CASH SMART PROGRAMME

Cash Lekgotla 12 November 2026 Slide Pack



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CASH SMART PROGRAMME

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CASH SMART PROGRAMME



Cash Smart Strategy: implementation foundations are in place

South African Reserve Bank

Progress has moved from strategic endorsement to detailed design, industry validation and transition preparation.

NOV 2025 — Strategy endorsed

MAY 2026 — 1st Cash Lekgotla

SEP 2026 — NCU registered

NOV 2026 — Blueprint validation

National Cash Utility

FOUNDATION ESTABLISHED

Entity registered; governance and phased operationalisation pathway approved. Blueprint now defines the utility's mandate, design principles and operating layers.

Next: finalise governance, business model and transition readiness.

Cash-centre network optimisation

MODEL ADVANCED

Base and enhanced models completed. Network design now tests demand, capacity, location, site configuration, route risk, resilience and security.

Next: validate refined footprint, costs and implementation sequencing.

White Label ATM

AS-IS COMPLETED

Industry data and bilateral engagements support the ATM baseline; coverage, utilisation, estate condition and operating-model requirements are being assessed.

Next: confirm pilot archetype and complete operating-model design.

Regulation & rulebook

DESIGN IN PROGRESS

Discovery and benchmarking completed; licensing perimeter, participation standards, the cash rulebook and non-bank participation are being developed.

Next: refine policy instruments and consult affected participants.

Technology enablement

BASELINE IN PROGRESS

Current-state mapping covers cash centres, NCMS/ICMS, ATMs, data and integration. Target architecture and control-tower requirements are being shaped.

Next: define interim NCU MVP, integration standards and sourcing.

Industry engagement

ACTIVE & EXPANDING

Two Cash Lekgotlas and structured engagements with banks, CITs, ATM operators, aggregators, retailers and technology providers are informing the design.

Next: convert feedback into design decisions and commitments.

EXECUTIVE TAKEOUT — **The programme is no longer defining the case for change. It is now converting approved strategy into an executable utility, regulatory framework and transition plan.**

Future-Proofing Cash:

Why Cash Needs a Great Scrum-Half

Cash Lekgotla 2026

South African Reserve Bank · 12 November 2026

Guillaume Lepecq, Chair of Cash Essentials

CashEssentials



Twenty minutes, four moves

1. Cash is changing its job — the global snapshot
2. Innovation in the cash cycle around the globe
3. The Four A's of a resilient cash cycle — plus one
4. Resilience is a business model, not just a social obligation

CASH LEKGOTLA · THE STATE OF CASH

Cash is changing its job.

A global snapshot

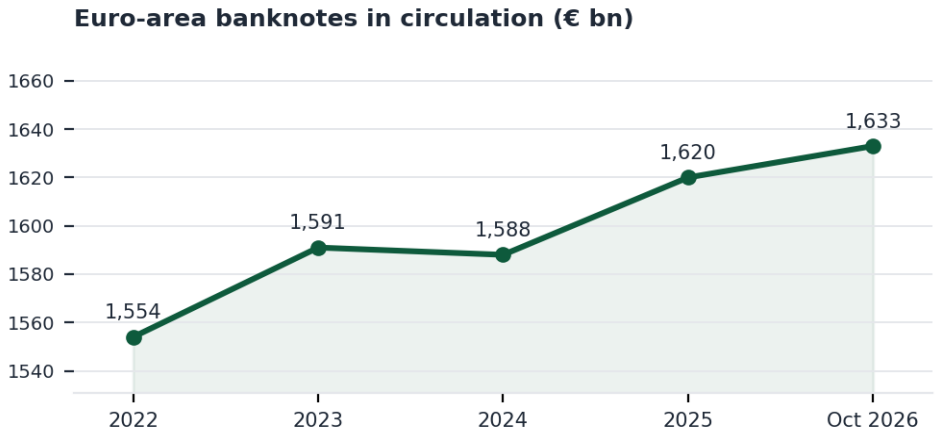
Global cash in circulation has risen almost continuously for three decades —
in advanced and developing countries alike.

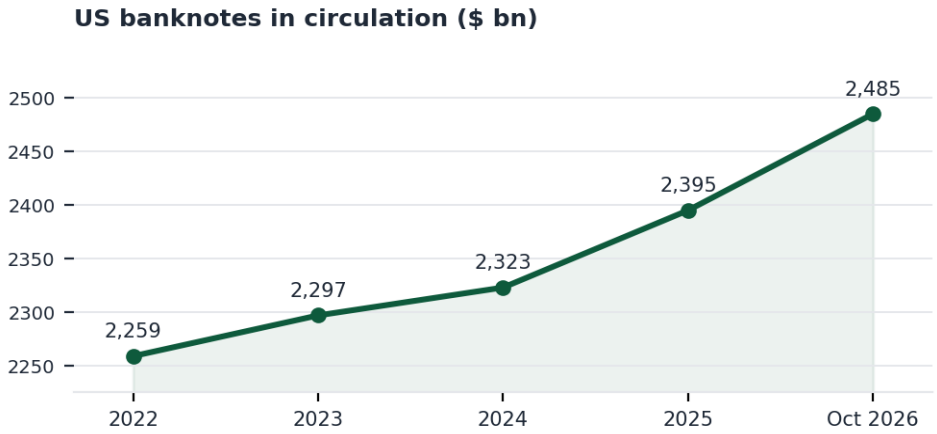
CashEssentials

Cash in circulation is growing

- Risen almost continuously for three decades — in advanced and developing economies alike
- Rising also **relative to GDP** in most advanced economies
- The recent dip reflects **inflation and higher interest rates** — an opportunity-cost effect, not a structural decline
- **Record highs in 2026:** euro-area and US banknotes in circulation — see right

Take-away — Demand for cash — especially as a store of value — is stubborn. The asset is not the problem.





CashEssentials

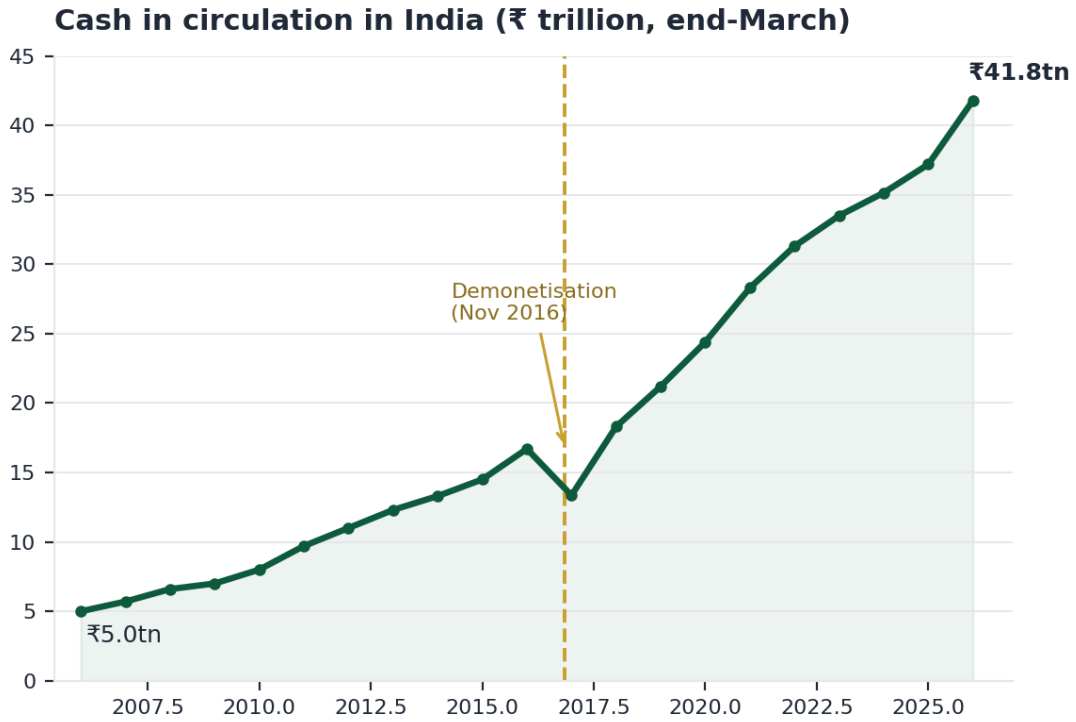
The functions of cash are changing

- The transactional role is declining — euro area: cash still the most-used instrument at the point of sale — **59% of transactions (2022), down from 79% in 2016**
- Sweden / Norway: cash used in only **10% / 3%** of last payments
- …yet cash demand **surged after Russia's invasion of Ukraine** — the closer to the war, the bigger the surge
- **The cash paradox:** transactional demand is declining — but store-of-value demand keeps rising

Signal — Even at 3% of payments, cash is held close — as insurance. Geopolitics has changed the cash narrative for good.

