

# Estates Visualisation

A data-driven approach to  
strategic estates management



# Introduction to data and estates visualisation

Utilising the power of data and modelling to understand the performance of large estates and simplify complex estate-wide decision making.

Data and Estates Visualisation allows organisations to understand their estates data and performance to allow them to unlock and identify the future requirements of their estate and business.

Through the collection and analysis of estates data and information, organisations can visualise complex estates problems and intelligently, and simply, justify future decision making.

Our expert team of consultants and analysts support organisations with the collection, analysis, modelling, and interpretation of data. Through utilising multiple data sources, they can create data tools, dashboards, reports, and visualisations that provide valuable insights into our client's operation, estate, and business.

Our team work with our clients to ensure they have the right information and data to enable informed decisions to be made surrounding their business and operation.





# Using data to optimise the estate

The application of data analysis and visualisation allows organisations to optimise their estate and how it performs. Our experience of delivering this service to estate owning organisations has enabled us to support clients with the management of:

## Long-term maintenance planning

Organisations with multiple, small projects spread over different buildings, may find it difficult to visualise and understand the overall maintenance requirement and programme. Utilising data to model the estate/buildings allows organisations to visually understand the extent of their maintenance projects. Visualising an estate in this way and applying estate data enables organisations to:

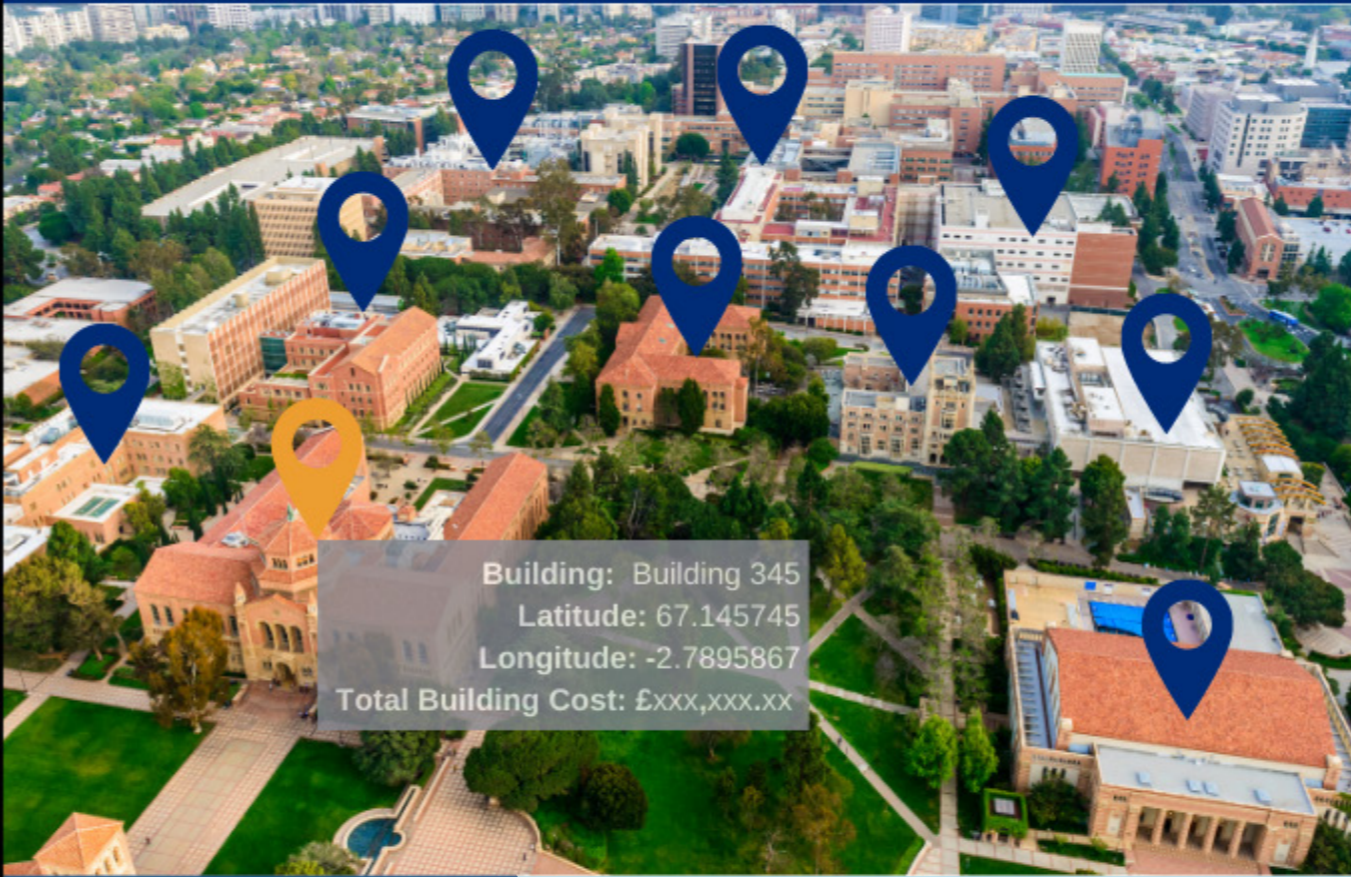
- Identify common work packages and areas
- Understand areas of prioritisation and decant constraints
- Schedule works without impacting business operations


