

Monitoring affordable homes

Alpha final report

October-December 2019



Contents

Introduction

Problem statement

Scope and focus of alpha

What we learned

The underlying problems

User needs and profiles

Where this service fits

User research insights

Tenures

Visualising

Reporting

Existing stock

Monitoring

The service

Process overview

Service blueprint

Service walk-through

Recommendations

Current service

Proposed beta scope

Proposed future scope

Introduction



- We completed a [discovery](#) on monitoring affordable homes at Southwark in Summer 2019, which provides the context for this work.
- In discovery, we explored the problem of being able to monitor affordable homes from the point of agreement to the point of occupation.
- We prototyped a service to test whether a technology based solution could address these problems. [View the outputs from discovery here.](#)
- In **alpha**, we've designed, tested and iterated this tool
- This **alpha** phase ran for 5 sprints from 2nd October - 11th December



The alpha team



Jack Ricketts
Product owner



Gaz Aston
Lead designer



Adam Duell
User researcher



Richard Pope
Product strategy



Alex Yedigaroff
Transformation
manager



James Darling
Developer



Daria Kwiatkowska
Service designer



5 sprints, 5 show & tells

- 2 Oct - 16 Oct
- 17 Oct - 30 Oct
- 31 Oct - 13 Nov (+ video)
- 14 Nov - 27 Nov (+ video)
- 28 Nov - 11 Dec (+ video)



Problem statement



How might we get clear, accurate and live data on affordable housing?
...in order to track the properties through their entire lifespan, to increase the provision of homes for Southwark residents

Scope and focus of alpha



Aim

to build and test a *minimum viable product* for monitoring affordable homes



Scope

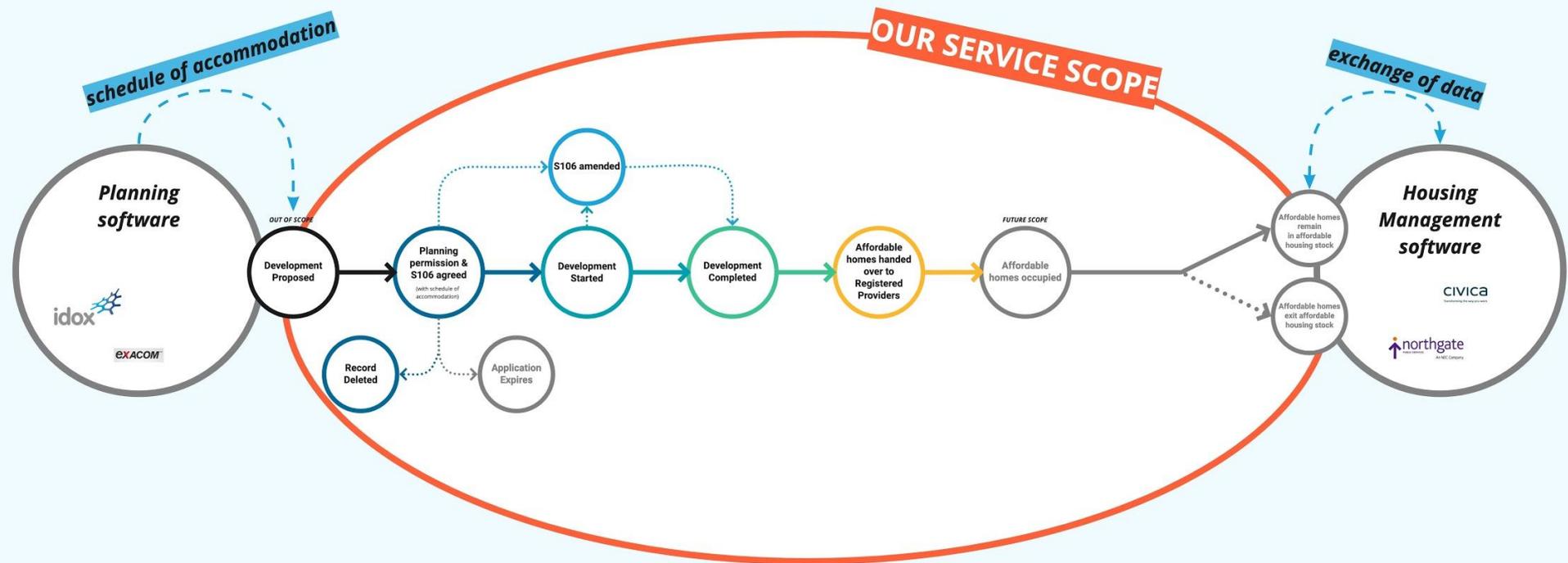
The four core service aims for this work are to answer the following questions:

- **What affordable homes have been agreed?**
- **Have developers delivered what was agreed?**
- **What happened to the affordable homes after they were delivered?**
- **Can we monitor all affordable housing?**

Answering each of these questions is dependent on the one before it.