India: demonetised, digitised — and doubling down on cash

- 2016 demonetisation plus a world-leading digital campaign (**UPI: 131bn transactions** in 2023–24)
- Yet cash in circulation has **more than doubled**: ₹16.5tn → ₹34.7tn (≈ US$415bn), still growing ~11–12%/yr
- The central bank is **expanding the cash cycle** to match demand
  - 250,000+ ATMs · rural business correspondents · 28–30bn fresh banknotes printed annually



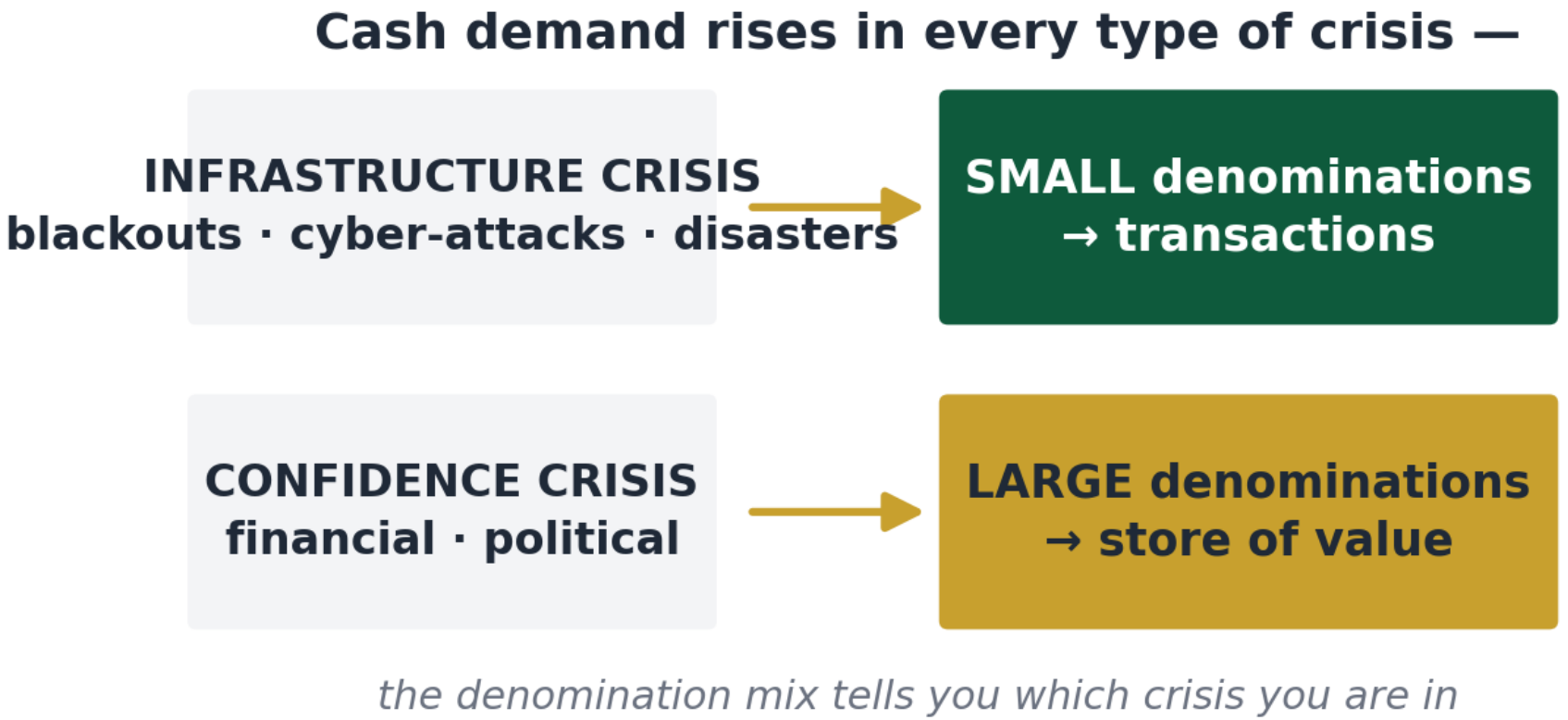
CashEssentials

New Zealand: cash is an equity issue

- RBNZ **Future of Cash Use** programme: research plus concrete cash-cycle projects
- Cash-use surveys (2017–2023, repeated 2025) show markedly higher cash reliance among **Māori and Pacific peoples**
- 2023: **57%** used cash for everyday purposes; **82%** used it at least weekly
- So cash is an **equity and inclusion issue** — not just a payments issue

The wider point — the core attributes of cash — financial inclusion, resilience, sovereignty, non-discrimination, protection of privacy — are gaining traction amid growing global uncertainty.

Cash demand is driven by uncertainty



Ask South Africa — When the POS terminal is down — load-shedding, floods, a cyber-attack — cash still works. The denomination mix tells you which crisis you are in.

1 · Cash is changing its job — the global snapshot
2 · **Innovation in the cash cycle around the globe**
3 · The Four A's of a resilient cash cycle — plus one
4 · Resilience is a business model, not just a social obligation

PART 1 · INNOVATION IN THE CASH CYCLE

Innovation in the cash cycle around the globe.

The question is no longer whether cash survives — it is whether the cash infrastructure survives cash's changing role.

That is not just a policy question. It is a business question.

Regulation is now building cash in, not winding it down

- **Sweden:** banks obliged to offer cash services
- **Norway:** banks must supply and handle cash
- **Netherlands:** statutory minimum ATM floor — 3,850 ATMs, all within 5 km of citizens
- **Finland & Lithuania:** post-Ukraine cash-resilience initiatives
- **EU:** Legal tender of cash regulation imposes mandatory acceptance of cash
- **Australia:** the ACCC has directed Linfox Armaguard to keep supplying cash-in-transit services until mid-2027 under the new cash-distribution framework

Pattern — Lawmakers increasingly treat cash access as critical national infrastructure — a public good, to be planned, not left to chance.

Sharing the infrastructure

- **White-label & pooled ATMs:** Bankomat (Sweden), Geldmaat (Netherlands), France, Luxembourg, Belgium — lowering the access cost curve
- **Interbank utilities & recirculation:** shared cash centres and note-recirculation schemes — Austria, New Zealand, the UK, Spain
- **Recycled cash & merchant replenishment:** in-store recyclers; merchants sourcing cash from daily takings (CIT substitution)
- **Public–private preparedness:** Bundesbank crisis symposium; Austria's “Cash for all cases” civil-protection partnership
- **Public funding of ATMs:** the Austrian central bank funds ATMs in rural areas; the Dutch central bank funds ATMs in the Caribbean islands; municipalities in Belgium, France and Spain fund local ATMs
- **Digital enablers:** ATM locators, cardless withdrawal, mobile-triggered cash-out

The private sector is innovating, too

- **Bankomat (Sweden):** insourcing its cash logistics — vaults, vehicle fleet, in-house CIT, for the first time in over a decade, serving 60% of Sweden's ATMs
- **Sonect (Switzerland):** retail cash withdrawals — order in the app, collect at the till of partner shops; piloted in the UK with Loomis, live in Italy
- **Clip (North America):** the largest non-bank business deposit network — self-service deposit boxes and deposits at 4,000+ US retail locations
- **Cash Perks (UK):** welfare and emergency payments sent by SMS — collected at 17,000 ATMs with no bank account, card or app
- **Managecash (Türkiye):** third-party cash withdrawals by QR code — cash from shops or individuals, no POS hardware
- **MoneyBox (KBA & Aflatoun):** educational banknotes and a four-compartment money box teach children to earn, spend, save and borrow — 20,000+ learners in 18 countries

1 · Cash is changing its job — the global snapshot
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PART 2 · THE FRAMEWORK

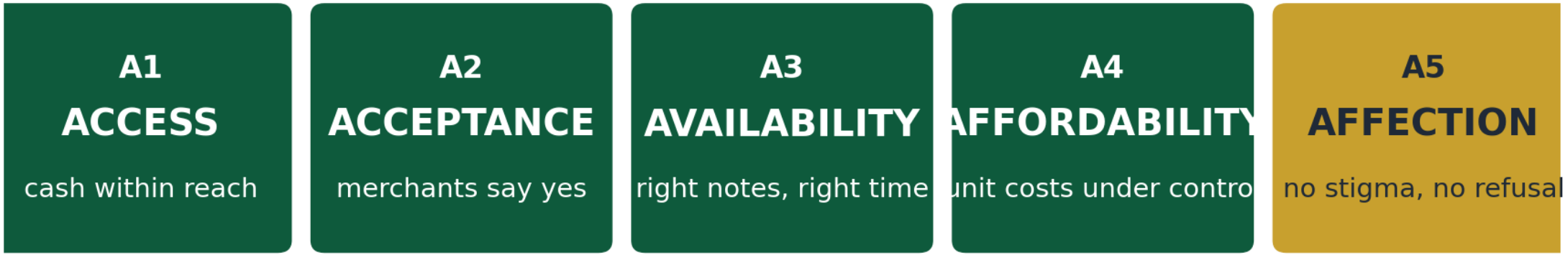
The Four A's of a resilient cash cycle — plus one.

The cash cycle is being re-engineered, not retired — and inclusion and resilience are the new imperatives.

