The Working City

Actions for Growth and Recovery

REPORT

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INTRODUCTION

For over a decade, cities have faced several shocks, including the 2008/09 global financial and economic crisis, water shortages due to droughts brought about by climate change, the health and socioeconomic devastation of the COVID-19 pandemic, and (to a lesser degree) social unrest that was often accompanied by looting and the destruction of businesses and property. These are not the last crises that cities will face.

Municipalities directly affect people's lives by delivering constitutionally mandated essential services and influencing local economic development. However, municipalities continue to struggle with systemic problems and are in a precarious and vulnerable state. This means that most municipalities (with a few notable exceptions) are highly unlikely to manage unforeseen shocks. For example, the pandemic worsened a bad situation and shone a light on the vulnerability of municipalities.

These shocks and disruptive events underscore the urgent need to build city and municipal resilience by tackling local government's underlying systemic and structural problems. Moreover, the government alone cannot solve these complex and entrenched problems; an all-of-society approach is needed to find long-term and sustainable solutions. Today, more people than ever live in cities, including two-thirds of South Africans. Cities are spaces where people come together to share experiences and ideas and to shape new systems; they are places of social, economic and political opportunities and intense social interactions; and they are central to development and at the forefront of the country's economic, social, environmental and cultural life.

The Urban Festival took place virtually on 31 October 2023. It was convened by the South African Cities Network (SACN) in partnership with the Department of Cooperative Governance (COGTA), the Department of Human Settlements (DHS), the South Africa Local Government Association (SALGA) and eThekwini Municipality.

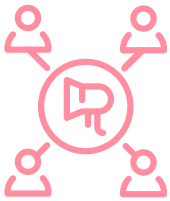
This Urban Festival 2023 was hosted under the theme of "The Working City: Actions for growth and recovery (data as an enabler for resilience)", which was aligned with the 2023 World Habitat Day's theme of "Resilient urban economies: Cities as drivers of growth and recovery". The Festival's aim was to highlight efforts made to get cities to work, i.e., to make cities functional, efficient and effective, with an emphasis on actions that demonstrate cities are working actively towards growth and recovery, not just conceptualising and strategising. The theme incorporated the enabling role of data, encouraging cities and citizens to demonstrate that their actions towards resilience, growth and recovery are underpinned by evidence-based decision-making and that they are working to increase and improve data use.

The Urban Festival 2023 had the following objectives:

- To showcase the SACN's contribution to South Africa's urban development agenda.
- To profile and celebrate the role of cities in the country's transformation journey.
- To shine a light on good practices and continuous improvement through innovation.
- To act as a platform that will stimulate collaboration between all of society and local government.

URBAN FESTIVAL STATISTICS

141
Virtual Attendees



69 897
COMBINED REACH

1 694
COMBINED ENGAGEMENT

10 735
REACH

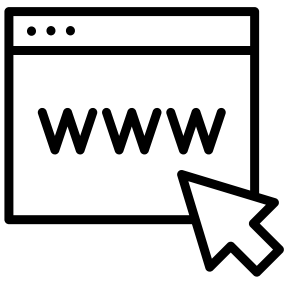
345
ENGAGEMENT

40 900
REACH

937
ENGAGEMENT

18 262
REACH

412
ENGAGEMENT



865
TOTAL WEBSITE VISITS TO THE URBAN FESTIVAL MICROSITE

OPENING REMARKS

Luncedo Njezula
Executive Manager: Governance, Strategy and Partnerships, SACN

**As Councillor Xola Pakati, the SACN Council Chairperson, was unexpectedly called to an emergency, Luncedo Njezula from the SACN gave the opening address.*

Luncedo welcomed everyone to the virtual Urban Festival 2023, under the theme of "The Working City: Actions for growth and recovery", and emphasised the importance of coming together to collectively address issues that cities face in these challenging times. For cities navigating the complexities of rapid urbanisation, economic recovery and sustainability, power lies in collaboration and in sharing knowledge and experiences. He explained that the Urban Festival offered a platform for everyone to exchange ideas, showcase innovations and be inspired to create vibrant, inclusive and resilient cities. The festival programme, which was curated by the SACN and its partners, COGTA, the DHS and SALGA, reflected the diversity of South Africa's urban landscapes, bringing together planners, policymakers, academics and city leaders from across the country. The festival's aim was to uncover practical and actionable strategies that will drive growth and recovery in South Africa's cities. He pointed out that cities are not mere concrete jungles but are living organisms, which thrive on the sweat and toil of their inhabitants. People make cities come alive and, through their hard work and determination, South Africa can achieve sustainable growth and recovery. He invited everyone to immerse themselves in the tapestry of urban experiences and to engage in meaningful conversations. In concluding, he called on participants to change the status quo, question existing paradigms and envision a future where cities are engines of opportunity, innovation and social progress – together, cities can be transformed into beacons of hope where every individual can fulfil their potential and contribute to the collective prosperity of the nation.

HOW WE WORK: BUILDING INSTITUTIONAL RESILIENCE

Keynote Framing

The Minister began by thanking the organisers for the opportunity to participate in the Urban Festival and highlighted the importance and multifaceted nature of urban development.

Urban areas are dynamic hubs of innovation, culture, and progress, but also present unique challenges that require attention and collaborative efforts. The Minister acknowledged that, while progress has been made in creating more sustainable, inclusive, and vibrant cites, much work still needs to be done. She added that institutional resilience for local government in South Africa is as important as the festival theme – The Working City: Actions for growth and recovery.

Minister Thembi Nkadimeng
Department of Cooperative Governance and Traditional Affairs (CoGTA)

To create a developmental and resilient state, local government needs to be able to perform, deliver and enhance its obligations and functions, to respond to shocks effectively and to strengthen capabilities. Minister Nkadimeng explained that building institutional and administrative capability was at the core of COGTA's work, and the department had been actively attempting to support municipalities through developing and implementing various policies and programmes, such as the Back To Basics campaign. Currently, South Africa has approximately 66 dysfunctional municipalities, which face multidimensional challenges, including weak institutional capacity, poor financial management and political instability. COGTA provides support to these dysfunctional municipalities and has introduced programmes aimed at eradicating poverty and boosting local economies with relevant partners.

Challenges confronting municipalities in South Africa include elevated levels of poverty and unemployment, inadequate or ineffective delivery of essential services, hurdles linked to bolstering local economies, striving for spatial transformation, addressing skills and capacity constraints and, in certain cases, grappling with political and administrative instability.

An institutionally resilient local government will provide the foundation for local government to respond to some of the key economic, social and built-environment challenges facing municipalities and communities. To guide development, the country has various policy directives in place: the National Development Plan (NDP), the National Spatial Development Framework (NSDF) and the Integrated Urban Development Framework (IUDF). The Municipal Infrastructure Grant (MIG) aims to eradicate municipal infrastructure backlogs in poor communities to ensure the provision of basic services, while the Community Work Programme focuses on creating employment opportunities and servicing communities. In addition, the District Development Model (DDM) is designed to address service delivery problems by allowing all spheres of government, from local municipalities to national government, to work together in a more effective and coordinated way.

However, the Minister stressed that although these key national policy directives are in place, the world is advancing, and so must South Africa's municipalities. In the fourth industrial revolution, a key driver is technology and the use of data, which can be used to improve service delivery in municipalities by spatially representing the data to guide analysis and the prioritisation of the required interventions and monitoring the impact of delivery. She cited the example of the eThekwini Metro's Strat Hub, which supports policy interventions and actions related to urban safety, road safety, disaster response, climate risk and vulnerability mapping, among others.

In conclusion, the Minister emphasised the importance of creating a resilient local government as a developmental state depends on sound institutions and thanked the SACN for its valuable contributions made in supporting municipalities over the years.

Data Demonstration 1

Mduzuzi Mdletshe,
eThekwini Municipality

Dimakatso Moloi
eThekwini Municipality

EThekwini Municipality has developed a mobile application (the app) to address the challenges of managing a large number of citizens and their service requests. The app was introduced as a preferred first point of contact for customers to enquire about any services rendered by the municipality. It allows customers to log faults and create requests for services, thereby eliminating the need to call the municipality. It also integrates with back-end solutions, enhancing business agility and growth and providing real-time transmission of information to field service agents and supervisors. The focus is on improving customer service and integrating technology to streamline processes.

The app has been well-received by citizens and has led to revenue enhancement for the city, as it allows for real-time communication and payment verification. The app is available on multiple online forms and app stores, and has seen a high adoption rate among users.The municipality is embarking on a public-private partnership with local telecommunications companies, to establish a platform that would allow citizens to access the app and other services for free (zero data cost model).

Benefits of the mobile app

Access to information: A user-friendly interface for customers to access information, such as details about their local government representatives, traffic alerts, news, tourist events and places to visit. A public services map and an "around us" map are included.	**Registration and access:** Customers need to register as an e-services user in order to access certain features, such as viewing bills and capturing data. This involves creating a username and password, agreeing to terms and conditions, and verifying the account through email.	**E-service meter reading:** Users are able to capture their water meter readings quickly and easily, as the system lists all the user's accounts and previous readings. Users can take a photo of their meter reading and upload it to the system, saving them time and effort.

The app has proven to be a faster, more transparent, and efficient way of receiving complaints and/or requests from citizens who no longer have to go to a walk-in centre or call a contact centre.

Future plans

Going forward, eThekwini Municipality intends:

- Monitoring and analysing app usage and user feedback.
- Improving infrastructure and connectivity in areas with challenges.
- Partnering with local telecommunications companies for a subsidised data model.
- Developing phase two of the mobile app for bus scheduling.
- Integrating water-sharing features into the mobile app.

Main points from the discussion

- **Language**. The app is available in English from the App Store and Huawei App Gallery. As isiZulu is the primary spoken language for the target audience, the municipality's Communications Unit continues to share updates in isiZulu and English.
- **The success of the app.** The success of a mobile app is measured by active usage, as users often download apps but seldom use them. According to the App Store, the app is rated 1.3 by users due to various difficulties, which include the app/registration/meter reading not working and some users being unable to view maps. However, such difficulties are not usually caused by the app itself but are determined by user location – in areas with poor coverage/unreliable infrastructure, the application can be problematic.
- **Accessibility.** The municipality should seek to make the app accessible to people who are not familiar with technology and be intentional about closing the technological gap.

The Transformative Power of Data

Claudia Juech
Bloomberg Philanthropies

During this TED Talk-style session, Claudia highlighted cases of innovation, collaboration and resilience in communities and cities to demonstrate the transformative power of data. These real-life examples show how data innovations have catalysed positive change and resulted in more resilient and vibrant local environments.

Examples of the power of data to transform

1. The "zip code as a destiny" project in the USA revealed that where you are born determines your economic destiny. In Charleston, North Carolina, the city used this data to explore how certain neighbourhoods have been left behind, socially and economically and then created different investment corridors for economic development aimed at undoing this spatial phenomenon. The project shows how data can provide new insights to catalyse action and be the glue that holds a project together and connects different projects.

2. In Chicago, the Invisible Institute uses volunteers to analyse police documents to identify cases where police violence and harassment were not reported so that these can be addressed.

3. In Honduras, a project looked at second-tier cities that have high numbers of informal settlements to understand which areas are most affected by natural disasters, such as flooding, mudslides and landslides, and to identify the most vulnerable, marginalised populations so that resources could be better allocated to those areas. The project found a way to work with representatives of informal settlement communities who are often not represented on official city maps and so are not included in formal processes.