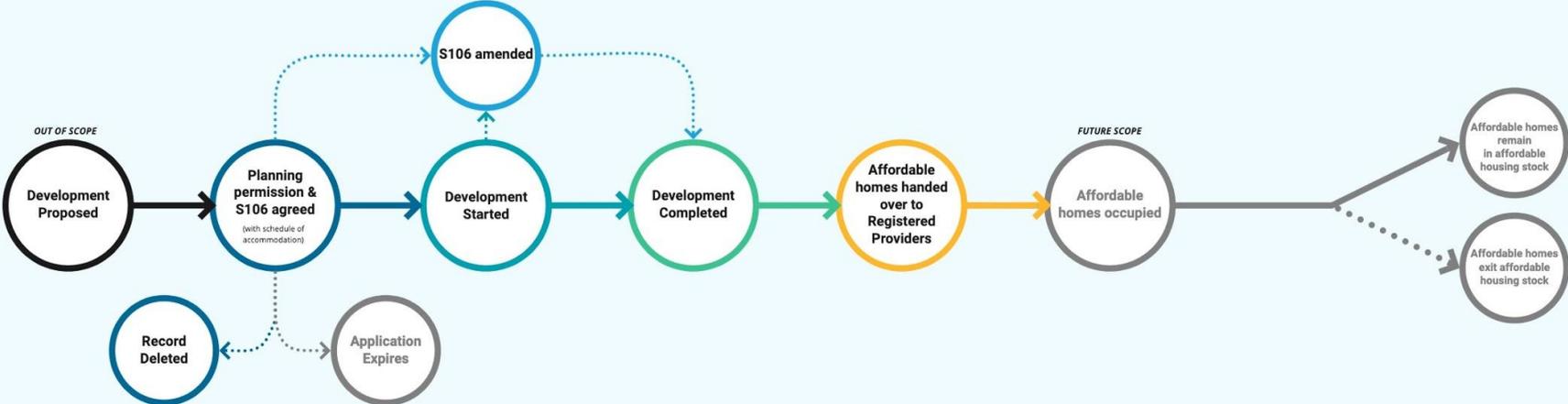
During alpha we've developed a service that can answer the first two questions, partially answer the third, and enable the answering of the fourth. The ambition is that this service could be a single source of truth for all affordable housing, providing transparency around affordable housing delivery and statistics.





This illustrates the service scope. The agreement, and provision, of affordable homes closely matches the planning application process. Our scope starts at the point that affordable housing is agreed as part of the planning process, and ends once they leave stock for whatever reason.

Monitoring Affordable Homes Process Overview (Alpha Scope)



In alpha, we've developed the service to the point at which affordable home are handed over from a developer to a registered provider, who can confirm that they've received what was expected.

Riskiest assumptions

We identified key assumptions behind the project and tested these as we built the service:

- Sufficient data or information will exist at the start of the process that will allow monitoring to take place
- The process of agreement / variation / starting / completion / occupation is sufficiently stable that it can be transposed into code
- Registered providers of affordable homes will engage with the service
- The service will help people do their jobs rather than make their jobs more difficult
- Southwark can be treated as any other registered provider and including Southwark's own social housing stock will be straightforward



What we learned



The underlying problems



Why is it so difficult to get clear and accurate live data on affordable housing?

Local authorities do not know how many affordable homes exist in their locality, and have little confidence that developers are providing the homes that are agreed during the planning process

Missing data is at the core of the problem

- You can not identify a home in the real world without knowing its address
- At the point that a home is secured from a developer in the planning process, addresses don't exist
- **This means you can not confirm whether a developer has met its obligations to provide affordable homes without creating a link between the plan and the address of a completed unit**

“...data is not comprehensive or generally comparable and there is limited understanding of total affordable housing stock by tenure.

Supply data usually comes from the administrative systems of funding programmes, which are no longer concerned with the housing once it has been delivered...

...there is very little data published that explicitly addresses affordable housing stock, particularly split out by tenure.”

The data problems



Data is not
digital

Planning documents are not digital and the information within is not machine-readable.



Data is not
standardised

There is no common structure or data schema for plans and planning applications. Schedules of accommodation all come in in varying formats, with different types of data. Data can be held in a multitude of documents,



Data is not
in order

The multiple PDFs generated by variations and changes to legal agreements mean it is not always clear what was agreed and how that might have changed over time.



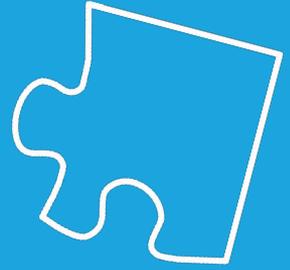
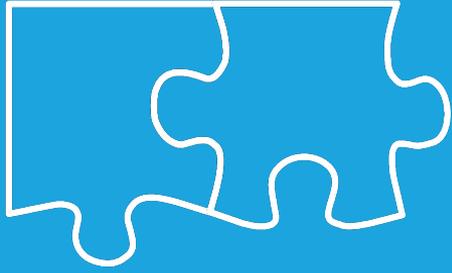
Data may not
exist

Address level data for units does not exist in planning. Although developers apply for Street Naming and Numbering this data is not shared with planning. This means we currently can't track individual units of affordable housing.