PART 2

Access, Acceptance, Availability, Affordability — and one more

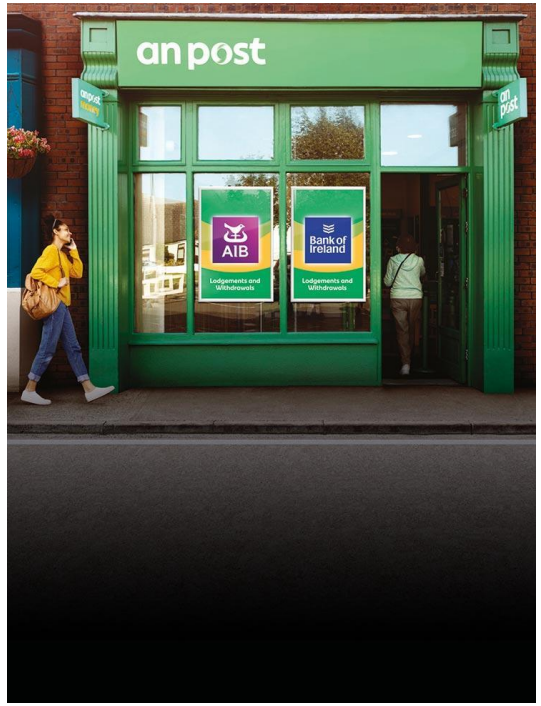
Four pillars that keep the cycle robust in normal times and elastic in crises — plus a fifth, born in conference debate: supply-side action alone is not enough, the demand side needs attention too.



A1 · ACCESS

Access: cash within reach

- Physical touchpoints: ATMs, branches, post offices, retail cash-out
- **The ATM paradox:** fewer ATMs, yet more cash in circulation — a supply-side issue, not a demand-side one
- Geographic coverage is the real test: rural areas, townships, the informal economy
- In low-cash countries, **access deserts appear before demand disappears** — ATM numbers per capita decline first



The business angle — Right-sized, shared, retail-embedded access networks cost less per transaction than legacy branch and ATM footprints.

Acceptance: merchants say yes

- Acceptance is the **demand side of access**: if merchants refuse cash, the network effect unravels fast
- Legal-tender status alone is insufficient — **Sweden and Norway now legislate acceptance and handling obligations**

The business angle — Acceptance expands the addressable market of every cash operator: an economy where cash circulates keeps the whole cycle commercially viable.

A3 · AVAILABILITY

Availability: the right notes, at the right time

- All denominations, all the time: crisis demand is **denomination-specific** — the mix must be preserved
- Fully elastic supply: central banks must meet surges **within days** — buffers, contingency logistics, rehearsed crisis procedures
- A payment instrument people cannot get is not resilient — it is a rumour

The business angle — Availability is a service-level promise: operators who guarantee surge capacity sell resilience — the insurance logic.

A4 · AFFORDABILITY

Affordability: the circuit-breaker

- The risk: shrinking volumes → rising unit costs → higher fees → lower use — the **cost death spiral**
- Costs all along the cycle: central banks, CITs (transport, insurance), banks, ATM interchange, merchants — and where they land on the consumer
- Consumers compare **total costs** across instruments: expensive cash excludes people — and exclusion has economy-wide costs

The business angle — Scale-sharing — utilities, shared cash centres, interchange reform — cuts unit costs while keeping coverage: profit through density and efficiency, not higher fees.

A5 · AFFECTION

Affection: no stigma, no refusal

- Cash users must not be discriminated against: **no refusal at the till, no surcharging, no stigma or awkwardness**
- Rebuild a positive narrative: cash is a **mainstream** part of the payment system, used and valued by everyone — not a legacy for the unbanked
- Respect is a customer-experience feature — treat the cash queue as first-class

The business angle — Perception drives usage: a cash experience that is normal, easy and welcoming keeps the transaction volumes the whole cycle depends on.

1 · Cash is changing its job — the global snapshot
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4 · **Resilience is a business model, not just a social obligation**

PART 3 · RESILIENCE

Resilience is a business model, not just a social obligation.

Cash is the insurance of the whole payment system — and insurance only pays out if the infrastructure is there when it is needed.

Cash is the insurance of the whole payment system

- In a crisis, cash is **insurance for the whole payment system**: non-excludable and non-rival — a public good (“institution cash”)
- The move away from cash has a **societal cost**: no fallback when digital rails fail, no liquid store of value in confidence crises — and a loss of privacy and civil liberties
- Resilience only works if cash stays **used and rehearsed in normal times** — a forgotten instrument cannot be switched on in an emergency

Resilience by design

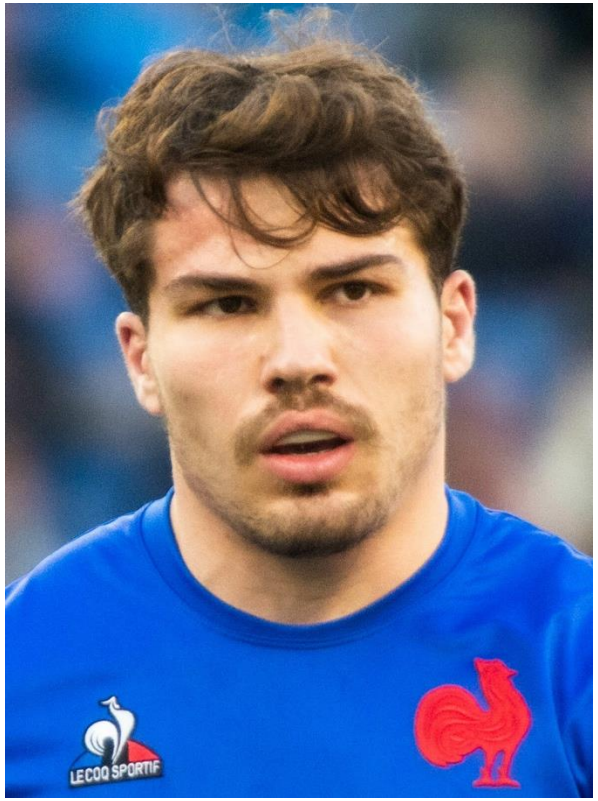
- **Business continuity —** critical ATMs must keep working in outages: backup power for the critical network, not every machine
- **CIT priority —** cash-in-transit treated as critical infrastructure: fuel priority, road access and movement permits in blackouts and disasters
- **Geography —** vault and cash-centre location is a resilience decision — Ukraine decentralised its cash reserves after un-evacuated banknotes had to be destroyed
- **Stress tests —** stress-test the cash cycle as banks are stress-tested — Germany's National Cash Forum has run a first crisis exercise, a second agreed
- **Funding —** payment providers that are not resilient should help fund their own fallback — a levy on PSPs, or ATM interchange reform

The design principle — a fallback that has never been rehearsed, funded or designed is not a fallback — it is an assumption.

Why a scrum-half?

- The smallest player on the field carries the biggest job description
- Serves the forwards and the backs — links the set piece to open play
- Always in the action, first to see the whole field
- Keeps the ball moving — the game only flows if the 9 does

The metaphor — The cash cycle is the economy's scrum-half: it links the issuers to the users, and it only works if it is always in the action.



When you look at South Africa, without doubt the best team in the world…

The teams that win are the ones that know how to adapt to their opponents and to the conditions of the pitch. You have to know how to win ugly.

Antoine Dupont, captain of France

The cash cycle has the same job: adapt to the conditions, and keep winning.