4. In Assam State, India, the Open Contracting Partnership uses fiscal geospatial demographic data (from multiple datasets) to identify to what extent vulnerable locations were receiving the infrastructure funding that they needed. The organisation built relationships with the state government and collaborated over five years. The project illustrates that building trust and collaboration takes time.

5. In Bogotá, Colombia, the city recognised that it could do more for economic development by supporting informal vendors. It provided various types of data to establish an alternative credit score, which led to many thousands of vendors gaining access to credit accounts.

6. In Mexico, a city developed a software tool that allowed citizens direct access to permitting processes, with the goal of cutting out the middleman and simplifying the process, but it also reduced corruption. Close to 100 cities in Mexico are now using the software. The project demonstrates the replication of an innovation that works in a similar context, i.e., the same regulatory environment.

7. In Mexico City, the mayor decided that she wanted to achieve digital autonomy to address inequality in the city. She established an innovation agency that was also responsible for the digital transformation of Mexico City. The agency has 40 developers who develop in-house tools and manage the data from Mexico City. It has also created points that provide free internet, allowing citizens to access digital government services and increasing availability to more people.

Key messages

- Data can provide new insights and innovative solutions for complex challenges and act as a catalyst for community-driven change.
- While the availability of datasets is crucial, what is very important is to ask the right questions and understand the problem in order to identify the relevant datasets that can help provide solutions.
- Data can move things forward but requires many other elements, such as building trust with communities and identifying who takes forward the actions determined by the data.
- When engaging communities around a project, it is useful to explain the entire data life-cycle (data collection and cleaning, design of data, analysis, visualisation and sharing of data) and identify who needs to be involved at each stage of the cycle.
- To mitigate the risk of inequitable use of data, different stakeholders need to be engaged throughout the life cycle, and community engagement solidified around data projects.
- "It's about people, not the data" – data is a means to an end and is powerful if you engage people and identify the right problem to solve.
- Data can foster collaboration as a driver of resilience.
- Data can help transform adversity into opportunities for growth and positive change.
- Data governance is crucial to ensure that data is inclusive and unbiased and does not discriminate against certain groups. For example, create generative AI policies and employ an AI ethicist to guide the application of datasets and AI across city departments.

City Leaders' Forum

Facilitator

Prof. Phil Harrison
WITS University

Zayde Ebrahim
City of Johannesburg

Bongumusa Zondo
eThekwini Municipality

Dr. Williams Obeng
Nelson Mandela Bay Municipality

Bob Naidoo
Buffalo City Metropolitan Municipality

The panel explored how cities have understood and adapted their governance and planning systems to achieve resilience in line with the sustainable development goals (SDGs), in particular SDG 11 and SDG 13:

- Goal 11: Sustainable cities and communities – To make cities and human settlements inclusive, safe, resilient, and sustainable.
- Goal 13: Climate action – To limit and adapt to climate change and its impacts.

City leaders reflected on the value of SDGs for local action and the extent to which cities have adopted SDGs in an exercise of collective learning on problems and possibilities.

SDGs 11 and 13: tools to drive resilience in cities

In 2000, the UN General Assembly adopted eight-millennium development goals (MDGs) up to 2015, which committed global leaders to:

- Eradicate extreme poverty and hunger.
- Achieve universal primary education.
- Promote gender equality and empower women.
- Reduce child mortality.
- Improve maternal health.
- Combat HIV/AIDS, malaria and other diseases.
- Ensure environmental sustainability.
- Global partnership for development.

Despite the global crisis of 2008, some progress was made in meeting some of the MDGs. For instance, the number of children dying under five years of age more or less halved; the percentage of underweight children dropped from 28% to 17%, and there was a more than one-third reduction in HIV. However, the MDGs focused exclusively on the global South, where poverty is most extreme. Yet, as many have pointed out, actions taken in the wealthier global North have a critical impact on the future of all of us. Therefore, a global agenda was needed.

In 2013, the UN set up an SDG working group, which developed the 2030 Agenda for Sustainable Development, with 17 SDGs and 169 targets, that was unanimously adopted at the UN General Assembly in 2015. The SDGs brought together an antipoverty agenda, which was strong in the MDGs, with the sustainability agenda dating back to the UN Summit on sustainable development in Rio in 2001. This important conflation of two major global agendas sought to address poverty and inequality while ensuring sustainability for humankind into the future.

SDG 11 was the symbolic end to an anti-urban agenda that had dominated the post-World War II world. It embraced the role of cities in driving sustainable development and can be seen as the culmination of a process that began with the Habitat I conference in Vancouver (1976). The New Urban Agenda (NUA) subsequently gave substantive content to SDG 11.

SDG 13 deals with climate change. By 2015, the understanding of climate change was far greater than in 2000, as in 2014, the UN Intergovernmental Panel on Climate Change (IPCC) released its fifth assessment report. Similarly, the understanding was greater in 2023 than in 2015, when the IPCC released its sixth assessment report. Both reports are unequivocal that human activities have caused global warming, which disproportionately affects the most vulnerable communities that have historically contributed the least to climate change.

Much has been said about the localisation of the SDGs, which recognise that their success is dependent on actions at a local level. So, how impactful have these SDGs been on local actions? What has been the impact of COVID-19 on achieving the SDGs? What other challenges have emerged that were not considered when preparing the SDGs (e.g., artificial intelligence)? What is the impact of the leadership crisis in municipal government in South Africa on achieving the SDGs?

Nelson Mandela Bay Municipality

The city highlighted its achievements in transitioning to renewable sources of energy (SDG 13).

- **Sustainable Renewable Energy Plan.** In 2021, the municipality adopted this plan, which serves as a blueprint for diversifying and decarbonising the city's renewable energy portfolio. It includes guidelines on how independent power producers (IPPs), traders, investors and customers can engage with the city, and is based on three pillars: facilitation, own use and procurement of new generation capacity.
- **Net billing.** The city encourages customers to participate in renewable energy through feed-in tariffs and currently has 600 customers registered as small-scale embedded generation tariffs, which contribute up to 26 MVAs of green energy within the municipality.
- **Wheeling tariffs.** The city uses the grid to allow IPPs and energy traders to connect renewable energy to third parties. It has signed an agreement with an IPP (Parsons Power Park), which contributes about 25 MWs of photovoltaic power from a plant that will wheel energy in and around the city. Three other similar projects are in the pipeline.
- **Community-based project.** The Salithuba Gap Tap project is a local community initiative in partnership with the municipality, where agriculture and renewable energy converge to deliver sustainable energy within communities. Greenhouses are built with photovoltaic systems on top.
- **Trading platforms.** The pilot project for South Africa's first live 30-minute trading platform will enable the municipality to manage its grid network, know when (at what times) and how much energy is being utilised, by whom and from whom – and what the half-hourly profits are for the municipality.
- **Grid Improvement.** The municipality has signed a financing agreement with the German Development Bank (KfW) for a R280-million grant to upgrade the inner-city grid, to improve the reliability and efficiency of supply and thus attract renewable energy investments in the city.
- **Energy efficiency demand management.** The municipality has installed about 10,000 LED streetlights that consume about 70% less than traditional lighting and is in the process of producing an energy efficiency certificate, assessing the electricity consumption of all municipal buildings to help develop alternative equipment that would use less energy.
- **Solar high mast lighting pilot project.** The city has installed solar panels on top of galvanised high mast steel poles to power the LED lights.
- **Geyser control.** For the past 17 years, this initiative has produced annual savings of over R70 million.
- **Procurement of new generation capacity.** The municipality has approved an energy plan to procure at least 30% of the required energy from IPPs, and a process is underway to procure 180 MWs from them. The municipality is also in the process of refurbishing the Mount Road ModPod 50, 40 MW gas turbine to give much-needed relief to loadshedding.

a world class African city

Strategic impact: Reasons for collecting SDG data at local level

Cities are drivers of change and work directly with communities in addressing the challenges. Collecting this data advances the acceleration and localisation of the SDGs, stimulates and drives local action, and changes the local-national dynamic. The tool is not only for monitoring and reporting but also needs to measure impact.

On 19 April 2023, the South African government and the UN formally signed the UN Sustainable Development Cooperation Framework, which is aligned to and advances the NDP. Cities are at the coalface, and so the progress and contributions of local government in achieving the SDGs must be captured as part of the overall national monitoring and reporting. Sustainable development is a key city objective and aligned to its Growth and Development Strategy (GDS), IDP and mayoral priorities.

Strategic objectives of CoJ SDG reporting

- It must help inform the city's long-term planning.
- It must support impact evaluations and help identify gaps/activities to be prioritised to uplift communities.
- It must allow the CoJ to position itself strategically, locally and globally, by reporting on SDG progress and challenges.

Critiques of the current reporting system and opportunities

- There is no standard methodology for monitoring and reporting on the SDGs at a local level and no standard list of local government indicators for cities to use.
- South Africa is reporting, but there are no vertical integration requirements with national SDG reporting.
- Similarly, horizontal integration between metros does not exist – cities define what and how they report.

CoJ had the flexibility to design an SDG reporting system to suit its own needs and requirements. It is a good case study to help inform a more aligned and integrated system for other South African cities through SALGA.

Joburg open SDG platform

- Open source is a free-to-use platform that other countries and cities can use.
- The city is currently tracking 92 SDG indicators relevant to its local context. The city's approach was to track as many SDG indicators as possible where data is available to provide a "whole picture" view.
- The platform boasts over 10 years of data points where possible. It relies on several data sources, including Stats SA, for indicators across the 17 SDGs. (Certain indicators were excluded because they were either not relevant to the South African context or no data was available.)
- The platform elevates city reporting and is not an additional reporting level. The data source priorities are Circular 88, the Service Delivery and Budget Implementation Plan (SDBIP), with data provided by departments or by service providers (e.g., Quantec and HIS) and external data owners (e.g., Stats SA and DHS).

Volunteer local reviews (VLRs)

- The CoJ is partnering with SALGA and several other municipalities to prepare VLRs, which report on achievements, shortcomings, strategies and measures for sustainable development using the SDG goals, targets and indicators.
- The preparation of VLRs will strengthen coordination and collaboration on SDGs' localisation among cities. It will include undertaking the relevant analysis and studies to support the development of VLRs, as well as monitoring and conducting capacity-building and awareness-building activities.
- The CoJ draft VLR includes a city profile, strategic alignment, background, current SDG status and analysis, local actions and projects, community engagement write-up, discussion and recommendations, and conclusions.

Strategic outcomes

- *Planning*. It is aligned to and supports the CoJ's GDS substitute long-term indicators (useful in times of political transition) and promotes integrated planning as a data management tool (all city departments and entities have access to shared data).
- *Impact evaluation.* It enables a comparative review of quantitative output (SDG indicator) relative to inputs (activities, programmes, resources) to assist prioritisation and is a call to action, encouraging citizens to be active participants.
- *Positioning.* It represents a step forward in leveraging digital technology and data visualisation for assessment. The city was nominated for the Global Award for Sustainable Development in Cities (Shanghai Award), remains a leading voice in United Cities and Local Government (UCLG) on localisation, and is one of the pioneers in the SALGA programme, helping to guide other cities in the process.

eThekwini Municipality

The city's policy is aligned to and guided by the SDGs ("leave no one behind"), especially SDGs 5, 11, 16 and 17, the NUA ("provide well-designed networks of safe spaces, inclusive for all inhabitants, accessible, green and quality public spaces and streets free from crime and violence"), the IUDF, as well as the UN Habitat III Policy Paper 1: the Right to the City and Cities for All. The city's focus is on how to coordinate efforts to ensure that residents have access to safe and inclusive green spaces, which are one of the many prerequisites for successfully implementing and localising the SDGs.

