FROM COUNTING HOUSES, TO MAKING HOUSES

COUNT: PUBLICLY AVAILABLE ADMINISTRATIVE DATA ON SUBSIDISED HOUSING

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1 Introduction

This paper explores publicly available delivery data on South Africa’s housing subsidy programme. It is an initial deliverable of a broader project that explores existing and proposed performance metrics for the State’s subsidy housing programme.

The primary indicator that is published on the housing subsidy programme is the number of housing units delivered.\(^1\) Nationally aggregated data on ‘housing delivery’ is published in various documents. This data is, in the main, derived from administrative entities that play a role in regulating construction or administering subsidies.\(^2\) This includes data generated by the National Home Builders Registration Council (NHBRC) and the National Department of Human Settlements, Water and Sanitation (NDHSWS). NHBRC data captures housing starts while NDHSWS data from 2008 typically reflects housing completions.\(^3\) A more recent addition to the delivery metrics is the number of title deeds registered, together with data on the title deed backlog published by the NDHSWS. National Treasury (NT) relies on these two entities to provide data it publishes in its Estimates of National Expenditure (ENE) as part of the detailed annual national budget publications. The ENE includes audited data for three years prior to the year of publication, a revised estimate for the year of publication together with projected estimates for three subsequent years, aligned with the medium-term expenditure framework.\(^4\) Parliament only votes on the budgeted allocation for the first year of the MTEF; the figures for the two outer years of the MTEF are included for planning purposes.

While the actual number of houses delivered is obviously critical in assessing the housing programme, there has been less of a focus on tracking how these housing assets perform over the long term. The Centre for Affordable Housing Finance (CAHF) has tried to rectify this by using a further administrative data set, namely the deeds registry to derive a set of additional subsidy housing market performance indicators to augment existing delivery-focused indicators. These performance-based indicators explore sales activity, property prices and mortgage lending.

Because there is no specific marker for RDP properties on the deeds registry, CAHF identifies registered RDP properties using a proxy based on recorded characteristics of the property.\(^5\) This proxy is not entirely accurate and some RDP properties in the deeds registry may be overlooked. A critical objective of this analysis is therefore to assess whether CAHF’s proxy is ‘good enough’ in light of other data.

There are significant discrepancies within and between the published numbers derived from these various administrative data sets. The data published by CAHF on the total number of RDP properties, as well as new RDP properties registered (both drawn from the deeds registry using the proxy) differs significantly from data on housing completions published by the NDHSWS which differs in turn from the number of housing starts published by the NHBRC.

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\(^1\) Expenditure-based data is also published regularly. That data is not explored as part of this analysis.

\(^2\) Survey data is also available. That data is explored in detail in a separate deliverable prepared as part of this project.

\(^3\) Prior to 2011, the NDHS published data on units delivered or under construction.


\(^5\) This includes variables such as the erf size, the nature of the seller (a state entity) and the buyer (an individual), as well as the property value.
We would expect these numbers to differ to some degree; there is always a lag, sometimes fairly extensive, between the beginning of construction (housing starts) and the completion of a house (housing completions). In addition, given that some subsidy housing is delivered on tribal land, not every completed house should be registered in the deeds registry (title deeds).

Beyond this, differences in the data – whether across data sources, or within the same data source over time, can indicate weaknesses in underlying administrative processes. For instance, the data on housing completions and title deeds do not align. This is an explicit indication of the widely known problem in issuing title deeds: in 2015, the title deed backlog was estimated at 818,262 units for government-subsidised houses provided since 1994.6

Why this matters

The State’s subsidy housing programme is the most visible, and theoretically enumerable of all government’s programmes. In addition, it is a costly programme; given an allocation of R168,8527 for each completed house in 2017, expenditure would amount to over R19 billion in 2017/18 (assuming 113,342 units were completed in that year). At the same time, the interconnected activities that result in a qualifying beneficiary taking possession of a newly built subsidy property and receiving a title deed are complex, and span a number of distinct entities across spheres of government. It is obviously critical that the systems and processes that underpin the programme are administered well. An investigation of the data is therefore useful, not only because it potentially enables monitoring of housing delivery but because it can help to flag administrative processes that are characterised by coordination failure, are simply unworkable or poorly implemented.

Further, the subsidy programme transfers a potentially valuable and leverageable asset to beneficiary households, in all likelihood the most valuable asset households will ever own. The housing subsidy programme is therefore directly redistributive, and has a direct and immediate impact on household wealth.

Administrative weaknesses can have profound implications on the longer-term wealth-creating effects of the programme; delayed transfer undermines the potential value of the housing asset for households, negatively impacts on the functioning of property markets, inhibits bank lending and interferes with sound city or municipal management. More broadly, poor governance and neighbourhood service delivery by municipal government can also negatively impact on the extent of asset wealth realised by beneficiary households and local home owners. Addressing this, and making these entry-level property markets perform, is a potential next phase of our national housing programme, now approaching a quarter century since inception. Our ability to address this, however, necessarily requires an understanding of where the problems are; and this requires that we identify government-subsidised properties with some degree of accuracy, monitor sales activity and price trends, and assess mortgage lending and performance on an ongoing basis.

Clearly, we need to do more than build houses to realise the potentially transformative aspects of the housing programme. At the same time, we need to monitor more than the construction of the house, occupation by beneficiary households and access to title deeds. It is the performance of this new property market segment that is of particular interest, because it is through this that the fundamentally

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transformative effects of the national housing programme manifest. We hope that this detailed examination of available administrative data\(^8\) can prompt reflection about the set of key metrics that are tracked and published as part of the monitoring and evaluation of the subsidy housing programme.

2 Data sets along the housing value chain

The schema below summarises available published data explored in this document along the housing supply chain. We note it includes metrics published by CAHF relating to resale market performance. Unlike data on housing starts, completions and registrations, these metrics are not tracked by the State and not reported on in official publications.

While government does not track or otherwise analyse resale market activity there are many organisations in the private sector that do, including banks, mortgage originators, and private property market data providers such as Lightstone and LexisNexis. However, the focus of published property market reports is on the high-end market where market activity is significant. Even Lightstone, which has a house price index for the ‘affordable’ market, does not explicitly attend to the resale market activity of the government-subsidised housing market – precisely because such properties are not explicitly flagged on the deeds registry and can be difficult to identify accurately.