Data is subject to
changing policies

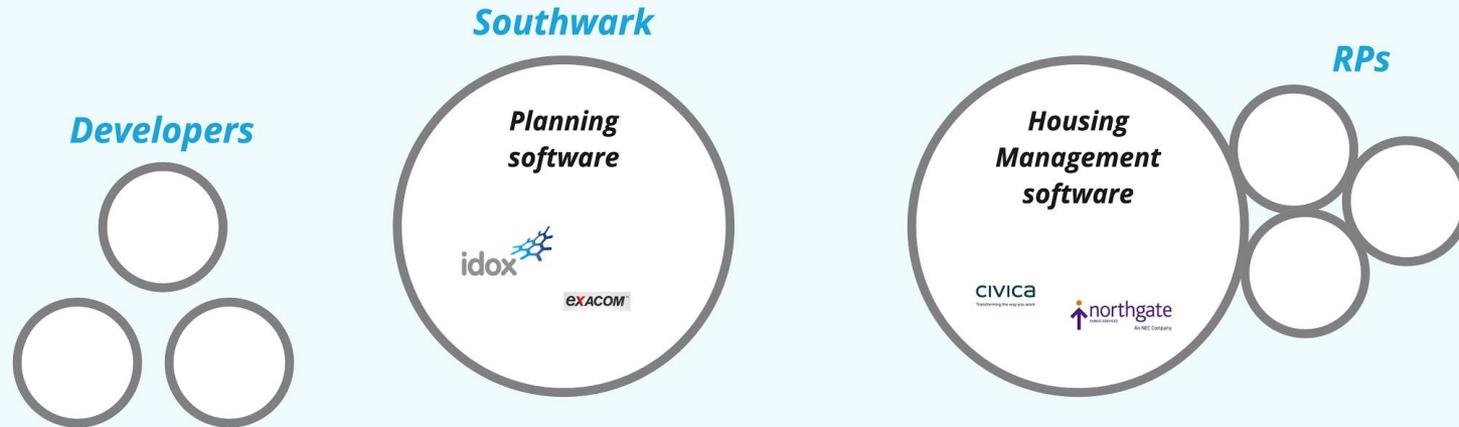
The policy landscape is constantly shifting. Products considered 'affordable' vary in different contexts. Different Registered Providers also have their own vocabulary.



**Everyone has a different piece
of the puzzle**

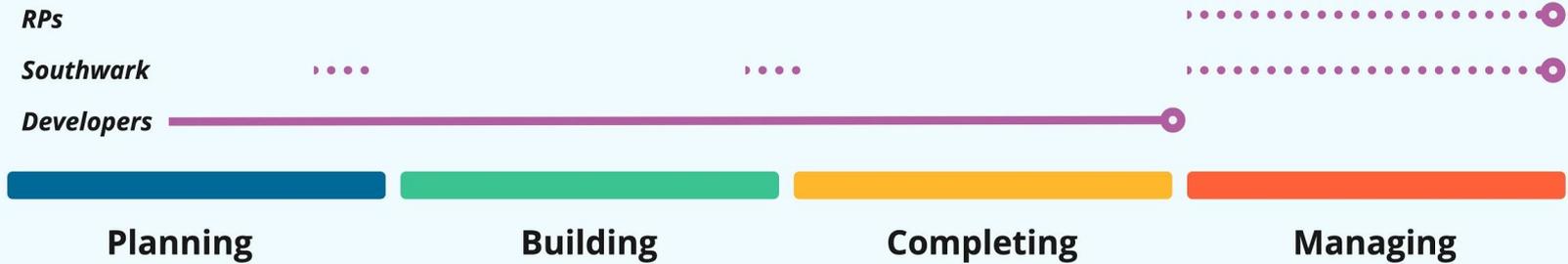


The system landscape



Systems used for planning and managing homes are spread across developers, Registered Providers and the Council. Within the Council, there are half a dozen different departments all using different systems. When looking across these systems the data doesn't always match. Because systems are not integrated there is no single source of truth for data on affordable housing.

The data landscape



When looking across the phases of development for an affordable home, RPs, the Council and developers each only have a partial view of the data. Developers have the clearest view throughout the process, right up until the building is complete. Southwark has an intermittent and limited view, until it comes to the end of the process, when the built homes are handed over to registered providers for affordable housing, at which point registered providers will have a complete view of the homes in their stock.