Safety is not simply about the rule of law

- Safety is the core mandate of local government, including how the city delivers services, plans and manages urban spaces, and collaborates with all stakeholders – for example, how it works with the taxi industry and with (formal and informal) traders, etc. in the inner city.
- It is about creating a safe environment that is conducive for local economies to thrive, creating multipurpose spaces and embracing the concept of informality.

Community-based development

- The city promotes collaboration with communities across the municipality (not limited to the inner city).
- The city may not be able to provide decent shelter to all residents but is improving living conditions, through upgrading informal settlements (footpaths, railings, ablution facilities through community works, lighting and better public spaces).
- Community-based development includes skills development, localised incubation hubs, improving trading spaces, financial capacity-building for SMEs and a self-sustainable local economy.

Building resilience through insight-driven policy and practice

- Vigorous implementation of urban resilience programmes.
- Support of the post-disaster rehabilitation and "bouncing forward" programmes and projects.
- Support programmes that seek to address the plight of those experiencing homelessness and its related challenges (climate change refugees and migrants).

Buffalo City Metropolitan Municipality

This sort of session is crucial for addressing the challenges facing municipalities, as the topics are at the core of building institutional resilience in cities. The UN's SDG 11 calls for the world to create sustainable cities and communities, through making cities and human settlements inclusive, safe, resilient and sustainable. In Buffalo City, the embedding of SDGs falls under the metro's GDS, which is aligned with the NDP. The municipality is working hard to build decent human settlements close to public transport, industrial areas and other amenities.

Challenges

- The recent census figures revealed an unprecedented population growth in South Africa, of almost 10 million within 11 years, which is cause for concern. The reality is that a growth in population means a growth in the number of people who come to cities in search of better opportunities, increasing the challenge of managing informality.
- The proliferation of informal settlements, especially in low-lying areas and flood plains.
- Climate change-related disasters, such as the floods and winds in 2023 destroyed houses, displaced people and damaged infrastructure. The city has to use limited resources for flood relief, but such disasters are impossible to fully budget for. Natural disasters are becoming more frequent, which is why it is important to embed SDG 13 in all developmental efforts.

Human settlements

- To accelerate the development of human settlements, Buffalo City has signed housing development agreements with the provincial DHS and the Housing Development Agency, with the aim of constructing and handing over 5528 units, positively affecting the lives of 22 000 people over the next three years.
- The city is mindful of the need to eradicate apartheid spatial patterns and create an inclusive, liveable city. The Built Environment Performance Plan (platinum status from the National Treasury) is a key instrument for achieving spatial integration and development within corridors in the city. To accelerate the approval of development plans, the city has established a Municipal Planning Tribunal and an internal working group with the aim of making processes quicker and better.
- The city participates in the National Treasury's title-deed reform programme, which supports metros in resolving challenges related to title deeds.
- Buffalo City is regarded as a rural metro, which is a challenge for human settlements.

Climate change

The city has developed a comprehensive Climate Change Strategy and a Climate Change Risks and Vulnerability Report and has established a committee to guide the mainstreaming of climate change into municipal planning and decision-making. It also regularly hosts a Green Forum and has built solid partnerships with businesses and other stakeholders to implement green initiatives, such as four waste buy-back centres with the Border Kei Chamber of Business (Call to Action campaign).

What worked/did not work in city efforts to localise SDGs 11 and 24?

Nelson Mandela Bay Metropolitan Municipality

- Like other cities, NMB experiences budgetary and financial constraints that hamper development.
- Political and administrative instability leads to competing (factions), not complementary, interests.
- The number of informal settlements is increasing and not planned for, but it requires resources to be reallocated.
- Grassroots planning, informed by the needs of citizens, is needed, as well as integrated (not siloed) planning, especially in relation to human settlement planning.
- The municipality needs to continue partnerships with development agencies and private sector players.

City of Johannesburg

- The SDGs are about the long term. However, since 2016, political and administrative instability has resulted in a lack of strategic certainty and made it difficult to plan for the long term – i.e., 15+ years of capital budgets and investments in (e.g.) renewables, transportation, green spaces, etc.
- Proper data can show whether or not city interventions are making a positive difference or not.
- There is a need to move away from policy to genuine implementation and solutions on the ground, although this is a lot tougher during times of instability and short-term thinking.
- What needs to stop is siloed planning, unsustainable practices of sprawl and land invasions.
- What is needed are genuine and innovative financing, public-private partnerships, cross-collaboration to support cities, and solutions for densification, connectivity, reducing environmental impact and improving social inclusion.
- We need to be inclusive, genuinely leave no one behind, and find ways of building resilience.

eThekwini Metropolitan Municipality

- The municipality faces similar challenges related to climate change as Buffalo City. It is not only about building new infrastructure but also about maintaining existing infrastructure to sustain its useful lifecycle.
- The floods and public unrest destroyed infrastructure, and then those areas became uninsurable.
- Community awareness and involvement (action) would make it easier to achieve SDGs, and community participation is a critical success factor.

Buffalo City Metropolitan Municipality

- Climate change is the biggest challenge for the municipality, which is a coastal city and cannot plan and budget for the impact of natural disasters (wind, floods, etc.) on settlements, especially informal ones. These disasters, together with COVID-19, affect city finances (the collection rate has still not recovered) and result in capital investments being postponed.
- Assistance from the National Treasury is not sufficient to cover all the damage caused by the disasters, including the need to resettle people, which brings problems with costs and finding land.
- On the positive side, the city has a good relationship with provincial departments and large manufacturers, such as Mercedes-Benz, who sponsor clean-ups in certain areas – the city has several other initiatives with businesses.

Main points from the discussion:

- A critical component of localising the SDGs is embracing grassroots planning and including marginalised communities in decision-making. This may involve a simplified methodology of communicating to communities about the IDP and how the IDP connects to their needs – and ensuring that it is accessible to all.
- Cities need to find new ways of engaging with stakeholders to plan at the community (ward) level, especially given the growing numbers of younger people (under 30 years) who may not come into City Hall. Instead of the compliance, box-ticking approach to public participation, a platform should be created for continuous engagement with citizens (i.e., not limited to the IDP process).
- Cities need to move away from policies to real implementation, explore new funding models and innovative financing, and stop siloed planning, which is unsustainable.
- Local governments need to get into more partnerships, as they cannot achieve SDGs alone. Attaining goals such as safety, food and security is always relational, involving partnerships, and are not standalone issues.
- Cities should build the right capacities and insulate themselves against shocks in the medium term.
- Institutionalising SDGs at the local level has proven difficult, and, therefore, cities need the right leadership.

WHERE WE WORK: DATA FOR DRIVING GROWTH AND RECOVERY

Data for Sustainable Human Settlements

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Kamogelo Shika
Development Action Group (DAG)

Monyake Moteane
The World Bank

Daniel Githira
UN-Habitat

The session was about understanding that access to current and accurate data is fundamental for the development of sustainable and resilient settlements in cities, particularly in the context of informality (informal settlements, densification of township areas and thriving informal housing markets). Cities need to be working with data that reflects the specific local and spatial realities, the demand, the supply and the scale of the need.

The NUA emphasises the need for local-level data on human settlement patterns for making informed and evidence-based decisions. In the context of the climate crisis, data on settlements is critical for both reducing disaster risks and city carbon footprints and mitigating the negative effects of climate change, such as global warming. City investment in data and spatial mapping can almost be seen as an action for growth and recovery to ensure the development of cities that are resilient and sustainable. In South Africa, several organisations are contributing to a complex, continuously evolving data landscape.

Gauteng City-Region Observatory (GCRO)

The Gauteng City-Region (GCR) is basically the Gauteng province, and the GCRO focuses on medium- to long-term independent research for policy.

Data is particularly important in a heterogeneous environment, such as the GCR, which is the most populated region in South Africa. It is especially important for unpacking the various trends and challenges facing cities and for providing metrics for decision-making.

Poly-crisis: A multiplicity of challenges

- *Population growth.* Currently, according to census data, GCR is home to 15.1 million people, which is expected to grow to 17 million by 2030, distributed within the existing urban core (backyard dwellings) and along the periphery (urban sprawl) – in some areas population density could increase to 1000 people per km^2 by 2030.
- *Water security.* Rand Water is the main supplier of water in the region and is at maximum extraction levels. Therefore, water conservation is a priority, especially in the context of Day Zero, but several surveys indicate that fewer people are concerned about running out of water (44% in 2020/21 compared to 56% in 2015/16). Compounding this issue is the power crisis, which affects the ability to have a sustainable water supply (pumps require electricity so that rolling blackouts may lead to water cuts).

Specific examples where data can assist cities (GCRO's work)

- The carbon atlas project seeks to understand the emissions and carbon sinks within the GCR and whether GCR cities can reach carbon-neutral status by 2050. This requires clarity on various prerogatives within the governmental institutions, such as the desire to be carbon neutral. To understand carbon neutrality means quantifying the different carbon sources and carbon sinks (i.e., where carbon is stored in vegetation, grasses and trees). However, carbon is stored largely in peripheral and unprotected areas, which reduces the carbon stocks.
- The economic data project uses novel datasets to look at high-resolution economic data, as much of the data is located at the regional planning level. For example, mapping economic activity (gross value added) using nightlight intensity data from satellite imagery as a proxy for daytime activity and correlated with datasets within a machine-learning environment. The model allows projections of the impact of COVID and loadshedding on the national economy.
- Understanding housing inequality and crowding, using building volume per person metric at the hexagon level (m^2 per person). This data is intersected with data about income groups and number of households. It enables spatial mapping of areas to show that marginalised income households are living in the most congested areas and have the least amount of space available, which compounds inequality within the GCR.
- Understanding the spread of Pathogen X through integrating maps of sewerage networks with socioeconomic parameters to understand the distribution of COVID-19 and future pathogens. This has shown an alignment between socioeconomic variables and the concentration of the virus in sewer water,
- The Quality-of-Life survey which has been running for several years and is a free resource.

Asivikelane, International Budget Partnership

The Asivikelane national campaign amplifies the voices of people living in informal settlements and advocates for improved and inclusive service delivery. Asivikelane is active in eight metros and two local municipalities – in some metros, 20% of the population lives in informal settlements. Bi-monthly surveys ask +/-4500 residents (65% female) in 374 informal settlements about their access to water, sanitation, solid waste and health services. This community data is used to identify local service priorities, facilitate engagements between government and residents in order to solve urgent service delivery problems and advocate for inclusive and equitable budgets for informal settlements.

Impacts and influence achieved since 2000

- Direct impact on more than four million residents, resulting in better services in water, solid waste and sanitation. For example, safer and healthier access to toilets (cleaned more frequently), safer location of services, reliable supply of clean water, improved fault reporting and quicker repairs to services.
- Indirect impacts include increased budgets for basic services in eThekwini, Johannesburg, NMB and Cape Town; revised tender specifications (to be more inclusive) in Tshwane and eThekwini; and the development of a policy guideline for gender-responsive basic service delivery with the Western Cape government.