2.1 Data on subsidy housing starts

According to the Housing Consumer Protection Measures Amendment Act, 2007,\(^9\) all houses built by home builders in South Africa must be enrolled with the NHBRC at least fifteen days before the building process starts. National Treasury publishes summarised data on housing starts as reported by the NHBRC in its annual ENE. As noted, the ENE provides data for the three years preceding its publication year, the year of its publication (the current year), and projected values for the three years following the

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\(^8\) Administrative data is data collected for administrative purposes, rather than for research.

year of publication, as part of the Medium Term Expenditure Framework (MTEF) budgeting process. For instance, in the 2019 ENE published in February 2019 as part of the national budget, data includes a revised estimate for the 2018/19 year (termed the ‘current year’ in the publication tables) as well as for the past three years (2018/17, 2017/16 and 2016/17) together with projections for 2019/20, 2020/21 and 2021/22. Reporting periods are for the year-ending March each year, but data for the current year which is published at the time of the National Budget (usually announced in February each year) is an estimate. This is adjusted the following year once data for the full year is available. Parliament then votes on the budget allocations for the first year of the MTEF, while the figures for the two outer years are provided for planning purposes.

A ‘best’ reported number of housing starts, based on most reasonable versions of this data as reported to Treasury is presented below, from 2008/09 to 2017/18. This data is, more recently, aligned with data published by the NHBRC in its annual report. However, as per Figure 1 below, NHBRC data as reported in its annual report differs noticeably from NHBRC data as reported to National Treasury prior to 2011/12. It is not clear why this discrepancy occurred and what intervention was implemented to resolve it.

Figure 1: NHBRC subsidy enrolments: ENE vs NHBRC Annual Reports –2008/09 – 2018/19

The data highlights the variable nature of housing delivery; with a peak of 168 753 starts in 2014/15 falling sharply the following year. Given that there is no market risk associated with subsidy housing, a range of other factors create this instability including available budget, capacity constraints within municipal and provincial entities that are responsible for delivery, land availability and unpredictable community engagement processes.

As summarised in Table 1 below, with the exception of 2014/15 the data reported for the current year as a revised estimate is revised downwards when reported in the following year’s ENE as an audited outcome. While the data for the current year is an estimate which is revised in later years, the magnitude of downward revision since 2016 has been significant. For instance, in the 2018 ENE the number of

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10 Current and historic data published in the ENE appears stable, with only one revision; for 2014/15, the observed home enrolment figure of 168 753 given in ENE 2016 and ENE 2017 is revised up to 198 753 in ENE 2018. This appears to be an error. The more reasonable looking figure of 168 753 is assumed to be reliable.
enrolments was reported as 112 600 for the current year (2017/18). In the 2019 ENE, the number of enrolments for 2017/18 was reported as 66 691 units.

With regard to expenditure estimates, ENE publications include budgeted allocation for the upcoming financial year plus two years of forward estimates---together these three years of figures make up the medium-term expenditure framework. In line with this, the ENE also includes a three-year projection for other key indicators including the number of subsidy home enrolments. However, these are unreliable with a mixture of upward and downward revisions as the status of these figures change from projections, to voted amounts, to revised estimates of expenditure, and finally to audited outcomes.

Curiously low projections are provided by the 2014 ENE. While that publication indicates a very high number of enrolments for the current year (2013/14) of 210 300 units (subsequently revised down to 119 440 units in the 2014 ENE), it includes very low projections in the mid 30 000s for 2014/15 onward. Unsurprisingly, these low projections were exceeded as per later publications.

The NHBRC uses five-year forecasts of subsidy housing delivery developed by the NDHS as an input into its forecasting and planning process. However, given that projections on housing delivery themselves often vary significantly compared to actual outcomes (see Section b. Data on Housing Completions below) the NHBRC projections will, by implication, be flawed. Further, this particular performance indicator lies largely outside of the span of control of the NHBRC and is not necessarily a reflection of its own performance. While the publication of these projections is a requirement for the NHBRC, the variance between actual performance and projected performance is not a reflection of the effectiveness of the NHBRC, although it might be interpreted as such.

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11 Telephonic conversation with an official from the NHBRC on 14 August 2019.
Table 1: NHBRC subsidy house enrolments reported in ENE 2008 - 2019

<table>
<thead>
<tr>
<th>Year of ENE</th>
<th>Unit of measure</th>
<th>Period for which figures are quoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Number of homes enrolled in subsidy sector (ENE 2008, P. 537)</td>
<td>15 089 59 361 11 117* 100 000 150 000 200 000</td>
</tr>
<tr>
<td>2009</td>
<td>Number of new subsidy home enrolments (units) each year (Table 26.9)</td>
<td>15 089 59 361 69 616 100 000 101 269 108 358 115 943</td>
</tr>
<tr>
<td>2010</td>
<td>Number of homes subsidy enrolment (Table 30.9)</td>
<td>59 361 69 616 100 000 59 000 94 000 60 000 80 000</td>
</tr>
<tr>
<td>2011</td>
<td>Number of home enrolments in the subsidy markets per year (Table 31.9)</td>
<td>69 616 100 000 41 616 94 000 60 000 80 000 70 000</td>
</tr>
<tr>
<td>2012</td>
<td>Number of additional homes enrolled in the subsidy sector per year (Table 31.10)</td>
<td>100 000 41 616 94 000 181 783 194 308 208 123 212 693</td>
</tr>
<tr>
<td>2013</td>
<td>Number of additional homes enrolled in the subsidy sector per year (Table 31.17)</td>
<td>41 616 94 000 138 883 181 800 211 300 221 865 232 958</td>
</tr>
<tr>
<td>2014</td>
<td>Number of additional homes enrolled in the subsidy sector per year (Table 31.14)</td>
<td>94 000 138 883 161 443 210 300 33 150 34 807 36 547</td>
</tr>
<tr>
<td>2015</td>
<td>Number of subsidy home enrolments per year (Table 38.14)</td>
<td>138 883 161 443 119 440 125 120 132 002 139 162 146 921</td>
</tr>
<tr>
<td>2016</td>
<td>Number of subsidy home enrolments per year (Table 38.12)</td>
<td>161 443 119 440 168 753 128 352 133 301 140 633 148 368</td>
</tr>
<tr>
<td>2017</td>
<td>Number of subsidy home enrolments per year (Table 38.12)</td>
<td>119 440 168 753 77 004 140 196 133 301 133 301</td>
</tr>
<tr>
<td>2018</td>
<td>Number of home enrolments in the subsidy sector per year (Table 38.13)</td>
<td>198 753 77 004 74 149 112 600 123 600</td>
</tr>
<tr>
<td>2019</td>
<td>Number of homes enrolled in the subsidy sector per year (Table 38.13)</td>
<td>77 004 74 149 66 691 105 308</td>
</tr>
</tbody>
</table>

