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THE BENEFICIARY EXPERIENCE TRACKING APPLICATION:

UNDERSTANDING THE IMPACT OF SPATIAL TRANSFORMATION
IN HUMAN SETTLEMENT INVESTMENTS



Authored by: Raesa Ghoor and Karishma Busgeeth

Acknowledgements: Botaki Afrika Enterprise,
Gauteng Department of Human Settlements,
Western Cape Department of Human Settlements and Johan Minnie



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ABBREVIATIONS

BEE	Black Economic Empowerment
BETA	Beneficiary Experience Tracking Application
BNG	Breaking New Ground
CAHF	Centre for Affordable Housing Finance
DALRRD	Department of Agriculture, Land Reform and Rural Development
FLISP	Financial Link Individual Subsidy Programme (now known as First Home Finance)
GCRO	Gauteng City-Region Observatory
HDA	Housing Development Agency
HSS	Human Settlements System
HSTS	Human Settlements Transformation Scorecard
ICT	Information and Communications Technology
IDP	Integrated Development Plan
IRDP	Integrated Residential Development Programme
IUDF	Integrated Urban Development Framework
M&E	Monitoring and Evaluation
NDHS	National Department of Human Settlements
PDA	Priority Development Areas (previously known as PSHDAs)
PHDAs	Priority Housing Development Areas
PHP	People's Housing Process
PHSHDAs	Priority Human Settlement Housing Development Areas
QOG	Quality of Growth
QOL	Quality of Life
QOP	Quality of Place
SACN	South African Cities Network
SCM	Supply Chain Management
SDGs	Sustainable Development Goals
SPLUMA	Spatial Planning and Land Use Management Act
STIA	Spatial Transformation Impact Application
TOC	Theory of Change
TOD	Transit-orientated Development
UMP	Urban Management Plan

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INTRODUCTION

The Beneficiary Experience Tracking Application (BETA) has been developed to understand beneficiary experience of recipients of state subsidised housing, in relation to spatial transformation. This report explains the importance of beneficiary evaluations, situates BETA in the increasing role of digital tools to assist government and explains beneficiary evaluations in the human settlements landscape. The report subsequently links BETA to key human settlement objectives of spatial transformation, unpacks the process of establishing the application and conducting surveys, and concludes with emerging trends from BETA's first pilot phase of community testing to analyse the impact of state investment on spatial transformation.

The establishment of the Housing Development Agency (HDA) was aimed at improving negotiation in the compromise between quality and large-scale delivery imperatives by tasking the agency to acquire state land in good locations and fast-track delivery (Menguelé, Khan & Vawda, 2008). In terms of the Housing Development Agency Act of 2008, an objective of the agency is to “monitor the provision of all infrastructure required for housing development”, which makes the HDA well suited to initiate a study on beneficiary experience (Republic of South Africa, 2008: 9). Central to achieving this

objective is “the development and deployment of applications and systems to improve business outcomes and drive value across the HDA” (HDA, 2022: 2).

Two programmatic and planning initiatives are helpful to understand spatial transformation in the context of human settlements. The one is the Comprehensive Plan for the Development of Sustainable Human Settlements, known as Breaking New Ground (BNG), and the other is the Priority Development Areas (PDAs) programme. BNG, released in 2004, created a focus shift within human settlements (NDHS, 2009). The PDAs programme, gazetted in 2020, established areas where human settlement investment is envisioned to be focused, as the government gazette states, “a significant portion of public funding will be directed to the PSHSDAs with the intention of attracting private sector investments” (National Department of Human Settlements, 2020: 20). These two documents represent an orientation and focus for human settlements and are useful to unpack BETA in relation to spatial transformation. The objectives and outcomes from the related documents (NDHS, 2004; HDA, 2014a; NDHS & HDA, 2020) are unpacked in this report in relation to spatial transformation.

WHY IS IT NECESSARY TO EVALUATE BENEFICIARY EXPERIENCES?

Housing is more than shelter, it is a home, and a home has significance as a place where there is “strong social, psychological and emotive attachments. The home is also understood as an open place, maintained and developed through the social relations that stretch beyond it” (Easthope, 2004: 135-136; HDA, 2022). In addition to psychological and social understandings of housing, there is economic meaning as well (Newtown, 2013). The economic understanding relates to the income generation possibilities from housing, and this is important to cultivate for low-income households (ibid). The current housing programme in South Africa has been critiqued for creating singular functional, low density and primarily low-income settlements that lack economic prospects on the urban periphery (Gardner, 2018). BNG implemented a housing plan with a greater focus on sustainable settlements (Gardner, 2018) and Charlton and Kihato (2006: 258) note that the strategies defined in BNG reflect “concern over the impact of the housing programme on the poor”. Beneficiary experience evaluation aids in a better understanding of the impact of programmatic intentions on the delivery of human settlements. It has the potential to bring a greater focus on beneficiaries’ needs as envisioned by the People’s Housing Process (PHP), with a focus on the transformative impact rather than specifically beneficiaries’ role in building (Charlton & Kihato, 2006).

Beneficiary evaluations also assist with fulfilling the state’s mandate as litigations within housing have directed judgements that “persistently required the state to engage meaningfully with those affected by housing interventions, but these judgements have not succeeded in changing an entrenched

institutional approach since 1996 of top-down state intervention in housing, with participation merely as a formality” (Huchzermeyer & Karam, 2016: 90). Beneficiary experience evaluation contributes to the need to engage with those affected by state housing. In addition, post-occupancy evaluations have the potential to assist in avoiding past errors and omissions of housing delivery, ensuring good design and construction (Aigbavboa, 2011). These evaluations also create a feedback mechanism between the state and beneficiaries, and save costs (ibid).

Beneficiary evaluation analysis also contributes to understanding the transformative impact of state investment. Spatial transformation is an outcome highlighted in several South African policy frameworks and plans (NPC, 2012; Harrison & Todes, 2013; COGTA, 2016; DALRRD, 2023). There is a need to measure “changes to the urban experience” and spatial outcomes to understand spatial transformation (SACN, 2016a: 76). BETA assists in evaluating changes to the urban experience. By initiating a post-occupancy evaluation through BETA, the HDA contributes to an exploration of how beneficiary assessments can assist in understanding changes to the urban experience, build on the intentions of the PHP, initiate a mechanism for the state to engage with beneficiaries, and provide a mechanism to assess the impact of policy and programmatic intentions that can be used to advise on a new directions for human settlements. In this context, the HDA developed BETA as a digital capability. It was developed on Survey 123 (ArcGIS Enterprise) and is accessible on both desktop and mobile platforms to track and monitor beneficiary experience.

SITUATING BETA IN DIGITAL TRANSFORMATIONS

The importance of digital technologies for the public sector has increased as they can decrease negative environmental consequences and improve infrastructural operations (Manny, Duygan, Fischer and Rieckermann, 2021). Digital transformation is “beyond digitalization, as it additionally includes organizational and institutional changes, e.g., organizational culture, regulation, or service delivery, and affects the public sector, among other sectors” (ibid 943-944). Digital transformation provides the opportunity for increased evidence-based policy formation, enables monitoring in real time, and increases feedback from the public or other stakeholders (ibid). It is argued to change the nature of governance by changing the relationship of how information is processed (ibid). It is not without limits. The limits include a bias towards solutions that are nonconcrete and mechanical as well as constraints with the abilities of users and organizations (ibid). This can contribute to misperceptions, misinterpretation, and distrust due to data privacy challenges (ibid).

ElMassah and Mohieldin (2020) analyse the potential of digital transformation in the localisation of the United Nations’ Sustainable Development Goals (SDGs) (United Nations, 2015). Localisation addresses the importance of local authorities in addressing challenges related to the environment and development (ElMassah & Mohieldin, 2020). Digital transformation can support the SDGs where “captured information is analysed by computational techniques to unveil trends and patterns and turned to be actionable dynamic information on human behaviours, environment and experiences” (ibid 2). This fits in with BETA’s aims, which are to monitor the shifts in the urban experience, as emphasised by the South African Cities Network (SACN) (2016a) in relation to spatial transformation. This publication starts to highlight some of the patterns and trends that BETA has unveiled from the initiating study. Highlighting the specific areas where the surveys were undertaken is useful in the context of localising challenges that need to be resolved.

HUMAN SETTLEMENTS’ OBJECTIVES IN RELATION TO BENEFICIARIES

The impact of policy intentions on beneficiaries is problematised in the first decade of housing delivery in South Africa as the well-meaning programme produced inadequate and low-standard environments and houses, resulting in beneficiaries who felt alienated in their environment or abandoned their homes (Menguelé et al., 2008). Charlton and Kihato (2006: 256) noted that “while the housing programme has had some positive impacts on beneficiaries, end-user satisfaction with the subsidy scheme has varied widely”. The state also attempted to improve beneficiary involvement through the PHP that was introduced in 1998 (ibid). The PHP resulted from a variety of influences that lobbied for the wider participation of beneficiaries in housing (ibid). While the impact of the PHP is contested, it brought an important understanding in housing policy where beneficiaries are active participants in building their own homes, “a conception that some contend is important for responding to the housing needs of the poor” (ibid

265). It was noted that beneficiary involvement in PHP was confined to building and did not significantly influence other aspects that could change socioeconomic circumstances (ibid).

Participation is a government objective for the housing subsidy programme, but it is in the PHP that these objectives are realised (or have the potential to be realised) (Newton, 2013). The focus of this publication is not on the PHP, but rather on how this objective of increased participation of beneficiaries can be realised through BETA. Newton (2013) argues that “[i]f we want to meet the housing needs of the poor ... we need to understand what these needs are, we need to acknowledge that all people, also those who are living in the most deprived housing conditions, have an idea of what their home should be like” (ibid 648). While BETA currently only focuses on those that have received state subsidies, it is a start to understand the housing experiences of those who qualify for these subsidies.

HUMAN SETTLEMENTS' OBJECTIVES IN RELATION TO SPATIAL TRANSFORMATION

A publication of the HDA, 'Pathways to spatial transformation', defines spatial transformation as "significant change in the urban environment that emphasizes the need to change historical spatial patterns for economic development and includes a wide range of criteria for sustainable settlements" (HDA, 2024: 3). Various theorists have noted housing's relationship to other socio-economic goals. Venter et al. (2015) analyse housing provision through the welfare state theory and relate the importance of understanding housing and its relationship to other welfare services such as retirement, health and social welfare. The rights-based approach of the "right to the city" can bring a more multifaceted understanding and agenda for transformation in the context of rapid urbanisation in southern cities (Parnell & Pieterse, 2010). In the context of a developmental state, a rights-based approach would involve structuring institutions and planning systems to support "the effective provision of various public goods and services such as infrastructure (ideally through environmentally sustainable technologies), stable and sufficient income through wage employment (or at least some form of welfare grant), health (including environmental health), education, housing and land, public space for assembly, culture and sport" (ibid 158-159). The relation of housing to other socio-economic goals highlights the need to understand the impact of spatial transformation within human settlements. The beneficiary focus solidifies beneficiaries as an important component of the human settlements value chain. This is echoed by Newton (2013: 647), who highlights that "[f]ar too often in discussions on housing we lose ourselves in discussions on numbers, global perspectives, demographic calculations and so forth, although these matters are also of importance we believe that in the end housing, or homing, is about the daily life experience of people, and thus the quality of the housing experience should be central".

Underscoring housing policy and practice is the need to improve people's lives through the provision of shelter. This is reflected in international programmes. SDG 11, is concerned about making "cities and human settlements inclusive, safe, resilient and sustainable" (United Nations, 2015: 21). Housing policy and housing programmes in South Africa

have been through several changes in the post-apartheid era (Charlton & Kihato, 2006; Venter, Marais, Hoekstra & Cloete, 2015; Huchzermeyer & Karam, 2016; Gardner, 2018). Charlton and Kihato (2006) note the shifts brought by BNG. Significant was the notion of using "housing as a leverage for influencing and controlling the way human settlements develop" (ibid: 257). Housing is seen as a catalyst to achieve other socio-economic goals in BNG (Charlton & Kihato, 2006) and is noted to be "significant in its audacity and scope" (Menguelé et al., 2008: 181). The Comprehensive Plan for the Development of Sustainable Human Settlements (BNG) outlived the five-year term of its envisioned implementation and is utilised as a policy reference (Huchzermeyer & Karam, 2016). BNG created an "emphasis on housing demand responsiveness rather than supply-driven state-assisted housing" (NDHS, 2009: i). It also positions human settlements within a "spatial restructuring framework" (ibid i).

A programme implemented by the National Department of Human Settlements (NDHS) is the Priority Development Areas (PDAs), previously termed the Priority Housing Development Areas (PHDAs) or the Priority Human Settlement Housing Development Areas (PHSHDAs). PDAs are areas that are identified to accelerate housing delivery in the creation of sustainable settlements (HDA, 2014a). They should include different income categories and uses, which are prioritised in municipalities' Integrated Development Plans (IDPs) (ibid). PDAs are an important cog in evaluating beneficiary impact, as the principles and outcomes are aligned to spatial transformation objectives. PDAs are identified in the NDHS's Framework for Spatial Transformation and Consolidation (NDHS, 2019) as an implementation instrument. PDAs intend to "support municipalities to prioritize housing development applications in terms of SPLUMA, thus directing housing finance to areas that promote inclusive residential markets" (NDHS, 2019: 12). BNG (NDHS, 2004) defines the objectives for human settlements. The objectives, principles and outcomes of the different policies are highlighted below, while Table 3 links these objectives, principles and outcomes to spatial transformation themes.



Table 1: BNG's objectives (NDHS, 2004: 9-10)

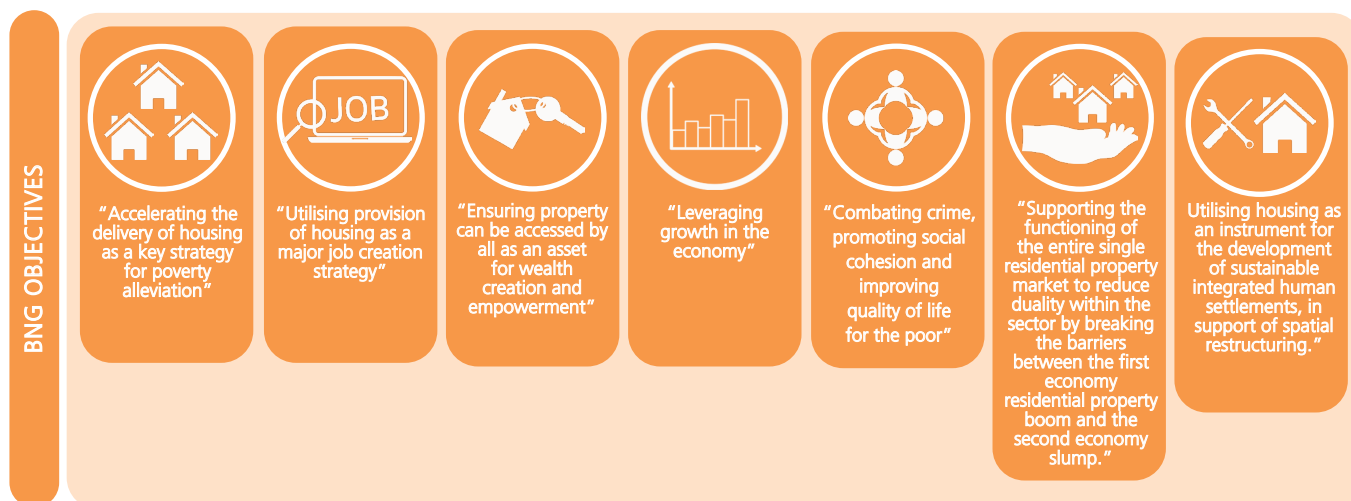







Table 2 : Principles & Outcomes of PDAs (HDA, 2014a: 13–14; NDHS & HDA, 2020: 9)








Within the different spatial transformation frameworks that the HDA has undertaken, several key themes or pillars have been identified (see HDA, 2024). Table 3 illustrates the theme, with an unpacking of the concept and its relationship to key human settlements objectives. This is important to understand in developing a theory of change for beneficiaries.