Success factors

- Consistent data collection through listening to residents, e.g., around the need for improved safety for women and children.
- Persistent government and stakeholder advocacy, engagement and communications.
- Data that the government views as valuable and credible (often more up-to-date than municipal data) builds trust.
- Establishing and maintaining long-term partnerships and relationships with the government.

Persistent Challenges

- Cities continue to under-budget for new and existing services to informal settlements.
- Residents' voices, especially those of women, are excluded from decision-making.
- Procurement lacks transparency.
- Poor budgeting and planning.
- The quality and quantity of services to informal settlements are insufficient.
- Weakened trust and accountability.

What cities can do

- Talk to residents as partners in planning and budgeting, and use Asivikelane as a vehicle for engagement.
- Be intentional about inclusion by going beyond IDP public participation roadshows and prioritising women's needs.
- Be transparent about planning, budget allocation and procurement processes.

The World Bank

Global temperatures are rising, and cities are heating up twice as fast due to dark urban surfaces, lack of vegetation, human-generated heat and heat-trapping urban design. Extreme heat matters for city departments and agencies due to its impacts on health, labour productivity, transportation, energy, crime and learning outcomes.

An urban heat study was undertaken in six neighbourhoods across Johannesburg and Ekurhuleni. The readings informed an urban-scale climate modelling exercise based on UN climate scenarios.

Findings

- Neighbourhoods with densely packed buildings and no trees face up to 6% higher temperatures than cooler (rural) neighbourhoods.
- City neighbourhoods face sharp disparities in heat intensity, e.g., informal settlements vs suburbs.
- By 2050, the number of hot nights (>20^{0}C) will increase significantly (x4). Currently, most areas experience fewer than 20 hot nights per year. Under a high climate change scenario, poorer neighbourhoods and central business districts will see 80 to 120 hot nights per year. Hot nights are linked to mortality and health impacts, as they prevent the body from cooling and resting.
- Outdoor activities become unsafe at high temperatures. A simulation of heat stress levels for a historical heatwave day from 2016 projected to 2050 found that many more areas will become high heat areas, which is alarming, as future heatwaves will be more intense.
- The hottest areas are those with less greenery, lower incomes and a higher proportion of black and coloured residents.
- Green cover varies from 0-15% in townships to 40-60% in prosperous suburbs. Wealthier neighbourhoods have more tree cover than lower-income neighbourhoods, even when houses are close together.
- Residents of poor-quality construction face extreme temperatures. Indoor temperature is 8^{0}C higher in a corrugated-roofed dwelling than in a house.
- Impacts of increased heat on infrastructure include rails buckling, asphalt softening, increased energy demand, transformer overheating and reduced power generation efficiency.
- Vegetation and cool buildings mitigate excessive heat – vegetation, shade, and building materials can reduce surface temperature by more than 10^{0}C.

Recommended actions

- Strategic urban greening in underserved areas. Set a target for the number of trees to be planted by (e.g.) 2030; obtain mayoral support and commitment for the tree-planting scheme; conduct a planning exercise looking at sites, species (type of trees), costing, feasibility and success factors.
- Cooling strategies for low-cost dwellings. Launch a cool-roofs programme as part of existing housing programmes; involve a research partner to measure heat stress in dwellings with and without cool roofs; and integrate cool-roof requirements into design and procurement standards for existing programmes.
- Protect public spaces from excessive heat. Engage health and education sectors to identify and mitigate indoor heat stress; consider solar louvres, cool roofs and air conditioning in combination with solar panels; implement shade and greening interventions to reduce heat stress in queues and walkways used by commuters (including school children).
- Promote urban vegetable gardening. Establish programmes to upscale urban gardening initiatives (identify sites, engage local communities, provide basic equipment, set up composting schemes); engage with existing urban garden initiatives and tap into expertise from the Milan Urban Food Policy Pact.
- Minimise energy needs for cooling. Engage with employers and building owners to bring down energy consumption; offer information on solutions (e.g., cool roofs, green roofs and insulation); encourage the installation of solar panels as a power source for cooling buildings.
- Heat-health warning and awareness. Establish a dialogue with relevant parties for a heat-health, early warning system; launch a climate change and heat awareness programme; establish a heat-health observatory to monitor excess mortality during heatwaves in a spatially explicit way as an input for public health planning.
- Community cool spaces. Do an inventory of municipal buildings, to establish those suitable for becoming cooling centres; explore options for solar panel installations to power active cooling in these centres; establish a communication programme to inform the vulnerable of the cooling centres.
- Protect workers and ensure labour productivity. Engage with unions and employers to ensure that occupational health practices are in place to raise awareness among employers on fluid intake and protective clothing for outdoor workers.
- Mainstream heat mitigation across city strategies. Appoint a City Heat Officer to work across departments to make heat mitigation the business of all city departments through mainstreaming into sectoral planning and operations.
- Establish a heatwave risk management cycle. Before a heatwave (strengthen preparedness), heatwave imminent (raise awareness), during a heatwave (protect vulnerable people) and after the heatwave (review and improve).

Development Action Group (DAG)

DAG works with disposed communities to empower active citizenry to realise inclusive and equitable cities. One of DAG's projects is the Contractor and Developer Academy (CDA), which works with emerging contractors and developers. Its work includes:

- Conducting information sessions in partnership with community forums and other sector entities.
- Training developers and contractors to build the capacity of emerging contractors and micro developers.
- Packaging of projects, linking developers to finance institutions, built environment professionals (BEPs), local authorities and contractors.
- Compiling a database of vetted and trusted emerging contractors and BEPs.
- Managing and analysing data, to understand market trends and management of township rental stock.
- Coordinating the sector to create an enabling environment for developers through fostering engagements and partnerships with key sector players, such as the City of Cape Town, BEPs and the private sector.

The small-scale rental housing sector is serviced by a spectrum of developers, ranging from incremental house owners (property owners who build additional unit(s) in their existing properties to supplement household incomes) to micro-developers (who purchase land or existing RDP homes, demolish them and construct 6-20 rental units).

Informal rental accommodation is a key feature of urban housing in South African cities. However, there is a lack of data and understanding about the nature and dynamics of this rental market, making government programmatic responses difficult. DAG uses different platforms and is able to understand this sector on a localised level through its data management work, which has the following objectives:

- To better understand the rental market's provision of affordable accommodation.
- To guide landlords in setting fair rental prices and determining "value-add" investments in rental properties.
- To provide tenants with information about local rental markets and factors informing rental prices, which they may be able to use in negotiating fair rental prices.
- To be a tool for lobbying and informing the different spheres of government. For example, providing data about densities to inform infrastructure retrofit programmes and increasing capacity and resilience of infrastructure (public parks, schools, sanitation networks, roads, waste removal, etc.).

In 2019, the team created a Facebook page as a platform to connect those who are seeking and those who are offering affordable rentals. Currently, the page has over 60,000 members (65% females and 35% males). Users include not only tenants and landlords but also interested parties such as property managers and real estate agents. Examples of posts include a landlord offering rooms in Makhaza, Khayelitsha, for R2,000 with amenities, such as hot water and individual electric meters, and a potential tenant looking for a flat or a place with a separate entrance in Eerste River, with a budget of R3, 000 to R3,500, and a need for parking.

The data from the Facebook group is used to produce quarterly analytics of the rental market – no private information is collected and shared publicly, and the analytics are aggregated at a neighbourhood level. Typical findings might be:

- Most tenants are seeking properties with individual electric meters, while a few are looking for furnished rental units. The majority of the tenants prefer a bachelor unit, suggesting a specific tenant profile (couples or individuals, rather than families, looking for accommodation).
- Average rental prices in Mitchell's Plain and Khayelitsha are higher than in Langa, although higher rents would be expected in Langa due to its location close to Cape Town's central business district (CBD). To understand why Khayelitsha has high rentals, the data zoomed into the neighbourhoods, such as Litha Park, Mandalay, where it found that erf sizes are larger (allowing for more spacious units), located close to Khayelitsha's CBD and have accessibility connections to Spine Road.

In addition, the team created a dashboard that offers a visual and interactive platform for people to draw their own analytics and insights. The dashboard features:

- An overview of tenants seeking accommodation and landlords offering accommodation options to understand supply-and-demand dynamics.
- The geographical distribution of rental prices to help users identify affordable areas.
- Different building typologies preferred by tenants (e.g., Wendy houses, bachelors or studios, two-bedroom RDP type, etc.).
- Information on available amenities, both within the chosen property and in the surrounding neighbourhoods.

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Challenges and potentials of using data optimally for decision-making include:

- Interdisciplinary collaboration (overcoming silos). This requires co-creating data with key public and private sectors, such as financial institutions, the City of Cape Town and communities (including tenants and landlords).
- Data capacity-building and data skills. Users need to understand and interpret the data to make informed decisions.
- Ascertaining whether a tenant/landlord has been successful in finding accommodation/tenants. After connecting through the platform, many tenants/landlords communicate directly outside of Facebook (e.g., WhatsApp).
- Language may reduce sample size. This highlights the need for innovative platforms that support interactions in different languages.

The project is an example of using social media platforms to get useful insights about a little-known sector.

UN-Habitat

The Data and Analytics Section is a focal point for sustainable urbanisation data within the context of the NUA and SDGs, particularly SDG 11 and SDG 13. It oversees data production, capacity development and reports production. The Section's responsibilities include statistics, urban indicators, tools, urban observatories, capacity-building, best practices, emerging technologies and reporting.

As SDG 11 interconnects with all the SDGs, the Global Urban Monitoring Framework (UMF) was developed as a way of dealing with cities that have different competing priorities. The UMF allows cities to look at the sum of their urban performance by graphically representing their baseline and targets across all attributes. This guides cities in identifying the actions needed to achieve sustainability by looking at the gaps between baseline and gaps. For example, in Kigali, Rwanda the environmental domain was found to be performing better than the economic domain. Over 20 cities are using this tool, and UN-Habitat is currently working with eThekwini to implement it.

- The Urban Observatory Model brings together stakeholders to work on data management for decision-making at the local level. It provides technical guidelines, information and guidance for formulating policy; shares best practices and lessons learnt; and facilitates partnership agreements. The GCRO is a certified urban observatory in South Africa.
- The Section generates geospatial data and provides tools for monitoring the implementation of SDGs and the NUA. It is important to know gaps at the most granular level for spatially targeted interventions. Data has been produced for about 1000 cities, which validate it and use it for decision-making and for reporting progress against indicators, e.g., 11.7.1: Access to public open spaces.
- The UN-Habitat SDG Cities Flagship Programme maps vulnerability using field data. It gathers information about neighbourhoods, e.g., safety, water and sanitation situations in a specific area, and then identifies gaps and tries to make sure that cities connect to these priorities. It was used during COVID-19 to do basic risk assessments.
- DEGURGA is a data tool that harmonises how urban areas are defined globally, as cities are usually defined and monitored by their administrative boundaries, which often fails to capture sub-urban growth.
- UN-Habitat has an urban database and processing tools that are available online, supported by capacity development for cities.

Final reflections from Monika Glinzler (DHS)

Monika Glinzler
Department of Human Settlements

Monika was struck by how different types of data are useful for different types of work. For instance, residents of a city or neighbourhood could use certain data to complain about the lack of services, draw attention to a problem or compare it with other neighbourhoods. Or city officials could use data tools to understand the specific areas that lack service delivery and allocate resources accordingly instead of making general allocations across the board – even to the level of fixing a tap in a specific street. Geospatial data allows an overview of how a city works, including the coverage of services and facilities (schools or health facilities), and enables decisions to overcome the spatial dimension of inequality in South Africa.