Audited
Current
Vote (proj)
Projections
While projections over the recent past have been optimistic, projections over the years 2019/20 – 2021/22 anticipate a significant slowdown in subsidy enrolments with 61 923 subsidy home enrolments projected for 2019/20, and 65 019 and 68 270 for the subsequent two years. These projections are significantly lower than previous projections for 2019/20 and 2020/21 (136 246 and 149 870 respectively) and lower than projected completions (98 152 in 2019/20, 83 292 in 2020/21 and 80 473 in 2021/22).

Publicly available data is an aggregated subset of the full data set that the NHBRC collects. When developers enrol properties, they must complete either the EF003 form (for freestanding properties) or ST003 form (for sectional title properties). The two forms capture various details, including the selling price, the estimated start, complete and occupation dates, the stand number, township, and province and the type of dwelling (detached, semi-detached, terraced or apartments). The forms also include a subsidy classification: no capital housing subsidy, capital subsidy with a mortgage bond and capital housing subsidy with a microloan. Based on the level of detail gathered, it seems plausible that NHBRC data could be matched against deeds office data to identify individual subsidy properties.

Aside from data provided by developers at enrolment, the NHBRC may also maintain additional data generated by inspections at key milestones during the housing delivery process. That data would provide insight into the time taken to construct subsidy units – a useful indicator of efficiency and potential data source to identify specific bottlenecks that might hamper delivery. No indicators in this regard are published by the NHBRC.

Unfortunately, data on efficiencies is not made available in the public domain. The reason for this may be technical: the NHBRC recently published a project request for proposals (RFP) for the appointment of a suitable service providers to provide enterprise-wide data management services and solution to the NHBRC for a period of one year. The RFP notes a number of challenges relating to data management services, reproduced in Box 1 below, which presumably impact on subsidy enrolments data. This in turn limits the scope and accuracy of data the NHBRC could publish on the subsidy programme.

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Other details requested by the NHBRC include the Payment Methods (Speculative, Plot & Plan, Cluster Development – Cash Payment and Cluster Development – PA003: Payment by Mortgage Lender
National Home Builders Registration Council (2019). Request for proposals: Appointment of a suitable service provider to provide enterprise-wide data management services and solution to the NHBRC for a period of one (01) year.
Box 1: Data management challenges at the NHBRC

- Inconsistent data classification – lack appropriate data and information classification leading to inappropriate handling of data and thus potential risk of data confidentiality exposure to the organisation.
- Lack of data integrity - the existence of multiple conflicting versions of data elements calls the integrity of the existing data into question. Data users, especially users who use large, complicated datasets for reporting purposes, often have no idea which version is the “official” version of the data. Since the NHBRC has no comprehensive way of identifying a data element’s System of Record. Data users, therefore, spend a great deal of time and effort researching and reconciling their data, and often make their best guess at the correct data versions to use.
- Duplicate data collection efforts - multiple versions of data elements, sources, and the semantic inconsistencies around their collection, have a detrimental effect on the ability for data to be shared across systems, and ultimately, for systems to be integrated and form a true enterprise system.
- Lack of semantic data standards, policies and governance – there is no central guidelines for data semantics, models, or definitions (data dictionary) and controls.
- Inconsistent management reporting and decisions making – real-time integration limitations leading to inconsistent data access and integration across devices, systems, and processes.
- Data lifecycle management – limitations related to data rule and controls throughout the data lifecycle from identification, access, use and archiving.

Source: Request for Proposals: Appointment of a suitable service provider to provide enterprise-wide data management services and solution to the NHBRC for a period of one (01) year, June 2019.

2.2 Data on housing completions

Data on the number of subsidy units completed, published by the National Treasury in the ENE, 17 is summarised in Figure 2 below. The NDHSWS publishes the same data on the number of subsidy units completed in its annual report. 18 The data is also published on the Department’s website. 19

For the time being, we will assume that the definition of a completed unit is well documented and adhered to, although it is not published.

ENE data is reproduced in Table 2 below, by year, going back to 2008. 20 As with data from the NHBRC given the timing of the tabling of the budget in February (1.5 months before the start of the financial year) and the need to collate figures ahead of year end, ‘current’ values published for each year are estimates. When actual

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17 As with NHBRC data, each ENE provides data for the three years preceding its publication year, the year of its publication (referred to as the current year), and projected values for the three years following the year of publication. Because the ENE publications are for the year-ending March each year, the number of units associated with publication years are estimates. Generally, we have assumed that the best estimate of observed delivery for a particular year is provided in the most recent ENE publication. Thus, the most reliable estimate of delivery in 2008/09 is provided by ENE 2011/12.
18 These numbers are an exact match with the exception of the numbers for 2015/16 which are out by 370 units.
19 Delivery stats are published by the NDHSWS on its website in a series of PDF documents. This data aligns with ENE data for the full financial year although some data is published for the year to end January.
20 The unit of measure for the NDHS housing flow statistics is not consistent across time. At first, the NDHS reported housing flow statistics using the number of houses completed (2005 – 2006). The unit of measure was then broadened to include houses that were in the process of being completed (2007 – 2010), and from 2011 – 2018 the unit of measure narrowed back to include only completed houses.
activity for the full year is reported on in the subsequent ENE publication, these figures are updated and can be adjusted upwards or downwards. Between 2011 and 2015 figures were adjusted upwards, consistent with reporting on actual delivery for a partial time period. From 2016 onward, numbers have been adjusted downward. As noted, the ENE includes budgeted allocation for the upcoming financial year plus two years of forward estimates – together these three years of figures make up the medium-term expenditure framework. A comparison between projected and observed values over the period 2011/12 – 2017/18 highlights significant variance. While a discrepancy is to be expected – forecast numbers cannot be precise – the magnitude of the discrepancy is worth consideration, particularly in light of the lead times on housing projects. With regard to most recent projections (not published in the table below) these remain high at 98 152 for 2019/20, declining noticeably to 83 292 in 2020/21 and 80 473 in 2021/22.21