Photo: stede64 / Wikimedia Commons, CC BY-SA 2.0

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SOUTH AFRICAN RESERVE BANK

Cash Ecosystem Blueprint Proposal

12 November 2026



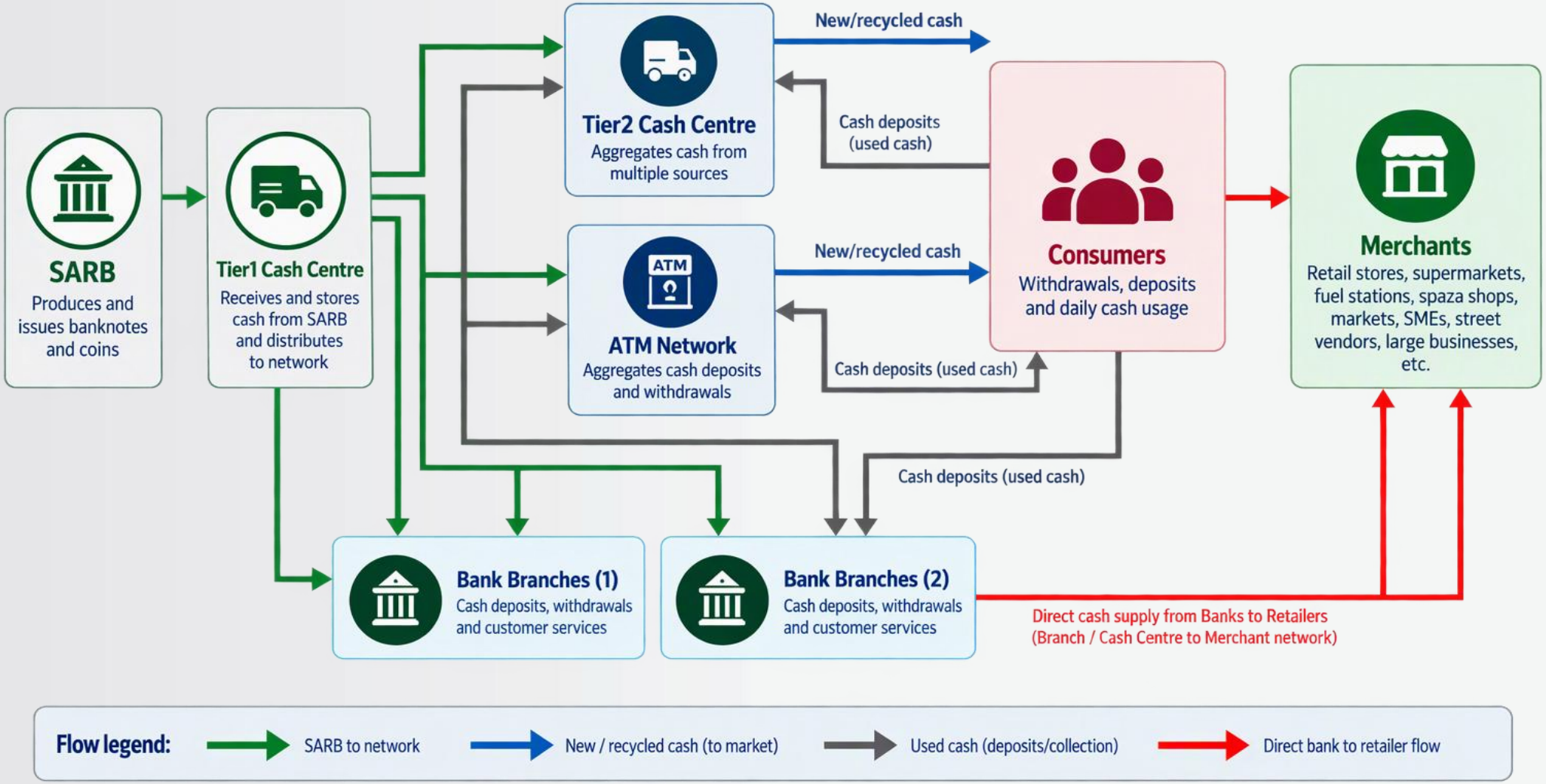
Outline

1. **The current cash ecosystem**
   - The current model
   - The nature of the current model
2. **The proposed cash ecosystem**
   - The design principles
   - The revised model
   - SARB regulatory functions
   - Licensed services
   - The proposed cash ecosystem blueprint
3. **Stakeholder engagement**

This is a draft blueprint. Your input will shape it.

The current model





The nature of the current model



The current model	The realities	Result
Commercially driven model	**Siloed planning and infrastructure ownership**	**An unsustainable cost base**
	Duplication across processing, distribution and inventory (unnecessary movements of cash)	
	Limited end-to-end visibility of cash supply and demand	
	Incentives that don't always support the most efficient flow of cash (NHTO)	
	Activities outside the current regulatory framework	

The design principles



Strategic Outcomes

Public interest first

Cash must remain available as a viable means of payment for all who need or choose to use it.

Affordable and economically sustainable

The end-to-end cost of cash must be reduced without compromising access, resilience, security or quality.

Universal and equitable access

The future ecosystem should provide reasonable geographic and economic access across urban, peri-urban and rural areas.

Resilient by design

Network design should incorporate redundancy, contingency arrangements, strategic stock, alternate servicing capacity and security.

Orderly transition and no deterioration in service

Transformation must not destabilise the cash ecosystem it is intended to improve.

Key Enablers

- Optimise cash flows through scaled efficiency and value differentiation
- Decrease the inefficiencies and costs by consolidating functions where there is duplication
- Design beyond the traditional wholesale and retail boundaries
- Eliminate distorting incentives

The revised model



1. SARB will be the regulatory authority.
    - **Principle:** SARB would license and supervise the relevant activities and entities under the applicable regulatory framework.
2. NCU functions
    - **NCU owned** functions (systemic)
        - **Principle:** Consolidate systemic functions which can produce benefits if scaled. (e.g.: Cash destruction, cash processing country wide)
    - **NCU controlled** functions (non-systemic)
        - **Principle:** Outsource non-systemic functions that can be fulfilled by the market. The NCU will manage, and monitor cash supply chain activities. Competitive service providers should support affordability, accessibility and resilience of cash through a licensing framework.
    - Functions **outside of the NCU**
        - **Principle:** Functions that are end-user consumer orientated.

The NCU (**cash system operator**) will own the infrastructure, and do cash ecosystem system coordination.

CASH SMART PROGRAMME



The revised model

SARB sets policy, regulates the cash ecosystem and independently oversees compliance. The NCU operates designated national cash infrastructure and services within that framework.

Regulatory authority, licensing, supervision and enforcement remain with SARB and must not be delegated to the NCU.

SARB: Regulator, policy authority and overseer	NCU: Utility operator
Sets national cash policy, strategic outcomes and the long- and medium-term banknote and coin forecast.	Translates Cash Smart outcomes into an operating model and short-term network cash forecasts.
Defines regulated activities, licenses participants where required, and supervises and enforces compliance.	Operates within SARB rules and manages providers and customers for services within its mandate.
Sets minimum standards for access, resilience, continuity, security, quality, integrity and conduct.	Operationalises the standards through infrastructure, processes, service levels, controls and contracts.
Retains central-bank responsibility for currency quality and integrity, and oversees systemic cash risk.	Runs approved utility functions, including cash-centre processing, storage, distribution and centre-to-centre movements.
Monitors the performance and compliance of the cash ecosystem as a whole, including the NCU.	Manages operational risk and provides service, efficiency and compliance data to SARB.

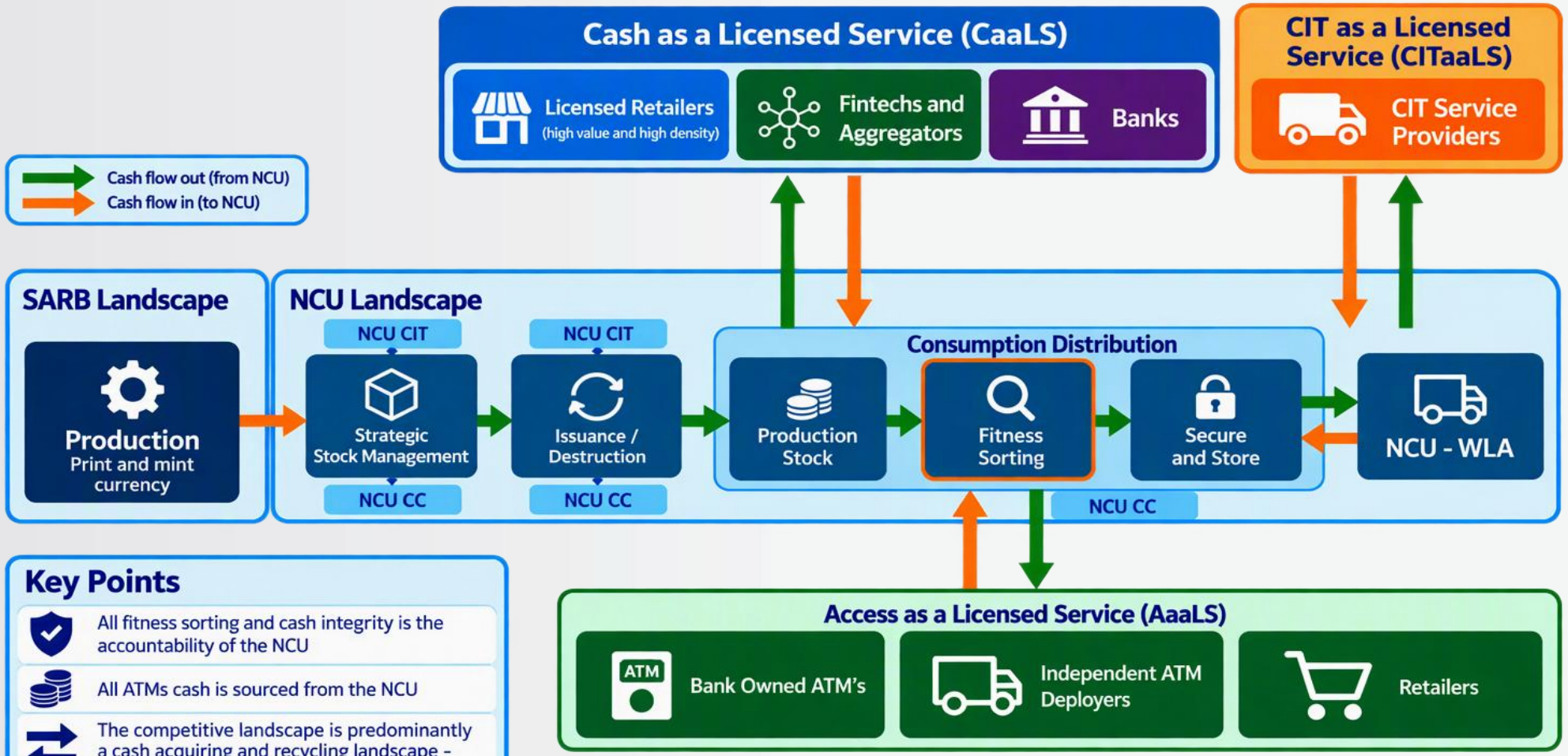


Licensed services

South African Reserve Bank

Licensed Service Model	Strategic Focus	Offered Services
Cash as a Licensed Service (CaaLS)	Focuses on optimizing cash handling, recycling, and retailer cash ecosystems to improve efficiency, accessibility, and liquidity management.	✓ Cash recycling ✓ Cash aggregation ✓ Merchant services ✓ Retailer cash management
Cash-in-Transit as a Licensed Service (CITaaLS)	Focuses on efficient, profitable, and licensed movement of cash across the economy through secure logistics and distribution networks.	✓ Cash collections ✓ Cash deliveries ✓ ATM replenishment / maintenance ✓ Secure logistics
Access as a Licensed Service (AaaLS)	Focuses on extending public and business access to cash through shared infrastructure and alternative access channels.	✓ ATM ownership and management ✓ Wallet redemption services ✓ Cash-back at till