Our approach is to:

- Fix the disconnect of data between ‘homes that are planned’ and ‘homes that are built’ using data
- Use the smallest amount of data required to record individual homes from the point of agreement
- Create machine readable schedules of accommodation
- Develop a single source of truth for all users of data about affordable homes



User needs and profiles



Users and needs

Southwark



✓ **S106 officers** monitor developments

✓ Data can be extracted for **reporting**

✓ Data-driven **policy**

✓ **Comms and FOI teams** can get accurate affordable housing data

✓ **Enforcement and Legal** can monitor what happens to the home

Developers



✓ Submit addresses and other valuable data when homes are completed

RPs



✓ Confirm units received from the developers and submit information if the unit is sold or any changes to tenancy types

Public



✓ Self-serve **FOI requests**

Users

We interviewed and tested the service with different types of users throughout this project:

- Planning case officers
- S106/CIL officers
- Street naming and numbering officer
- Housing strategy officer
- Planning policy officers
- Registered Providers

Some of these users are people who the service relies on for the process to work, or to input data, such as the planning case officers and the street naming and numbering officer, but these users would not actually be end-users of the service. Others, like the S106 officer, will be able to use the outputs of the service .



Usability testing

We've conducted usability testing with users throughout the alpha process. You can view the user research report [here](#).



Tenures and affordable home products



Many different housing products exist that are variously described as 'affordable'

There is no consistency in definitions across local authorities, regional government, central government and housing associations

In alpha, we've used the categories of 'market', 'intermediate' and 'social'. Southwark has its own policies that determine the products that fit in these categories.

Future development should capture the product type at the most granular level to allow different users to see 'affordability' as they define it.

Stage		At proposal	At agreement of 'intermediate housing mix proposal'	At completion	Shown as (for visualisation)	
Entered by		Case officer	Case officer or S106 officer	Developer	n/a	
Tenure	35%	Social rent	Social rent	Social rent	Social rent	
		Intermediate	Shared ownership	Shared ownership	Shared ownership	Affordable
			Shared equity	Shared equity	Shared equity	
			London Living Rent	London Living Rent	London Living Rent	
			Community Land Trust	Community Land Trust	Community Land Trust	
			Discounted market sale	Discounted market sale	Discounted market sale	
		Starter Home	Starter Home	Starter Home		
	Other non-market rent	Other non-market rent	Other non-market rent	Affordable rent	Non-affordable	
				Discount market rent		
				London Affordable Rent		
Private/market	Private/market	Private/Market	Private/market			



[Workings here](#)

Visualising the data

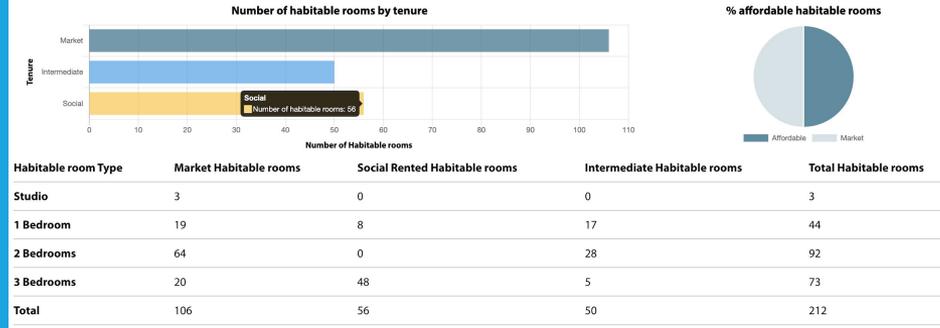


Users of an affordable housing monitoring service need to be able to visualise the split of units or habitable rooms in a development or scheme.

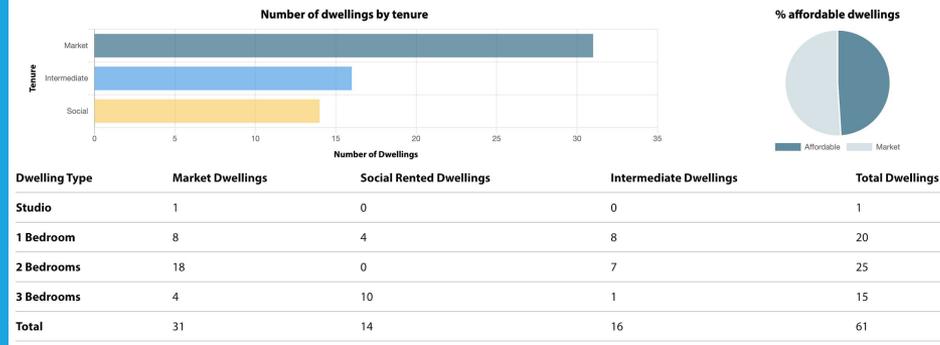
We also know that users want to view these statistics based on their own search terms. We've designed and tested views based on developments, schemes, or a users own search.

