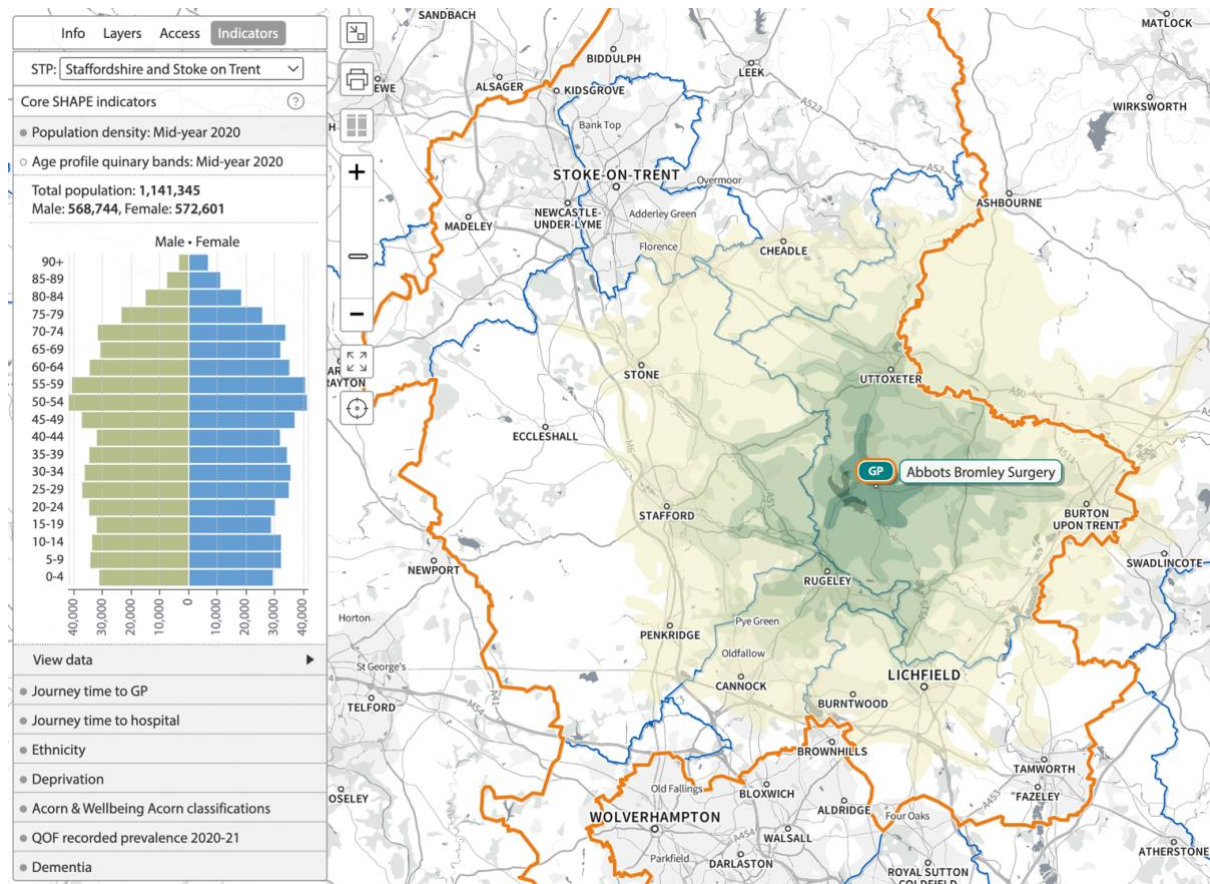


Figure 8 - Travel Time Catchment and Population Demographic

Users can dynamically generate access catchments for walk, cycle, car and public transport, for one or many sites and then get detailed population demographics for any specific catchment.

On-demand address geocoding, location searches and routing options are available using online external web services.

"The Strata mapping tool has significantly improved our understanding and decision making. This has informed next steps based on health inequalities ensuring as many people as possible have equal access to high-quality diagnostic services."