The proposed cash ecosystem blueprint



Key Points

- All fitness sorting and cash integrity is the accountability of the NCU
- All ATMs cash is sourced from the NCU
- The competitive landscape is predominantly a cash acquiring and recycling landscape - licensed as "Cash as a Service"
- Cost of funds benefits to be linked to the velocity of cash into the NCU – to increase fitness sorting stock

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NCU services



Strategic Stock Management	Issuance and Destruction	Secure and Store	Fitness Sorting	WLA ATM	Secure CIT
• National reserve & strategic stock management • Demand forecasting & regional inventory optimisation • Contingency, crisis & emergency readiness	• New currency issuance & unfit-note withdrawal • Currency destruction, processing • Reconciliation, audit & counterfeit management	• National vault & inventory management • Cash distribution, order fulfilment & route optimisation • Stock visibility, demand balancing & release scheduling	• Fitness verification, authentication & counterfeit detection • Cash integrity monitoring	• ATM cash supply, forecasting & liquidity optimisation • ATM monitoring & replenishment scheduling • ATM settlement & shared utility services	• NCU CIT orchestration • Secure cash collection & delivery • Optimised cash movement across the network

CASH SMART PROGRAMME

Bringing it together

SOUTH AFRICAN RESERVE BANK

SARB / CMD – SOVEREIGN AUTHORITY, REGULATOR AND GUARDIAN OF CURRENCY

SOUTH AFRICAN RESERVE BANK
Currency Management Department (CMD)

- Issue and destroy currency
- Currency policy and denomination strategy
- Currency integrity and quality standards
- Regulatory and licensing framework
- Oversight of NCU and systemic risk
- Set resilience and access requirements
- Emergency powers in a cash crisis

SARB SETS THE RULES AND PROTECTS THE CURRENCY

SUPPLY FROM SARB

Banknotes and coin (issued to NCU)

- High quality currency
- Secure supply
- Denomination mix
- National availability

NATIONAL CASH UTILITY (NCU)

- Control Tower and data platform
- Forecasting and demand planning
- Network optimisation
- Standards, SLA and compliance
- Ecosystem analytics and reporting

CASH CENTRES AND WLA

Receive from SARB → Process, sort and check fitness → Authenticate and verify → Pack and prepare → Store and manage inventory → WLA (White Label ATMs)

INTER-CASH-CENTRE CIT

Cash Centre A ⟷ Cash Centre B

Secure, managed centre-to-centre movements as part of the national wholesale network

LICENSED OPERATORS

Provide services to market participants under NCU orchestration, standards and SLAs

- **CIT companies** (branch, ATM, retail, merchant collections/deliveries)
- **Banks** (branch services, ATM services, cash management)
- **Retailers** (store cash management, collections/deliveries)
- **Aggregators** (cash aggregation, retailer networks, value-added services)
- **ATM operators** (ATM replenishment and servicing)
- **Other licensed providers** (as approved by SARB/NCU)

CUSTOMERS (OUTSIDE NCU)

Consumers, businesses and institutions

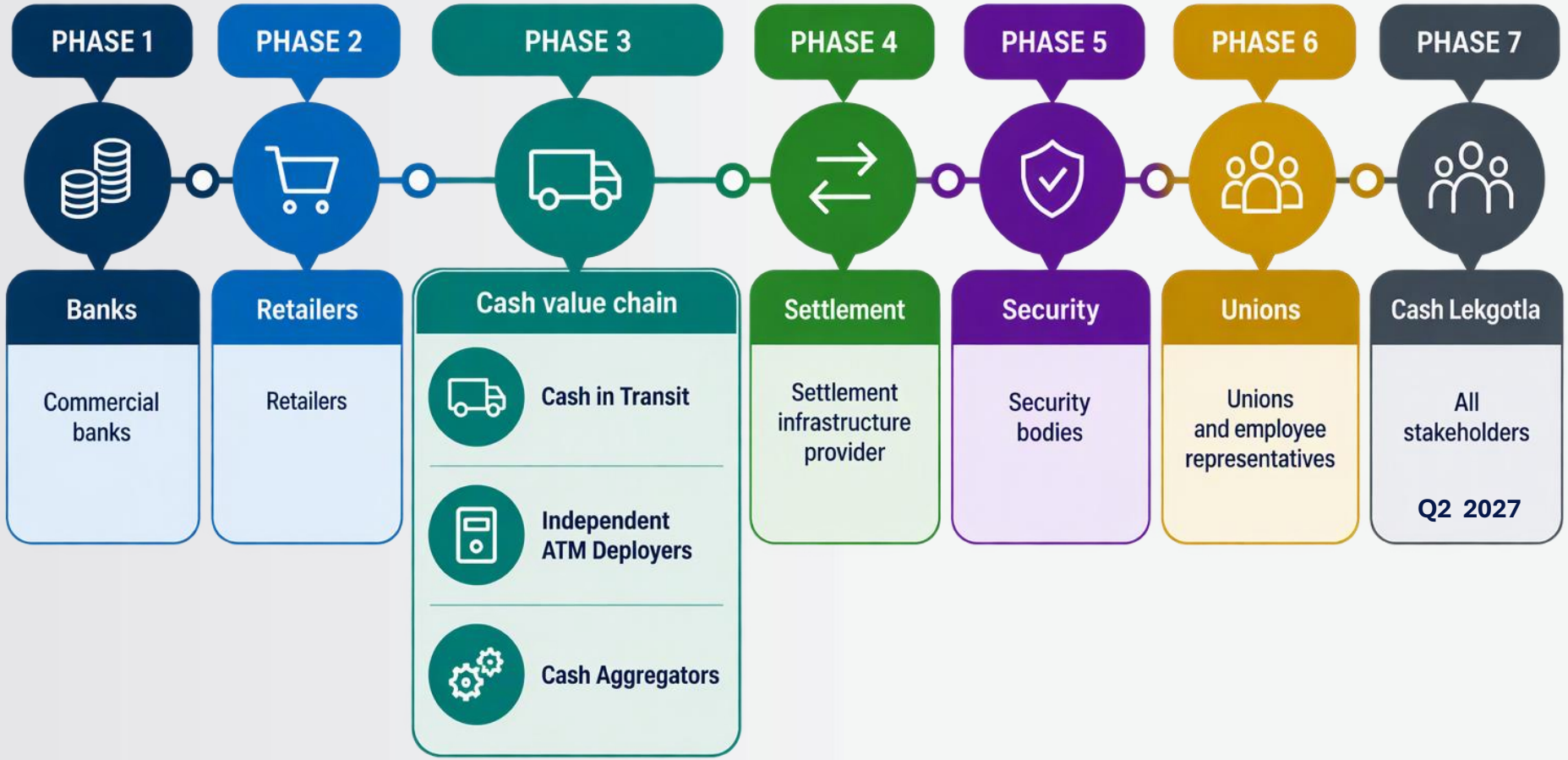
- Individuals (Consumers)
- Businesses
- Retailers (Merchants)
- Government Entities

Customer-facing services, channels, pricing and products remain competitive and outside the NCU

Inclusive access | Secure and resilient | Efficient and affordable | Data-driven decisions | Neutral and trusted | Sustainable for the future

Stakeholder engagement

Given the different roles and interests across the cash ecosystem, stakeholder engagements will be done in phases.



The programme team will reach out to schedule the engagements.
cashsmartstrategy@resbank.co.za

CASH SMART STRATEGY

Dr Zahier Ebrahim



SOUTH AFRICAN RESERVE BANK

NETWORK OPTIMISATION - MODEL REFINEMENTS & SCENARIOS

Agenda

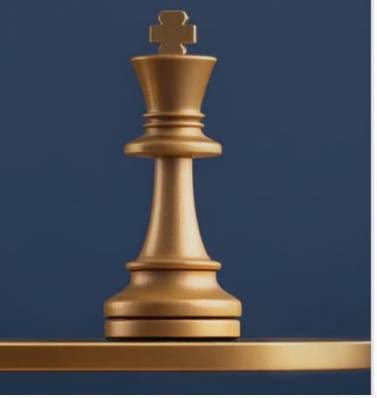


- Network Optimisation Objectives
- Data Journey
- Workshop Outcomes and Model Enhancement
  - *Assumptions*
  - *Site classification*
  - *Optimisation Scenarios*
- Operational Realities
- Results and Trade-Offs
- Opportunities
- Next Steps

CASH SMART STRATEGY

Network Optimisation Objectives

South African Reserve Bank



OUR OBJECTIVE

To establish the optimum cash network that minimises the cost of cash while ensuring appropriate access, resilience, capacity and operational sustainability across South Africa.

01 Optimise the cost of cash

Design the most cost-effective network capable of meeting service, resilience and operational requirements.



KEY OUTCOMES

- Minimise total cost to serve
- Improve utilisation of infrastructure and equipment
- Optimise logistics and transportation requirements

02 Improve access to cash services

Determine the optimum number and distribution of cash centres required to support equitable access to cash.



KEY OUTCOMES

- Improve geographic coverage
- Support urban and rural demand
- Enhance service availability to the cash ecosystem

03 Determine the optimal centre configuration

Define the most appropriate mix of facility types required to support the national cash network.



KEY OUTCOMES

- Align site functions to demand and cash flows
- Optimise operational roles across the network
- Balance efficiency, resilience and flexibility

04 Select the most suitable locations and capacities

Identify the locations and capacities that maximise network performance while maintaining resilience and operational effectiveness.