Statistics

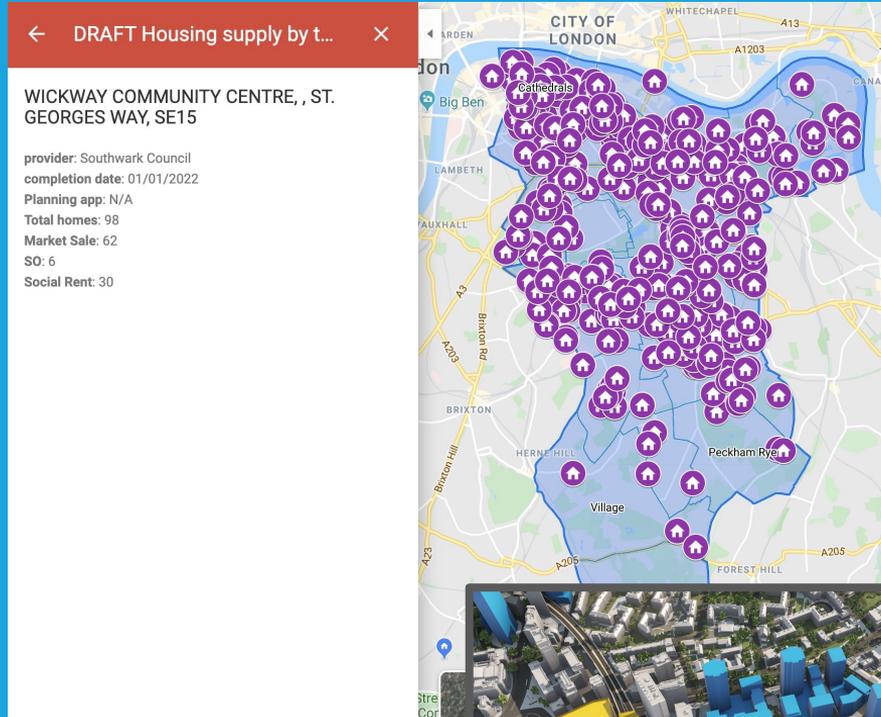
By Habitable room



By Dwelling



By collecting and storing data on affordable homes in a standardised format, other approaches to visualising the data, for example through maps or 3D modelling are simplified.



Reporting



In discovery, we learnt about the difficulties in completing reports for MHCLG (LAHS) and the GLA (LDD).

These reports include data on all housing supply (not just affordable housing).

Working with the users who complete these reports, we've identified data fields (for example around wheelchair accessible units) that will simplify reporting and checking processes.