For the DHS, a key aspect is that data enables South Africa to report on its implementation of the NUA, not only to tell the world of progress but, more importantly, to benchmark progress against the country's commitments. The value lies in the variety of data, as demonstrated during the session, from census-level data to household surveys, data collected by cities (and demanded by government), as well as anecdotal and storytelling data that shows, inspires and advocates for the envisioned sustainable human settlements.

Data For Driving Growth and Recovery

Facilitator

Karen Harrison
Cities Support Programme (CSP)

Ekow Duker
The AI Shop

Faith Sithole
Sasfin

Julio Sabu
South African Revenue Service (SARS)

Hlompho Mpanje
City of Johannesburg

The session had three objectives:

- To highlight the importance of data for driving effective and responsive decision-making.
- To demonstrate the importance of active citizenry by connecting across all of society and highlighting cross-sectoral partnerships.
- To hear how market actors have developed innovative tools that enable evidence-based decision-making for some of the toughest challenges facing organisations and government.

Mr. Ekow Duker, Founder of The AI Shop

The AI Shop is an early-stage venture that deploys language models as productivity-enhancing tools across a range of industries and job types.

Cities are always navigating or on the brink of disaster(s) or stress(es), from a housing crisis to homelessness, crime, inadequate health care or lack of economic opportunities. Data, technology and innovation can be used to navigate crises and pivot towards growth and recovery. However, when faced with a mountain of data and not knowing where to start, data can feel like an enemy. To avoid this, the following lessons were provided

- *Run pilot projects to gain momentum.* The first few data projects need to succeed, not be the most extravagant or the most valuable. They should be meaningful enough for the initial successes to convince others in the organisation to invest in the projects but not too small for them to be considered trivial. It is about enabling the data team to gain momentum.
- *Focus on building successful teams and an in-house data and analytics team.* Outsourced partners may help gain momentum faster, but internal teams are always more efficient, and projects (especially the most sensitive ones) should be kept internal.
- *Provide broad data training.* Train executives and senior leaders (+/- 4 hours), division leaders (+/- 12 hours) and data scientists and engineers (+/- 100 hours).
- *Develop a data and AI strategy.* This should be done after gaining some basic experience in data and AI.
- *Communicate widely.* This requires developing a credible and compelling data and AI story that explains the project's value and benefits in order to build trust and goodwill. The appropriate marketing and product roadmap messages should be shared widely. Given the scarcity of AI talent, strong employer branding and demonstrating that the projects are exciting and impactful will assist in attracting talent with the right data and AI skills. As AI is not well understood, internal communication is also important for dispelling fear, uncertainty, doubt and reluctance to adopt data and AI among employees.

Not being able to write code is no longer a barrier, as language models can be used to chat with data (in much the same way as writing/sending text messages). Previously, getting a prototype into the market would have taken 6-12 months using supervised learning, but today, it takes hours, days and weeks using generative AI (language models).

Sasfin

Before looking at how to leverage data, it is important to understand what data is. Data is a mixture of meaningless words and numbers, but it starts to make sense once it is sorted, arranged and presented visually based on what needs to be communicated. It is like having a pile of Lego that makes no sense until it is sorted (e.g., by colour), arranged (e.g., by size) and presented visually (e.g., as a house).

Leveraging data to identify opportunities (even during crises)

In any entity, it's important to ask the following questions:

- Do we have the right tools? Do we know what kind of data we have and how to use it?
- Do we have the right people with the right skills and tools? Are they the right people to execute what is required?
- Are the correct processes being followed? E.g., storage, access, capture.

Before using data, it is important to understand the quality challenges that may arise. Data quality is a measure used to monitor data cleanliness and flag data issues based on completeness, conformity, consistency, uniqueness, accuracy and validity. Therefore, the data has to be cleaned (like cleaning a house before receiving visitors) and meet these quality dimensions. This requires having the necessary tools to deal with the data, the right people (who attend the appropriate conferences and are upskilled to use the correct tools), a data strategy (identify the person who compiles it), a chief data officer and the right tools to tell the data stories.

South African Revenue Services (SARS)

South Africa's economic challenges are well documented – declining real gross domestic product per capita (since 2015), slow productivity, high unemployment rate and persistently high inequality. In addition, South Africa has structural challenges – high inequality levels, spatial distortions, a shrinking tax base and low levels of education. Like other developing countries, South Africa faces a decline in investment commitment, which affects fiscal sustainability. To improve fiscal capacity, countries need to mobilise resources and build impactful governance strategies aimed at sustaining the fiscus.

A country's fiscal health is measured by tax-to-GDP ratio – most developing countries have a ratio of 15% compared to 35% in upper-middle-income countries, whereas South Africa's ratio averages about 25%. SARS exists to serve the 'higher purpose' because its work enables the government to build a capable state and foster sustainable economic growth and social development. Everything that SARS does is about having a transformational impact on the wellbeing of the lives of people, especially the most vulnerable. SARS has 12.8K staff members serving 26 million registered individuals out of a population of >62 million.

SARS's vision for 2024 is to be "A smart, modern SARS with unquestionable integrity, trusted and admired". SARS cannot win the transformation battles alone. A collaborative effort with key strategic partners is required to mobilise the public to collect more revenue for inclusive economic growth.

SARS's modernisation journey

SARS has made quantum-leap advances in the fields of information and communication technology (ICT) to improve operational effectiveness and efficiency. Since SARS's modernisation programme began in 2007, there has been wide-scale migration to electronic channels, minimising the introduction of human errors and resulting in a high-quality, data-rich environment. Most recently, as part of Vision 2024, SARS committed to increase and expand the use of data within a comprehensive knowledge management framework, to ensure integrity, drive insight and improve outcomes.

SARS makes use of the available information (and the information received from third parties) to inform risk assessments and reduce the administrative burden for the majority of compliant taxpayers. It is able to reduce the opportunity (risk) for false or inaccurate declarations through the pre-population of returns and declaration documents with data from its own systems and third-party sources (e.g., banks). This process further reduces compliance costs for taxpayers and results in a more efficient administration for SARS.

Partnership journey with National Treasury and UNU-WIDER

The South Africa – Towards Inclusive Economic Development (SA-TIED) programme builds on the successful collaboration between the United National University World Institute for Economic Development (UNU-WIDER) and the National Treasury in 2014-16 on the regional growth and development in Southern Africa project. The 2019-23 UNU-WIDER work programme focuses on the interlinked development challenges of transforming economies, states and societies and maps them against the SDGs 5, 8, 10, 16 and 17.

The partnership journey with the National Treasury and UNU-WIDER, in making available anonymised tax data directly, speaks to the key must-win battles for SARS, which include:

- Broadening the tax base.
- Improving voluntary compliance and fiscal citizenship.
- Leveraging resources (people, data and technology) and efforts intelligently to achieve more with less.
- Maintaining crucial partnerships with government stakeholders locally and internationally.
- Building an organisation with integrity that can be trusted and admired.

Public revenue mobilisation for inclusive development: external imperatives

Tax administration records find use outside the tax administrative process. In many countries, tax administrative data underpins the production of official economic statistics. Like many countries, Stats SA uses value-added tax and corporate income tax records to create a business register and sampling frames for all official economic sample surveys. Tax records can be used to directly derive statistics useful for planning and evidence-based decision-making. Tax administrative data, particularly at a micro level, provides the natural evidence base for policy analysis and policy-relevant resources. Increasingly, tax data is being used in evaluating economic and social policy and assessing the impact of incentives and targeted interventions. Currently, a collaboration project is underway to use firm-level research for policy analysis (SA-TIED).

Public revenue mobilisation for inclusive development: external imperatives

SARS is committed to being a data-driven organisation with data products, analytics and visualisations that are delivered in a manner that provides one version of the truth and insights to drive optimisation and strategic direction of the organisation. The emergence of new technologies, such as AI and cloud computing, provides new possibilities for improving the efficiency and effectiveness of administrative efforts. In an environment of big data and predictive analytics, the ability to identify risks and drive evidence-based decisions has a huge impact on improving compliance. If implemented appropriately, such technologies could yield savings in IT infrastructure costs and data accessibility and usage for SARS, businesses and the public at large. SARS plans to increase the data analytics capability in both the collection and usage of data to enable better decision-making. The aim is to progress SARS through the analytics maturity curve to become a data- and information-driven organisation to increase cost-effectiveness and internal efficiencies.

Tax administrative data: facilitating research and tax administration

The SA-TIED programme looks at ways to support policymaking for inclusive growth and economic transformation in the Southern Africa region through original research conceived and produced in collaboration with partners. Its official partners have included institutions such as the UNU-WIDER, National Treasury, SARS, the Department of Planning, Monitoring and Evaluation (DPME), the Department of Trade and Industry (dti), Trade and Industrial Policy Strategies (TIPS), the International Food Policy Research Institute (IFPRI) and the EU. The SARS Data Analytics and Insights team within SARS's National Revenue and Compliance Management Division (NRCM) provides the tax administrative data to the Secure Research lab at the National Treasury, where researchers, policymakers and academics can access data.

Looking forward

National Treasury and the Presidency are jointly responsible for Operation Vulindlela (OV), which supports the implementation of structural reforms required to unlock higher levels of economic growth. National Treasury modelling indicates that successful implementation of the 2020 Economic Reconstruction and Recovery Plan could raise growth to beyond 3% by 2030, with structural reforms contributing the largest part of this growth. If not, the baseline growth is projected to be 1.7%, with population growth at close to 2%, meaning that South Africans will grow poorer over time.

The SA-TIED will focus on expanding the use of tax administrative data for tax policy research and on supporting the research efforts of SARS in exploring the determinants of revenue collection in South Africa and the link between the tax structure and economic growth. A particular focus is on understanding how people and firms respond to tax policy design and tax administration processes. The overall objective is to examine the interplay between historical, social, economic, financial, fiscal and environmental issues, policy implications of migration and remittance dynamics and their impact on poverty, inequality and wellbeing. This is particularly important in framing and understanding the lack of inclusivity in South Africa's growth path, despite many appropriate policies, and in assessing current and potential policy options for promoting inclusive growth.

The South African experience has shown that it is possible to make sensitive tax data available for research without compromising the anonymity of firms or individuals, which bodes well for the possible use of other administrative datasets and initiating similar tax projects in other countries. Many processes are in place at SARS and the National Treasury Secure Data Facility to protect the data, such as non-disclosure agreements. The data has opened avenues for research in areas and topics that were not possible before in South Africa. The Spatial Economic Activity Data, South African (SEAD-SA) collaboration with academics and metros is a case in point. National Treasury has approved and signed off support for the State Integrated Business Register and its inclusion as a project in the UNU-WIDER agreement and SA-TIED programme. This forms part of the MOU between SARS and UNU-WIDER.

City of Johannesburg (CoJ)

Data is important, as it serves as a foundation, enabling proactive preparation for disasters and proactive responses to various kinds of crises and challenges. The use of data during the initial phases of planning processes helps to optimise operations, achieve sustainable growth and navigate economic challenges. The starting point is knowing what data to use and for what. For instance, when the city faces a crisis, it needs to determine what was learned from previous disasters to identify patterns that provide insight and early detection. This assists in optimising where to allocate resources. It's a form of predictive modelling in response to a crisis. In terms of recovery, the city needs to carry out an economic impact assessment and then find a business model that can be tailor-made for the recovery. To forecast better, it is important to look at the data incidence, severity and intensity and to understand the impact and characteristics of the challenge, e.g., how did the fire start? Root cause analysis is used to learn from past incidences, which hopefully will prevent similar incidents from occurring in the future. Communication and transparency are also critical so communities know what is happening, as they are the people who are affected and who know what is happening and can provide data.

