

5 Ways to Unlock Value and Opportunities from Public Sector Land



This short guide for the public sector will:

- provide an overview and practical tips on how to unlock the value and opportunities that can be derived from land.
- showcase ways to use technology and consultancy to speed up the assessment process and give you more higher quality information so you can make informed decisions.

The Covid-19 Pandemic has shone a spotlight on the importance of home and its impact on our lives and wellbeing. As the inequalities in society become far more apparent, particularly when it comes to housing, the levers from which the public sector is able to respond are getting harder.

The Covid-19 Pandemic has forced organisations to fast track their adoption of digital technology particularly supporting day-to-day ways they operate. The public sector is having to grapple with both the effects of a global pandemic – many of which are still as yet unknown and a continued acceleration of budget cuts. Both are likely to have an adverse impact on their revenue generation streams and therefore future ambitions.

In February 2021, the UK Government announced that it had exceeded its target to sell off surplus public sites and raised £5.2bn selling more than 2,100 sites over 5 years for the public purse. This shows the levels of income that can be made when the public sector understands and takes a strategic approach to their land assets and analysis.

2020 has shown that there is a different way for the public sector to work. This article looks at some of the ways that public sector bodies can use a mix of technology and qualified experts to understand their land assets quickly and affordably and unlock a wealth of future opportunities based on up-to-date land value assessments.

The big question is: How can you understand the viability of all your sites and prioritise the land with greatest potential?

The current challenges of valuing land

When it comes to valuing public sector land it can be a somewhat frustrating experience. Do you have the time to look into the details for a particular site? Or are you grappling with limited budgets or having to call in favours to rustle up a quick sketch of what's possible?

Has a thorough assessment been carried out that gives you confidence in the final recommendations? Do you really have confidence in the information that you hold and the opportunities that are set out in front of you? Or are there aspects where you're not quite sure? Is your information up-to-date and does it reflect the latest mandates you're meant to meet both now and in the future?

The answers to the questions above ultimately boil down to whether you have confidence in the information and recommendations that you have for your land assets including understanding the true potential opportunities open to you.

Understanding, valuing and unlocking the opportunities from land assets doesn't have to be this complicated. The following 5 tips show how the public sector can make the best use of technology and engineering led professional consultants to make the most of the opportunities from land.



Tip 1 - Achieving a design led approach to calculating density.

When it comes to land assets and value, the key is to understand all the options that are open to you. When you're looking at your land portfolio would a 500 or 5000 new home development be possible? What unit mix works best financially? What wider planning regulations and policies would your development have to adhere to and what options fit with the local council housing plan and priorities? What unit mix is possible on the site itself taking into account the precise site context?

Ideal outcomes: Take an informed design led approach to calculating densities that takes into account the variables and constraints for that particular site or sites. This helps you to make better, more informed decisions based on sound data. You can also use visualisations to make it easier to understand and communicate the challenges and also offer decision makers more chances to explore possible scenarios and solutions virtually.



Tip 2 - Plan to meet the latest sustainability goals and targets.

The UK Government has set in law a target to reduce all greenhouse gas emissions to net zero by 2050. The new homes we build now will be the ones that exist in 2050 and with new and existing homes making up about 20% of current emissions addressing this now is key.

The Future Homes Standard will be introduced in full by 2025. Some parts, focusing on how to build energy efficiency into new homes, are being fast tracked and come into effect this year so local authorities must start building these legal requirements into their thinking now.

Ideal outcomes: Building in the latest sustainability goals and thinking into the assessments on how to unlock the value of their land is vital. By including sustainability targets in the overall decision making process local authorities have a better chance of meeting their goals for carbon as it can be considered right from the start.



Tip 3 - Evaluate a wider range of risks from the onset.

One of the main challenges of assessing the value of land is understanding the constraints of the site including what's happening beneath the ground, and those connected to its immediate locality. For example, railway adjacent sites face additional height constraints, the site topography such as steep inclines, flood zones, historical assets nearby or historic site uses may all impact what can be built.

Ideal outcomes: Bringing in engineering and technical guidance at a very early stage of the site assessment process gives far more clarity on the key challenges and constraints for that particular site(s). This enables the development of outline mitigation strategies that inform the overall decision making process.



Tip 4 - Maximise the space.

