Methodology: Assumptions and Inputs



# 2022 Sydney Housing Supply Forecast – Methodology: Assumptions and Inputs

The Sydney Housing Supply Forecast (SHSF) provides an estimate of future housing supply that developers will build over the next five years. The Department of Planning and Environment (DPE) prepares it to inform infrastructure planning and service delivery, as well as decisions on future land-use zoning.

The forecast is an estimate of the number of new dwellings that will be built under **current** zoning and planning controls, announced **strategic precincts** and planning proposals with **gateway approval**. It reflects current trends in residential construction and approval activity. However, these trends may change due to the impact of economic, social and other factors on housing development.

The applied forecast methodology depends on the development type and geography, which highlights the nuanced approach built into the forecasting process.

Figure 1. Construction along the Parramatta River from James Ruse Drive, Parramatta, NSW



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The forecast is made up of **three growth scenarios – medium, high and low**. From 2016 – 2019 it was prepared as a single baseline forecast. Growth scenarios were introduced in 2020 in response to the COVID-19 pandemic. Multiple scenarios aimed to address uncertainty around different health, population, social and economic outcomes arising from the pandemic. As we move out of the pandemic we will continue to prepare a range of growth scenarios to deal with ongoing economic and housing market uncertainty.

### Key supply forecast inputs

The supply forecast reflects current trends in residential construction and approval activity and counts estimated dwelling completions. Several key inputs help determine these trends and inform the forecast.

#### Upcoming developments

We measure upcoming developments based on residential development pipeline data and a greenfield audit. The residential development pipeline is a Sydney-wide database of current residential development projects, which has one of three classifications (see Figure 2).

Figure 2. Three stages of development



The greenfield audit tracks recently subdivided residential lots and residential subdivision development projects in re-zoned greenfield areas.

Proposed developments in both the greenfield audit and the residential pipeline are allocated an assumed forecast completion year based on the size and cost of proposed development, stage of construction, age of approval, and development application lodgement date. **The five year forecast is almost exclusively made up of the pipeline and audit projects.** 

The pipeline of projects is created by collecting and refining data from the following sources:

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- CoreLogic's Cordell Connect Australia Projects database and the NSW Planning Portal —this monitors current and future construction projects from pre-approval to completion. The department collects, geocodes and verifies the data annually
- new lots from NSW Land Registry Services—the department extracts new lots from the cadastre database in key greenfield areas
- Nearmap—helps identify the construction status of a project by providing near-real-time aerial photography
- development application tracking through consent authority websites—these include local council development application trackers, NSW major projects website and Sydney and local planning panels.

Strategic precincts are longer term upcoming developments in the forecast. They include infill and greenfield State led, council-led and collaboration precincts.

#### Dwelling potential

'Dwelling potential' refers to the number of new dwellings that a site could generate under existing conditions. The department measures this in urban areas using its development capacity model, which is based on current zoning, planning controls, cadastre and existing dwellings data within a residential area. The development capacity model is updated regularly to ensure it is current for a range of capacity estimating tasks.

Planning proposals with gateway approval are monitored to add extra dwelling potential that is sitting in the legislative pipeline. Dwelling potential is based on the detailed precinct planning that the planning proposals represent.

Similarly, strategic precincts and State led housing delivery programs and initiatives are tracked to include developments scheduled to deliver new housing beyond the five year forecast period.

#### Historic net dwelling completions

Historic net dwelling completions are measured using Sydney Water new billings data. This data indicates past levels of development. Sydney Water regularly provides the department with private dwelling connections data. It is geocoded to identify the location and size of each new residential connection. The data serves as a proxy for net dwelling completions and is available from 1998.

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## Forecast coverage

#### Dwelling types and 'Other' dwellings

The Sydney housing supply forecast includes private dwellings and State led housing delivery projects which include social and affordable housing components. Housing typology covers detached houses, medium-density development (townhouses, terraces and villas) and apartments.

The annual Sydney housing supply forecast does not explicitly forecast or include the following dwelling types:

- secondary dwellings
- boarding houses
- · student accommodation
- · group homes
- seniors living developments, including retirement villages, hostels and aged-care facilities
- housing for people with a disability
- manufactured housing estates.

The department provides key data on some of these other forms of housing in recognition of their role in helping meet the needs of Sydney's diverse and growing population:

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https://www.planning.nsw.gov.au/Research-and-Demography/Sydney-Housing-Supply-Forecast/Other-forms-of-housing

Some councils have a significant proportion of these other forms of housing in their new housing stock. It therefore makes sense for them to include other data as they analyse housing demand and supply from a holistic perspective. Nevertheless, the annual Sydney housing supply forecast is the best data set to use in strategic planning due to its consistent, supply-focussed methodology and data sources.

#### Policy currency

The Sydney housing supply forecast reflects all current land-use zonings to August 2022.

#### Geographic areas

The forecast covers all 33 local government areas in Greater Sydney, as proclaimed councils in 2016. The forecast is available at SA2 and suburb level for Sydney.

Greater Sydney includes the following local government areas:

Bayside, Blacktown, Blue Mountains, Burwood, Camden, Campbelltown, Canada Bay, Canterbury–Bankstown, Cumberland, Fairfield, Georges River, Hawkesbury, Hornsby, Hunters Hill, Inner West, Ku-ring-gai, Lane Cove, Liverpool, Mosman, North Sydney, Northern Beaches, Parramatta, Penrith, Randwick, Ryde, Strathfield, Sutherland, Sydney, The Hills, Waverley, Willoughby, Wollondilly and Woollahra.



Hornsby Lane Cove Blue Mountains North Sydney Blacktown Fairfield Sydney Inner West Liverpool Strathfield Wollondilly

Figure 4. Greater Sydney local government areas

## Glossary of terms

Approved: refers to development approval, where a consent authority has granted permission for a project to commence development

Commencement: a residential building commences when the first physical building activity happens on the site, whether that is materials fixed in place, labour expended or both

Completion: a residential building is complete when building activity has progressed to having a water connection and the building can be occupied

Forecast: an estimate of the number of new houses or dwellings that are likely to be built in the future

Greater Sydney: the Sydney Statistical Division comprising 33 local government areas (this excludes the Central Coast and Wollongong local government areas)

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**Greenfield:** 'raw' land that is not used (or initially zoned) for urban purposes but identified for future urban development

**Housing demand:** the need for housing based on the number of households in the population and their willingness and ability to buy or rent in the housing market

Housing supply: the production and delivery of housing

**Infill urban areas:** residential development occurring in residential suburbs within the existing urban area

**Market take-up:** the estimated take up of capacity within a zone over the medium and long term, based on past construction activity and projected future residential development for each zone in all local environment plans

**Residential development pipeline:** the annual snapshot of new dwelling activity across Sydney, measured in potential dwellings in one of three categories: under assessment, approved but is yet to commence construction, and under construction

Sydney housing supply forecast: the annual estimate of housing supply for Greater Sydney

**Under construction:** a residential building that has commenced construction but has not yet been completed to a stage that allows occupation

**Development Capacity Model:** a model that estimates dwelling capacity based on current zoning and planning controls, as well as cadastre and existing dwellings data within a residential area. The database is regularly updated to ensure it is current for each forecasting year

**Urban renewal:** the transformation of existing underused, brownfield or low-density urban areas to accommodate higher density and often mixed-used developments

**Zoning and planning controls:** legislative framework for regulating land use and development, including the location, density, height and type of new residential development

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