The CoJ has developed an SDG tracking device or voluntary local review (VLR) that tracks 92 domestic indicators relevant to this city, as well as a benchmark that allows progress to be monitored and evaluated continuously. This tool and benchmarking progress is a way to position the city strategically. The CoJ also shares its experiences and learning with other cities across the globe through Metropolis and partnered with GCRO to do their fifth Quality of Life survey centred around COVID-19. The health disaster vulnerability index looks at four indicators: (i) exposure to risks, (ii) difficulty to cope with risks, (iii) health vulnerability and (iv) emergency services. The indicator that ranked the highest was the difficulty to cope with risks, which related to finances, indicating the need for programmes that ensure the inclusion of vulnerable individuals during a crisis. The CoJ also looked at resilience planning and the capacity of the city to survive, adapt and thrive regardless of the chronic stresses or shocks experienced. What emerged was that cities and organisations need to have leadership and management that know exactly what they are doing and are able to make decisions quickly, so as to provide teams with direction during times of crisis.

Cities need to develop dashboards that show where they want to get to (long-term strategy) and how they want to get there (short- and medium-term indicators), and to obtain data from stakeholders, as stakeholders advocate for change and their information can help hold leaders accountable. As centres of economic activity, metros can boost employment and innovate. They need to address inequalities and create sustainable human settlements using data, to achieve an inclusive and sustainable world.

Main Points from the discussion:

- **Sharing data between the private sector and the public sector.** One limiting factor is the POPI Act, which requires specific data to be deleted after a given time to protect the customer. The private sector can learn from the public sector's innovations in anonymising data and how to make data more accessible. For instance, tracking customer payment behaviours would allow cities to identify ratepayers who may not pay rates and proactively design measures to deal with these clients.
- **Modernising SARS: An example of successful innovation.** Before 2007, SARS was processing its data manually (customs and taxpayers). It was a cumbersome and paper-based process, and storing many paper documents was also a safety hazard. SARS realised that it had access to data not only from taxpayers' declarations but also from third parties (insurance companies, banks, etc.), and this data collected electronically could be used to have a single view of a taxpayer. SARS has a pilot project whereby taxpayers can do self-assessments, with the aim of eventually becoming the norm, and is looking at real-time filing. SARS realised that the best way to mine all this data was to collaborate and, if anonymised, the data could be used for research, especially to understand taxpayer compliance/tax filing behaviour. The findings were used to develop initiatives to encourage taxpayers to file their returns on time and comply with their tax obligations. SARS aims to build an automated system that enables a single view of a taxpayer, allows real-time filing, does not compromise taxpayer confidentiality, and encourages taxpayers to file their returns on time.
- **Updating databases.** It is crucial to understand the stakeholders and their roles and grant access according to their roles or the stage – not all the information can be accessible because some data may be sensitive. The managing and updating databases will depend on the frequency of data capture (real-time or not).
- **Making administrative data accessible.** As part of a broader partnership, the UK Office of National Statistics will provide training within South Africa's public sector in December. The training will be on making administrative data accessible and available, focusing on secure data centres and platforms and looking at how to manage access and data integrity, etc., responsibly.
- **Influencing policy.** It is a balancing act between using the data and integrating it with the experience and priorities of political heads. However, political heads are generally receptive to evidence-based data and allowing the data to inform their priorities. For example, in CoJ, the political leadership agreed to add a COVID priority to the existing ten mayoral priorities based on the data. The CoJ's data is available on the city's website and accessible to all stakeholders, including civil society and the private sector.

Data Demonstrations 2

Nelson Mandela Bay Municipality

Tanya Jonas
Nelson Mandela Bay Municipality

"In the middle of difficulty lies opportunity" (Einstein)

In 2010, the NMBM experienced a cash flow crisis. To prevent the National Treasury and creditors from implementing punitive measures and to mitigate the risk of a cashflow crisis re-occurring, control measures had to be put in place. The municipality implemented vigilant day-to-day monitoring of working capital management to maintain the municipality's daily operations and service delivery. In seeking to satisfy the needs of both internal and external stakeholders, the municipality found itself with two opportunities.

Opportunity 1: Online supplier payment scheduler

The tool enables the NMBM's Cash Management Section to assess and then schedule invoices for payment in accordance with internal controls and business processes. Each invoice that is payable goes to the originating department where it is assessed, verified and approved for payment by the head of department. The information is then accessible to the cash management section, which can calculate the working capital value (cash available vs invoices to be paid) and say which invoices can be paid on that day. The information is recorded on the cashflow monitor payment scheduling tool (EFT cashflow monitor), which is accessible to all internal roleplayers within the supplier payments value chain. This system gave assurance to internal and external stakeholders, thereby facilitating information sharing and transparent decision-making.

Opportunity 2: Online self-help supplier query portal

The cashflow crisis created payment uncertainty and led to the NMBM, as a debtor, facing reputational damage, as suppliers did not know when or if they would be paid for goods and services delivered. Therefore, the NMBM developed an online tool, which enabled its suppliers to perform an invoice number search, view their respective scheduled invoices, and view and download payment remittances. It is available 24/7 and 365 days a year and removed the need for suppliers to call or visit municipal offices, reducing telephonic and emailed queries to officials. The supplier portal is transparent, informative and understandable to users and enables the publishing of "must-read" messages for the suppliers doing business with the NMBM. For example, informing them when monthly statements must be submitted.

Where to from here?

Future enhancements to the self-help supplier portal include allowing NMBM suppliers to upload their invoices electronically via the self-help portal. Applicable validations will enable supplier invoices to be verified upon submission, prior to being uploaded, and the supplier will be notified if the upload has been successful or not (with a reason). This will minimise the submission of invalid and/or non-compliant invoices.

Data stories: Charting the property and planning data ecosystem for Dublin

Prof. Rob Kitchin
Maynooth University,
Dublin, Ireland

The All-Island Research Observatory (AIRO) undertakes extensive empirical and practical work with local/regional authorities and government departments/agencies in the Republic of Ireland and Northern Ireland. This includes building city dashboards, using administrative and real-time data related to transport and environment, and creating data tools that allow people to visualise and interact with the data, make sense of it and make decisions based on the data. Also, projecting data as 3D (virtual and printed) models.

Data stories: understanding the property and planning data ecosystem

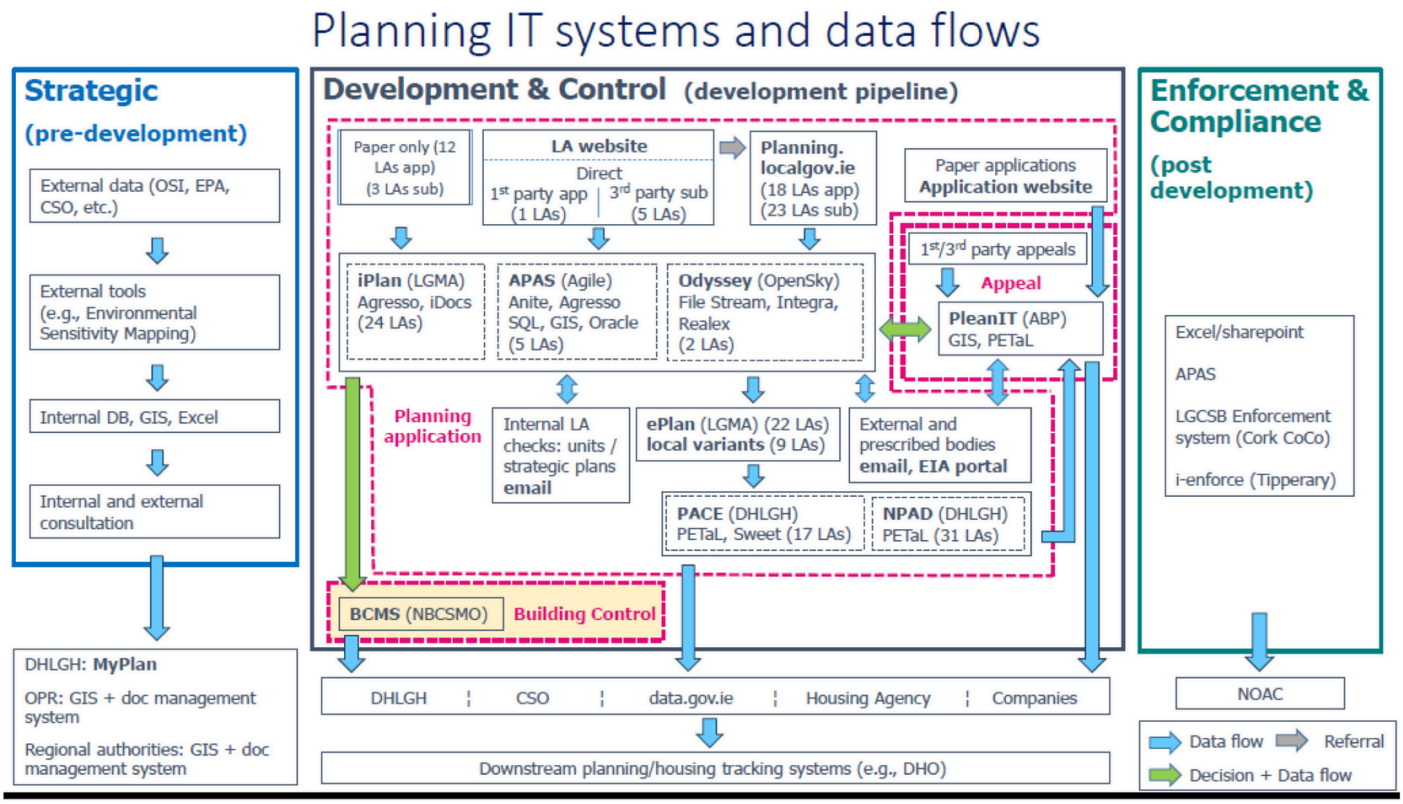
This ecosystem is central to government policy and legislation, media discourses and public perception, informing corporate investment strategies and NGO advocacy work and activities. However, relatively little critical attention has been paid to how the data is generated, collected, managed, shared, transformed and used – and how it is interpreted and shifted into policy.

The property and planning data ecosystem is quite wide, with data related to planning, stock, land, housing/population demographics, housing/development finance, housing management, construction activity, employment and materials, market activity and conditions, homelessness (direct provision, refugee accommodation, traveller accommodation, student residences, nursing homes), housing actors and contextual factors (infrastructure, services).

Phase 1 looked at the data actors and data flow. A range of data actors are involved.

- Public sector – related to policy, delivery, regulation and finance, as well as data producers/analysts.
- Private sector – real-estate consultancies, real-estate platforms, property data/analytics, industry groups, banking/finance and surveying/inspection.
- Civil society – service providers/advocates, community advocacy, NGOs, professional bodies, regulation/scaling data, financial/investment, and consultancy.