Existing stock

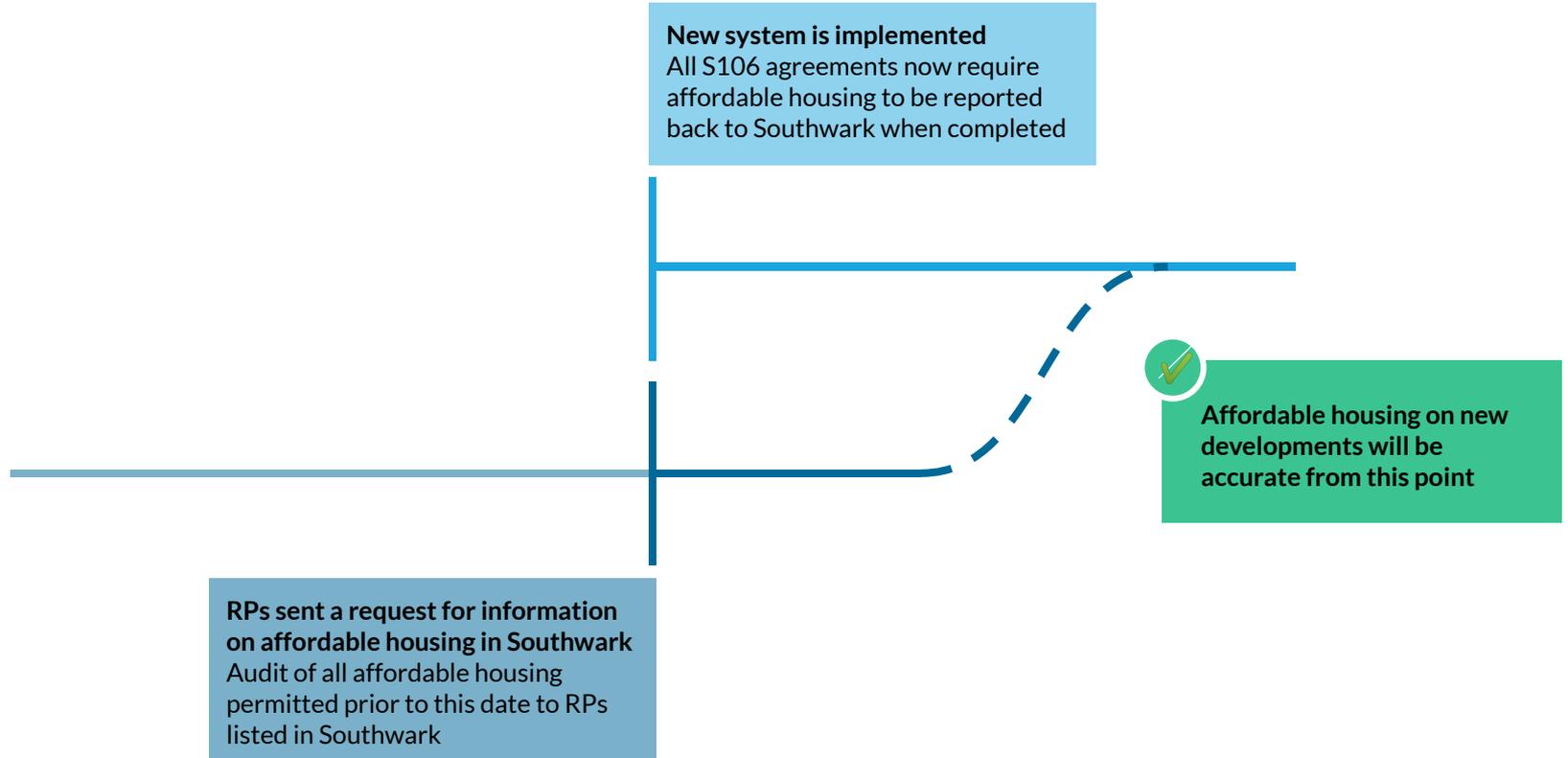


The service has been designed to track the delivery and use of affordable homes secured in developments and schemes from the point of an S106 being agreed in the planning process.

There is currently a limited understanding of the picture of existing affordable homes in the borough.

We have proposed a process for collecting information from all registered providers in the borough to collect information about all existing stock, enabling a fuller picture of all affordable stock and enabling the ongoing monitoring of existing homes.

Audit of existing stock



Monitoring changes



Once homes have been delivered and are handed over to registered providers, the service needs a mechanism to regularly check the status and tenure of affordable homes and to monitor and record any changes.

We've worked with a registered provider to identify the need to record their own internal identification numbers for homes to allow for straightforward regular data matching.

By knowing the address and identification numbers for individual affordable units, it enables the exploration of additional checks, many of which could be automated. Examples of these include Land Registry (for title changes), Council Tax records and Electoral Roll records.

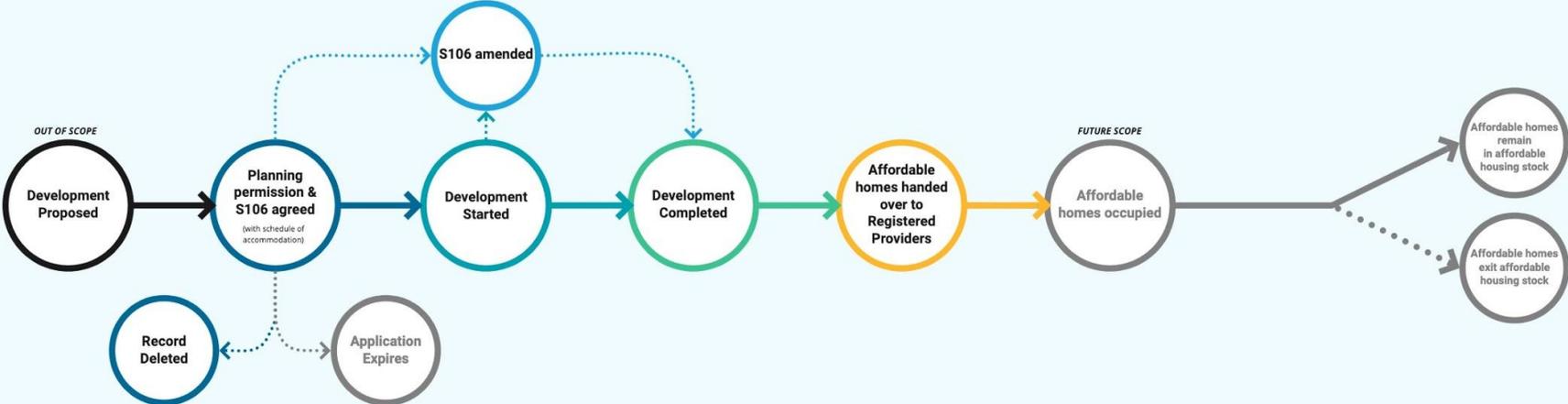
The monitoring affordable homes service



Service overview and blueprint



Monitoring Affordable Homes Process Overview (Alpha Scope)