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### Table 2: NDHS completed housing units statistics reported in ENE 2008 - 2018

<table>
<thead>
<tr>
<th>Year of ENE</th>
<th>Unit of measure</th>
<th>Period for which figures are quoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Number of houses completed and in process of completion (Table 26.1)</td>
<td>252,834 271,219 220,204 226,471 242,916 265,330</td>
</tr>
<tr>
<td>2010</td>
<td>Number of houses completed and in process of completion (Table 30.1)</td>
<td>257,348 252,834 271,219 248,850 250,000 250,000 250,000</td>
</tr>
<tr>
<td>2011</td>
<td>Number of houses completed per year (Table 31.1)</td>
<td>271,219 248,850 239,533 166,047 220,000 220,000 230,000</td>
</tr>
<tr>
<td>2012</td>
<td>Number of additional residential units completed per year (Table 31.1)</td>
<td>146,465 160,403 161,854 88,989 120,000 130,000 140,000</td>
</tr>
<tr>
<td>2013</td>
<td>Number of additional residential units completed per year (Table 31.1)</td>
<td>161,854 121,879 120,610 72,223 132,705 138,540 137,898</td>
</tr>
<tr>
<td>2014</td>
<td>Number of additional residential units completed per year (Table 31.1)</td>
<td>121,879 120,610 115,079 70,362 66,655 72,533 76,433</td>
</tr>
<tr>
<td>2015</td>
<td>Number of additional units in the housing subsidy submarket completed per year (Table 38.1)</td>
<td>120,610 115,079 105,936 66,655 103,983 113,388 120,308</td>
</tr>
<tr>
<td>2016</td>
<td>Number of subsidy housing units provided per year (Table 38.1)</td>
<td>115,079 105,936 94,566 103,983 108,017 117,105 139,329</td>
</tr>
<tr>
<td>2017</td>
<td>Number of subsidy housing units completed per year (Table 38.1)</td>
<td>105,936 94,566 99,904 108,017 113,341 117,105</td>
</tr>
<tr>
<td>2018</td>
<td>Number of subsidy housing units completed per year (Table 38.1)</td>
<td>94,566 99,904 90,692 113,341 99,654</td>
</tr>
<tr>
<td>2019</td>
<td>Number of subsidy housing units completed per year (Table 38.1)</td>
<td>99,904 90,692 86,131 99,654</td>
</tr>
</tbody>
</table>

**Audited**

**Current**

**Vote (proj.)**

**Projected**
Best estimates of subsidy units completed based on ENE publications are summarised in the figure below.

**Figure 2: Subsidy units completed: 2007/08 – 2018/19**

![Bar chart showing subsidy units completed from 2007/08 to 2018/19](image)


The data shows a downward trend in completed units. A very significant decline is visible between 2009/10 and 2010/11, with a steady downward trend reversed in the most recent year. The data is noticeably less variable than data on housing starts as published by the NHBRC summarised in Figure 1 above.

While the NDHSWS has an extensive administrative system to enable delivery in line with the National Housing Code, data used to compile delivery statistics is not drawn directly off the HSS. Rather, the National Department relies on provinces to submit data on delivery.\(^{22}\) The Auditor General then verifies these figures as part of its audit process.

Provincial data published by the NDHSWS in its annual report is summarised in Figure 3 below. It shows a decline in all provinces except Mpumalanga since 2009/10.

\(^{22}\) Telephonic conversation with an official in the NDHS, 2019.
Figure 3: NDHSWS subsidy units completed: Provincial breakdown: 2009/10 – 2017/18


While the total audited national numbers reported by the ENE broadly align with the sum of provincial numbers as per the NDHS annual reports summarised in Figure 3 above, this is not always the case. For instance, for the 2014/15 and 2015/16 years, data published in the Department of Human Settlements annual reports exceeds ENE national totals by 644 and 435 units respectively. For 2017/18 the ENE exceeds annual report data by 83. While this is admittedly a fraction of total units delivered it is not at all clear why there is any discrepancy at all.

The NDHS website and annual reports also provide data on the number of serviced sites. This data is summarised in Figure 4 together with completed subsidy units. The number of serviced sites is significantly lower than completed units although the gap has declined as delivery of serviced sites is more stable than subsidy units.

Figure 4: NDHS serviced sites and subsidy units completed: 2008/09 – 2017/18


It is not clear how serviced sites that subsequently become subsidy houses are captured in the data. It would appear that the two are distinct given that they are counted as distinct ‘housing opportunities’, although this warrants investigation. For instance, the City of Cape Town notes in the definition section of its 2016/17 Annual Report: “In some instances, delivery of a serviced site and a top structure may be on the same property, but is viewed as two opportunities (serviced site and top structure) to align with reporting requirements on expenditure for grant funding as two separate milestones.” A further uncertainty relates to the number of housing opportunities per serviced site; in the case of informal settlement upgrading it appears plausible that one upgraded site serviced with communal taps and toilets might accommodate a number of households.

Aside from publishing annual statistics, the NDHS periodically publishes the total number of housing opportunities created by the State since 1994, including subsidy units and serviced sites on its website. That data reports that as at December 2017, 2975197 RDP / BNG houses have been delivered by the State since

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1994 (it is not clear when in 1994) while 1,088,764 serviced sites were delivered over this time period, together, this equals 4,063,961 state-subsidised, 'housing opportunities' delivered across South Africa. There is no published data on how many are delivered in urban areas where beneficiaries would have freehold title as opposed to rural areas.

Aside from data reported by the NDHS on national and provincial delivery, municipalities may also publish delivery data. For example, data published by the City of Cape Town (CCT) in its annual report, provides a breakdown of the data into serviced sites, completed houses and an 'Other' category including “community residential unit (CRU) upgrades and shared services provision to re-blocked informal settlements and backyarders”. (This is a recent development. Previously, the CCT only published aggregate data on housing opportunities.) The data shows a decline in the number of housing opportunities in total, driven by a very visible decline in the number of serviced sites delivered, with some recent growth in the number of top structures.