Table 3: Spatial transformation themes linked to human settlements objectives and unpacking of the theme

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
Land value-add and infrastructure	<div data-bbox="459 394 887 533">  <p>"Ensuring property can be accessed by all as an asset for wealth creation and empowerment" (BNG).</p> </div> <div data-bbox="459 555 887 694">  <p>"Utilizing housing as an instrument for the development of sustainable integrated human settlements, in support of spatial restructuring" (BNG)</p> </div> <div data-bbox="459 716 887 855">  <p>"Improve participation of the disadvantaged in the residential property market" (PDA outcomes)</p> </div> <div data-bbox="459 878 887 1016">  <p>"Increase the asset creation potential of the state's investments in human settlements" (PDA outcomes)</p> </div> <div data-bbox="459 1039 887 1178">  <p>"Access to connectivity, economic and social infrastructure" (PDA Principles)</p> </div> <div data-bbox="459 1200 887 1339">  <p>"Provision of quality housing options" (PDA principles)</p> </div>	<p>Spatial transformation analysis includes evaluating access to infrastructure, such as adequate services in water, electricity, sewerage, and information and communications technology (ICT) (HDA, 2024). Infrastructure strain can result from the location of housing projects, Pieterse (2019: 23) explains that "local authorities have been compelled to continuously extend network infrastructure systems to far-flung areas without being able to invest nearly enough to ensure optimal maintenance of existing, and aging, infrastructure systems". Infrastructure strain will prevent sustainable transformation.</p> <p>Well-connected and located land is an important consideration in spatial transformation as land is one of the key structuring elements in the urban environment (SACN, 2016b). This theme has not been termed 'land', but 'land value-add' in recognition of the fact that when land is identified for human settlement development, there is a need to understand the utility value of that land in terms of the cost-benefit analysis for municipalities and its contribution to integration. Therefore in planning there is a need to evaluate land location, investment potential and infrastructure systems.</p>

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
Integration and transport networks	<div data-bbox="459 315 890 456">  <p>"Utilizing housing as an instrument for the development of sustainable integrated human settlements, in support of spatial restructuring" (BNG)</p> </div> <div data-bbox="459 472 890 613">  <p>"Create opportunities for liveable, inclusive and resilient towns and cities" (PDA outcomes)</p> </div> <div data-bbox="459 629 890 770">  <p>"Reverse the unjust and dysfunctional spatial legacy of apartheid" (PDA outcomes)</p> </div> <div data-bbox="459 786 890 927">  <p>"Promotion of regeneration, densification and integration" (PDA principles)</p> </div> <div data-bbox="459 943 890 1084">  <p>"Access to connectivity, economic and social infrastructure" (PDA principles)</p> </div>	<p>The peripheral location of the housing programme has created a spatial form where "class and social segregation has intensified since 1994, with the poorest being furthest away from economic opportunities, and the extremely sprawled/low-density urban form of the apartheid era intensified with disastrous ecological consequences" (Pieterse, 2019: 23). Therefore, the aim of integration as defined in the NDHS's 'Investment Potential. Atlas 2009', is "a well-integrated mix of adequate houses of different types, tenure and price in a defined geographical area to support a range of household sizes, ages and income groups in close proximity to well-functioning services and facilities; implying the incorporation of mixed land use in the area" (NDHS, 2009: 11).</p> <p>In the context of BETA and spatial transformation at the HDA, integration is time-based. BETA is intended to be a multi-year perspective to measure how a household, human settlement typology and/or area changes over time. The integration category is strategic to monitor changes over time.</p> <p>Within the context of integration, transport networks are included in this grouping of themes and indicators (HDA, 2024). Mobility systems are one of the key structuring elements of the built environment (SACN, 2016b). Transport networks are important as they are a key instrument for increasing access (Harrison & Todes, 2013). For example, "the time-distance between work and residence affects the likelihood of an individual securing and sustaining a job. The reasons given for this include inefficient job searches, high commuting costs, and low worker productivity because of commuting times" (ibid: 5).</p>



Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
<p>Economic development, job creation and socio- economic sustainability</p>	<div data-bbox="464 327 887 465">  <p>"Accelerating the delivery of housing as a key strategy for poverty alleviation" (BNG)</p> </div> <div data-bbox="464 483 887 622">  <p>"Access to connectivity, economic and social infrastructure" (PDA principles)</p> </div> <div data-bbox="464 640 887 779">  <p>"Leveraging growth in the economy" (BNG)</p> </div>	<p>Economic development, job creation and socio-economic sustainability is important in the context of spatial transformation in South Africa. This is because the post-apartheid economy remains largely untransformed within a constrained macro-economic climate (Pieterse, 2019). In this context, the main tool for redistribution is the social wage, which includes grants, access to basic services, housing, health and education amenities, and subsidised transport (ibid). Local governments are responsible for the urban aspects of realising the social wage, which places them under considerable constraints due to maintaining ageing infrastructure and responding to the high demand for services (ibid). The impacts of the housing programme (which include housing developments on the urban periphery) increases the social wage constraints of the state as the housing programme is a driver of built environment investments (ibid). Within this context, the spatial transformation objectives of economic development and job creation become imperative.</p> <p>In debates on accessibility between people and employment, there has been discussion about whether to bring employment to the people or the people to employment (Harrison & Todes, 2013). There is a growing understanding that both strategies need to be utilised, but there is a view that the state has the potential and reach to bring people closer to employment (ibid).</p> <p>The sectors and structure of the economy are important to identify in relation to spatial transformation as this has the potential to impact spatial structure. This is illustrated in the example of Johannesburg that transitioned from a manufacturing to a service-dominated economic structure (Harrison & Zack, 2012). This led to decentralisation and the diffusion of centres (ibid). Rosenberg (2020) unpacks some of the economic classifications of different sectors of the economy. These classifications are useful when undertaking spatial transformation analysis.</p>

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
Transversal alignment	 <p>BNG, although not explicitly outlined in the objectives, recognised the need for “Adjusting the institutional arrangements within government” which included “Redefinition of Roles, Responsibilities and Processes in Government”, “Expanding the role of Local Government”, “National and Provincial Institutional Reforms” and “Promoting inter- and intra-governmental co-ordination and alignment” (NDHS, 2004: 31-33)</p>	<p>Funding alignment challenges have been cited as an impediment to human settlement delivery (HDA, 2017a). The spatial transformation theme of transversal alignment includes indicators relating to alignment with different national, provincial and local government plans (ibid).</p> <p>Planning alignment and funding distribution are important in the context of the SDGs that emphasise the importance of urban governments in achieving targets (Pieterse, 2019). Transversal alignment aims to understand how different policies are synchronised to achieve spatial transformation outcomes.</p>
Urban management	 <p>“Combating crime, promoting social cohesion and improving quality of life for the poor” (BNG)</p>  <p>“Ensuring property can be accessed by all as an asset for wealth creation and empowerment” (BNG).</p>  <p>“Promotion of regeneration, densification and integration” (PDA principles)</p>  <p>“Increase the asset creation potential of the state’s investments in human settlements” (PDA outcomes)</p>	<p>In a publication of the HDA (2017b) on building maintenance, it is noted that post-occupancy, property ownership has many responsibilities. Failures of maintenance “result in negative impacts on individual properties and assets and that there is a direct correlation between failed maintenance and a negative impact on precincts attached to such assets” (HDA: 2017b: 7). Where maintenance fails in precinct and urban management there is “a direct correlation to decay and a negative impact on adjacent precincts” (ibid 7).</p> <p>For sustainability of projects, urban management is key (HDA, 2017b). The report recommends, among other interventions for maintenance: the Urban Management Plan (UMP) should be part of project implementation, with requisite funding models, a multi-stakeholder approach for maintenance, the need for user education and encouragement of active citizenry (ibid). These interventions are necessary to achieve spatial transformation outcomes.</p>

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
<p>Quality, climate change resilience and social cohesion</p>	<div data-bbox="464 315 887 456">  <p>"Combating crime, promoting social cohesion and improving quality of life for the poor" (BNG)</p> </div> <div data-bbox="464 472 887 613">  <p>"Create opportunities for liveable, inclusive and resilient towns and cities" (PDA outcomes)</p> </div> <div data-bbox="464 629 887 770">  <p>"Access to connectivity, economic and social infrastructure" (PDA Principles)</p> </div> <div data-bbox="464 786 887 927">  <p>"Provision of quality housing options" (PDA principles)</p> </div>	<p>In the publication of the HDA (2017a) on spatial transformation, quality includes indicators of urban design principles that are innovative, densification and compact development, and unified public façade treatment. Quality is about the standard of the built environment that responds to design principles and innovation. Design is important in creating just cities (Schupbach, 2015). Schupbach (2015) outlines seven principles for designing just cities. These include creating a better public realm, maintaining infrastructure, improving connectivity, zoning for progress, engaging all residents, experiment, and not forgetting about beauty (ibid). Creating just cities is important in the South African context of historical segregation and achieving the ends of spatial transformation.</p> <p>Climate change resilience in urban areas is explained as the "growing global recognition of the need to adapt urban planning, development and management practices to dynamic future climate conditions" (Tyler et al., 2016: 420). Building resilience includes "strengthening infrastructure and ecosystems", "building the capacities of social agents", and "addressing the institutional factors that constrain effective responses" (ibid: 421). Within a spatial transformation framework in human settlements, interventions include the installation of innovative technologies within houses for sustainability (HDA, 2024), as well as encouraging initiatives to protect vulnerable and climate-sensitive areas (Dudley et al., 2010).</p> <p>Urban areas are becoming diverse, and urban planning needs to play a role in this context to encourage social cohesion (Schreiber, n.d.). For example, land uses need to be dedicated to community and ecological uses (ibid). In addition, transit-orientated development (TOD) is a useful framework for creating</p>

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
		<p>connected and encompassing spaces in planning frameworks (ibid). Related to these principles is ensuring that public spaces and street networks are designed for human interactions and different activities (ibid).</p>
<p>Human Settlements Transformation Scorecard (HSTS)</p>	 <p><i>“Utilising provision of housing as a major job creation strategy”</i></p>	<p>HSTS comes from the SCM policy that is designed for catalytic projects (HDA, 2017c) and represents a commitment to transformation in procurement. SCM policy is governed by different pieces of legislation, such as the Preferential Procurement Policy Framework Act, No. 5 of 2000, and the Broad-based Black Economic Empowerment Act, No. 53 of 2003 (ibid).</p> <p>Isandla Institute’s White Paper recommendation states that there needs to be a stronger emphasis on “the creation of an enabling dispensation for, economic opportunities inherent in human settlement/housing value chains, with particular reference to the circular economy (e.g. community waste management systems), the role of small-scale contractors and local artisans, and households’ ability to leverage their home as an income-generating asset” (Isandla Institute, 2024: 12). This degree of economic transformation is not ubiquitous in current transformation frameworks, however there is a recognition of the role human settlements have to play in empowering previously excluded groups such as women, youth, disabled people and military veterans. This is evident in the HDA’s SCM Policy (HDA, 2017c), which includes standards for procurement in terms of black economic empowerment (BEE) levels, ownership (black, women, youth, disabled, military veterans and local communities), job creation and skills development. Based on the White Paper recommendation, it is evident that there can be an expansion and emphasis on this in legislation and policy to achieve transformative outcomes.</p>

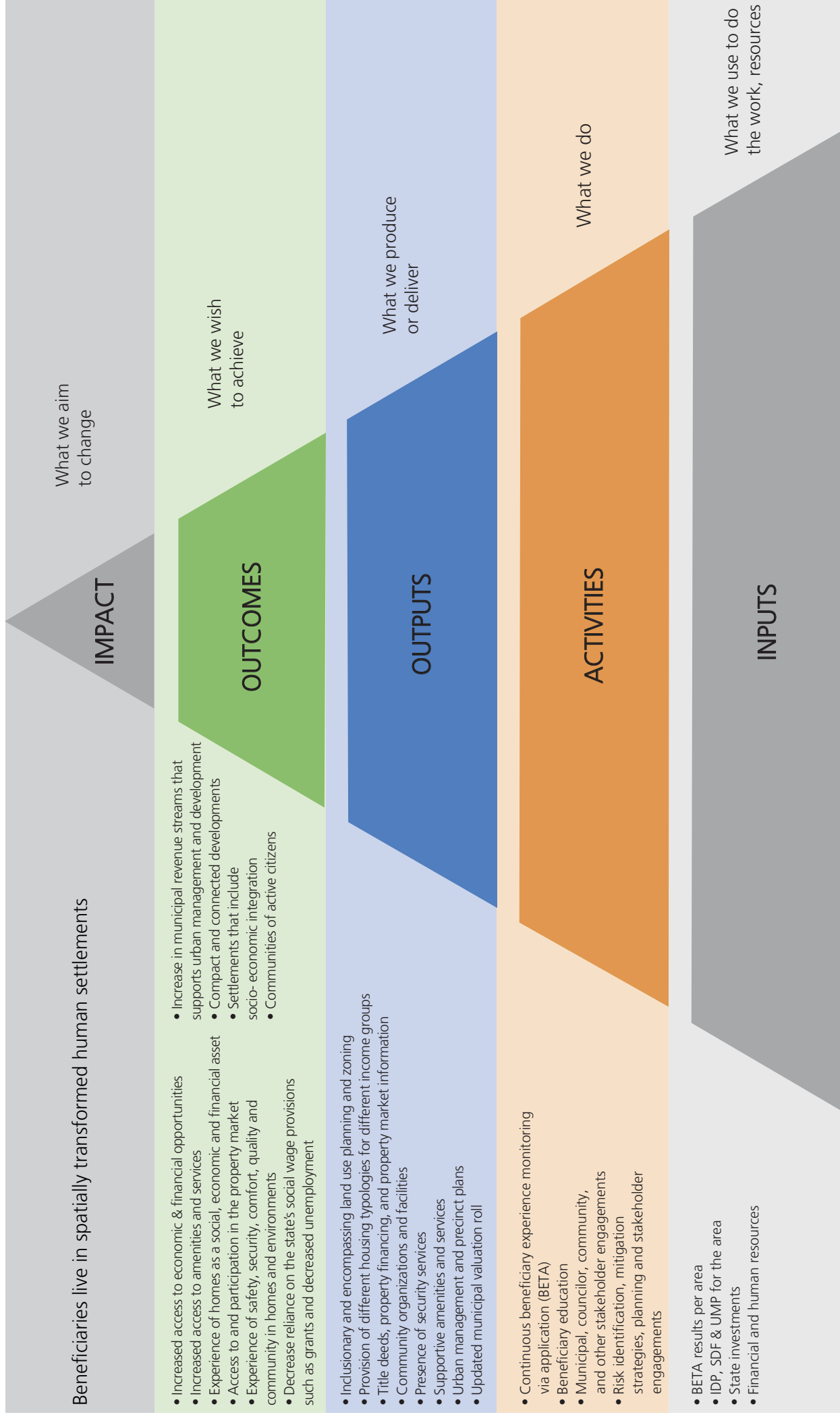
Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
<p>Functional and equitable residential property markets</p>	<div data-bbox="464 315 887 461">  <p>"Supporting the functioning of the entire single residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump" (BNG)</p> </div> <div data-bbox="464 479 887 624">  <p>"Ensuring property can be accessed by all as an asset for wealth creation and empowerment" (BNG)</p> </div> <div data-bbox="464 642 887 788">  <p>"Leveraging growth in the economy" (BNG)</p> </div> <div data-bbox="464 806 887 952">  <p>"Improve participation of the disadvantaged in the residential property market" (PDA outcomes)</p> </div>	<p>Critiques of human settlement interventions include that they have "little use to date as an economic asset generating income beyond survivalist-level" and "poor functioning of the housing as a financial asset" (Charlton, 2018: 100). Housing is framed in terms of assets in certain plans (BNG), and it is a useful framing to understand housing markets (CAHF, 2018). Housing is an individual or private asset to individuals and has social, financial and economic aspects (ibid). Housing is also a national asset as the housing programme is an investment by the government (ibid).</p> <p>Improving the social asset component is important for "the quality of the neighbourhood and creating spaces for families to come together" (CAHF, 2008: 2). The financial asset potential is important for trade potential, for the house to be used as collateral from banks, for inheritance, and contribution to wealth savings and creation (CAHF, 2018). Financial value is enhanced through easing improvement to homes, encouraging initiatives that will increase the value of the property, encouraging the availability of finance for homes, and easing the process of undertaking transactions so that financial value is realised (ibid). Regarding economic asset potential for households, this relates to the ability for a household to start a business, rent accommodation or earn other types of income from owning a house (ibid). It also contributes to the diversification of settlements through different land uses, resulting in increased sustainability (ibid).</p> <p>A key aspect of the BNG reorientation in the vision for a single property market and creation of housing assets was to "alleviate the financial burden shouldered by local government, whose implementation of the narrow welfare-type intervention compromises their rates base" (Menguelé et al., 2008: 190). This relates to the sustainability of cities and towns as the ability of households to contribute to rates and</p>