CDC Programme Team, NHS England

Population Projections and Trend Analysis

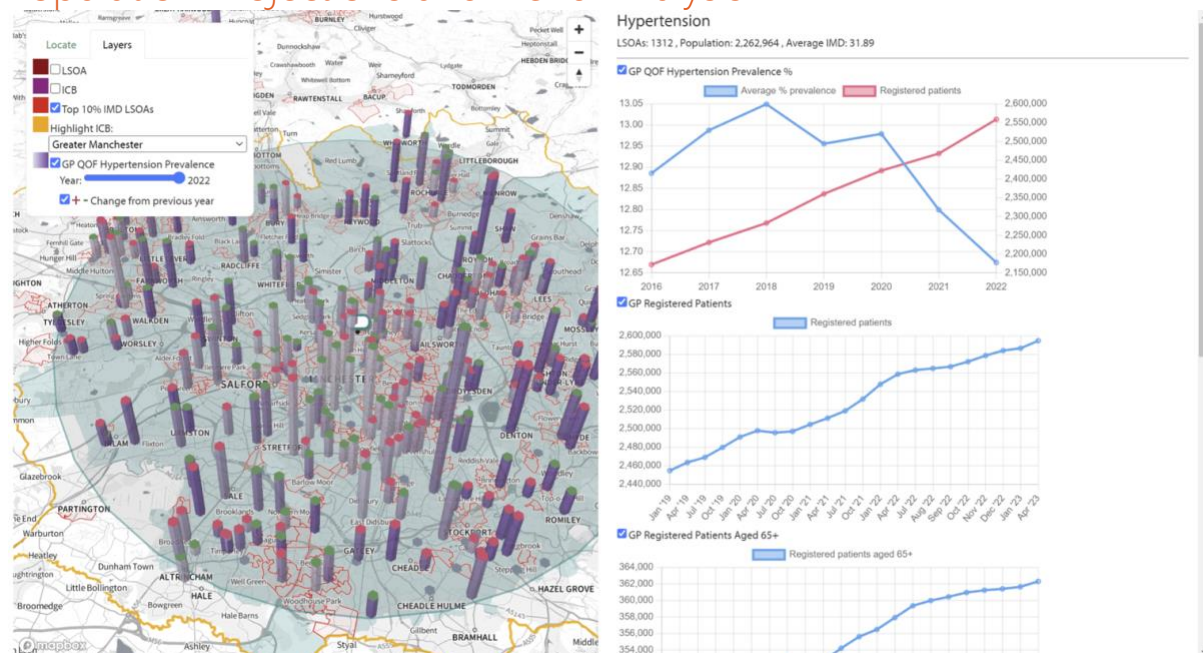


Figure 9 - Disease and Outcome Prevalence Projections



Figure 10 - Population and Housing Projections

Parallel supports organisations to understand how populations are changing over time and what that means for future service demand, infrastructure, and investment. By combining national population projections with local demographic trends, service activity data, and spatial insight, Parallel can help organisations model future scenarios, identify emerging pressures, and test the long-term implications of different planning decisions. This includes analysing changes in age structure, deprivation, population growth and decline, and the geographic redistribution of need, enabling organisations to move from reactive planning to proactive, evidence-led strategy. Through clear visualisation and robust trend analysis, Parallel enables leaders to plan with confidence, align services to future demand, and make defensible decisions that stand up to scrutiny.

"Strata supported our strategic thinking so we could recommend contributions from housing developers of £18m to provide general practice facilities for York residents."

NHS Property Services

Service Assurance Information

Provision of the service provides a cost-effective solution, incorporating intelligent end-user tools designed to offer efficiencies and integration with client linked data sources. API integrations allow automatic data updates from internally used databases and systems which ensures the effortless software maintenance for the client. Restful API are available for read only data retrieval with option filters for a limited subset of datasets based on users permissions and terms.

Incident Management, Back-up and Restore

Windows Defender, Azure Sentinel and others are used across all our relevant cloud services for advanced cybersecurity threat identification and prevention. A wide range of potential compromises are monitored and protected by these solutions, covering all services and including automated preventions for database injection, suspicious end-point activity through to Denial of Service attempts. Additional monitoring and alerting is in place for service usage, capacity and connections, and alerts and notifications are generated in real-time, within 1 business hour. Parallel's stringent and embedded incident response processes are invoked for appropriately prioritised action by the team and contracted 3rd party experts.

Backups are taken automatically and are stored in geographically distinct secure virtual storage areas. Where applicable, site replication is enabled for near real-time replication of sites and databases to ensure failover recovery is possible and achievable within acceptable recovery time objectives.

In the event of an incident users will be notified by a public dashboard or status page within our software to allow them to check the current status of service or any ongoing issues. Email alerts are also issued to users to notify of any planned or unplanned outages or disruptions. We may also use our customer support channels such as the live chat (subscription dependent) and helpdesk support to inform customers of any issues. We also have social media accounts that users can follow to be kept informed of any critical information. Users can report any incidents directly through our website, helpdesk or email.

Service Requirements

There are no service constraints but access to our cloud services requires network connectivity along with the use of a modern web browser. We recommend an end user device with a specification of at least 8gb of RAM and an i5 or higher processor.

Data Protection

Parallel adheres to applicable data protection principles, standards, and information governance requirements.

Security

Parallel are Cyber Essentials Plus accredited, cloud software and digital solutions are delivered from secure, encrypted websites.

A proactive approach is taken to information security and processes include; data cleansing, secure equipment disposal, penetration testing, vulnerability management, protective monitoring process, incident management and response, access control testing, configuration and change management. Monthly information security forums are held where we review our software, devices, processes and policies and update the logs and trackers implemented to help us maintenance best practice and the highest levels of competency. All staff are trained and assessed on cyber security and keep them informed of any changes to our security policies or procedures. Information security is championed at board level with quarterly update reports.