**Figure 5: Housing opportunities in the City of Cape Town**


### 2.3 Data on units registered in the deeds registry

A final data set explored in this paper is aggregated data on title deeds – that is, subsidy housing registrations as reported by the ENE and the NDHS. The NDHSWS currently derives data on registrations using a deed search on the ID numbers of beneficiaries provided by the NDHS to a private company who has access to deeds registry data, a database that is owned by the Department of Rural Development and Land Reform. The NDHSWS pays a private company for this service because it no longer purchases deeds data directly from the DRDLR.

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30 A further 68,656 Hostel / CRU units and 124,183 Social / Rental / Institutional units were developed.

31 The City also discloses progress on the number of “erwen registered in beneficiaries’ names at the deeds office” in ‘historic housing projects’ (1,182 in 2016/17). It is not clear which projects this refers to.

32 Based on a conversation with an official in the NDHSWS (2019).
Reporting on title deeds in the NDHSWS Annual Report and the ENE is a relatively recent addition. In the case of the NDHS, the annual reports for the years 2013/14 through to 2016/17 contain some data under performance indicators for the Urban Settlements Development Grant (USDG) for the eight metropolitan municipalities. In 2013/14 only four of the eight metropolitan municipalities provided data. By 2016/17 all metropolitan municipalities reported data with the exception of Buffalo City and Tshwane.

**Table 3: Title deeds registered in eight metropolitan municipalities**

<table>
<thead>
<tr>
<th>Metropolitan Municipality</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nelson Mandela Bay</td>
<td>2,181</td>
<td>849</td>
<td>1,608</td>
</tr>
<tr>
<td>Mangaung</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ekurhuleni</td>
<td>1,758</td>
<td>2,034</td>
<td></td>
</tr>
<tr>
<td>City of Johannesburg</td>
<td>4,599</td>
<td>3,297</td>
<td></td>
</tr>
<tr>
<td>eThekwini</td>
<td>58</td>
<td>1,477</td>
<td>359</td>
</tr>
<tr>
<td>Cape Town</td>
<td>2,927</td>
<td>1,737</td>
<td>899</td>
</tr>
<tr>
<td><strong>Total across eight metropolitan municipalities</strong></td>
<td><strong>9,765</strong></td>
<td><strong>9,118</strong></td>
<td><strong>5,432</strong></td>
</tr>
</tbody>
</table>


In addition to data reported under the USDG, the 2014/15 and 2015/16 annual reports of the NDHS include data on property registrations across the country. This data is broken down into registrations on new developments and “pre- and post-1994 properties” (making a distinction between so-called “old township stock” built before 1994 and not yet transferred, and subsidised housing built as part of the national housing subsidy programme since 1994). The 2014/15 NHDS Annual Report indicates that a total of 32,750 title deeds were issued as at 31 March 2015 by provincial departments for new developments, while 26,279 title deeds were issued for “pre- and post-1994 properties”. The respective numbers on title deeds from the 2015/16 Annual Report were 14,266 and 48,497, the latter performance metric reported under the activities of the Estate Agencies Affairs Board. Presumably these include municipal data reported under USDG indicators where available as summarised above.

Data on title deeds is included in the 2017, 2018 and 2019 ENE publications broken down into the number of title deeds issued with respect to new developments as well as title deeds issued to eradicate the backlog. The most recent ENE specifically defines new developments as post-2014 and the backlog as pre-2014.

34 These are Mangaung (2,181), Tshwane (4,599), eThekwini (58) and the City of Cape Town (2,927). Cape Town reports on the number of deeds of sale signed with beneficiaries.
37 Ibid. Pg. 42.
38 Data for the current and previous years is also included in the NDHS annual reports for 2016/17 and 2017/18.
Data on title deeds for new developments is summarised in Table 3 below from the ENE for 2017 to 2019. The 2017 ENE notes that past and current data is not available, although it projects that 170 240 title deeds will be issued per year on new developments for 2017/18 to 2019/20. There is a discrepancy between the 2018 ENE data and the 2014/15 NDHS Annual Report on title deeds for new developments for 2014/15 year. Also noteworthy is the significant upward revision in 2016/17 data from 17 396 as reported in the 2018 ENE to 60 740 in the 2019 ENE. It is not clear why this revision occurred.

Table 4: NDHS title deeds for new developments reported in ENE 2017 – 2019

<table>
<thead>
<tr>
<th>Year of ENE</th>
<th>Unit of measure</th>
<th>Period for which figures are quoted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of title deeds registered for new developments per year (Table 38.1)</td>
<td>2013/14</td>
</tr>
<tr>
<td>2017*</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>2018</td>
<td>Number of title deeds registered for new developments per year (Table 38.1)</td>
<td>38 013</td>
</tr>
<tr>
<td>2019</td>
<td>Number of title deeds registered for new (post-2014) developments per year (Table 38.1)</td>
<td>14 266</td>
</tr>
</tbody>
</table>

Audited | Current | Vote (Proj.) | Projected |

Note: * No past data available

A comparison of historic data on new developments with data on units completed highlights a significant shortfall in registrations. For instance, in the 2014/15 financial year a total of 38 013 title deeds were registered for new developments while 94 566 units were completed (see Table 2). Likewise, in 2015/16 14 266 title deeds were registered while 99 904 units were completed. The 2017/18 data is striking with only 1 151 title deeds on new projects. This is less than one tenth of the estimate of actual performance on title deed registration as per the previous ENE and a fraction of the over 86 000 houses completed that year. While the Department reports that it “initiated a directive to link title transfer to completion certificates”[^43], one is hard pressed to take at face value the restated estimate for 2018/19 as reported in the 2019 ENE. (The registration of 170 240 title deeds in a single year would have an unprecedented impact on the national deeds registry – indeed, it is unlikely the institution would have the capacity to handle this number. CAHF’s Citymark data shows that since at least 2010, the total number of new residential property registrations on the deeds registry across the market as a whole was limited to between 52 000 and 62 000 annually.^[42])

A specific grant, the Title Deeds Restoration Grant, of R1.644 billion, has been set aside in the budget over the period 2018/19 to 2020/21 to eradicate the pre-2014 backlog. In line with this grant, the ENE also publishes data

on the number of title deeds registered to eradicate the title deed backlog. According to that data, 247,500 title deeds were registered in 2018/19 with a further 228,561 title deeds having been registered between 2014/15 and 2017/18.