Spatial transformation theme/pillar	Key human settlement objective	Unpacking the theme
		<p>taxes captures property values and has the potential to contribute to development (CAHF, 2018). CAHF (2018: 4) states “[a]s properties appreciate in value, they increase a city’s rates base, and this contributes to the growth in city budgets that enable them to invest in further infrastructure and services delivery, which further supports growth”.</p> <p>Another concept related to functional housing markets is that efficient markets enable property filtering (CAHF, 2018). This is when options are available for housing finance, there is access to market information and there is sufficient supply in relevant market categories, households can move to different housing options based on their changing needs (ibid). Currently this does not exist as there is more demand for housing in lower income markets than there is supply at affordable prices (ibid). This results in large amounts of informal housing (ibid).</p>
Public safety	 <p>“Combating crime, promoting social cohesion and improving quality of life for the poor” (BNG)</p>  <p>“Create opportunities for liveable, inclusive and resilient towns and cities” (PDA outcomes)</p>	<p>Safety in the NDHS’s ‘Investment Potential Atlas’ (NDHS, 2009) is categorised with other quality-of-life indicators as it is about human needs that link to an acceptable life. It is defined as “a secure environment with low levels of crime and fear of crime and a range of community safety programmes to maintain this” (ibid: 10).</p> <p>In South Africa, safety is an important consideration of human settlements. This is due to the relatively high rates of crime compared to the global average, as well as the high incidence of gender-based violence (Isandla Institute, 2023). The experience of safety is dependent on built environment quality (ibid).</p>

Based on the unpacking of the spatial transformation themes in the previous section, a theory of change has been developed specifically for beneficiaries’ experiences of spatial transformation to actualise spatially transformed human settlements (see Figure 1).

Understanding the outputs, outcomes and impacts of spatially transformed settlements and their relationship to beneficiaries helps us frame the BETA questionnaire. The following section illustrates how the questionnaire was framed based on the understanding of spatially transformed outcomes, as well as building on previous work of the NDHS.

Figure 1: Theory of change for beneficiaries' experience of spatial transformation in human settlements (derived from Table 3)



TOWARDS A SPATIAL TRANSFORMATION EVALUATION QUESTIONNAIRE FOR BETA

The questionnaire was designed to measure spatial transformation in order to evaluate the impact of human settlement investments. Table 4 highlights which questions can assist in understanding different aspects of spatial transformation. The next section starts to analyse the results via themes. In addition, the questionnaire divides the questions into quality of life, quality of place and quality of growth. This classification builds on the NDHS's 'Investment Potential. Atlas 2009' (NDHS, 2009). The Atlas provides a spatial understanding of

human settlement policy and is intended to steer investment decisions (ibid). The Atlas uses an analysis of the space economy based on 'quality of life', which is "the potential of different areas to contribute to sustainable livelihoods of people", and 'quality of place', which is "the potential of different areas to contribute to sustainable physical environments" (ibid: 1). The following figures explain some of the criteria used to analyse the space economy.

Figure 2: Outline of criteria in the Investment Potential Atlas (adapted from NDHS,2009: 11)



Note: Quality of governance is non-spatial and was not analysed in the Atlas (NDHS, 2009). Within spatial transformation themes transversal alignment speaks to governance challenges but is not dealt explicitly within the BETA questionnaire and is recognized as a limitation in the 'limitations of analysis' section.

Figure 3: Quality of place indicators (adapted from NDHS, 2009: 13)

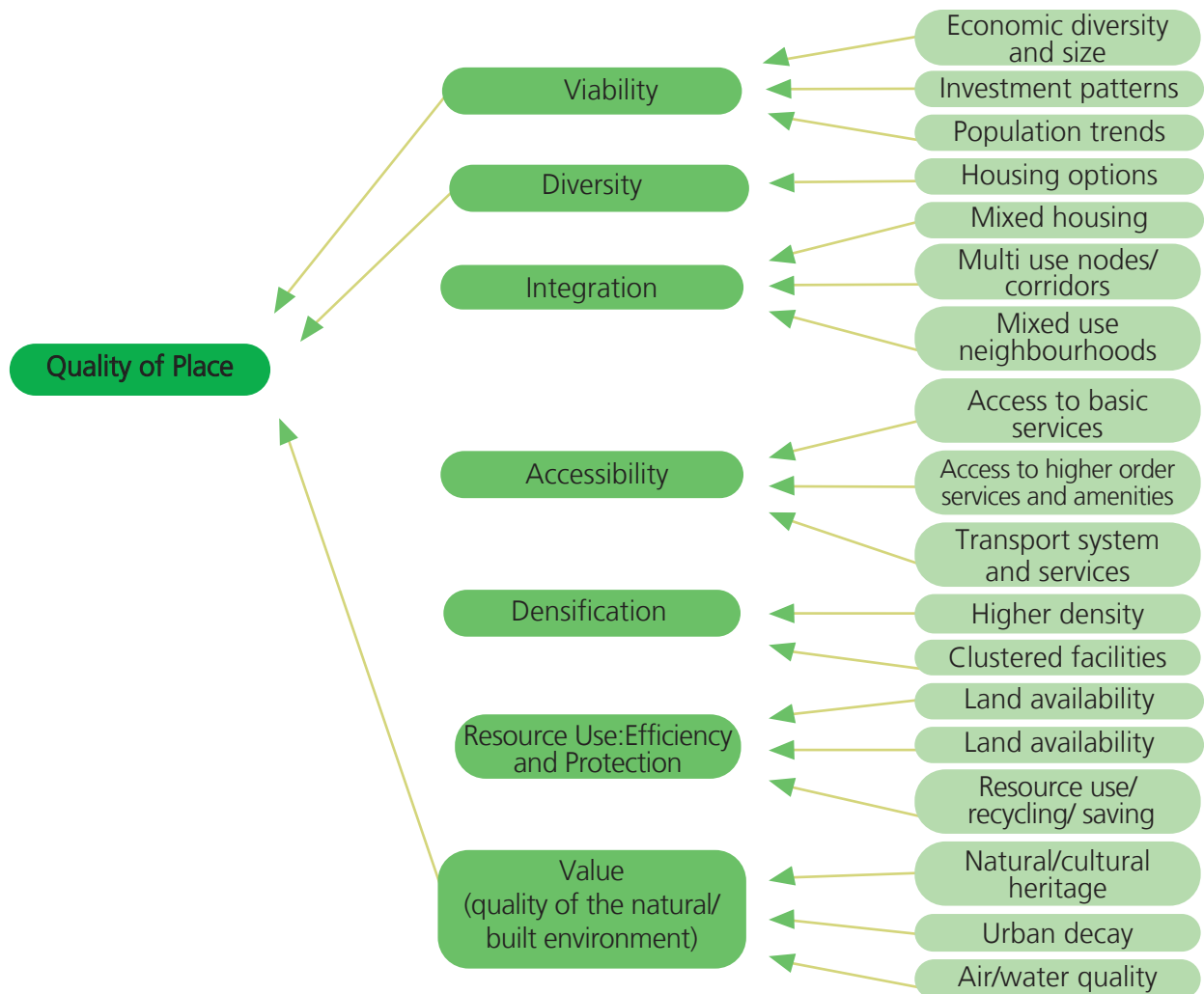
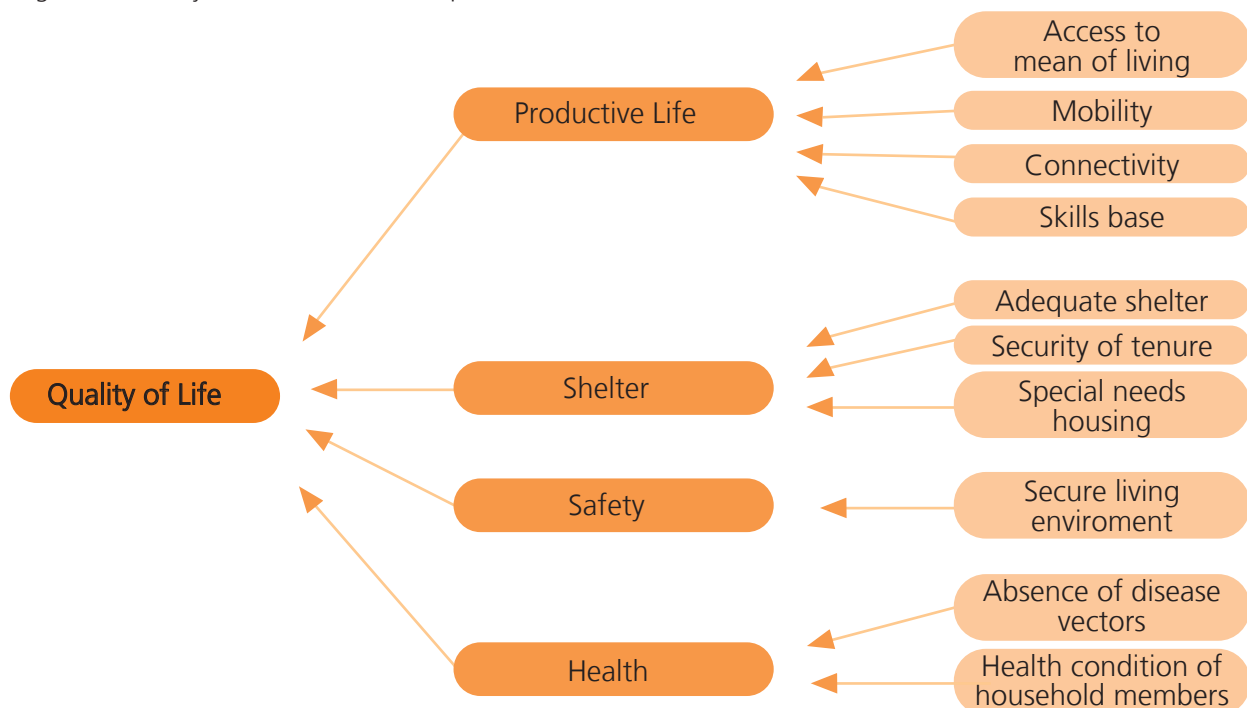
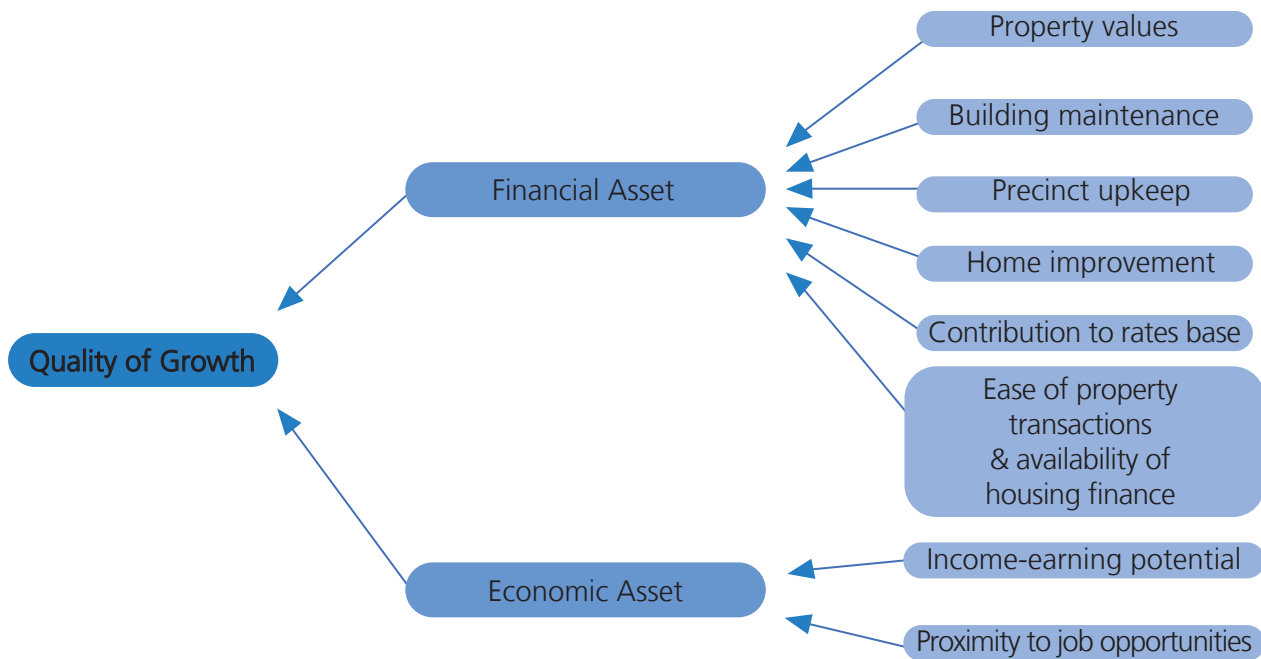


Figure 4: Quality of life indicators (adapted from NDHS, 2009: 13)



BETA builds and expands on these classifications. In addition, it includes the concept of quality of growth. Quality of growth is about how the subsidy received from the state assists in contributing to changing and improving the circumstances of beneficiaries.

Figure 5: Quality of growth indicators (Derived from NDHS, 2004; Menguelé et al, 2008; HDA, 2017b; CAHF 2018; Charlton, 2018)



Quality of place, life and growth intersect and overlap with various pillars of spatial transformation. Table 4 indicates this alignment between BETA and the pillars or themes of spatial transformation. Many of the spatial transformation themes overlap and intersect, therefore the classification of questions via themes contributes to a specific understanding for analysis (noting that the question can contribute to other themes as well).