The diagram below emphasises the complexity of the data ecosystem, using the example of applying for planning permission. A lot of data is trapped in these systems. For example, through the application process, the iPlan system (which is used by 24/31 local authorities in Ireland) can collect up to 1300 variables, of which 14 end up on the government open-data site. The data flow within each of the individual boxes was looked at. For instance, data is pulled into AIRO (Dublin Housing Observatory) and helps inform policy and decision-making.



Phase 2 was about producing data stories working with 12 organisations. Over 6-12 months, researchers were embedded into their workplaces, to look at data practices, infrastructure, governance – how they are using the data, who they are sharing the data with. Interviews, walk-through observations, ethnographies and research creation were used to create three data stories.

The aim was both to tell stories about the data and to tell stories with the data (e.g., stories about housing and planning using the data). The data stories are produced by:

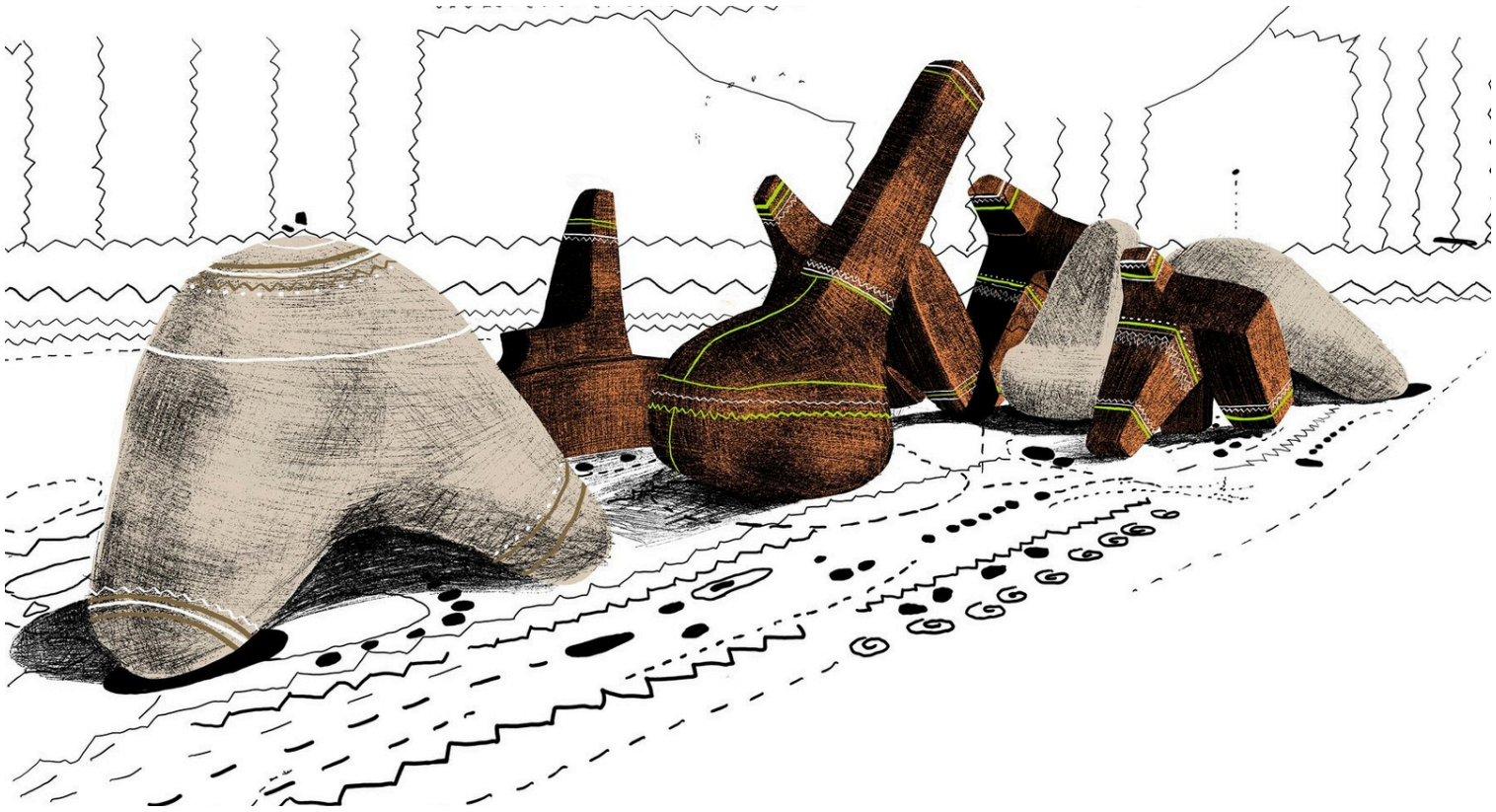
- The research team – e.g., dashboards, 3D visualisation work.
- The creative writer/artist – using their own creative practice.
- The stakeholder team – working with the research team and the creative writer/artist to create their own story, reflecting on what they are doing/not doing/could be doing differently. The story might be around literacy, story-telling, interpretation, etc. It was up to the stakeholders to decide on the theme.

VIRTUAL EXHIBITION

NOGA MO JOZI

Noga Mo Jozi delves into the many possible African urban imaginaries of Johannesburg with the help of AI as an iterative tool for creation. It sees African urban futures not as sci-fi but as the extension of a millennia-old engagement with spiritualism, humanity, the earth, and design intersecting with technology. The exhibition by Dr Sechaba Maape in collaboration with Menzi Ndlovu, Dirk Coetser, and Anita Szentesi.

Check out the full film - click here



Drawing by Dr Sechaba Maape for the South African pavilion at the Venice Biennale 2023. Photo: Dr Sechaba Maape.

CLOSING REMARKS

Yolisa Kani
SACN Board Chairperson

The SACN Board Chairperson thanked the Minister of COGTA, the SACN Council Chairperson, participating cities, SACN board members and staff members and all distinguished guests for attending the Urban Festival, which the SACN has hosted for many years. She highlighted the importance of these events, which enable much-needed conversations in light of the many problems facing South Africa, including climate change, rapid urbanisation, geopolitics (Russia/Ukraine, Israel/Palestine), coalition governments, socioeconomic challenges – as well as high unemployment and energy and water crises.

It is through sharing thoughts and experiences that practitioners are able to find solutions to the complex problems that face local government.

The Urban Festival showed once again the power of the collective – one that remains unshakeable, committed to a resilient local government and united in achieving spatial transformation and stable governance, as evidenced by initiatives such as the NDP and the IUDF. The various panel discussions and presentations provided many lessons, including:

- The importance of staying the course despite unforeseen and foreseen challenges, such as the global pandemic and political instabilities.
- Cities are finding innovative ways to address challenges that have the potential to transform not only cities but also the entire country.
- Data is not just a tool but a driving force for progress and a catalyst for change – it empowers people to ask the right questions, engages diverse stakeholders and identifies solutions that resonate with communities.
- The public sector needs to leverage the private sector, which wants cities that function and to access data.
- Data can enhance service delivery and financial resilience.
- Cities are dynamic laboratories of progress where collaboration and adaptability are key.

The Chairperson invited everyone to carry the knowledge, insights and connections from the Urban Festival 2023 into cities and to continue shaping urban spaces into thriving, safe, resilient and sustainable communities.

SPONSORS AND PARTNERS

The 2023 Urban Festival was made possible thanks to the support from:

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Department:
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REPUBLIC OF SOUTH AFRICA

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SOUTH AFRICAN LOCAL GOVERNMENT ASSOCIATION
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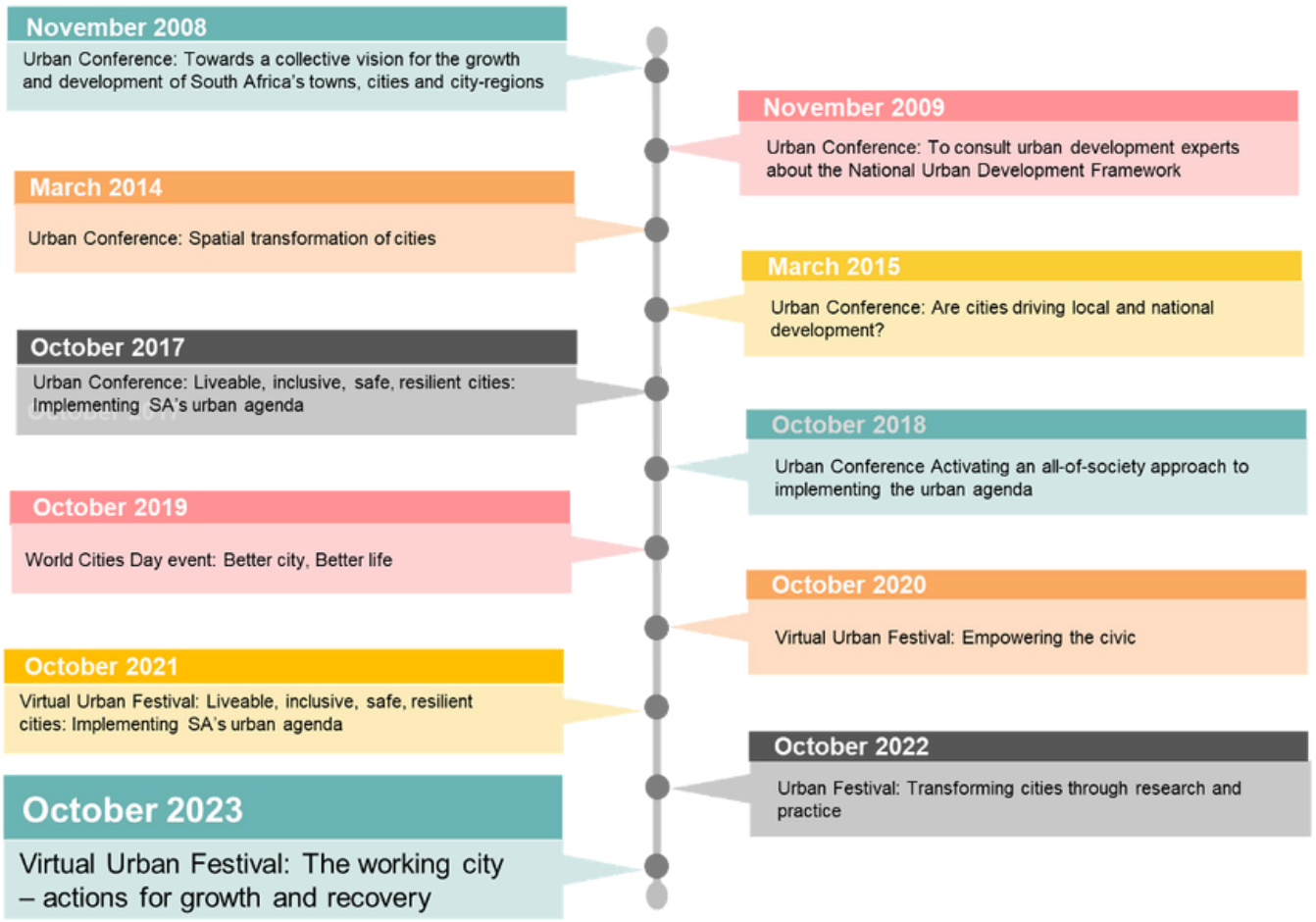
Inspiring service delivery

ETHEKWINI MUNICIPALITY

SACN-hosted Urban Conferences/Festivals

Since 2002, the SACN has been the custodian of South Africa's urban story and at the heart of urban research and practice through its flagship publications and urban conferences and events. The Urban Festival 2023 brought together urban practitioners from across South Africa's cities in a conference format to explore the important urban issues of the day.