Table 5: NDHS title deeds to eradicate backlog reported in ENE 2017 - 2019

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2017*</td>
<td>Number of title deeds registered to eradicate backlog per year (Table 38.1)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>207,146</td>
<td>247,500</td>
<td>247,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>Number of title deeds registered to eradicate backlog per year (Table 38.1)</td>
<td>61,545</td>
<td>60,944</td>
<td>67,458</td>
<td>207,146</td>
<td>247,500</td>
<td>247,000</td>
<td>247,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>Number of title deeds registered to eradicate pre-2014 backlog per year (Table 38.1)</td>
<td>60,944</td>
<td>67,458</td>
<td>38,614</td>
<td>247,500</td>
<td>206,170</td>
<td>206,170</td>
<td>**</td>
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</tr>
</tbody>
</table>

Note: * No past or historic data available, ** target is expected to be achieved by 2020/21

While the Title Deed Restoration Grant is administered by the NDHSWS, it is curious that there is no mention of the grant or its impact on the operational environment of the National Deeds Registry either in the March 2018 annual report of the Department of Rural Development and Land Reform or the 2019 ENE for that department. It is worth reiterating that these numbers are not evident in the national deeds registry as reported by CAHF. The total number of new registrations per annum has not been more than 62,000 for the entire residential property market since 2010. With respect to the reported number of over 67,000 title deeds registered in the 2016/17 year, the Auditor General notes in the 2016/17 Annual Report:

"I was unable to obtain sufficient appropriate audit evidence for the reported actual performance of the target for the number of title deeds backlog eradicated. This was due to a lack of adequate source documentation to support the reported achievement. I was unable to confirm the reported achievement by alternative means. Consequently, I was unable to determine whether any adjustments were required to the reported actual performance of 67,449 title deeds backlog eradicated."

The 2017/18 Annual Report of the NDHS speaks directly to this point:

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Action Plan has been developed to address issues affecting the completion of the annual performance report and to improve reliability of the actual reported targets. These include: Collecting actual title deeds from the provinces to ensure accuracy of the reported title deeds transferred; Purchasing of title deeds information from the title deeds office to ensure accuracy of the reported title deeds transferred.\textsuperscript{45}

Nevertheless, concerns about the reliability of this data remain; the Department’s 2017/18 annual report notes:

81 929 pre-and post-1994 title deeds issued as reported by the provinces. National department verification exercise totalled to 41 841.\textsuperscript{46}

The Auditor General makes the following comment on this proviso:

*The department did not have an adequate record keeping system to enable reliable reporting on the achievement of the indicators listed below. As a result, I was unable to obtain sufficient appropriate audit evidence in some instances, while in other cases the supporting evidence provided did not agree with reported achievements. Based on the supporting evidence that was provided, the achievement of these indicators was different to the reported achievement in the annual performance report. I was also unable to further confirm reported achievements by alternative means. Consequently, I was unable to determine whether any further adjustments were required to the reported achievements of the indicators listed below.*\textsuperscript{47}

As noted, a final data set explored with regard to title deeds is CAHF’s estimate generated by Lightstone based on record-level deeds data. The reported number of title deeds registered for subsidy units (backlog and current project) as per the ENE and NDHS exceeds the total new registrations across the entire residential property market between 2014 and 2017. While we note CAHF’s data is reported for a calendar year as opposed to a financial year ending end March as is the case with ENE data, the variance between the data dates would not explain the significant variance.

*Figure 6: Total title deeds registered for all subsidy properties as reported by the ENE compared to CAHF data on the total number of new registrations for all residential properties (including subsidy units)*

Source: ENE publication, 2018/19, CAHF. CAHF has created a proxy of the number of RDP properties registered on the deeds registry because there is no specific

\textsuperscript{46} Ibid. Pg. 44.
\textsuperscript{47} Ibid. Pg. 126.
subsidy flag in the deeds registry that identifies a registered property as having been subsidised by the state. CAHF’s proxy is based, inter alia, on the profile of the ‘buyer’ (an individual) and ‘seller’ (the State), the size of the erf (less than 500 square metres) and the price. That data is summarised below for the period 2007 to 2017. CAHF’s proxy-based estimate for subsidy housing title deed registration is significantly lower than data on units completed published in the ENE.

*Figure 7: Subsidy housing title deeds registered: 2007 - 2017*

Source: Estimate generated by CAHF’s Citymark analysis, using deeds registry data supplied by Lightstone Property as at the end of December 2017.

Of course, CAHF’s data is based off a proxy indicator as there is no specific flag in deeds registry data to identify a subsidy property. Given publicly available data, it is difficult for CAHF to assess the quality of its proxy.

3 Bringing it all together in a housing value chain

The chart below summarises the number of subsidy starts, completions and registrations as per available administrative data, between 2008 and 2018. It is, of course, not possible to align them directly (construction on a house may start in one year, and be completed and registered in the next, or indeed in subsequent years). Nevertheless, over a decade, the data on starts and completed units should be somewhat similar. In fact, however, there is a discrepancy, with completed units exceeding housing starts by almost 100 000 units over the ten years between 2008/09 and 2017/18. This may in part reflect poor compliance with NHBRC enrolment requirements, particularly between 2008 and 2010, the period after it became mandatory for subsidy units to be enrolled.

As noted, the more glaring discrepancy is between the number of completed units and the number of registered units. In most years, it appears that no more than 20% of units delivered were registered, and there is no evidence of a catch-up being achieved in the following years. While this may in part reflect methodological issues with regard to the proxy indicator developed by CAHF, data published by the NDHS and in the ENE would seem to support the broad conclusion that there is a problem with the housing subsidy development process that results in a relatively low number of properties registered in the deeds registry. It appears the title deed backlog continues to grow even as funding is made available to reduce the pre-2014 backlog. Indeed, post-2014 registration figures suggest that interventions made to identify and rectify underlying factors that gave rise to the backlog have been ineffective, even as efforts are made to eradicate the backlog in the pre-2014 period.
4 Where to from here?

This short review of published delivery data based on administrative data sources has highlighted some discrepancies between and within data sources. Of late, the data appears more stable and internally consistent, but it is not clear whether this is because data quality has improved or data sources have been narrowed.