KEY OUTCOMES

- Determine optimal site locations
- Define required capacity by site
- Incorporate infrastructure, risk and security considerations

A FUTURE-STATE CASH NETWORK THAT DELIVERS

- Lower and more sustainable cost of cash
- Improved national access and coverage
- Optimised centre configurations and capacities
- Greater operational resilience and network sustainability
- Data-driven investment and infrastructure decisions

CASH SMART STRATEGY

Network Optimisation – The Data Journey Recap

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1 DATA SETS INCLUDED

DATA SETS INCLUDED

Network optimisation combines demand, transaction, capacity and infrastructure data to identify optimal facility locations and configurations.

INSIGHTS TODAY. A MORE RESILIENT TOMORROW.

01 POPULATION



Population

Where people live and potential service demand originates.

- Population density
- Growth trends
- Urban / rural split

02 RETAILER ACTIVITY



Retailer activity

Where commercial activity creates demand for cash services.

- Retailer density
- Cash-intensive retailers
- Trading intensity

03 ATM & BRANCH DEPOSITS AND WITHDRAWALS



ATM & Branch Deposits and Withdrawals

Transaction volumes and cash movement patterns that indicate demand and supply requirements across the network.

- ATM withdrawals
- ATM deposits
- Branch withdrawals
- Branch deposits

04 EQUIPMENT PROCESSING



Equipment processing

Processing capacity and transaction volumes at existing sites.

- Daily volumes
- Processing speeds
- Equipment capacity
- Uptime & availability

05 VEHICLE LOADING BAYS



Vehicle loading bays

Loading-bay capacity and 30-minute transaction cycle constraints.

- Number of bays
- Turnaround time (30 minutes)
- Operating hours
- Bay utilisation

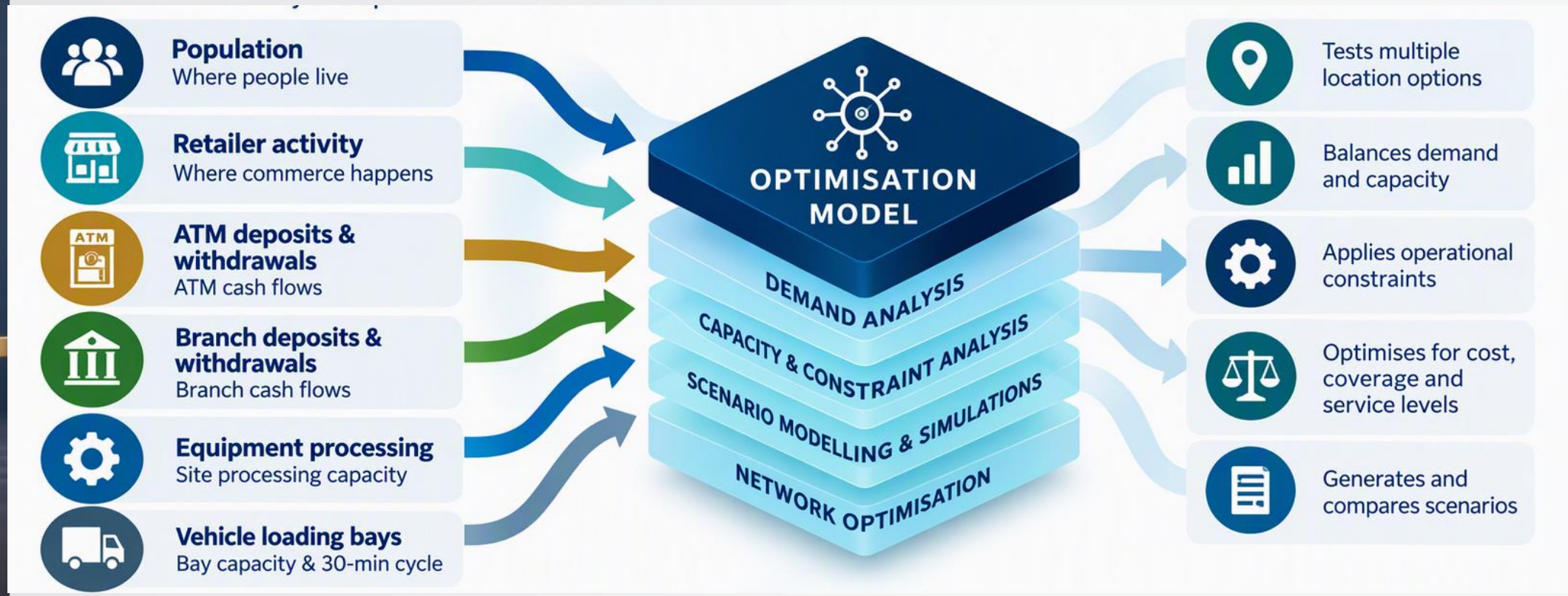
CASH SMART STRATEGY

Network Optimisation – The Journey Recap

SOUTH AFRICAN RESERVE BANK

- Preliminary data sets include proxies for demand
- Capacities extended to equipment processing and vaults

Workshops held led to the included of additional capacity elements and granular demand data.



CASH SMART STRATEGY

Network Optimisation Workshop Outcomes

SOUTH AFRICAN RESERVE BANK

CASH NETWORK.

The optimisation model has evolved from identifying where demand may arise to evaluating demand, capacity, transaction flows, infrastructure constraints and site suitability.

THEN — Proxy & Capacity Model

Identify potential demand and available processing capability.



KEY INPUTS (EXAMPLES)

Population
- Population density
- Growth trends
- Urban / rural split

Retail Activity
- Retailer density
- Cash-intensive retailers
- Trading intensity

Equipment Processing Capacity
- Daily processing volumes
- Processing speeds
- Equipment capacity
- Uptime & availability

KEY LIMITATION
Did not fully capture actual cash flows, vehicle constraints, infrastructure bottlenecks or site risks.

MODEL EVOLUTION

Demand Proxies
↓
Demand + Capacity
↓
Transaction Flows
↓
Operational Constraints
↓
Network Optimisation

NOW — Enriched Demand & Operational Model

Evaluate optimal facility locations, coverage, capacity and resilience.



KEY INPUTS (EXAMPLES)

Population
- Population density
- Growth trends
- Urban / rural split

Retail Activity
- Retailer density
- Cash-intensive retailers
- Trading intensity

ATM & Branch Deposits
- ATM deposits
- Branch deposits

ATM & Branch Withdrawals
- ATM withdrawals
- Branch withdrawals

Vehicle Loading Bays
- Number of loading bays
- Bay utilisation
- Vehicle turnaround times
- Operating windows

Security Assessments (In Progress)
- Physical security
- Site resilience
- Access control
- Risk considerations

BUSINESS VALUE

RICHER DEMAND AND OPERATIONAL INTELLIGENCE ENABLES:

- Better location decisions
- Improved capacity planning
- Identify infrastructure constraints
- Evaluate network resilience
- Assess site suitability
- Compare optimisation scenarios and trade-offs

CASH SMART STRATEGY

Network Model Assumptions

South African Reserve Bank

01 Servicing range



90 minutes

The ideal servicing range is a 90 minutes travel time radius around each cash centre.

02 Inter-centre movements



Inter-centre movements are limited to sites within 250 minutes of one-way travel of one another.

03 Demand patterns



Demand patterns and distribution are fixed, i.e. 2025 November and December demand patterns are indicative of future demand patterns.

04 Symmetric lanes



Lanes are symmetric (travelling from A → B takes just as long as travelling from B → A).

05 Police station locations



Police station locations are representative of the average servicing location in a district.

06 Demand proxies



Adult population (aged 16+) and retailer counts are proxy's for the origin of demand.

07 Coin and note movements



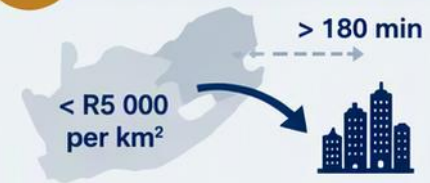
Coin and note movements (excl. inter-centre movements) are performed on the same vehicle.

08 Processing capacity



Processing capacity is constant (no overtime or additional peak capacity).

09 Remote region volumes



Volumes from sparse, remote regions (<R5 000 demand per km² and >180 minutes from nearest cash centre) shift towards the nearest region that can be directly serviced by a cash centre.



Operational Realities

CASH SMART STRATEGY

Model Site Types

South African Reserve Bank

1 Processing site

Receives, counts, sorts and prepares cash for circulation.



- Cash receiving and processing
- Sort and prepare for distribution
- Inward and outward CIT vehicle flows

SUPPLY ENABLEMENT
Increases available cash in the network

2 Storage site

Holds cash securely to buffer supply and meet local demand.



- High-security storage
- Buffer stock to balance demand
- Supports local distribution

SUPPLY STABILITY
Provides resilience and reduces travel time

3 Destruction site

Processes unfit and end-of-life cash in a secure and compliant manner.



- Secure destruction of unfit cash
- Environmentally responsible
- Regulatory compliance

SUPPLY CLEANSE
Removes unfit cash from the system

+ Combination sites

Some locations perform more than one role to meet local needs and improve efficiency.



FLEXIBILITY & EFFICIENCY
Right mix of services for local demand

Why the distinction matters for optimisation

SUPPLY
Processing and storage increase available cash in the network.