Table 4: The questionnaire's contribution to different spatial transformation themes

BETA questions	Indicator's contribution to spatial transformation analysis			
South African ID number				
Choose the location of your house	Integration and transport networks			
Name				
Surname				
Contact number				
Gender	Integration and transport networks	Economic development, job creation and socio- economic sustainability		
Race	Integration and transport networks	Economic development, job creation and socio- economic sustainability		
Employment status	Integration and transport networks	Economic development, job creation and socio- economic sustainability		
Number of people in your household	Integration and transport networks	Economic development, job creation and socio- economic sustainability		
Grant benefits of your household	Integration and transport networks	Economic development, job creation and socio- economic sustainability		
Number of Child Support grants				
Number of Older Person grants				
Number of Disability grants				
Number of Grant-in-aids				
Number of Care Dependency grants				
Number of War Veteran grants				
Number of Foster Child grants				
Total number of grants received				
Type of house	Functional and equitable residential property markets	Integration and transport networks		
BNG				
Financial Link Individual Subsidy (FLISP)				
Rental housing				
Rent-to-buy				
Military veterans				
What is your housing ownership title?	Functional and equitable residential property markets			
Is the house fully paid?	Functional and equitable residential property markets	Economic development, job creation and socio- economic sustainability		
In which year (CCYY) did you take occupancy of the house?	Integration and transport networks			
Years occupied?	Integration and transport networks			
Please indicate your previous home address by choosing the appropriate province, municipality or township below:	Functional and equitable residential property markets	Economic development, job creation and socio- economic sustainability		
Select the province that you stayed in:				
Select the municipality:				
Select the township:				

BETA questions		Indicator's contribution to spatial transformation analysis		
Quality of place				
What do you like about this place?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
It is close to work				
It is reasonably priced				
It has a sense of community and belonging				
It has access to basic services				
It has access to transport				
It has access to churches				
It has access to hospitals				
If not, why not?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
People keep to themselves				
Crime do you like about this place?				
Reckless driving				
Unsafe roads				
Other				
Please briefly describe any other issues you are experiencing in the community:	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
Is there a sense of community in your area?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
What are the factors that contribute to the sense of community in your area?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
Trust neighbours and mutual concerns				
Social connection				
Community values				
Other				
Please briefly describe any other factors that contribute to a sense of community in your area:	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	Public safety
Travel				
What mode of public transport do you use to get to work?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	
Bus				
Taxi				
Train				
E-hailing (Uber, Bolt, Lyft, etc.)				
Private car				
Other				
Please briefly describe any other mode of public transport that you use to get to work:	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	
Has the travel time increased or decreased since moving here?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion	

BETA questions	Indicator's contribution to spatial transformation analysis		
If travel time increased or decreased, by how many minutes?	Integration and transport networks	Land value-add	Quality, climate change resilience and social cohesion
Have you been able to save on transport?	Integration and transport networks		Economic development, job creation and socio- economic sustainability
How much have you been able to save per month on transport?	Integration and transport networks		Economic development, job creation and socio- economic sustainability
Are you happy with the design of your house?	Quality, climate change resilience and social cohesion		
If not, why not?			
Poor design			
Poor quality			
Too small			
Too many stairs			
Please indicate the impact of your house on your access to social and commercial services or amenities:	Integration and transport networks	Land value-add	
I am closer to transport modes			
I am closer to shops			
I am closer to friends and family			
I am closer to churches			
I am closer to recreational facilities			
I am closer to schools			
Please indicate the impact of your house on your access to basic services:	Integration and transport networks	Land value-add	
I have improved access to clean water			
I have improved access to well-connected electricity			
I have improved access to good ablution facilities			
I have improved access to refuse removal			
What will happen to your house when you grow old or pass away?	Functional and equitable residential property markets		Economic development, job creation and socio- economic sustainability
I will retire in this house			
My children will inherit this house			
The house will be sold as per my will			
Quality of life			
What changes have you seen in your life since you moved?	Quality, climate change resilience and social cohesion		
I worry more and have more stress			
I worry less and sleep better			
I am proud as an owner and experience respect from friends and family			
I have more privacy			
Impact of your house on your health	Quality, climate change resilience and social cohesion		
My health has improved due to better health care and a cleaner environment			

BETA questions	Indicator's contribution to spatial transformation analysis	
My health has deteriorated due to poorer health care and dumping		
No change		
Impact of your house on your children's school performance	Quality, climate change resilience and social cohesion	
I am closer to good schools and my children are performing better		
I am further from good schools		
No change		
Impact of your house on your security and safety	Public safety	Quality, climate change resilience and social cohesion
I am exposed to more crime		
I am exposed to less crime		
Do you feel safe in your area?	Public safety	Quality, climate change resilience and social cohesion
I feel safe using public transport		
I feel safe walking in my area		
I feel safe using public and communal facilities		
I feel safe in my home		
Quality of growth		
Impact of your house on your employment and income	Economic development, job creation and socio-economic sustainability	
I started a new business		
I experienced business growth		
I am closer to work and saving more		
I am renting out a room or backyard structure		
Have you made any changes to your house since moving here?	Functional and equitable residential property markets	Urban management
If yes, how did you pay for the changes?	Functional and equitable residential property markets	Urban management
I got a loan		
I used my savings or stokvel		
I obtained credit from a material supplier		
The landlord paid for it	Functional and equitable residential property markets	Urban management
How did you make the changes?		
I did it myself		
I employed a contractor	Functional and equitable residential property markets	Urban management
I asked a friend		
Are you able to maintain the house in terms of repairs and upkeep?	Functional and equitable residential property markets	Urban management
If any damage happens to your house or your house requires maintenance, how will you pay for it?	Functional and equitable residential property markets	Urban management
I will obtain a loan		
I will use my savings or stokvel		
I will borrow from friends or family		
I will ask my landlord		
How will you make the changes for maintenance?	Functional and equitable residential property markets	Urban management

BETA questions	Indicator's contribution to spatial transformation analysis	
I will do it myself		
I will employ a contractor		
I will ask a friend		
What are your future plans for your house (from now until 2026)?	Functional and equitable residential property markets	Urban management
I will remain in the house		
I don't have any definite plans		
I will rent it out		
I will extend it		
I will sell and buy elsewhere		
I will rent elsewhere		
I will move out		
Do you pay rates to the municipality?		
If not, how much can you afford to pay per month?		
R50		
R100		
R150		
R200 or more	Functional and equitable residential property markets	Urban management
Are you proud of your home and garden?		
Please take or attach a photo of your home		
Please take or attach a photo of your garden		

Note: The BETA questionnaire was adapted from HDA (2018) with subsequent engagements and consultations with various stakeholders in the sector

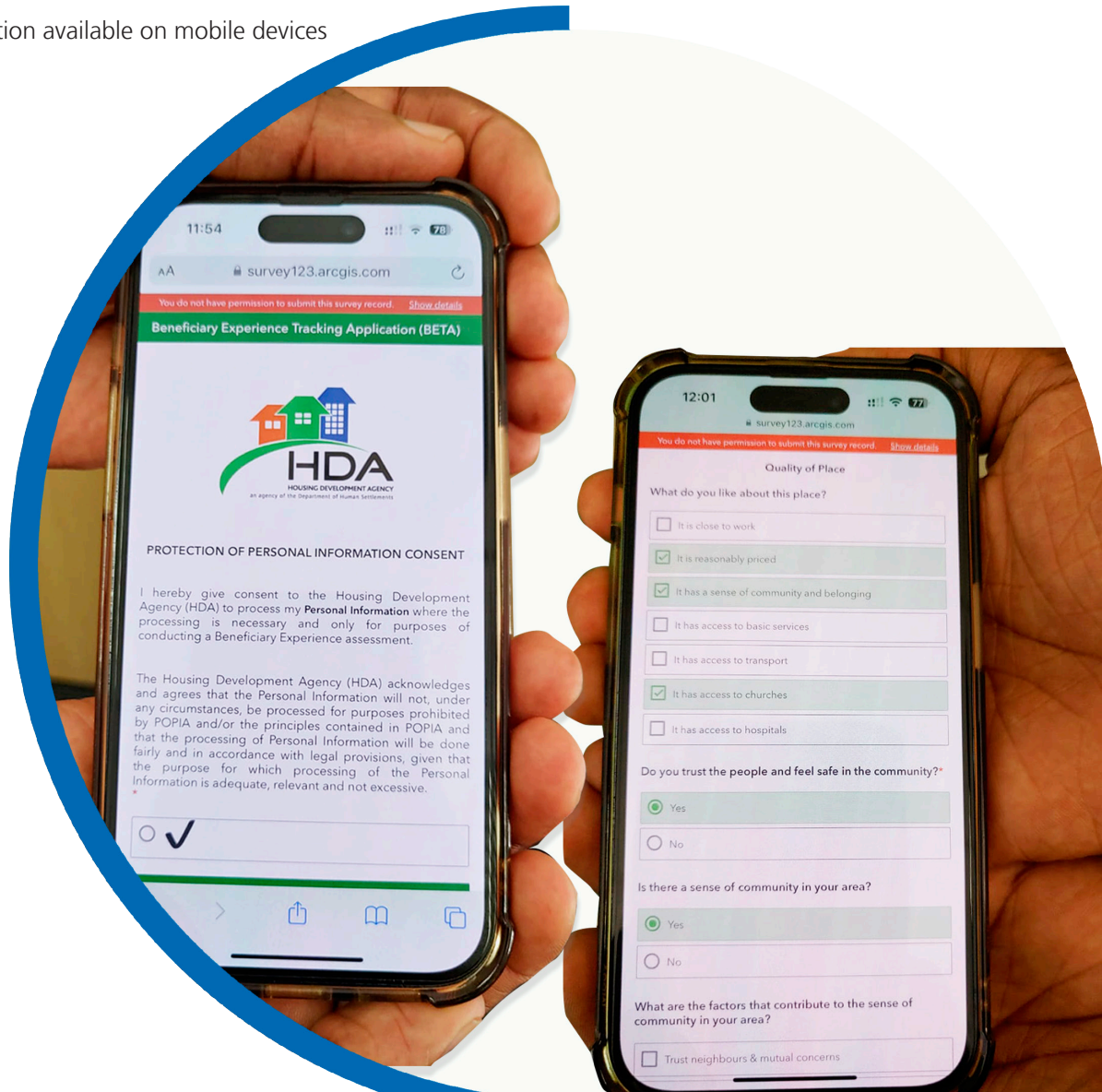
BETA APP AND SURVEYS: PILOT STUDY

Within the HDA, several factors influenced the decision to monitor beneficiary experiences. Firstly, beneficiary experiences were considered necessary to provide a greater understanding of the impact of spatial transformation. The original application was titled the Spatial Transformation Impact Application (STIA). Secondly, emanating from an initiating study on lessons learnt in Fleurhof and Savannah City, there was an understanding of the usefulness of beneficiary experiences (HDA, 2018). Lastly, a gap was recognised within the human settlements sector in which there has been insufficient understanding of the impact of the housing subsidy. The monitoring of beneficiary experiences was developed through previous

fieldwork reports (HDA, 2018) and in consultation with different stakeholders in the sector to reflect on the different policy and programmatic goals of human settlements. After its drafting, numerous stakeholders were consulted, including the Gauteng City-Region Observatory (GCRO), Zutari, the City of Cape Town, Esri (a GIS mapping service provider) and the HDA's employees.

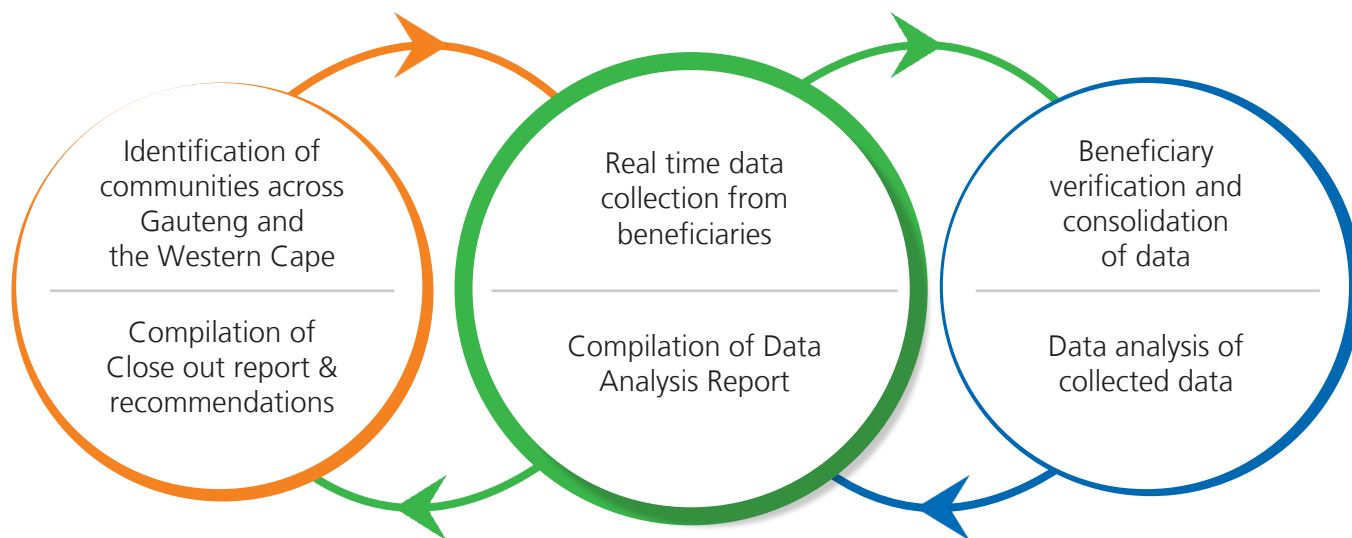
During 2020/21, the HDA developed the digital capability of a mobile application (App) via Survey 123, which is part of the ArcGIS Enterprise suite, allowing the App to be accessible via wireless computing devices such as smart phones and tablets, as well as laptops and desktop computers. Figure 6 provides screenshots of the BETA App.

Figure 6: BETA application available on mobile devices



The HDA appointed a service provider to undertake the community testing in real time using the App allowing the data captured to automatically reside in the HDA ArcGIS Enterprise Portal. Figure 7 illustrates the methodology undertaken in early 2023. To ensure that the process ran smoothly, stakeholder engagement was undertaken with the DHS at a provincial level, as well as with the HDA’s offices in Gauteng and the Western Cape. Relationships were also cemented with relevant councillors to ensure a smooth data collection process. A community sample of 505 beneficiaries was tested in Gauteng and the Western Cape in March 2023. Data cleaning and human settlements system (HSS) verification was subsequently completed after data collection.

Figure 7: Community testing methodology. Adapted from the HDA Request for Proposals (HDA, 2022)



This sample starts to illustrate trends in human settlements delivery, but is an initiating pilot study that is envisioned to be a longitudinal study and to expand in scope, size, and location. The surveys’ locations do not have particular significance, but were selected as they facilitated ease of undertaking questionnaires as a first pilot and initiating study. Table 5 illustrates the area and typology breakdown.