## Whole-life cycle costing

Undertaking data analysis and evaluation to understand the whole-life cost of buildings, assets and technology. We seek to understand and uncover the associated costs of existing and proposed assets to determine best value options for our clients. An initial low value investment can create higher, longer term operating and service costs. Provelio assess the whole-life cycle cost of the entire investment, project or portfolio including:

- Investment cost: The initial upfront investment/cost
- Maintenance/servicing costs: The costs of running and maintain the investment over a fixed amount of time.
- Operational costs: Additional operational costs that are associated with the investment
- Occupancy costs: The costs associated with supplying services and occupants
- End of life costs: The cost of any future disposals or demolitions associated with the investment

### Estate Visualisation Tool - Long-term Maintenance Planning





**Building Groups**

Delivery Year: All

Type Of Element Grouping: All

Building: All

**Element Groups**

Type Of Element Grouping	Total Maintenance Cost
Building Contractor	£0,000,000
Roofing	£000,000
Lifts	£000,000
Windows / Doors	£000,000
Ground Works / Civils	£000,000
Electrical	£0000
Mechanical	£000,000
<b>Total</b>	<b>£000,000,000</b>

**Elements**

Element	Total Maintenance
Internal Wall Finishes	£
Roof	£
Internal Walls and Partitions	£
Ceiling Finishes	£
Lift and Conveyor Installations	£
Sanitary Appliances	£
Internal Floor Finishes	£
Internal Stairs and Ramps	£
Windows and External Doors	£
<b>Total</b>	<b>£</b>



## Carbon reduction and management

To be able to reduce carbon usage across an estate you firstly need to understand your current usage, the starting point. This usage combined with the organisations net-zero targets identify how much carbon must be reduced across the estate. This allows for a programme of reduction and mitigation projects to be created. The data from this programme of works can be combined, and visualised, with other programmes of work across the estate ensuring that carbon reduction is undertaken in conjunction with the wider commitments of the organisation's capital and maintenance programmes. This approach to carbon reduction enables organisations to:

- Save money on overlapping programme projects (e.g. a project is identified in long-term maintenance and is also highlighted as a carbon saving project)
- Prioritise projects that create the bigger time and cost saving by having a wider strategic scope on project delivery
- Efficiently undertake building works with minimal operational disruption

## Space usage and utilisation

How organisations now use space has significantly changed. To get the most value from your space means understanding how that building is utilised and what it is used for. Collecting, analysing, and visualising data on space utilisation allows organisations to better understand the performance of their space. Poor performing space can be costly to a large estate, but by identifying these areas organisations can look at methods of optimisation and utilisation to generate additional value that enhances the performance of the entire estate.

## Decant management

For some projects to be undertaken it is necessary to decant operations into a temporary facility. Within many estates decant space can be limited, and not offer the same functionality, therefore the need to decant must be considered and carefully planned. Estates visualisation captures all estates data from maintenance, energy, space, capital projects and procurement and identifies how particular buildings should be prioritised, including the impact of decant. The data tool enables organisations to understand the impact decanting a building would be, where would be the most suitable place to decant and all the projects that must be undertaken to ensure the decant is efficiently undertaken.