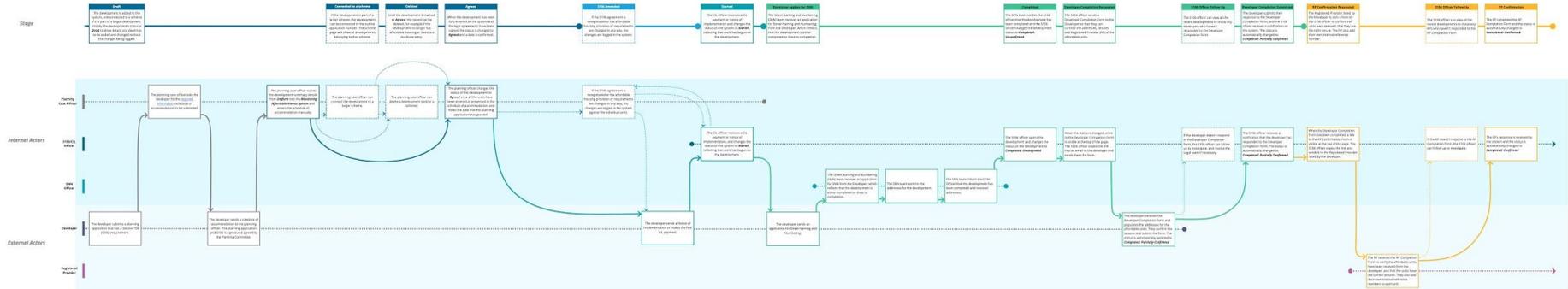


Alpha service blueprint

We mapped out the step-by-step process and exchange of information within the process of building an affordable home in a series of service blueprints, beginning with alpha. The aim of these diagrams is to give a clear guide to implementation of the service, along with the actors involved and triggers within the process.

Physical versions of these documents are available at Southwark Council. All of the original designs are available on this [Miro board](#), or you can access the high-resolution PDFs here - [Alpha service blueprint](#)

Monitoring Affordable Homes Service Blueprint (Alpha Scope)



Click here for a
walkthrough of the service
based on a real example



Recommendations



Recommendations



Start using the service

Entering details of affordable housing from the point of agreement will ensure you know 'what is delivered is what was agreed'



Iterate

Developing the service through quick iterations will meet further aims around public transparency, continual monitoring and a single source of data.



Support and scale

Wider benefits will be realised at regional and national level. Opportunities to scale should be explored

Current service recommendations

- The service that has been built is a minimum viable product to allow the recording and tracking of developments that include affordable homes.
- This means that there are further features in the product backlog that will enhance the service for the various users.
- The alpha service also has no ongoing support or maintenance.
- We have created a [trello board](#) which outlines the features that should be designed and built in the next phase.