More critically, the analysis highlights the importance of triangulating data generated by the administrative systems of the entities that govern housing delivery end-to-end. That there are inconsistencies between agencies that are all state-owned indicates there is significant room for improvement. Six areas for attention are discussed briefly below:

**Negative implications of unrealisable projections**

Given the profile and impact of the subsidy housing programme it is completely understandable provisional estimates and projections are ambitious.

While stretch targets can be a motivating factor, they can be demotivating for officials who oversee and report on ‘disappointing’ delivery performance, when they are missed repeatedly. They also lead to a culture of blame with various players along the value chain and spheres of government ascribing shortcomings to others. Given the complexity of the housing delivery process and the multiple handover points between departments and entities who provide budget, release land, provide bulk services, manage construction, build units and register title deeds, a blame culture does little to foster the cooperation required to coordinate this process productively.

In addition, data collected on performance should enable sound monitoring and evaluation, accurate and timely identification of problem areas and the development of strategic interventions to improve outcomes. However, when reporting becomes compliance-driven, officials are incentivised to inflate provisional numbers and hide weaknesses.
Further, the publication of unrealistic provisional estimates and projections undermines external confidence in the capacity of the State to administer this programme. It also confuses critical signals that inform the nature and scope of solutions that may be developed by the private sector and required by beneficiary households who may wish to upgrade, leverage or purchase subsidy properties.

Developing projections is always complex. However, there appears to be scope for improvement, particularly with regard to the primary performance indicator, namely, the number of units completed. Given the very long lead times and multi-stage process from project inception to completion of construction, it should be possible to generate more reliable projections of units completed using data on the pipeline of existing projects where funding has already been committed. These projections have a direct bearing on funding requirements as well as planning activities of the NHBRC.

**Indicators of process, not only outcomes**

While the information systems that underpin the administration of subsidies as well as the activities of the NHBRC are sophisticated, the performance metrics that are published are relatively sparse. Virtually all reporting is on outputs: number of homes enrolled in the subsidy sector per year, number of subsidy housing units completed per year, number of title deeds registered for new (post-2014) developments per year, number of title deeds registered to eradicate backlog per year. While an emphasis on outputs is important, this narrow focus represents a lost opportunity in terms of identifying and understanding delivery inefficiencies, identifying shortcomings (both in the value chain, and in specific geographic areas), and identifying opportunities to replicate successes. Efficiency indicators such as average or median time to complete various project phases (or, a project-level indicator that measures when phases are completed within normative timeframes) could be easily introduced given the data that the NHBRC already collects but does not yet publish.

**Registration data as a national asset**

The report notes that data on title deeds is purchased by the NDHSWS from a private sector provider. Many provinces and municipalities purchase this data too. While it would obviously be more efficient for the State to purchase this data once, it would be ideal if the NDHSWS and other national departments could access the data from the deed registry at no cost. A much more efficient approach would be for the Deeds Registry to beneficiate the data itself, and provide it to all organs of State through a centralised portal. This would enable the State to better monitor and report on title deed registrations, thereby completing its monitoring of its expenditure in terms of the national housing programme. It would also allow for monitoring of resale market activity in the state-subsidised housing market, a key gap in current property market analytics available in South Africa.

**Technology upgrades that don’t go far enough**

During 2019 both the NDHSWS and the NHBRC have sought the assistance of external service providers to update and improve their systems. This, of course, to be welcomed. However, beyond enabling both organisations to do what they have always done a little better, there is an opportunity to leverage new technologies to overcome some of the coordination failures that impact on the housing programme. Distributed ledger technology, most commonly known in its incarnation as blockchain technology, can enable multiple parties to update data on an on-going basis while ensuring that historic data is ‘immutable’. This would enable a system that is at the same time flexible and responsive to changes that inevitably occur on housing.
projects (including removing and replacing beneficiaries) but auditable to manage the risk of fraud. Likewise, smart contracts and escrow mechanisms could allow for seamless integration of the activities of the NHBRC which inspects properties, and provincial or municipal entities that pay contractors subject to key milestones being met.

Blockchain technology could also enable the NDHS to create a shadow deeds registry for subsidy properties that cannot be registered on the deeds registry typically because a General Plan does not exist. This could enable the State to manage the backlog better; beneficiaries would be able to update the register by recording transactions and life events that impact on property ownership (including sales, deaths, marriages and divorces). Primary registration can then take place with reference to verified and secured records once administrative impediments to transfer have been removed. Finally, blockchain technology could enable the State to distribute components of property rights across time and across beneficiaries — opening up new possibilities for subsidy mechanisms. For instance, beneficiaries may be granted the right to live in a property for a certain period and the right to sell a property beyond that. Beneficiaries would then be able to trade certain rights but not others.50

A second category of technology that could enable better delivery and governance is surveillance technology. This leverages high resolution imagery together with automated image processing technologies to detect activity — in this case, building activity. It would be useful to assess whether and how the NHBRC could leverage this in its inspection process.

Resist the temptation to flag RDP properties

Organisations, including the State and CAHF, that wish to monitor the asset performance of RDP properties would like a reliable indicator flagging these properties in deeds registry data. This would enable more reliable identification of these properties at lower cost. However, the missing flag on RDP properties in the deeds registry might be a fortunate oversight. Less data enables less official control, and in light of the complicated attitude within Government to the sale of RDP houses,51 this is, arguably, a good thing. As it is, the title deeds of RDP properties are encumbered by a restrictive clause that prevents the sale of the property for a period of eight years. While this is ostensibly to protect the poor who may be tempted to, or lured into, selling their houses for very little, by increasing barriers to formal transaction mechanisms, it arguably makes buyers and sellers more vulnerable.

That said, there is a very real need to assess market performance for RDP properties. The question to consider is whether on balance a proxy indicator enables sufficiently useful and accurate insights to be generated. We would argue it does. To support this and sharpen the proxy, NHBRC data could offer a useful check. As noted, the NHBRC explicitly requests data on subsidy classification for every house it enrols.