Table 5: Breakdown of surveys per housing typology, place and province (HDA, 2023a)

Province	Place name	Housing typology				Total
		BNG	FLISP	Rental Housing	Military Veterans	
Gauteng	Savannah City		29			29
	Roodepoort Tshedzani			26		26
	Palm Ridge	111			16	127
	Turffontein			25		25
Western Cape	Belhar			28	35	63
	Pelikan Park	70	01			71
	N2 Gateway Joe Slovo	94				94
	The Property Bank Malibu Village and The Conifers (Blue Downs)		26			26
	Blue Down/Forest Village (Eerste River)	44				44
Total		319	56	79	51	505

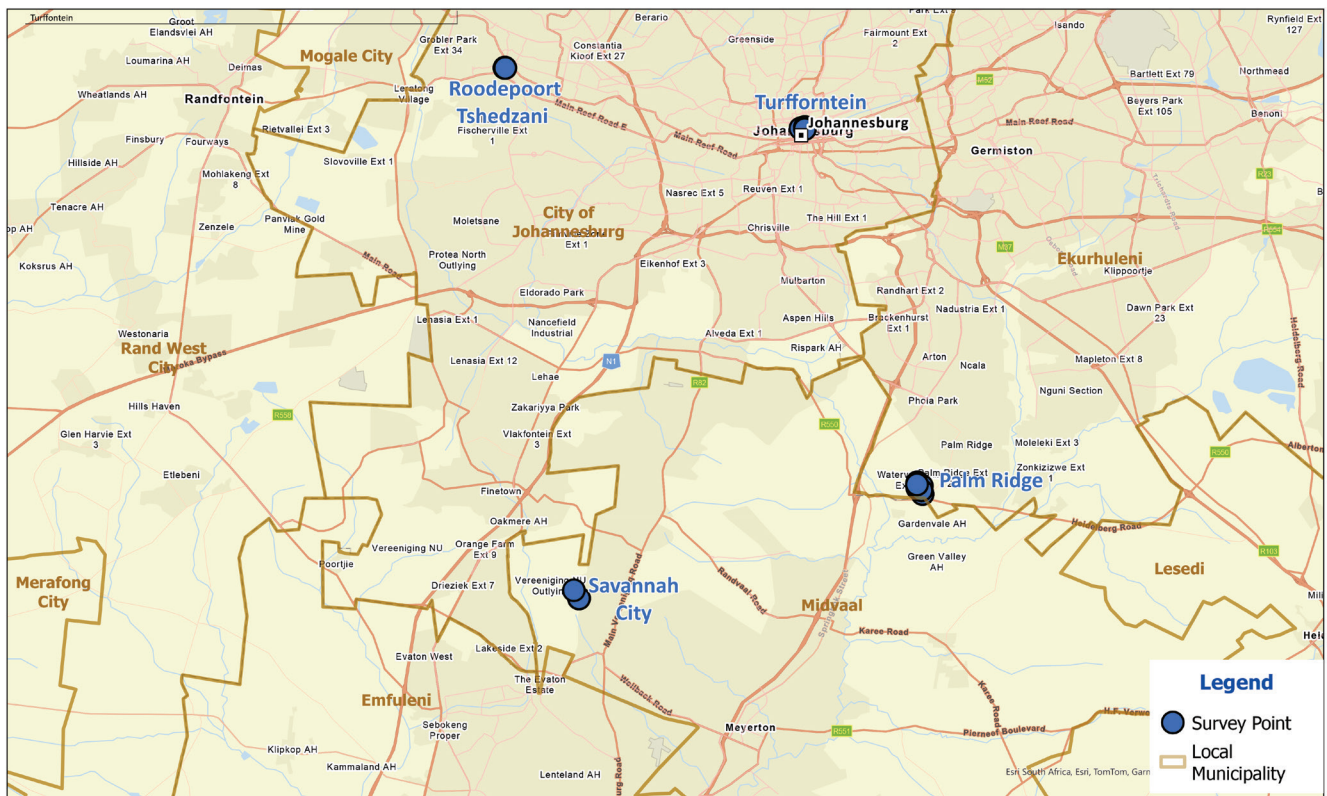
LOCATION OF SURVEYS CONDUCTED

The maps below illustrate the location of the interviews:

Figure 8: Location map of the Western Cape surveys



Figure 9: Location map of the Gauteng surveys



ANALYSIS: ILLUSTRATING SPATIAL TRANSFORMATION IN THE PILOT STUDY

The pilot study, as indicated in the previous section, albeit not a comprehensive spatial transformation analysis, does start to help us recognise how BETA can assist in contributing to spatial transformation. This section outlines the four different sections (an overview, quality of place, quality of life and quality of growth) in the questionnaire. It also illustrates emerging trends and indicates how this contributes to spatial transformation analysis.

FOCUS OF THE ANALYSIS: TOWARDS GENERAL RATHER THAN PLACE-SPECIFIC TRENDS

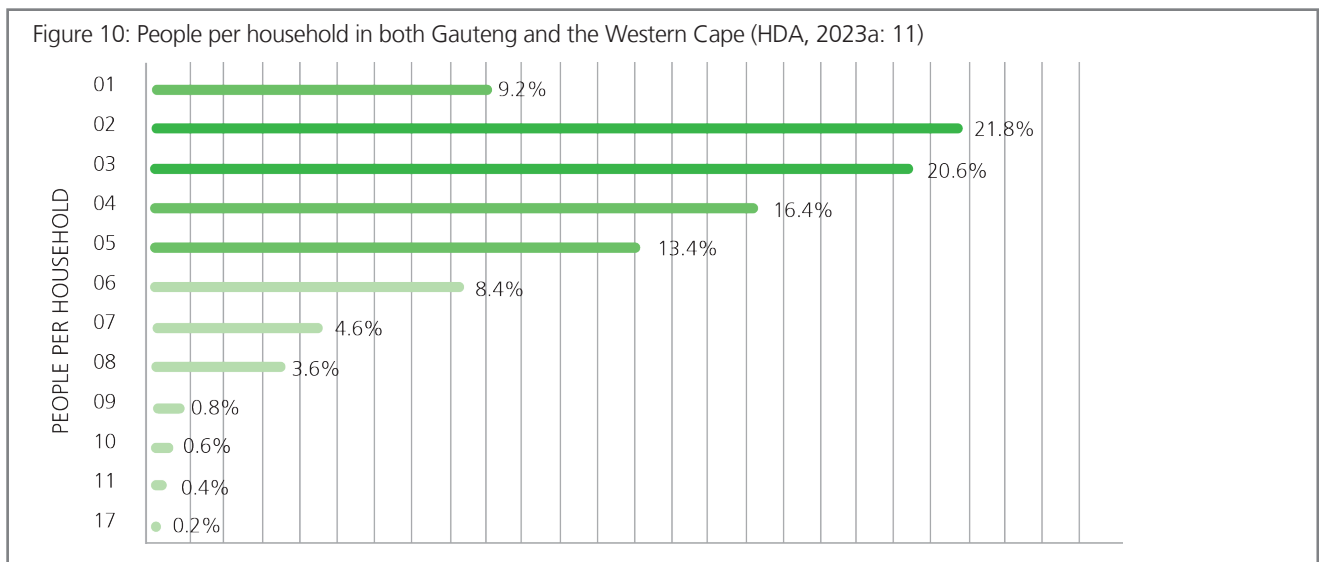
To understand location-specific spatial transformation trends, it would be necessary to understand different spatial transformation imperatives as outlined in the HDA's publication, 'Pathways to spatial transformation' (HDA, 2024), in conjunction with the place-specific beneficiary analysis. The sample size that was selected cannot provide an accurate reflection per area, as it focused on one or two state housing subsidies per area. However, it collectively starts to provide an indication of general trends. This is intended to be a longitudinal study, so trends will become more apparent over time.

OVERVIEW QUESTIONS

The overview questions are important in the context of spatial transformation as they help provide an understanding of whether the objectives of integration and socio-economic sustainability are being attained. Through household size, number of grants, race and employment status, one can start to understand the socio-economic profile of housing programmes. A longitudinal study will also assist in understanding change in an area over time. Spatially transformed developments would be socially and class inclusive with opportunities for financial and economic development (quality of growth).

Households

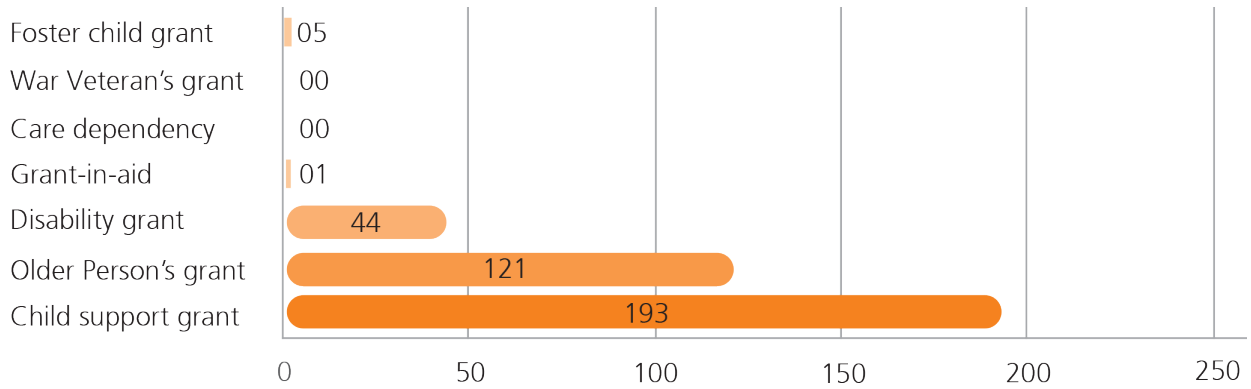
The survey results undertaken by the HDA “indicate that the housing programmes are successfully accommodating a range of household categories. The distribution of beneficiaries across different household sizes in Gauteng and the Western Cape shows a diverse landscape of housing needs. The majority of beneficiaries fall into categories such as households with 2, 3 or 4 people [see Figure 10, average household size], highlighting the prevalence of small extended families. However, there are also beneficiaries living in single-person households, as well as larger, more complex households” (HDA, 2023b: 5). Figure 10 illustrates the complexity of households. A critique of human settlements, when it comes to integration, is that policy makers do not consider the diversity of households (Charlton, 2018). The state’s assumption of nuclear families in state-subsidised housing is challenged by actual spatial habits that indicate that households are more fluid and are often characterised by survival strategies that require frequent movement (ibid). The results indicate the “importance of designing housing typologies that can cater to the varying needs and dynamics of different household structures. By considering the household size in housing developments, policy makers can ensure that housing interventions are responsive to the diverse demands and compositions of households, thereby promoting inclusivity and meeting the specific needs of beneficiaries” (HDA, 2023b: 5).



Grants

As illustrated earlier, grants are a key part of South Africa’s social wage, in the theory of change (TOC) for spatial transformation, housing – if functioning as an asset – should decrease reliance on grants. It is the intention of the longitudinal study to understand the impact of the state’s investment on the grants received. The BETA sample reveals that there is a reliance on social grants particularly the older person’s grant and the child support grant (HDA, 2023b). Child support grant is the most common with 38.2% of households receiving the grant (ibid). The older person’s grant is prevalent in 24% of households and 8.7% prevalence for the disability grant (ibid). There are no recipients of the War Veteran’s grant even though there is Military Veterans housing. Therefore, the findings illustrate “the necessity of considering social grant reliance and eligibility in housing planning to adequately address the needs of low-income households in South Africa” (HDA, 2023b: 6). Figure 11 illustrates the number of households receiving different types of grants in the survey.

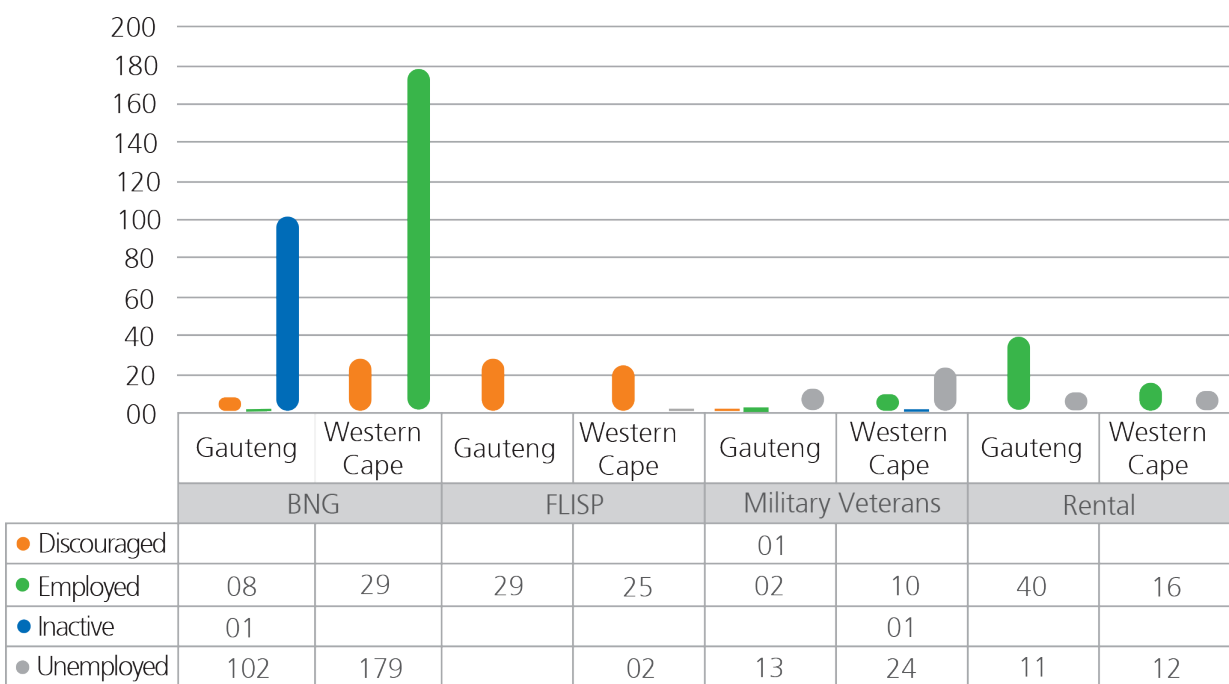
Figure 11: Number of households receiving different grant benefits (HDA, 2023a: 12)



Employment

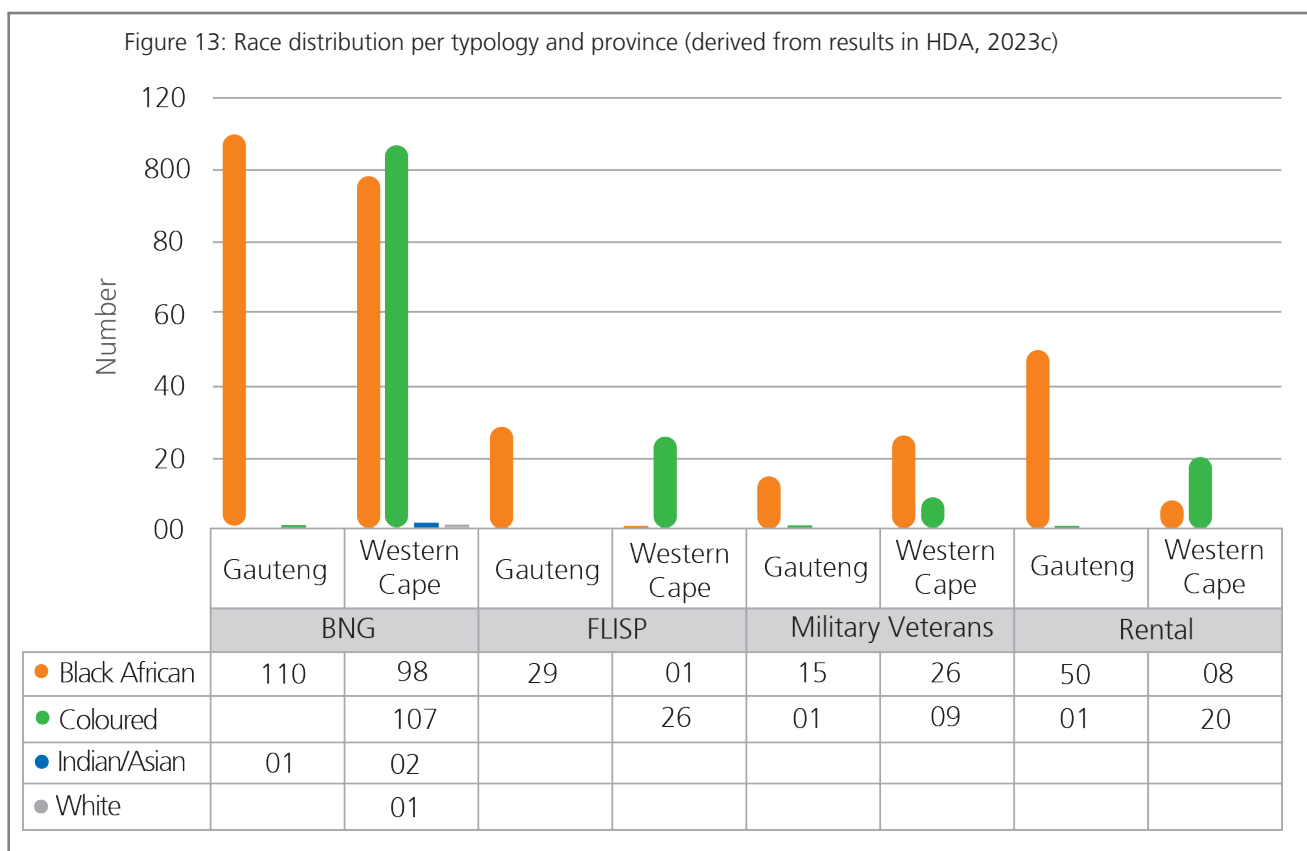
The human settlements programme emphasises the need to use housing as a catalyst for growth in the economy (BNG), but “key findings regarding the employment status of beneficiaries reveal that a significant majority of beneficiaries in both Gauteng and the Western Cape were unemployed [see Figure 12]. In Gauteng, 60.9% of beneficiaries were unemployed, while in the Western Cape, the figure rose to 72.8%. This indicates a high level of reliance on housing programmes among individuals who lack employment opportunities. Moreover, the small percentage of beneficiaries who reported being employed highlights the need to address the employment challenges faced by housing beneficiaries. The findings emphasise the critical role of government intervention in providing housing support to those in dire situations, who may not have the means to address their housing needs independently. Efforts should be made to not only offer affordable and accessible housing but also create avenues for employment and economic empowerment for beneficiaries, ensuring a more comprehensive approach to addressing their long-term stability and well-being” (HDA, 2023b: 5).