ANNEXURE A: FULL PROGRAMME OF THE URBAN FESTIVAL

31 OCT - PROGRAMME OVERVIEW

Urban Festival 2023

PART 1 HOW WE WORK: Building Institutional Resilience

8:30 - 8:45	Welcome by Programme Director
8:45 - 9:00	Official Opening and Welcome
9:00 - 9:15	Entertainment
9:15 - 9:45	Keynote Framing: Building Institutional Resilience
9:45 - 10:00	Video
10:00 - 10:30	Tea Break
10:30 - 11:45	Panel: City Managers' Forum (hosted with SALGA)
11:45 - 12:15	Data Demonstration 1
12:15 - 12:45	The Transformative Power of Data
12:45 - 13:00	Video
13:00 - 13:30	Lunch

PART 2 WHERE WE WORK: Data for Driving Growth and Recovery

13:30 - 14:00	Data Demonstration 2
14:00 - 15:30	Parallel Sessions: 1. Data for Sustainable Human Settlements (hosted with DHS) 2. Data for Driving Growth and Recovery (hosted with CoGTA)
15:30 - 15:45	Video
15:45 - 16:30	Virtual Exhibition: Voice of Young Planners & Urbanists
16:30 - 16:45	Closing Remarks
16:45 - 16:50	Entertainment
16:50 - 17:00	Closing by Programme Director

Programme subject to change and confirmation

ANNEXURE B: REMARKS BY MINISTER THEMBI NKADIMENG

Programme Director, SACN Council Chair Mr Xola Pakati, SACN Board Chairperson Ms Yolisa Kani, city managers from the respective metropolitans, the delegation from SALGA, academia and private sector, officials and delegates, ladies and gentlemen

Good morning to you all,

I first would like to express my sincere gratitude for this opportunity to participate in the Urban Festival of 2023. It is an honour and privilege to have been given this platform during the culmination of this year's Urban October. As we commemorate this traditional month-long celebration and take stock of our collective achievements, it is important that we engage in meaningful discussions regarding the critical factors that significantly shape and advance our urban agenda.

Being a part of this Urban Festival is not only an opportunity I value but also a recognition of the importance of urban development and its multifaceted impacts on our communities and societies. As you all know, urban areas are dynamic hubs of innovation, culture, and progress, and they also present unique challenges that require our attention and collaborative efforts.

As we gather at the Urban Festival, we are presented with a valuable opportunity to explore and address key issues that influence the trajectory of our urban development. It is a time for reflection, discussion, and, most importantly, action. We must acknowledge that while we have made considerable progress in creating more sustainable, inclusive, and vibrant urban environments, there is still much work to be done.

The theme for the Urban Fest 2023 is **The Working City: ACTIONS FOR GROWTH AND RECOVERY**. Allow me to engage you all on a fundamental issue that is critical to the theme of the festival, and that is "Institutional resilience for local government in South Africa".

I will also reflect on some of the relevant issues and challenges that underscore the need for an institutionally resilient local government sector and data-driven decision-making to respond to these challenges and achieve greater institutional resilience.

Before we commence, it's essential that we establish a clear understanding that South African local municipalities bear a constitutional responsibility, as outlined in Section 152 of the 1996 Constitution of the Republic of South Africa, the 1998 White Paper on Local Government, and the Municipal Systems Act No. 32 of 2000. These legal frameworks distinctly define the obligations and functions of municipalities.

These obligations and duties are imperative towards fulfilling our responsibility to the citizens of the country. We must, therefore, ensure that as local government, we are able to perform, deliver and enhance our obligations in a resilient manner. We must also be able to respond to shocks effectively and strengthen our capability as local government towards creating a developmental and resilient state.

As The Department of Cooperative Governance and Traditional Affairs, it is our duty to ensure that all municipalities perform their basic responsibilities and functions consistently by:

1. Putting people and their concerns first;
2. Supporting the delivery of municipal services to the right quality and standard;
3. Promoting good governance, transparency and accountability;
4. Ensuring sound financial management and accounting; and
5. Building institutional resilience and administrative capability.

We, as national government and supported by provinces and SALGA, have an existential obligation to ensure that our municipalities comply with their legislative requirements, but also, the support of local government is necessary to ensure that this critically important sphere of government is capable of executing its responsibilities in line with the systems and requirements set out in legislation that governs the establishment and functioning for local government.

As a country, we have the National Development Plan as our long-term plan and define our long-term destination, tackling key challenges faced within the country. The NDP also requires us to build a capable and developmental State by dealing with issues of political stability, capacity within government, and strengthening intergovernmental relations.

The Department has been actively attempting to support municipalities through the development and implementation of various policies and programmes. The back-to-basics programme focused on building institutional resilience through strengthening institutional capacity programmes for the three spheres of government with the notion of supporting, monitoring, intervening and enforcing the responsibilities of national, provincial and local government in building institutional resilience.

We currently have approximately 66 dysfunctional municipalities in our country that have multidimensional challenges related to poor governance, weak institutional capacity, poor financial management and political instability, which ultimately affects service delivery to our communities. COGTA is focusing its efforts towards supporting these dysfunctional municipalities and has established systems and programmes to ensure that we improve the status of our distressed municipalities.

Let's now provide some context for the challenges confronting municipalities in South Africa. Our municipalities are marked by and confronted with a series of issues, including elevated levels of poverty and unemployment, inadequate or ineffective delivery of essential services, hurdles linked to bolstering our local economies, striving for spatial transformation, addressing skills and capacity constraints required to carry out our local government responsibilities, and in certain cases, grappling with political and administrative instability.

Creating an institutionally resilient local government will set the foundation for local government to respond to some of the key economic, social and built environment challenges that are faced by our municipalities and our communities at large.

As a country, we are working together to eliminate these key challenges we are faced with; as mentioned, we have the NDP; we also have the NSDF through the leadership of DALRRD, focusing on our spatial challenges and guiding our development priorities as a country.

The State of Cities Report IV identified that spatial transformation is about more than understanding spatial relationships and requires changes in power and politics, institutions and intergovernmental relations and management skills and capacity.

We in this regard, have developed the IUDF aimed at addressing spatial transformation in our metros, intermediate cities and small towns. The IUDF clearly defines the importance of a stable governance system; this is defined in Policy Lever 8 of the IUDF with the aim of managing the intergovernmental dynamics within municipalities and managing multiple fiscal, political and accountability tensions in order to fulfil their developmental and growth mandates.

We also have the CWP focusing on creating employment opportunities and servicing our communities and the Municipal Infrastructure Grant, which aims to eradicate municipal infrastructure backlogs in poor communities to ensure the provision of basic services such as water, sanitation, roads and community lighting.

We are also working through the District Development Model (DDM) to improve intergovernmental relations between the different spheres of government to collectively tackle the problems in distressed municipalities. The DDM is designed to address problems with service delivery by allowing all spheres of government, from local municipalities to national government, to work together in a more effective and coordinated way.

Although we have these key national policy directives, we must acknowledge that the world is advancing, and so must our municipalities. Technology and the use of data is a key driver in the 4th industrial revolution, the world is advancing, and so must South Africa. We must acknowledge the role that data through various systems such as GIS can play in leveraging some of the key challenges faced by local government.

These systems can be used to improve service delivery in municipalities through the process of capturing issues spatially representing the data, which will guide analysis, guide the prioritisation of the required interventions and monitor the impact of delivery. These systems have the ability to improve municipal capability through tracking and processing of its administrative responsibilities, such as development and building plan applications and can also improve municipal finance management through improving revenue collection on municipal services.

From an international perspective, countries are advanced, and I would particularly like to cite work done by China and the city of Shanghai, which is The Shanghai trio of interrelated tools, the Shanghai Adapted Index (SAI), the Shanghai Manual, and the Global Award for Sustainable Development (Shanghai Award). These tools are designed to support the effective implementation of urban sustainability at the local level. The Shanghai Adapted Index is the first adaptation of the Global Urban Monitoring Framework that provides a graded index system to measure progress on sustainable urban development and their contribution to the SDGs and New Urban Agenda.

But bringing it back home, we have also made progress, and the eThekwini Metro's Strat Hub can be viewed as an exceptional tool which is viewed as the City of Durban's 'Single Source of Truth' that is co-created through internal and external partnerships.

This tool has supported policy interventions and actions related to urban safety, road safety, disaster response, climate risk, and vulnerability mapping, to name a few. Specifically on urban safety, the Strat Hub is supporting the implementation efforts related to the 2023 GC 26 resolution on Safer Cities and the adoption of the UN System-wide guidelines in 2019.

We must learn through our local and international best practice models and maximize the opportunities that data and technology can offer us in advancing our priority issues.

As I conclude, I would like to stress the importance of creating an institutional resilient local government, it is clear that the foundation of a developmental and resilient state is heavily dependent on sound institutions. Our primary focus should be to do the best we can as government for the people that matter the most, and that is our communities.

I would also like to thank the South African Cities Network for the valuable contributions made in supporting our municipalities over the years. I look forward to us all continuing to work together. I wish you well in the Urban Fest 2023, and I hope you will derive value from the session today and make a difference for our people.

I thank you.

ANNEXURE C: SPEAKERS AND PANELLISTS

 Mr Zayde Ebrahim	Group (Executive) Head: Strategy, Policy Coordination and Relations, City of Johannesburg
 Mr Daniel Githira	Data Analyst, UN Habitat
 Ms Karen Harrison	Economic Development Programme Lead, City Support Programme (National Treasury)
 Professor Phil Harrison	South African Research Chair in Spatial Analysis and City Planning, Wits University
 Mrs Tanya Jonas	Deputy Director, Budget and Treasury Directorate, Nelson Mandela Bay Metropolitan Municipality
 Ms Tracy Jooste	Head Of Special Programmes, International Budget Partnership (Asivikelane)
 Ms Claudia Juech	Government Innovation Program Developer, Bloomberg Philanthropies
 Mr Theo Kaspers	Head of Cooperation at the EU Delegation in Pretoria

Professor Rob Kitchin	Social Sciences Institute, Maynooth University, Ireland

Mr Mduduzi Mdletshe	Deputy Head Applications and Projects, eThekwini Metropolitan Municipality

Dr Nana Mhlongo	Deputy Director-General for Research, Policy, Strategy and Planning, National Department of Human Settlements

Mrs Dimakatso Moloi	eThekwini Metropolitan Municipality

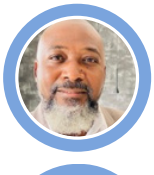
Mr Monyake Moteane	Urban Specialist, The World Bank

Ms Hlompho Mphanje	Specialist: Strategic Networks and Associations (International Relations), City of Johannesburg

Mr Bob Naidoo	HOD Corporate Services, Buffalo City Metropolitan Municipality

Dr Laven Naidoo	Senior Researcher, Gauteng City-Region Observatory

Dr Williams Obeng	Nelson Mandela Bay Metropolitan Municipality



Mr Julio Sabu	Executive: Operational Research, South African Revenue Service (SARS)

Ms Kamogelo Shika	Project Coordinator, Development Action Group (DAG)

Ms Faith Sithole	Data Science and Analytics Lead, Sasfin

Mr Bongumusa Zondo	Acting Chief Strategy Officer, eThekwini Metropolitan Municipality

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