Completing the housing delivery value chain with indicators to measure performance

All of this gets back to the critical gap in the current assessment of the national housing programme: a view on performance. The considerable cost of the State’s housing programme has been noted: given an allocation of


51 For instance, at an official ceremony in 2017, the then, and current, Minister of Human Settlements, Lindiwe Sisulu was quoted in the press as saying: “When (government) gives a house to the needy, it is for the whole family and not for one person. No one must sell the house. It must be passed from generation to generation.”. See: Government to implement laws to curb the sale of RDP houses, 29 Mar 2017, downloaded from https://www.property24.com/articles/government-to-implement-laws-to-curb-the-sale-of-rdp-houses/25604 on 20/08/2019.
R68 852\textsuperscript{54} for each completed house in 2017, expenditure would amount to over R19 billion in 2017/18 (assuming 113 341 units were completed in that year). According to CAHF’s proxy, the annual investment by the state in its national housing programme has resulted in 30% of all properties in the deeds registry being state subsidised. This is significant. But what impact has it had?

Today, the best we can do is analyse the market segment as framed by CAHF’s proxy. From this, CAHF has determined that in 2017, there were a total of 1 888 979 government subsidised properties on the deeds registry, of which 76% were valued at less than R300 000. A further 22% were valued at between R300 000 – R600 000, and 2% were valued at over R600 000.\textsuperscript{53} CAHF has also determined that of the 1.88m state-subsidised properties on the deeds registry, 951 850 are in the major metros, and of these, 847 292 are older than eight years, making them eligible for trade on the resale market. Considering that each year, 2.58% of all residential properties transact, this could suggest the potential for 21 860 formal residential transactions of government subsidised housing per annum – versus the 11 008 formal transactions that took place in 2017.\textsuperscript{54} In that year, only 2 256 of these transactions were financed with a mortgage. That relatively small number notwithstanding, state investment has indeed leveraged private capital.

However, CAHF’s analysis shows that the government subsidised housing programme is underperforming the wider market, with lower levels of churn, lower levels of bank financing, and in some cases, lower values being achieved. At the same time, it shows pockets of progress which are beginning to realise the Breaking New Ground vision of “supporting the functioning of the entire single residential property”.\textsuperscript{55}

What we cannot show, however, is the impact that the subsidised housing allocation has had on the household: how many have traded up? How many have traded down, or traded themselves off the deeds registry? How long do households occupy their first home and where do they go when they sell? We are also unable to show the impact on local economic development. What impact has the delivery and existence of state-subsidised housing had on neighbouring area property values? To what degree is mortgage finance being leveraged and can this be improved, by what policy intervention? And then, there is the potentially vast (but statistically invisible) reality of informal transactions. Could we understand these better if we could better see (and map) the location of RDP projects and the title deeds backlog? These and so many more questions are unanswerable because of the imprecision of the currently available administrative datasets, and the absence of a performance metric that would require a better organisation of the data.

Twenty-five years into the national housing programme, it is surely time we explored the performance of these properties now delivered, both to take stock of what has been produced but to also plan forward into the next generation of state-support for housing. Administrative data already collected by the state could go very far in supporting this effort and in assisting policy makers and regulators at the national and city levels to leverage the impact of this significant programme in support of their ongoing goals.

\textsuperscript{54} Parliamentary Monitoring Group (2018). Question NW1367 to the Minister of Human Settlements.

\textsuperscript{53} CAHF’s Citymark analysis, using deeds registry data supplied by Lightstone Property as at the end of December 2017.

\textsuperscript{54} Rust, K. (2018). “Investment and economic empowerment opportunities in South Africa’s affordable housing sector.”

\textsuperscript{55} The national housing policy, Breaking New Ground, was adopted in 2004. Within a vision “to promote the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing”, the policy asserts the following objectives: accelerating the delivery of housing as a key strategy for poverty alleviation; utilising provision of housing as a major job creation strategy; ensuring property can be accessed by all as an asset for wealth creation and empowerment; leveraging growth in the economy; combating crime, promoting social cohesion and improving quality of life for the poor; supporting the functioning of the entire single residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump; and utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring.” \url{http://www.thehda.co.za/uploads/files/BREAKING_NEW_GROUND_DOC_copy-2_4.pdf}
Overview of data sets

South Africa National Treasury Estimates of National Expenditure (ENE) Publications: Published in February each year, these publications provide information on the prioritisation, spending plans, and service delivery commitments of all national votes and government agencies. Data on housing starts and completions are presented as performance indicators in the Housing/Human Settlements chapter/vote of the annual ENE. Accessible from the National Treasury website at http://www.treasury.gov.za/documents/national%20budget/default.aspx

NHBRC Annual Reports: They provide a comprehensive overview of the operations, activities as well as the operational and financial performance of the NHBRC for each financial year, along with insight into its plans and projects going forward. Data on subsidy home enrolments are provided as indicators of the operational performance of the NHBRC. Accessible from the NHBRC website at https://www.nhbrc.org.za/reports/

NDHS Annual Reports: These publications which are typically published in or around September of each year. These publications provide a comprehensive overview of the operations, activities as well as the operational and financial performance of the NDHS for each financial year, along with insight into its plans and projects going forward. Data on targeted and actual completed serviced sites and top structures are provided at both a national and provincial level to measure the service delivery performance of the NDHS. Accessible from the NDHS website at http://www.dhs.gov.za/content/annual-reports

NDHS Housing Delivery Statistics: In addition to their annual reports, the NDHS provides documents with housing delivery statistics at both a national and provincial level. These documents are accessible from the NDHS website at http://www.dhs.gov.za/content/housing-delivery-statistics-

City of Cape Town Annual Reports: These publications provide a comprehensive overview of the operations, activities as well as the operational and financial performance of the City of Cape Town for each financial year, along with insight into its plans and projects going forward. Data on targeted and completed serviced sites and top structures are presented as performance measurements of the City. Accessible from the City of Cape Town website at http://www.capetown.gov.za/document-centre/Document-overview/city-research-reports-and-review

CAHF Citymark data set: This data set was constructed for CAHF by Lightstone Property using deeds registry data. Subsidy houses are identified using property characteristics based, inter alia, on the profile of the ‘buyer’ (an individual) and ‘seller’ (the State), the size of the erf (less than 500 square metres), and the price. Information on accessing this data set is available on the CAHF website at http://housingfinanceafrica.org/documents/citymark-user-guide/
Bibliography


National Department of Human Settlements (2019). Appointment of a professional service provider to provide specialised technical skilled resources for the housing subsidy systems (HSS) environment for a period of 36 months.