Figure 12: Employment status per typology and province (derived from results in HDA, 2023c)



Race

In the endeavour to create socially inclusive spaces, aspects of racial make-up of settlements are important to understand as the survey findings states, “[i]nformation about race of the beneficiaries is critical for the assessment of the various groups of people that are benefiting from government housing actions. This also helps determine if there are any races that are being directly or indirectly discriminated, and excluded, a violation of the RSA Constitution because access to housing is a human right for all (Republic of South Africa (RSA) Constitution 1996; RSA Housing Act 1997). The beneficiaries were asked to indicate their race. This was important to have a general understanding of the different races that are benefiting from housing in the country” (HDA, 2023b: 5). The study further indicates, “in Gauteng Province most of the beneficiaries were Black Africans 204 (98.5%), whereas in Western Cape Province there were diverse beneficiaries. In Western Cape the majority of beneficiaries were Coloured 162 (54.4%) followed by Black Africans 133 (44.6%).” (ibid: 5). Figure 13 illustrates race distribution per typology and province.



QUALITY OF PLACE

Quality of place is defined as the ability of an area to contribute to a physical environment that is sustainable (NDHS, 2009). This relates to patterns, forms and spatial relationships with the natural and built environment (ibid). Within the human settlements environment, there is a need to recognise that provision of shelter is not sufficient and that we need to consider that “relation with the public domain, the design of these public spaces, the connection to other parts of the city, the use of sustainable materials, etc. are all factors that need our attention” (Newton, 2013: 648). ‘Integration and transport networks’, ‘land value-add and infrastructure’, ‘quality, climate change resilience and social cohesion’, and ‘public safety’ are the spatial transformation pillars that assist us in unpacking quality of place. In the HDA’s spatial transformation publication (HDA, 2024), the distinction between ‘integration’ and ‘land value-add’ differs in the planned and the existing features. The HDA evaluates the existing settlements’ performance on ‘land value-add’ and what is planned for the settlement in ‘integration’. At the HDA, integration is defined as the additional expected potential assigned to a parcel of land based on what has been planned to be built on it.

Sense of community and place quality

The analysis regarding quality of place indicates “that beneficiaries highly value the sense of community and access to basic services [see Figure 14-16 and Table 6]. This highlights the importance of fostering social cohesion and providing essential amenities in housing developments. However, the lower mention of reasonable pricing and proximity to work suggests potential challenges in affordability and commuting distances, which should be addressed to enhance the overall housing experience” (HDA, 2023b: 7). Table 7 illustrates some of the reasons people do not like their place of residence.

Figure 14: Results of the question ‘What do you like about this place?’ (HDA, 2023a: 21)

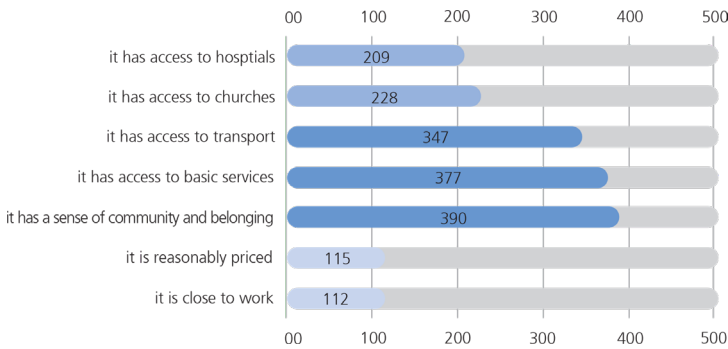


Table 6: Results of the question ‘What do you like about this place?’ (HDA, 2023a): 22

What do you like about this place?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
it is close to work	43	69	112	22%
it is reasonably priced	52	63	115	23%
it has a sense of community and belonging	134	256	390	77%
it has access to basic services	121	256	377	75%
it has access to transport	94	253	347	69%
it has access to churches	55	173	228	45%
it has access to hospitals	51	158	209	41%

Table 7: Reasons for not liking place of residence (HDA, 2023a: 23)

Reasons for not liking place of residence	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
People keep to themselves	07	07	14	20%
Crime	26	34	60	85%
Reckless driving	03	11	14	20%
Unsafe roads				
Other (reasons)	10	09	19	27%

Figure 15: Results of the question ‘Do you trust the people and feel safe in the community?’ (HDA, 2023a: 22)

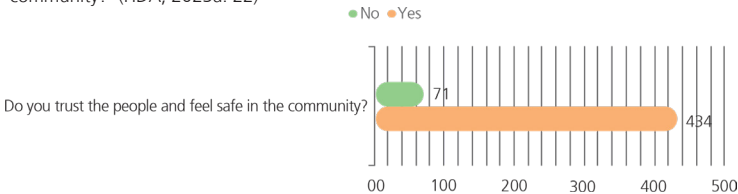
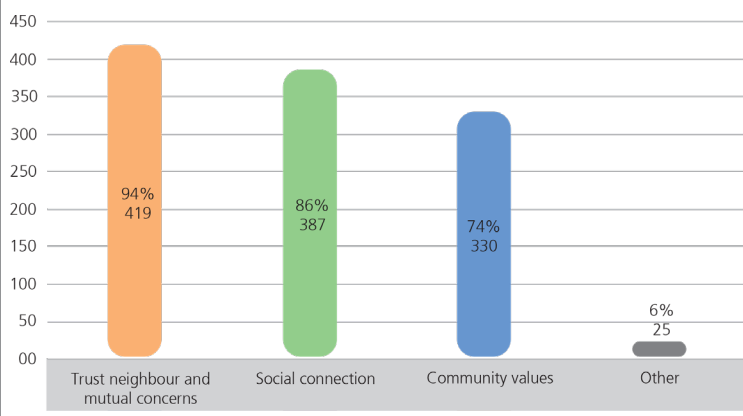


Figure 16: Results of the question ‘What are the factors that contribute to the sense of community in your area?’ (HDA, 2023a: 22)



Transport

Figure 17: Results of the question 'What mode of public transport do you use to get to work?' (HDA, 2023a: 29)

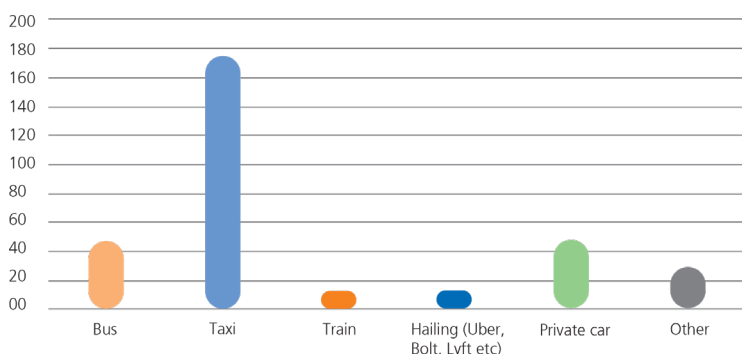


Table 8: Results of the question 'What mode of public transport do you use to get to work?' (HDA, 2023a: 27)

What mode of public transport do you use to get to work?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
Bus	07	40	47	09%
Taxi	71	104	175	35%
Train		12	12	02%
Ehailing (Uber,Bolt,Lyft,etc)	03	10	13	03%
Private car	23	25	48	10%
Other	27	02	29	06%

Figure 18: Results of the question 'Has the travel time increased or decreased since moving here?' (HDA, 2023a: 29)

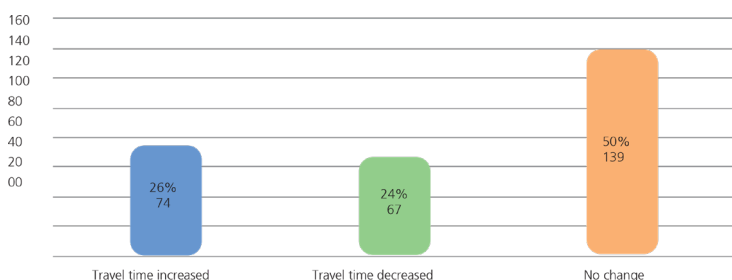
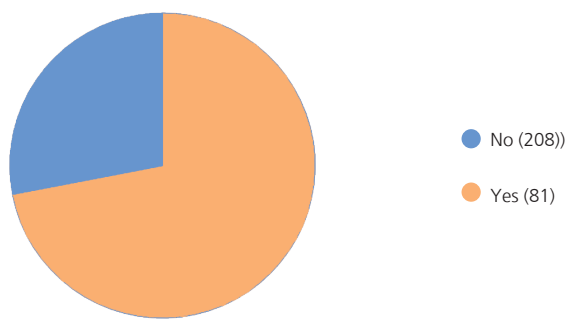


Table 9: Results of the question 'Has the travel time increased or decreased since moving here?' (HDA, 2023a: 29)

Has the travel time increased or decreased since moving here	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
Travel time increased	28	46	74	26%
Travel time decreased	31	36	67	24%
No change	61	78	139	50%
Too Many Stairs	120	160	280	100%
Total				

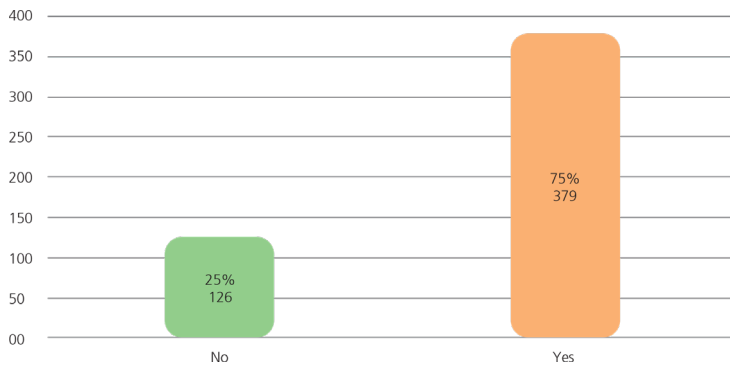
Figure 19: Results of the question 'Have you been able to save on transport?' (derived from results in HDA, 2023c)



Regarding travel and transport networks, "the reliance on public transport [see Figure 17 and Table 8], particularly taxis, suggests the need for efficient and accessible transportation options. Alternative modes of transport [results of the 'other' category] mentioned, such as walking, work transport and wheelchair use, highlight the importance of accommodating diverse needs and promoting sustainable transportation practices" (HDA, 2023b: 7). In addition "the majority of beneficiaries did not experience significant changes in travel time after moving [see Figure 18 and Table 9], it is crucial to investigate the underlying reasons for this lack of change. Identifying barriers and potential solutions can help improve transportation infrastructure and connectivity in housing developments. The finding that a majority of beneficiaries were unable to save on transport costs indicates that there is room for improvement in designing housing solutions that reduce transportation expenses [see Figure 19]. Rental housing showing the highest monthly savings on transport costs suggests the potential benefits of affordable rental options located in accessible areas" (ibid: 7).

House design

Figure 20: Results per typology and province of the question 'Are you happy with the design of your house?' (HDA, 2023a: 32)



Regarding house design, “[t]he dissatisfaction with the design of houses expressed by a portion of beneficiaries highlights the importance of considering aesthetics, functionality and quality in housing design [see Table 10 and Figure 20]. Addressing concerns related to poor design, poor quality, small size and excessive stairs is essential to ensure that housing meets the needs and expectations of beneficiaries” (HDA, 2023b).

Table 10: Reasons for not being happy with house design (HDA, 2023a: 33)

Reasons for not being happy with house design	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
Poor Design	21	52	73	58%
Poor Quality	41	66	107	85%
Too Small	35	64	99	79%
Too Many Stairs	00	13	13	10%

Access to amenities and basic services

Figure 21: Results of the question 'Please indicate the impact of your house on your access to social and commercial services or amenities' (HDA, 2023a: 34)

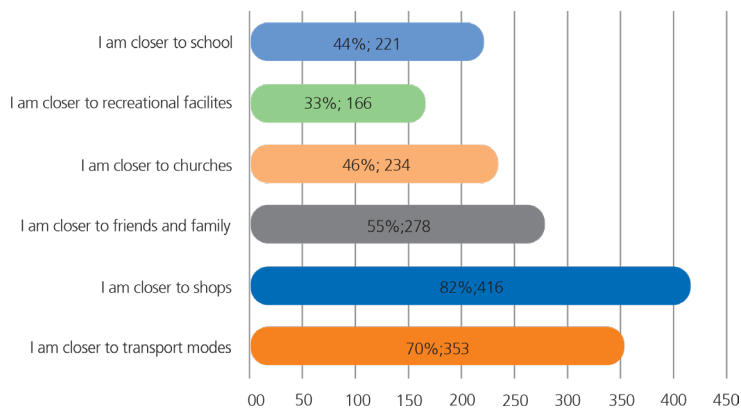


Table 11: Results of the question 'Please indicate the impact of your house on your access to social and commercial services or amenities' (HDA, 2023a: 34)

Impact of your house on your access to social and commercial services or amenities	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I am closer to transport modes	84	269	353	70%
I am closer to shops	130	286	416	82%
I am closer to friends and family	86	192	278	55%
I am closer to churches	58	176	234	46%
I am closer to recreational facilities	31	135	166	33%
I am closer to schools	49	172	221	44%

Figure 22: Results of the question 'Please indicate the impact of your house on your access to basic services' (HDA, 2023a: 35)

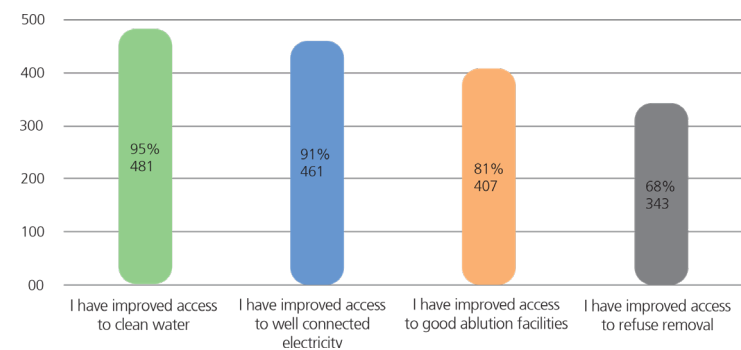
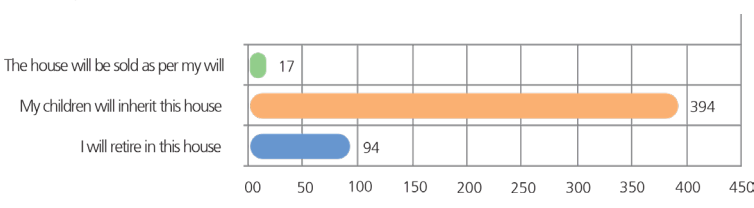


Table 12: Results of the question 'Please indicate the impact of your house on your access to basic services' (HDA, 2023a: 35)

Impact of your house on your access to basic services	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I have improved access to clean water	195	286	481	95%
I have improved access to well-connected electricity	176	285	461	91%
I have improved access to good ablution facilities	145	262	407	81%
I have improved access to refuse removal	73	270	343	68%

Figure 23: Results of the question 'What will happen to your house when you grow old or pass away?' (HDA, 2023a: 36)



In the survey, beneficiaries "reported positive impacts on access to social and commercial services, including transportation, shops, friends and family, churches, recreational facilities, and schools. This suggests that the houses have contributed to improving proximity and convenience for beneficiaries in accessing these services" (HDA, 2023b: 7) [see Figure 21 and Table 11]. However, "fewer beneficiaries in Gauteng perceived a positive impact on access to social and commercial services [see Table 11]. This indicates a potential discrepancy in targeted development and access in those areas, highlighting the need for focused efforts to ensure equitable access to essential services. Regarding access to basic services [see Figure 22 and Table 12], beneficiaries reported improved access to clean water, well-connected electricity, good ablution facilities, and refuse removal. The high percentage of beneficiaries reporting improved access indicates the positive impact of the houses in providing essential amenities. This suggests that efforts to ensure access to basic services have been successful in supporting the well-being of beneficiaries. Considering the future of the houses [see Figure 23], a significant portion of beneficiaries expressed their intention for their children to inherit the house, while a smaller percentage mentioned retiring in the house or selling it as per their will. This highlights the importance of intergenerational housing support and the desire for passing down the house to future generations. It also underscores the need for long-term planning and maintenance of these houses to ensure their longevity and continued benefit to families" (ibid: 8).