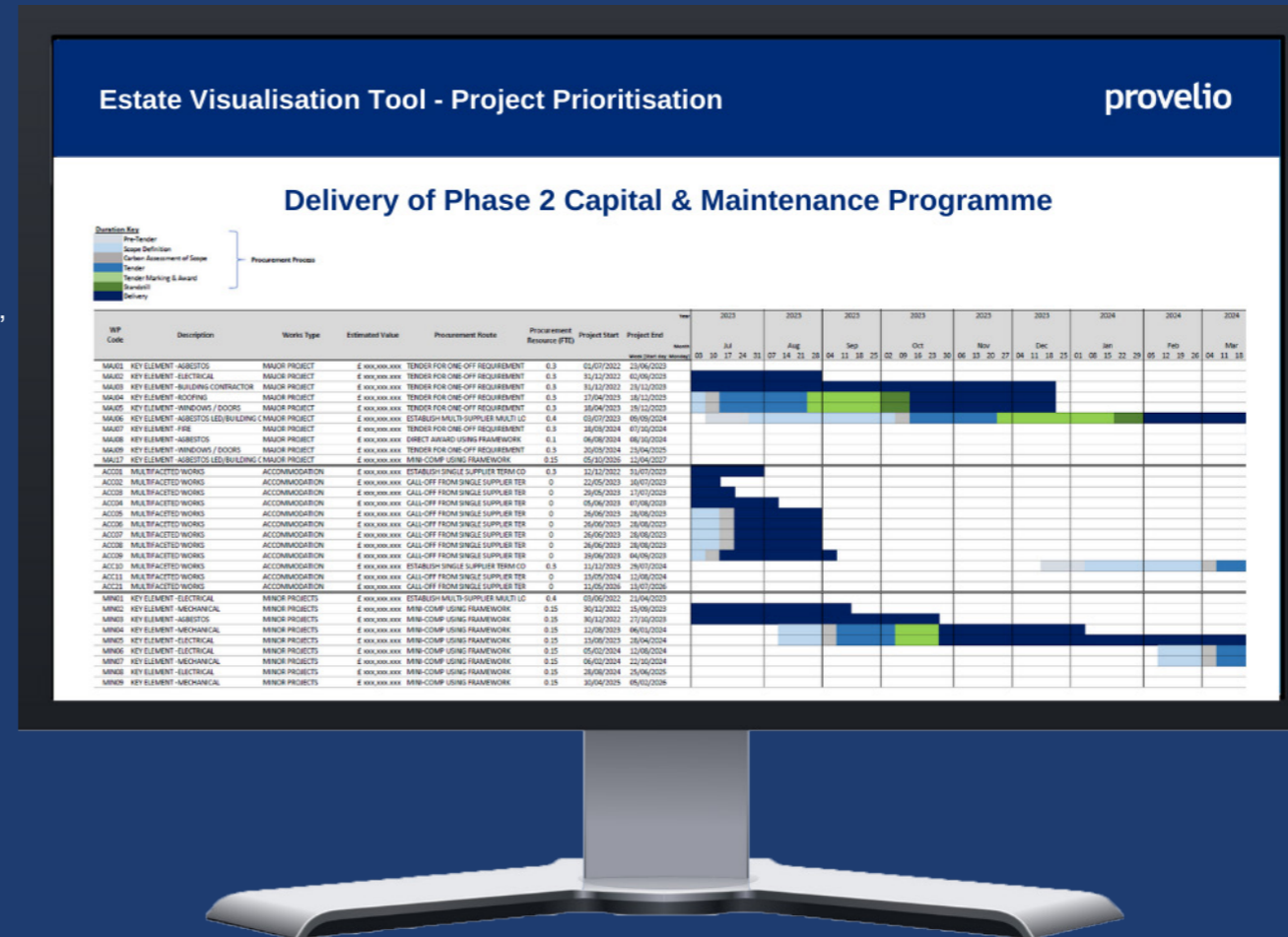




# Capital programme prioritisation

Capital Programmes are typically influenced by the wider organisation's strategic direction and funding. To get the most out of your estate, funding capital projects should be considered in conjunction with other key aspects of the wider estate agenda. Collecting data on other estates functions such as procurement, maintenance, energy, and space enables a wider visualisation tool to be generated that identifies how projects should be prioritised. The data-driven tool enables organisations to intelligently prioritise capital projects based on:

- Available funding across differing timespans
- Space and decant availability
- Project characteristics, such as:
  - Compliance
  - Health & Safety
  - Operations
  - Carbon
  - Procurement
  - Timescales for delivery
  - Resource requirements