Hosting

Parallel offer a range of hosting solutions: Cloud-based virtual servers hosted directly by Parallel through our secure cloud providers, hosted dedicated servers, or the client's own existing hosting solution.

Within a fully cloud-based solution Parallel manage separate database and website servers for live and UAT environments, either in a dedicated or shared-host cloud server environment. The configuration required is usually based on the client's and their user's requirements and the hosting budget. Provisioning of the hosting service is normally undertaken by Parallel on the client's behalf.

Access Control and User Management

Role based access controls are managed at top level and administrative accounts are managed separately. MFA and biometric controls all in place and access is only granted on an as required basis and is adjusted accordingly when someone moves roles within the company. Access to management interfaces and support channels is documented in a permissions tracker and reviewed at regular information security forums. We have an Information Security policy which details authorised controls based on roles. User management can be undertaken either by Parallel as a managed service or by clients directly using a set of simple administration tools. The solution is driven by the needs of the client.

Performance

Our SaaS products and services are subject to ongoing capacity reviews, performance enhancements and can auto-scale to handle increased demand. They are designed with

scalability and elasticity in mind to ensure increased usage does not hinder performance. Where required, products run in dedicated environments with full resource isolation, data ring fencing and scaling options.

Testing and Quality Assurance

All our software is continually assessed, tested and improved in the following key areas:

- Bug and issue tracking and resolution
- Security monitoring and improvements
- Performance monitoring and improvements
- User maintenance
- Infrastructure and cloud environment management
- Disaster recovery and business continuity including back up strategy
- Configuration management and patch/update processing

We take the following approach to testing:

- Exploratory testing – our testers explore the product from a user perspective and identify bugs not always identifiable by automated testing.
- Structured testing – A suite of test cases are developed alongside the use cases and are followed step by step to ensure bug free operation on the core functional areas
- Regression testing – runs after every change to ensure the change does not introduce or reintroduce unwelcome bug or issues.
- Performance testing – we evaluate the stability, speed and responsiveness of systems to ensure user experience benefits from a performant system capable of handling the anticipated workload and future capacity needs

Site Analytics

Direct access to Google analytics is provided to clients wishing to monitor their own usage statistics. Service metrics are available on measures such as levels of active and inactive users to inform on user engagement and system adoption, session duration, frequency of use, number page loads and data calls, date and timestamps.

Implementation and Support

Onboarding

The implementation process is designed to be smooth and straightforward, with an easy-to-use onboarding experience that works across end-user devices. Before signing up, users can join

product demonstrations to see the benefits of the software in action, understand how the software works, and explore how it's been utilised in similar case studies.

Once signed up, users are given clear information on how to request approval for access to additional features and data.

Depending on the subscription, Strata offers a 24/7 online self-service resource centre with FAQs, training videos, user tips, and case studies. Users can also get support from the Parallel team via email or live chat.

Some subscriptions include a dedicated account manager who provides regular check-ins, helps users get the most out of Strata, and reviews usage data.

Regular user forums are run to introduce new features, share updates, and give users the chance to exchange tips, learn from each other, and suggest product improvements.

Offboarding

Where the product is a subscription application, the organisation lead is notified no less than one month prior to subscription expiry via email automatically with renewal options.

For products which are under contract, the end of contract process is clearly set out and aggregated in the initial fee proposal and contract terms. Prior to the end of the contract, following client discussion, a fee proposal will be issued to inform the client of the ongoing costs to extend the service.

Where applicable, export functionality exists within the system so users can extract data subject to permission levels. Where required, Parallel can also supply full data extracts upon request.

Availability

Parallel provides 99% availability of core functionality within business hours (Mon – Friday, 9.00am-5.00pm). User subscription periods will be extended to account for the length of downtime below the SLA.

Support

For any commissioned project a technical account manager is allocated who works closely with customers and the wider technical team. They will act as the first point of contact and provide client and third-party support throughout the commission from initiation through to project completion and post care.

Customers also have direct access to wider team members by email and helpdesk support Monday – Friday 9.00am – 5.00pm.

Training

The team provide presentations, workshops and online webinars. Parallel provides an online 24/7 self-service training resource centre including FAQs, training videos, user insights and case studies. Users can also contact the Parallel team for support via email or live chat (subscription dependent).

Data Import and Export

Different export functionality and capabilities are provided dependent upon the cloud software service. File types supported include: csv, odf, excel, pdf, jpg, jpeg, png and txt.

Where applicable, export functionality exists within the system so users can extract data subject to permission levels. Where required, Parallel can also supply full data extracts upon request. Dependent upon user permissions and software access, it is also possible for live feeds via API.

Parallel have an extensive range of solutions for data reporting allowing direct user manipulation of complex tabulated data. Our tabulated reporting tools enables users to work with linked datasets to prepare reports for further mapping, editing, visualisation or export.

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