How do you assess all the options available to you before narrowing it down to the most impactful layout that meets your overall land strategy and selection criteria? There are many permutations when it comes to massing on site and it takes significant time to work through these permutations to build confidence that the best solution has been found.

Ideal outcomes: Make the best use of computer technology to explore all your available options. It will give you more confidence and reassurance that you're seeing the optimum solutions for your site without having to work through hundreds of options manually.



Tip 5 - Be agile with planning.

By being able to assess so many options easily and affordably, making the best use of technology and professional consultants, Government bodies have a significant opportunity when it comes to proactively designing their planning and housing strategy.

Ideal outcomes: Leverage technology to its full capabilities to render, scenario test and understand the massing options and permutations that are open across one site or a portfolio of sites easily and use that to support your final choices and overall land strategy.

Unlocking residential land opportunities for Transport for London

The challenge

The Housing Strategy Team, part of Transport for London (TfL) Commercial Development, is building a case for land associated with transport infrastructure that could be released for development in key locations in London.

As part of their case to the government, TfL wanted to understand the potential number of homes they can unlock through the investment of infrastructure routes. Consultancy firm Ramboll was commissioned to use our SiteSolve technology to undertake a mass land study to evaluate the viability of over 2000 plots of land. The outcome of the study enabled TfL to understand the viability of all the sites and prioritise the land with greatest potential. This gave them important insight into a number of key metrics, including cost, value and the number of units that could be achieved over these sites to help support their strategic decision making.

The solution

SiteSolve's generative design engine enabled thousands of massing options to be tested for each site to identify an optimal arrangement for each one that considered the actual plot geometry, access and planning constraints.

For every single site, SiteSolve gave a detailed breakdown outlining the likely number of achievable units, the target mix achieved as well as a cost and value breakdown. Flags highlighted key risks associated with the site, such as topological slope steepness or contaminated land risk, to give an understanding into how different restrictions and constraints could affect the potential to build out each plot of land.

By engaging and collaborating with external parties, Ramboll was able to embed the planning, value and cost information to create a data-driven optimisation approach. By acting as a hub into which all this data was fed and incorporated into the massing generation process, SiteSolve developed credible solutions which were optimised for true return on investment.

The outcome

This innovative approach resulted in greater certainty than traditional policy-based density regulation methods in determining the number of apartments achievable on each site as it enabled a value-based, data-driven approach. It gave a higher level of informative detail as well as a visual sense of the capacity of every plot giving TfL greater understanding of the risks and opportunities over the whole portfolio of sites. By utilising a cloud-based system thousands of sites were analysed in parallel, this mass land viability study could be undertaken in only a matter of hours, a fraction of the time it would take a human designer or planner to look at just one.

Using SiteSolve to rapidly evaluate this large land portfolio ensured no site was overlooked, and every site was optimised to maximise its potential. Furthermore, the more accurate analysis that SiteSolve provided will help de-risk the development of marginal land and increase land use efficiency. This study is a crucial piece of work to identify opportunities for unlocking land for affordable homes, alongside better journeys.

“SiteSolve has been a key delivery partner supporting us on a first-of-a-kind pilot project to analyse and appraise a large volume of potential development sites in London. SiteSolve is a powerful tool driven by a very experienced team that enable us to gain an in-depth understanding of the portfolio, providing excellent results in a short amount of time and cost-efficient way.”

Candice Lemaitre - Transport for London - Commercial development Innovation Lead

Build on technology and professional expertise

The public sector has a valuable asset sitting literally right under their feet; the land that they own. As part of considering how we transition out of the Covid-19 Pandemic and work on achieving targets for affordable house building as featured in Government mandates, it's important that local authorities gain a better understanding about how they can unlock and realise the value of the land that they own. As shown in the five tips above, this no longer needs to be a long drawn out, cumbersome, costly process.

Local authorities can work faster and more productively by making the most of technology and professional know-how to provide strategic advice that shows what's possible on your sites in real time and ultimately save you money.

There is a new way to unlock land value for the public sector. The big challenge now is how do we make the best of technology and human consulting expertise across more public sector bodies so that more can derive real value and deliver on their ambitions for the future.

SiteSolve powered by Ramboll

The Transport for London case study shows what can be achieved in terms of unlocking site value using SiteSolve powered by Ramboll.

SiteSolve is a technology led platform driven by Ramboll's technical consultants that helps public and private sector clients understand the potential viability and options to unlock and realise the opportunities from their land assets.



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