NETWORK OPTIMISATION
Balances supply and demand across site types, locations and constraints.

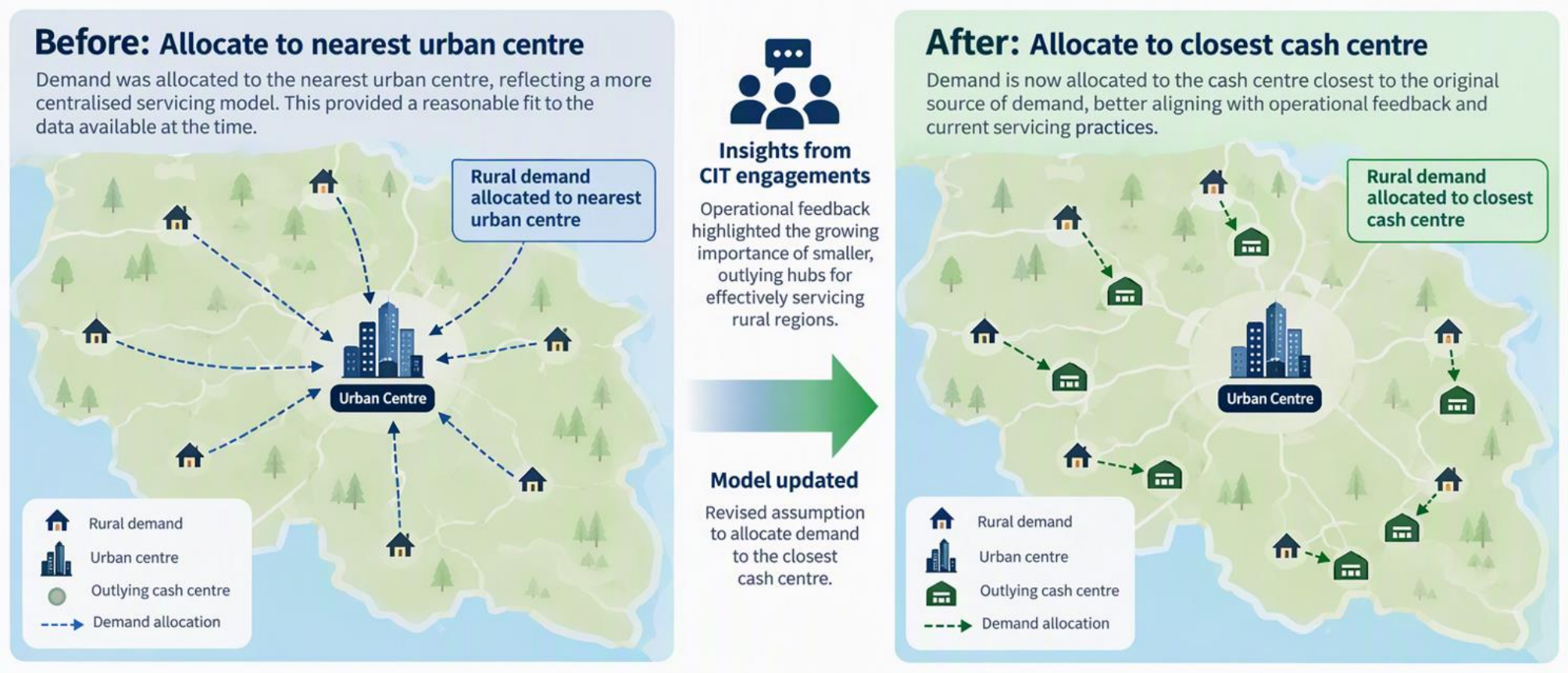
DEMAND
ATM and branch withdrawals and deposits, plus retailer activity and population, determine where cash is needed.

OPTIMAL OUTCOME
A network that meets demand efficiently, uses assets effectively and maintains service and resilience across the country.

Model Logic Improvements

South African Reserve Bank

- Revised the treatment of outlying demand, resulting in a greater share of service load being allocated to outlying rather than urban sites.
- Updated average trip volume assumptions using enhanced operator trip data, improving the accuracy of site-level workload estimates.
- Incorporated additional data for Mafikeng and Bethlehem, refining demand estimates across several police districts.
- Together, these changes produced a network configuration that better reflects current servicing patterns and observed operational data.



CASH SMART STRATEGY

Security Considerations

South African Reserve Bank

1 Optimise the network for demand and cost

The model identifies the optimal network based on demand, capacity and cost.



Security risk is not used to exclude locations in the optimisation model.

2 Why risk is not a quantitative input

Excluding high-risk areas would remove cash centres from densely populated regions, including Gauteng and KwaZulu-Natal, undermining access to cash.



Our priority is to maintain access to cash for all communities.

3 Apply a qualitative security assessment

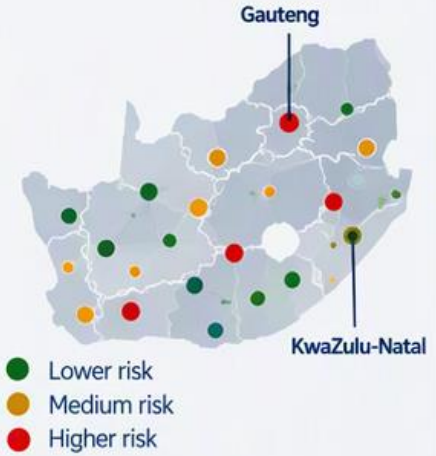
Security risk is assessed after analysing the model outputs.

- Model outputs (optimised network)
- Security overlay assessment
- Risk discussion and mitigation

Security informs decisions rather than determines them.

4 Use the risk map overlay

A risk map, developed using CITASA inputs, highlights risk levels across South Africa.



The overlay identifies higher-risk sites to inform targeted risk mitigation measures.

5 Implement risk mitigation measures

Use the risk insights to define appropriate mitigation actions through operational controls, investment and network design.

- Enhanced security measures
- Increased monitoring and controls
- Optimised logistics arrangements
- Infrastructure and configuration decisions

The objective is to manage risk, not to remove access to cash.



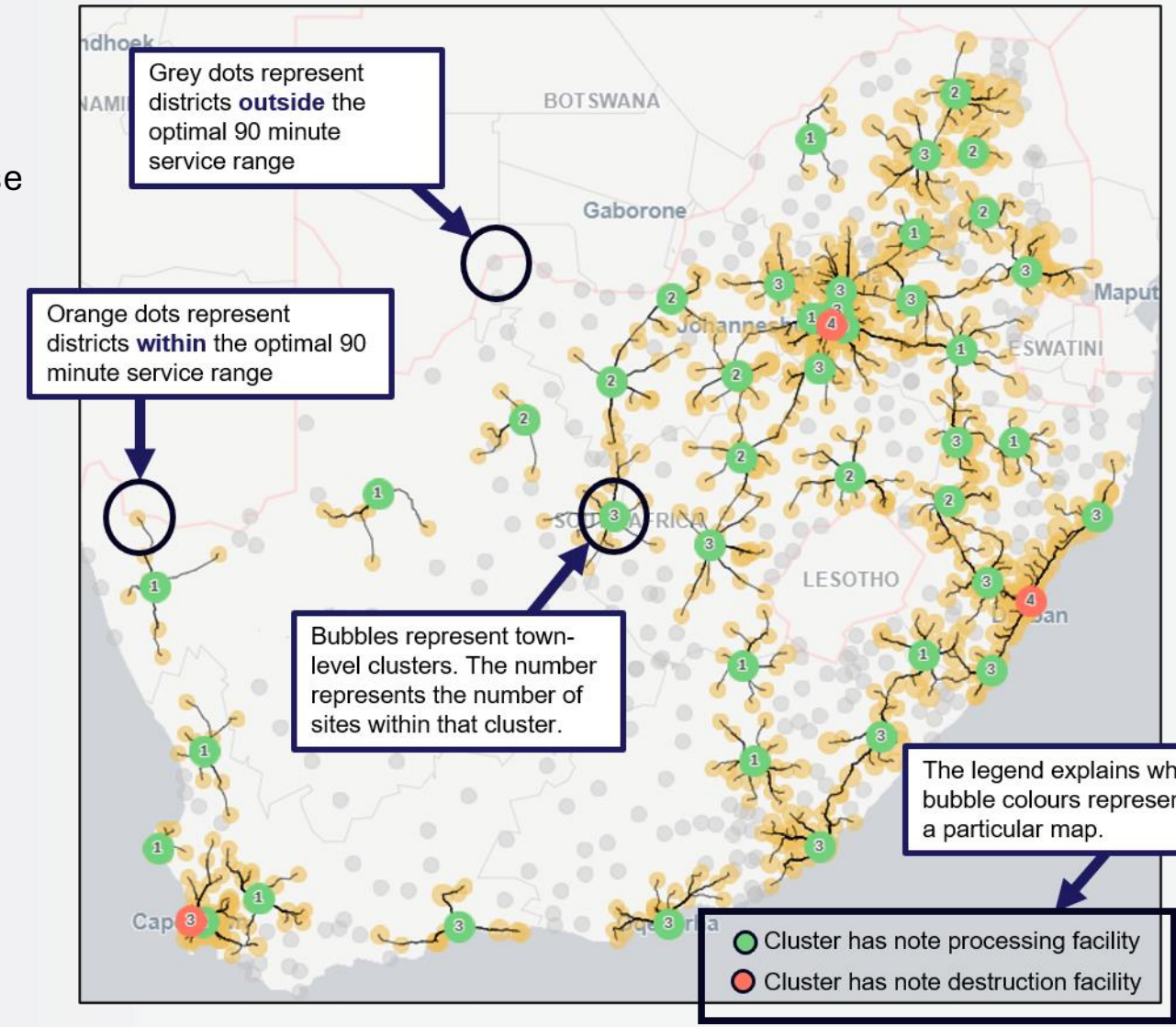
SCENARIOS

CASH SMART STRATEGY

Optimisation Map Terminology

South African Reserve Bank

- ***Vehicle bays*** refer to a combination of traditional bays and chute-based bays
- ***Destruction facilities*** are sites that can utilise either on-line or off-line destruction methods