QUALITY OF LIFE

Figure 24: Results of the question 'What changes have you seen in your life since you moved?' (HDA, 2023a: 37)

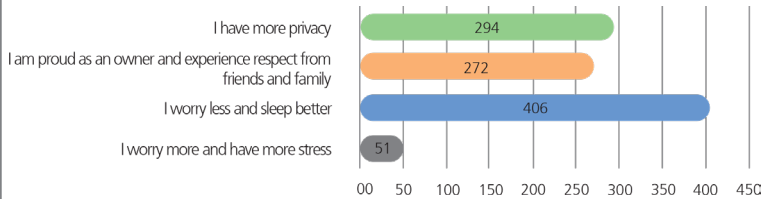


Table 13: Results of the question 'What changes have you seen in your life since you moved?' (HDA, 2023a: 37)

What changes have you seen in life since you moved?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I worry more and have more stress	21	30	51	10%
I worry less and sleep better	171	235	406	80%
I am proud as an owner and experience respect from friends and family	71	201	272	54%
I have more privacy	99	195	294	58%

Figure 25: Results of the question 'Impact of your house on your health' (HDA, 2023a: 38)

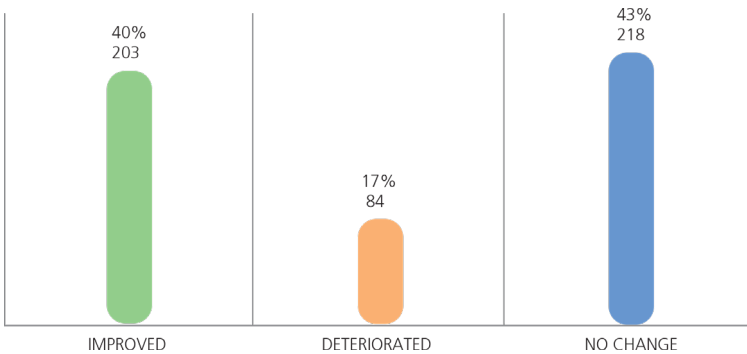


Table 14: Results of the question 'Impact of your house on your health' (HDA, 2023a: 38)

Impact of your house on your health	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
Improved	43	160	203	40%
Deteriorated	44	40	84	17%
No change	120	98	218	43%
Total	207	298	505	100%

Quality of life indicators relate to spatial transformation as it relates to the pillars of 'quality, climate change resilience and social cohesion', and 'public safety'. The concept of a home is central to life and has several dimensions (Newton, 2013). At a basic level, house is shelter, which gives users physical protection (ibid). The results from BETA illustrate that there has been positive change in this basic level of receiving a house (see Figure 24 and Table 13). Since moving to their house, a high percentage indicated "reduced worries, better sleep, increased pride as homeowners, and improved privacy"; "a significant portion of beneficiaries felt that their health had improved due to better healthcare and a cleaner environment... [h]owever, a notable proportion reported no change in their health [See Figure 25 and Table 14]"; and "In terms of security and safety, beneficiaries generally felt that the house had a positive impact, with the majority reporting feeling less exposed to crime." (HDA, 2023b: 8). It is noted that a smaller percentage experienced increase in stress and worry, felt more unprotected from crime, and indicated that they experienced a deterioration in health due to dumping and poor healthcare (ibid), highlighting the need to understand the confluence of factors that lead to these outcomes. These trends illustrate that receiving a home contributes to the primary function which is of shelter as physical protection and in "times of crisis, or when people are homeless, this primary function will be of particular importance, but once this basic need has been realised, the additional levels of meaning become of greater significance" (Newton, 2013: 647).

Table 15: Results of the question 'Impact of your house on your security and safety' (HDA, 2023a: 40)

Impact of your house on your health	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I am exposed to more crime	34	56	90	18%
I am exposed to less crime	173	242	415	82%
Total	207	298	505	100%

Figure 26: Results of the question 'Impact of your house on your security and safety' (HDA, 2023a: 39)

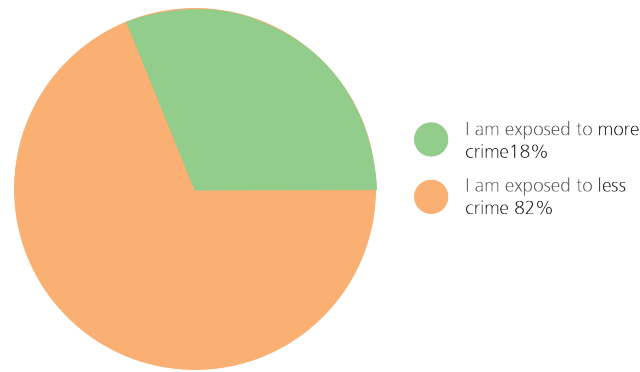


Figure 27: Results of the question 'Do you feel safe in the area?' (HDA, 2023a: 40)

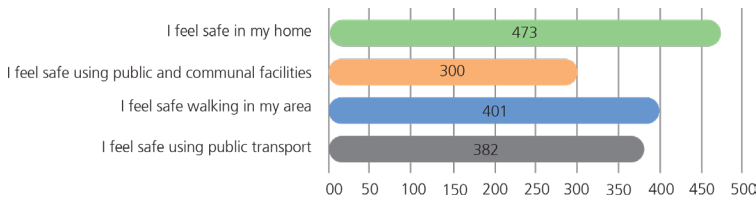


Table 16: Results of the question 'Do you feel safe in the area?' (HDA, 2023a: 40)

Do you feel safe in your area?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I feel safe using public transport	157	225	382	76%
I feel safe walking in my area	175	226	401	79%
I feel safe using public and communal facilities	102	198	300	59%
I feel safe in my home	197	276	473	94%

Figure 28: Results of the question 'Impact of your house on your children's school performance' (HDA, 2023a: 39)

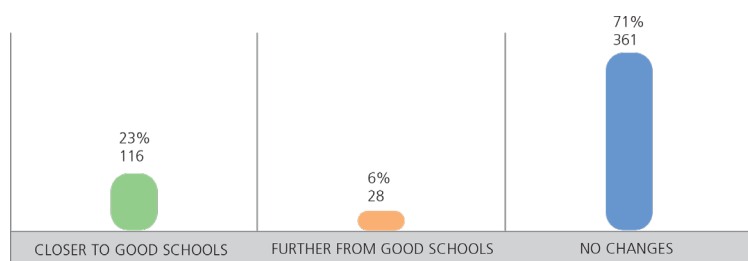


Table 17: Results of the question 'Impact of your house on your children's school performance' (HDA, 2023a: 39)

Impact of your house on your children's school performance	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
Closer to good schools	32	84	116	23%
Further from good schools	09	19	28	06%
No changes	166	195	361	71%
Total	207	298	505	100%

Safety

In terms of quality-of-life indicators “[m]ost beneficiaries reported feeling safe in their areas, including using public transport, walking in their neighbourhood, and within their homes. However, when it came to feeling safe using public and communal facilities, there was a slightly lower percentage expressing this sentiment” (HDA, 2023b: 8) [see Figure 26-27 & Table 15-16].

Education

The last question about quality of life regards school performance, and “a considerable number of beneficiaries felt that their proximity to good schools had positively influenced their children's performance. However, a small percentage felt that they were further away from good schools, suggesting a potential disparity in access to quality education. The majority reported no change, indicating that the house itself may not have directly impacted children's academic outcomes” (HDA, 2023b: 8). See Figure 28 and Table 17.

QUALITY OF GROWTH

Table 18: Results of the question 'Impact of your house on employment and income' (HDA, 2023a: 41)

Impact of your house on employment and income	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I started a new business	08	09	17	3.4%
I experienced business growth	02	32	34	6.7%
I am closer to work and saving more	14	14	28	5.5%
I am renting out a room or backyard structure	00	02	02	0.4%

Table 19: Results of the question 'Are you able to maintain the house in terms of repairs and upkeep?' (HDA, 2023a: 43)

Are you able to maintain the house in terms of repairs and upkeep?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
No	71	117	188	39%
Yes	126	174	300	61%
Total	197	291	488	100%

Table 20: Results of the question 'Have you made any changes to your house since moving here?' (HDA, 2023a: 42)

Have you made any changes to your house since moving here?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
No	188	254	442	88%
Yes	19	44	63	12%
Total	207	298	505	100%

Figure 29: Results per typology of the question 'Have you made any changes to your house since moving here?' (derived from results in HDA, 2023c)

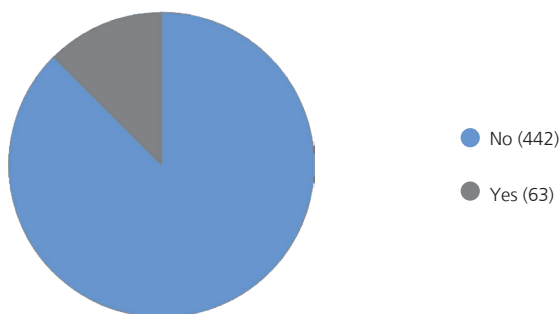


Table 21: Results of the question 'how did you pay for the changes?' (HDA, 2023a: 42-43)

How did you pay for the changes	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I got a loan	02	06	08	13%
I used my savings/stokvel	16	35	51	81%
I obtained credit from a material supplier	01	05	06	10%
The landlord paid for it	00	01	01	02%

Table 22: Results of the question 'How did you make the changes?' (HDA, 2023a: 43)

How did you make the changes?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I did it myself	13	15	28	44%
I employed a contractor	06	30	36	57%
I asked a friend	01	05	06	10%

Building on the definition of housing assets outlined in 'functional and equitable housing markets', and the theme of 'economic development, job creation and socio-economic sustainability', quality of growth analyses how beneficiaries use the house as an economic and financial asset. According to the sample, "the findings indicate that the quality of growth for most beneficiaries is poor, as only a small percentage reported positive impacts on their financial well-being [See Table 18]. This suggests the need for comprehensive support systems, such as job training programmes or entrepreneurial opportunities, to ensure that housing initiatives contribute to long-term economic stability" (HDA, 2023b: 9).

In terms of improving the financial asset, the findings suggest that "limited changes made to the houses by beneficiaries... While a majority of beneficiaries indicated the ability to maintain their houses, a significant portion stated difficulties in affording repairs and upkeep [see Table 19-24 and Figure 29]. This highlights the need for financial assistance or alternative financing options to support beneficiaries in maintaining their homes effectively" (HDA, 2023b: 9). Regarding rates, "the majority of beneficiaries do not pay rates [see Table 25-26], posing a financial challenge for municipalities. This underscores the need for strategies to ensure that beneficiaries are aware of their obligations and can afford to contribute to the upkeep of their communities. Despite the challenges, the majority of beneficiaries expressed pride in their homes and gardens [see Table 27], indicating that housing programmes have had a positive impact on their lives. This emphasises the significance of housing initiatives in fostering a sense of pride, ownership, and stability among beneficiaries" (ibid).

Table 23: Results of the question 'If any damage happens to your house or your house requires maintenance, how will you pay for it?' (HDA, 2023a: 44)

If any damage happens to your house or your house requires maintenance, how will you pay for it?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I will obtain a loan	15	16	31	06%
I will use my savings/stokvel	104	140	244	48%
I will borrow from friends/family	27	82	109	22%
I will ask my landlord	22	21	43	09%

Table 24: Results of the question 'How will you make the changes for maintenance?' (HDA, 2023a: 46)

How will you make the changes for maintenance?	Province		Total	
	Gauteng	Western Cape	Count	Percentage
	Count	Count		
I will do it myself	92	144	236	47%
I will employ a contractor	38	81	119	24%
I will ask a friend	28	58	86	17%

Figure 30: Results of the question 'What are your future plans for your house?' (HDA, 2023a: 44)

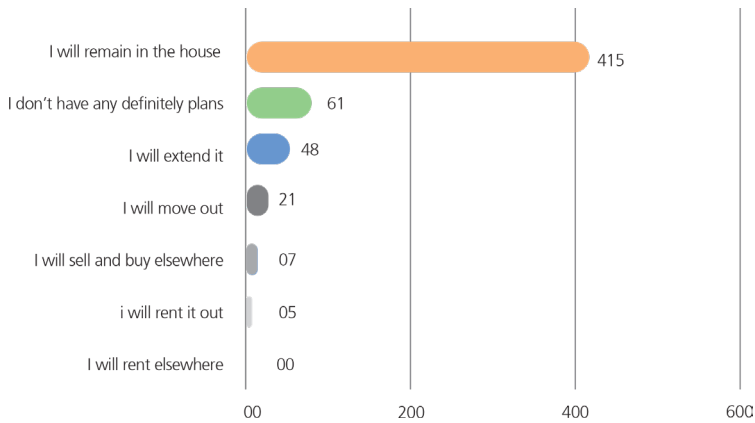


Table 25: Results of the question, 'Do you pay rates to the municipality?' (HDA, 2023a: 45)

Do you pay rates to the municipality?	Province		Total		
	Gauteng	Western Cape	Count	Percentage	
	Count	Count			
Do you pay rates to the municipality?	No	148	139	287	57%
	Yes	59	159	218	43%
	Total	207	298	505	100%

Table 26: Results of the question, 'If not, how much can you afford to pay per month?' (HDA, 2023a: 46)

If not, how much can you afford to pay per month?	Province		Total		
	Gauteng	Western Cape	Count	Percentage	
	Count	Count			
If not, how much can you afford to pay per month?	R50	23	83	106	37%
	R100	47	41	88	31%
	R150	44	10	54	19%
	R200 or more	34	05	39	14%
	Total	148	139	287	100%

Table 27: Results of the question, 'Are you proud of your home and garden?' (HDA, 2023a: 46)

Are you proud of your home and garden?	Province		Total		
	Gauteng	Western Cape	Count	Percentage	
	Count	Count			
Are you proud of your home and garden?	No	26	23	49	13%
	Yes	105	219	324	87%
	Total	131	242	373	100%

DATA COLLECTION CHALLENGES AND MITIGATION STRATEGIES

The community testing evaluations revealed the following data collection challenges of data collection. In collaboration with the service provider, mitigation strategies were identified and deployed.