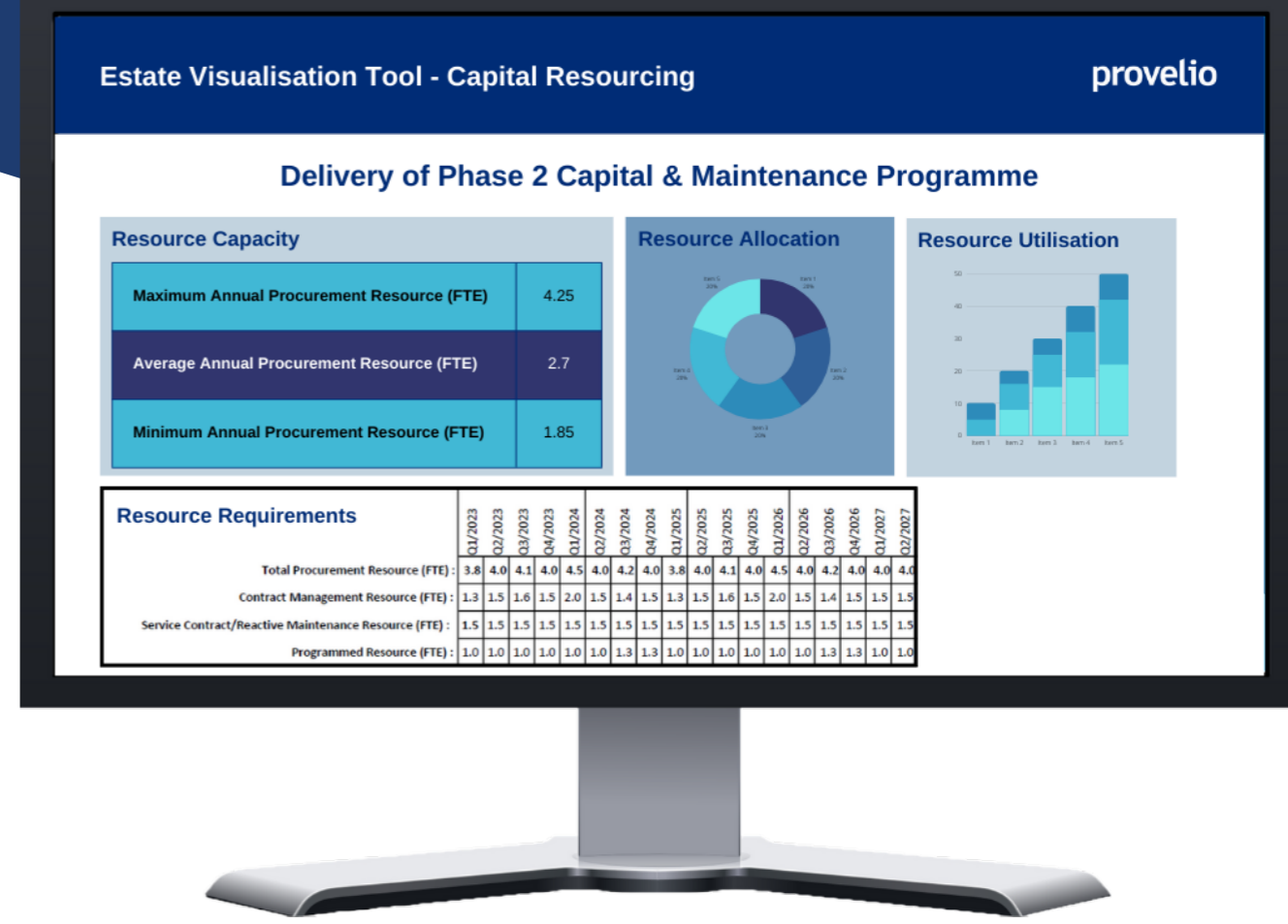


# Capital resourcing and procurement

Maintaining an estate and undertaking capital projects requires resource to undertake the procurement activities associated with the proposed future works. The planning of future estates work must be done in conjunction with available resource to ensure the work can realistically be undertaken and managed. Data and Estates Visualisation allows the resource and procurement requirements of each project/programme to be considered within the data capture and analysis process. This enables organisations to understand the impact of projects on their available resource and develop an achievable schedule of work based on the following parameters:

- Funding
- Compliance
- Timescales
- Resource

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 Allowing our clients to easily visualise the future of their estate



# Benefits of estates and data visualisation

- Have your data efficiently collected, processed, and presented in a manner that allows your organisation to develop actionable tasks going forward
- Ensure an individual is focused and dedicated to the task, to ensure it is completed in an efficient manner
- Save time and money by outsourcing the work
- Large volumes of data are daunting to view and difficult to begin analysing. An experienced consultant knows how to handle this data and will make it easier for you to understand and utilise effectively
- Risks can be mitigated more effectively when data is analysed to provide predictive power and accurate forecasting.
- The data collected can help inform project and programme delivery
- The organisation can identify areas of growth and business development
- Determine the priority of tasks to ensure the right tasks are being actioned at the right time

## Data and Estates Visualisation Services

Key services provided by Provelio as part of their Data and Estates Visualisation service include:

- Cost Modelling
- Space Utilisation
- Cost Benefit Analysis
- Life-cycle Costing
- Scenario Planning
- Carbon Modelling
- Benchmarking Analysis
- Impact Assessments

Visualise the future of your estate





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provelio