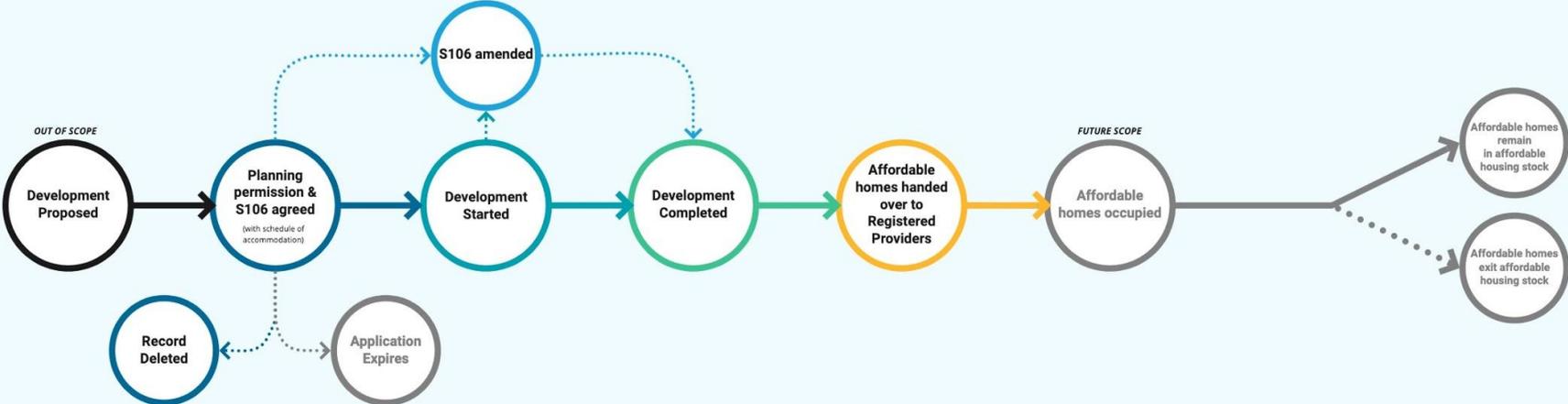


Future scope

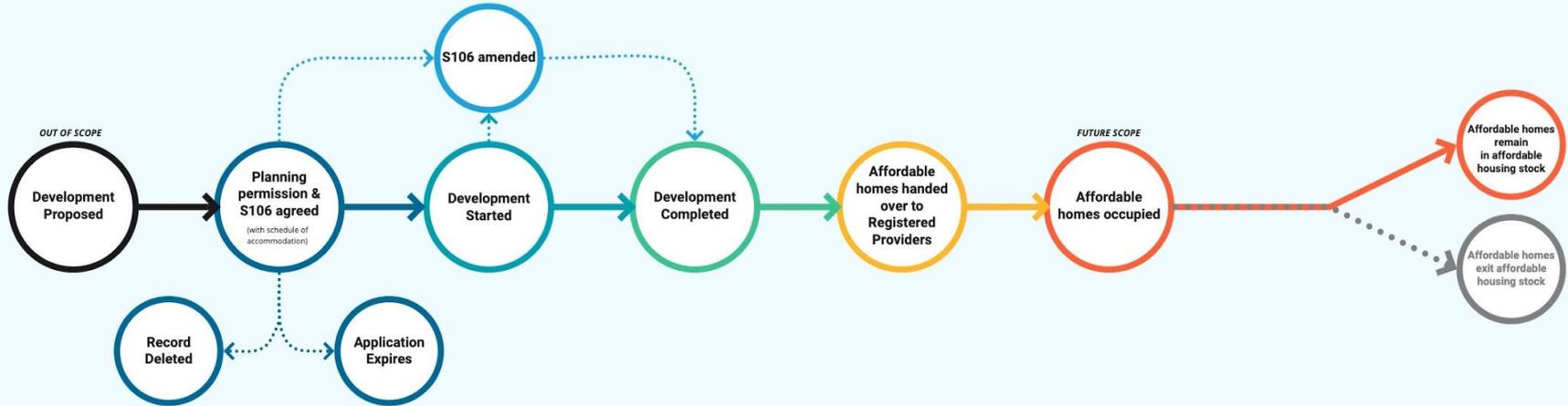
- We've demonstrated how the service could evolve in [the following diagrams](#), gaining additional capabilities with each phase.
- By continuing development and iteration, in the future we would be able to answer all four of our [core service aims](#).
- We have also created [detailed service blueprints](#) which detail exactly how the service could evolve and gradually become more automated and integrated with other systems.



Monitoring Affordable Homes Process Overview (Alpha Scope)



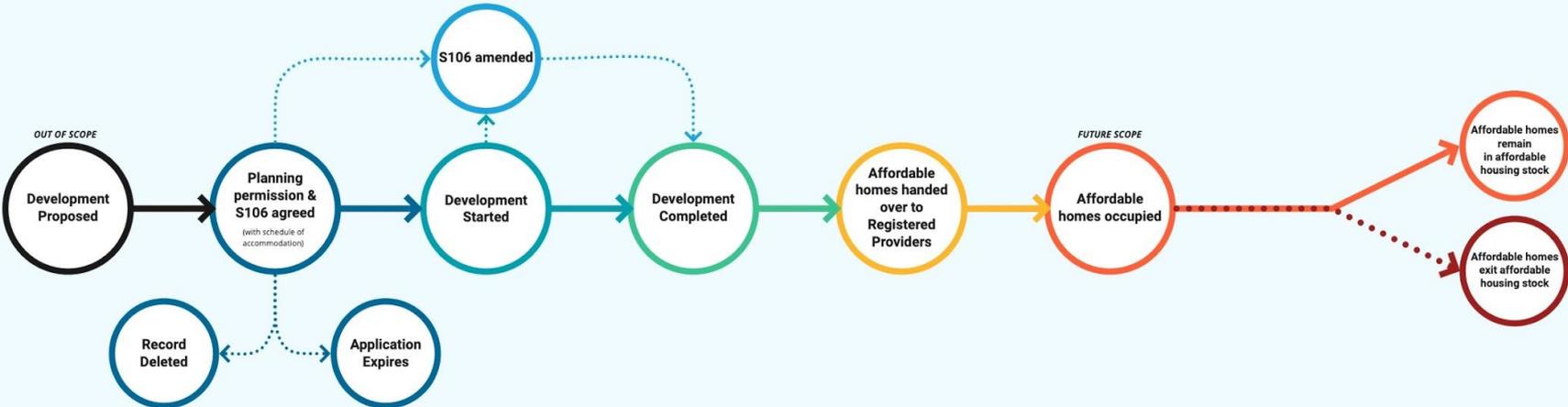
Monitoring Affordable Homes Process Overview (Beta Scope)



Developing this service in a beta phase would widen the scope of the service to include

- Applications expiring
- Occupation of homes
- Continual checking that homes remain in stock

Monitoring Affordable Homes Process Overview (Beyond Beta Scope)



Further work on this would mean we can then, using external data sources, identify when homes unexpectedly leave stock