Challenges of data collection

- Limited response rate: One of the challenges faced during data collection has been a low response rate from beneficiaries. This could be due to various reasons, such as difficulty in reaching the beneficiaries.
- Language barriers: Communication barriers, particularly related to language, also posed challenges during data collection. Some beneficiaries preferred speaking in their native language, which required the presence of translators or interpreters to facilitate effective data collection.
- Data accuracy and reliability: Ensuring the accuracy and reliability of the data collected was a challenge. Beneficiaries may have provided incomplete or inaccurate information, impacting the overall quality of the data. Hence, we decided to exceed the target so as to increase the chance of successful beneficiary verification.
- Reluctancy on the part of the beneficiaries to be interviewed due to problems with the particular programme implementation.
- External factors such as lack of service delivery and other social ills also affected the quality of responses.
- Lack of cooperation from some of the key stakeholders delayed the implementation of the project and also affected the probability of success; with a high risk of failure.
- The small sample size in relation to the total population in all communities makes it difficult to draw conclusions and make recommendations towards policy review.

Source: Extract from HDA (2023b): 9-10

Mitigation strategies

- Increase awareness and engagement: To address the low response rate, efforts were made to increase awareness among beneficiaries about the survey and its purpose. This was done through community meetings, door-to-door visits, and engaging local leaders or community organisations to encourage participation.
- Employ trained field workers: Utilised trained fieldworkers who are familiar with the local context, culture and language to build trust and rapport with beneficiaries. Field workers explained the importance of the survey and addressed any concerns or questions raised by beneficiaries, thereby increasing their willingness to participate.
- Use standardised data collection tools: Developed standardised data collection tools, such as questionnaires or surveys, to ensure consistency and reliability of the data. This helps in gathering comparable information across different beneficiaries and locations.
- Train data collectors: Provided thorough training to data collectors to ensure they understand the objectives of the survey, the importance of accurate data collection, and how to address potential challenges during the process. This included training on ethical considerations, data protection and techniques for effective communication.

Source: Extract from HDA (2023b): 10

SPATIAL TRANSFORMATION ANALYSIS: LESSONS LEARNT AND RECOMMENDATIONS

In the theory of change, it is noted that if beneficiaries live in spatially transformed settlements, they experience 'increased access to economic and financial opportunities', and can utilise housing as an asset. This links to the spatial transformation themes of 'economic development, job creation and socio-economic sustainability', and 'functional and equitable residential property markets'. Current trends paint a different picture. The sample survey illustrates a high reliance on grants and lack of access to economic opportunities. There is also a lack of property filtering as evident from plans for the house in the immediate future, as illustrated by the question 'What are your future plans for your house (from now until 2026)?'. Most indicated that they would remain in the house (see Figure 30). It is noted that most beneficiaries see the house as a long-term asset for inheritance, as indicated from the answers 'that their children will inherit the house'. Lessons learnt and recommendations are highlighted below.

Lessons learnt and recommendations for 'economic development, job creation and socio-economic sustainability', and 'functional and equitable residential property markets'

Lessons learnt:

- ❑ Access to housing is not enough: Providing housing alone does not guarantee beneficiaries financial freedom or improved quality of growth. It is essential to consider factors such as proximity to employment opportunities, urban amenities and rental demand in the areas where housing is provided.
- ❑ Financial inclusion is crucial: Beneficiaries' access to financial markets and resources, such as obtaining title deeds or loans, plays a significant role in enhancing their quality of growth. Lack of access to funds can limit their ability to invest in potential businesses or make necessary changes to their homes.
- ❑ Importance of affordability and savings: Many beneficiaries relied on their savings or stokvels to make changes to their houses or cover maintenance costs. Affordability is a key factor in ensuring beneficiaries can maintain their homes and make necessary repairs. Encouraging savings and financial planning can help beneficiaries address maintenance needs.
- ❑ Sustainable service delivery: The study highlights the financial burden on municipalities when beneficiaries do not pay rates for municipal services. Sustainable service delivery requires beneficiaries to contribute financially to ensure the continued provision of services. Promoting a culture of payment among beneficiaries can help municipalities maintain service levels.

Recommendations:

- ❑ Enhance access to employment opportunities: Consider the location of housing projects and ensure convenient access to employment centres. This can be achieved through strategic urban planning and collaboration with local authorities to develop housing typologies in areas with employment opportunities and urban amenities.
- ❑ Foster financial inclusion: Facilitate the provision of title deeds to beneficiaries, enabling them to access financial markets and resources. This can empower beneficiaries to invest in their potential businesses, expand income-generating activities, and contribute to their financial well-being.
- ❑ Promote savings and financial planning: Implement programmes that encourage beneficiaries to save and plan for future housing maintenance and repairs. This can help them address challenges without relying solely on limited resources or loans.
- ❑ Encourage sustainable service delivery: Promote a culture of payment among beneficiaries for rates and municipal services. This will ensure the sustainable provision of services and alleviate the financial burden on municipalities.

Source: Extract from HDA (2023b): 11–12

The theory of change envisions spatially transformed settlements for beneficiaries that include 'experience of safety, security, comfort, quality and community in homes and environments', which relates to themes of 'quality, climate change resilience and social cohesion', 'public safety' and 'urban management'. The analysis generally indicated an overall improved experience of safety and sense of community, improved access to basic services and some improved access to auxiliary services. While no specific indicator in the questionnaire deals with climate change resilience, the question in quality of place around the design of the house with further interrogation can assist in understanding if homes are climate change resilient. It is noted that, while there was general satisfaction with house design, the dominant reasons of those that were not satisfied were poor quality and small size. Therefore, to achieve quality, one would need to better understand factors that lead to poor quality and those that prevent home improvements. Although there is an improvement in social cohesion and public safety, there is a need to expand initiatives for these types of interventions, as the box below illustrates:

Lessons learnt and recommendations for 'quality, climate change resilience and social cohesion', 'public safety' and 'urban management'

Lessons learnt:

- ❑ **Need for high-quality housing:** Some beneficiaries reported being unable to maintain their homes due to financial constraints. This emphasises the importance of providing high- quality housing that is durable and requires minimal maintenance. Building houses that are resilient and require fewer repairs can alleviate the financial burden on beneficiaries.
- ❑ **Self-help and community involvement:** Beneficiaries who cannot afford to hire contractors often take on repairs and maintenance themselves. Encouraging self-help initiatives and fostering community support can empower beneficiaries to address housing challenges and reduce dependency on external assistance.
- ❑ **Pride and emotional well-being:** The majority of beneficiaries expressed pride in their homes and gardens, indicating that housing programmes positively impact their emotional well-being and sense of belonging. Housing initiatives should aim to create homes that not only provide shelter, but also foster a sense of pride and ownership.

Recommendations:

- ❑ **Improve housing quality and durability:** Emphasise the construction of high-quality and durable housing that requires minimal maintenance. This can reduce the financial burden on beneficiaries and ensure the longevity of housing projects.
- ❑ **Foster self-help initiatives and community involvement:** Encourage beneficiaries to actively participate in maintaining and improving their homes. Promote self-help initiatives and community support networks where beneficiaries can share skills and resources to address housing challenges.
- ❑ **Enhance emotional well-being:** Design housing projects that promote a sense of pride, ownership, and belonging among beneficiaries. This can be achieved through community engagement, landscaping, and creating green spaces that enhance the overall quality of well-being.

Source: Extract from HDA (2023b): 11-13

The outcomes envisioned for beneficiaries in human settlements include increased access, socio- economic integration and living in connected and sustainable developments (see page 20). This links with the themes of 'integration and transport networks', and 'land value-add and infrastructure'. The results from the pilot indicate that most did not experience a change in travel time, and being closer to work was not a prominent access advantage (HDA, 2023b). While there has been an improvement in access to basic services and some improvement to additional auxiliary services, access can be improved (ibid). There is a need to improve access to well-located land to ensure access to adequate infrastructure, supportive amenities and services, and improve travel costs and distances.

LIMITATIONS OF THE ANALYSIS AND FUTURE RESEARCH OPPORTUNITIES

Two themes of spatial transformation were not dealt with explicitly in the questionnaire, 'Human Settlements Transformation Scorecard' (HSTS) and 'Transversal Alignment'. This is because HSTS, deals with primarily government intervention for job creation and transformation. The survey dealt with 'economic development, job creation and socio-economic sustainability' more generally to analyse the impact of the subsidy on access and proximity to economic opportunities for beneficiaries. In other spatial transformation analysis (HDA, 2024) it is possible to evaluate government intervention based on information available. The second aspect is 'transversal alignment'. 'Transversal alignment', and by extension, governance, is difficult to categorically evaluate in terms of the attitudes of beneficiaries as the questionnaire focused on outputs and experiences that are related to spatial transformation themes. Within broader spatial transformation analysis, it is acknowledged that local authorities within South Africa face challenges related to untransformed cities as the location of settlements on the urban periphery create constraints to the infrastructure system

(Pieterse, 2019). While BNG diagnosed challenges of human settlement delivery and represented a reorientation (Pieterse, 2019), this was not followed by significant change within housing policy and programmes (Gardner, 2018; Pieterse, 2019). The draft White Paper is a key opportunity to change human settlements strategy (Gardner, 2018).

There are various other research opportunities available to be derived and combined with BETA. Firstly, as stated earlier, the analysis also dealt with general trends across typologies within Gauteng and Western Cape. Therefore, it does not reflect place specific spatial transformation understandings. BETA in combination with other spatial transformation indicators (HDA, 2024) has the potential to assist us in understanding area trends. Secondly, as a pilot study, there were certain limitations in scope and number and nature of questions that could be posed to beneficiaries. In addition, interrogation and further research is needed to refine and propose other questions to improve the impact of BETA to our beneficiary understandings.

NEW DIRECTIONS FOR HUMAN SETTLEMENTS

Suggestions for improving spatial transformation in South Africa's towns and cities are various. Pieterse (2019) highlights that at an urban government level there is a need for innovative leadership with strong urban narratives and a need for reimagining and restructuring resource distribution to catalyse transformative imperatives. Frameworks such as the National Spatial Development Framework (NSDF) suggest that there is a need for a "collaboratively prepared and mutually agreed to 'intergovernmental spatial transformation accountability model' by which all three spheres of government, sector departments and non-State actors will individually and collectively hold each other accountable" (DALRRD, 2023: 124). The HDA's publication on spatial transformation has highlighted the potential to have measurable indicators for spatial transformation and its potential to be used in monitoring and planning (HDA, 2024). Therefore, to improve spatial transformation there is a need for: intergovernmental coordination and accountability mechanisms; strong urban leadership and innovative resource distribution; utilising measurable indicators for planning and monitoring; and understanding and evaluating for transformative beneficiary impact.

The broader scope of BETA has illustrated the need to increase participation and community engagement in human settlements. In a recent submission for the draft White Paper, the Isandla Institute (2024: 7) writes that community engagement should be "articulated as one of the defining features of human settlements planning and development ... greater emphasis should be placed on deliberative approaches and methodologies in human settlements programming and development and the implications for government capabilities. This also includes a more prominent role for affected communities and households in monitoring and evaluation of human settlements programming and provisioning". The pilot of BETA as a digital transformation tool and as post-occupancy evaluation centres monitoring and evaluation (M&E) to a prominent role to understand impacted households and communities. It is recommended that BETA be evaluated, refined, scaled, and utilised within human settlements as an important M&E tool for the state.

CONCLUSION

Beneficiary impact and evaluations provide an opportunity for human settlements. They highlight the importance of post-occupancy evaluations for the state and respond to calls that the state needs to have better involvement with people directly impacted by their investments. A spatial transformation theory of change in relation to beneficiaries gives us a framework to evaluate the human settlement programme. While there has been improvement to beneficiaries' experiences in receiving a subsidy from the state, it does not reach the transformative potential envisioned by policy and programmes. Greater emphasis in planning,

governance, M&E and policy needs to be placed on spatial transformation objectives to achieve spatial transformation outcomes.

It is envisioned that BETA will be used by recipients of state subsidies to provide input about their experiences. It is also envisioned that the results from BETA will be used for future planning and development in human settlements to better plan for beneficiary needs. In the long term, BETA is envisioned to be used as an effective M&E tool for the National Department of Human Settlements.





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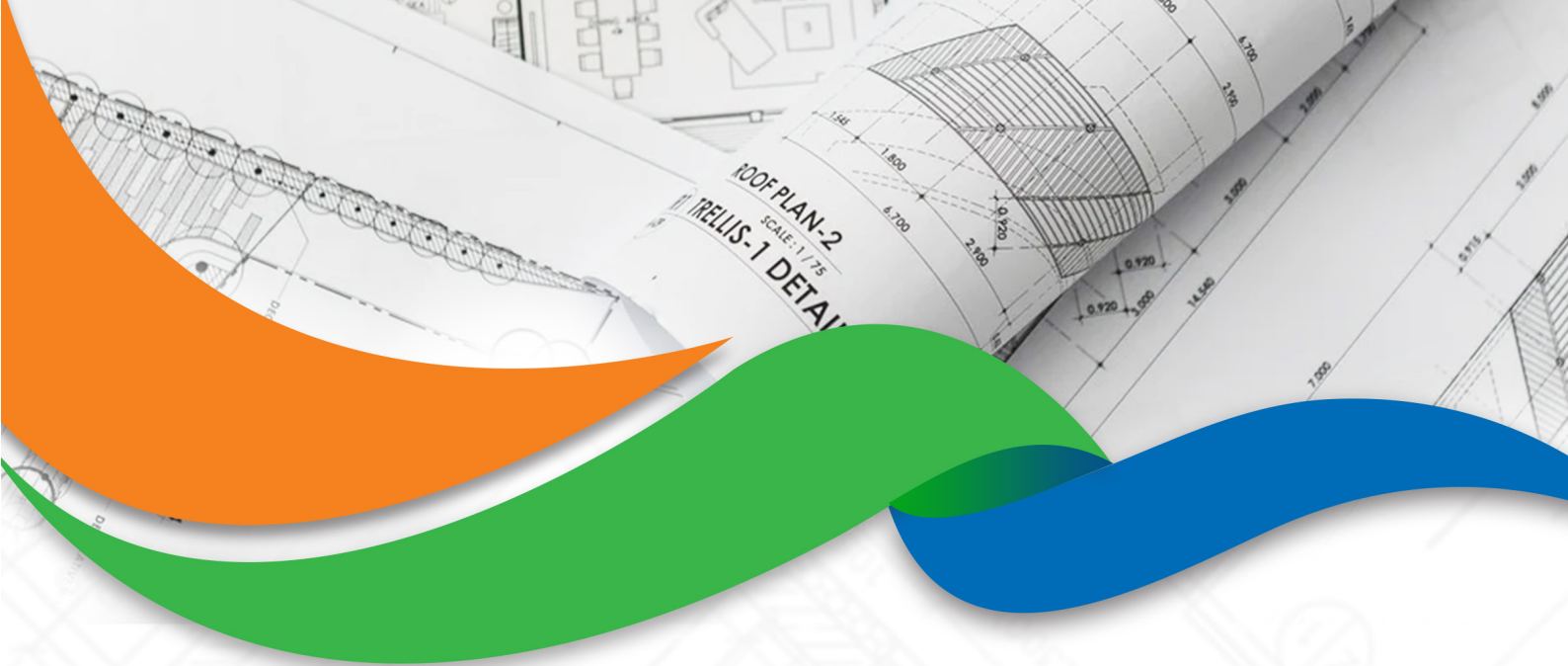
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