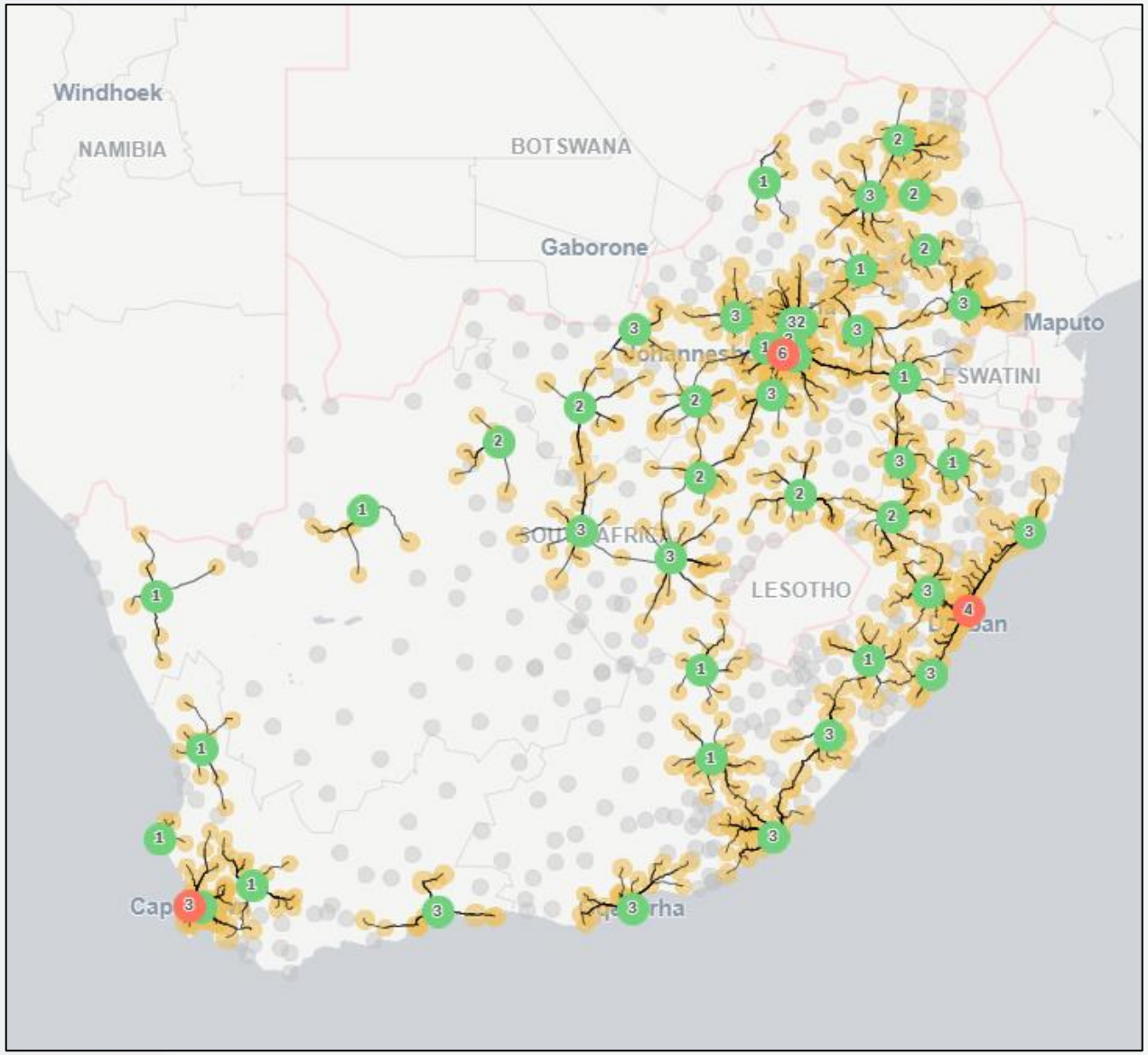
CASH SMART STRATEGY

The Cash Centre Network At A Glance

South African Reserve Bank

As-Is: National View

- The As-Is scenario acts as a base, validating that the model is behaving as intended and offering baseline figures to compare other scenarios against.
- This scenario has no vehicle-km and vehicle-time impact. It will be used as the base to compare other scenarios against.
- The model dataset includes 106 sites, including 3 SARB-managed sites with destruction facilities



106 Sites	40% Processing Util
3 Destruction facilities	52% Peak Bay Util
402 Vehicle Bays	

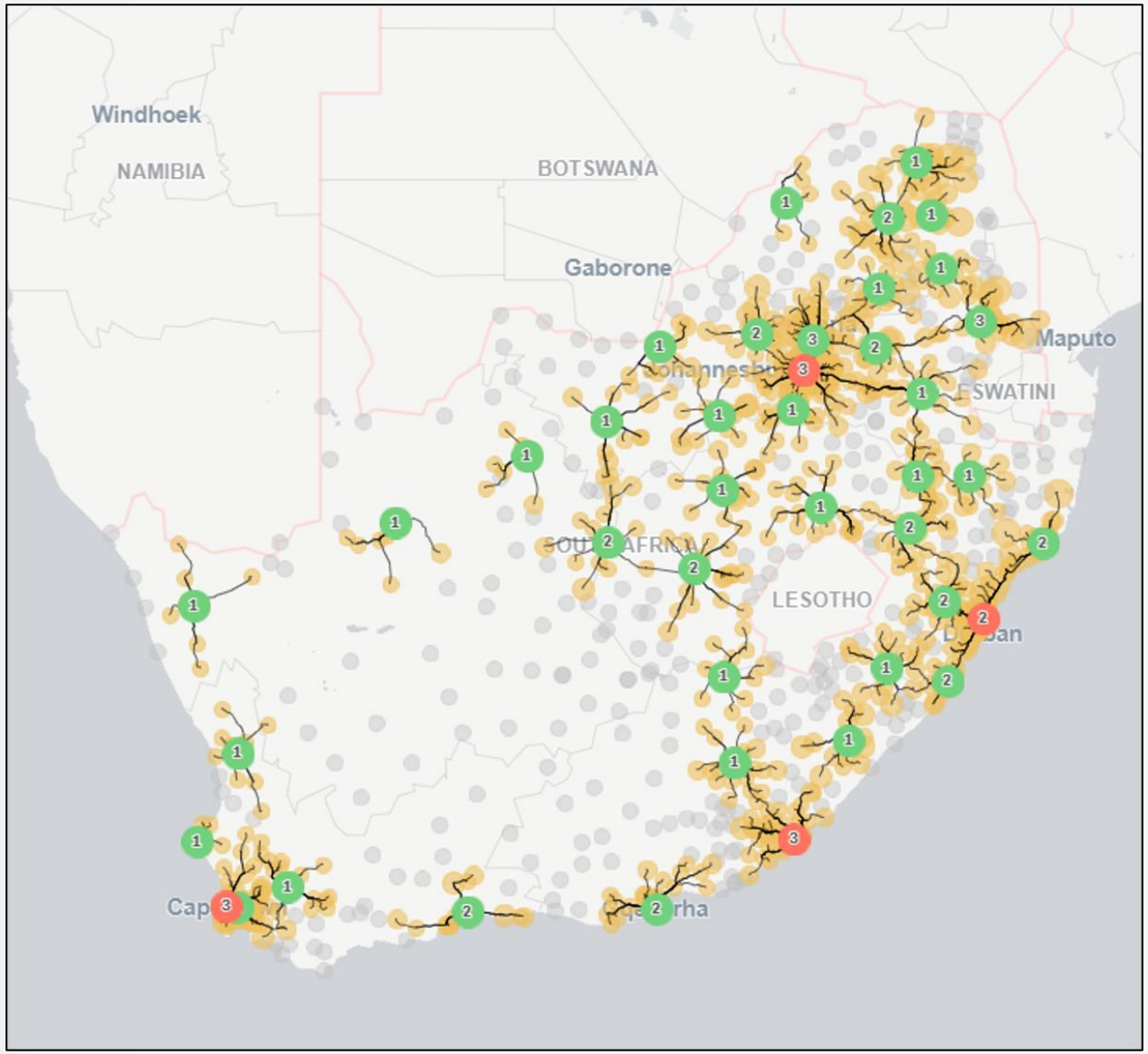
CASH SMART STRATEGY

The Cash Centre Network At A Glance

Optimised: National View

- The Optimised scenario focuses on **right-sizing** the network by removing redundant sites from the network and absorbing their demand into other sites.
- The model remains constrained by current vehicle bay configurations, but can **increase processing capacity** as required.

64 Sites	Optimal Processing Util
5 Destruction facilities	79% Peak Bay Util
257 Vehicle Bays	



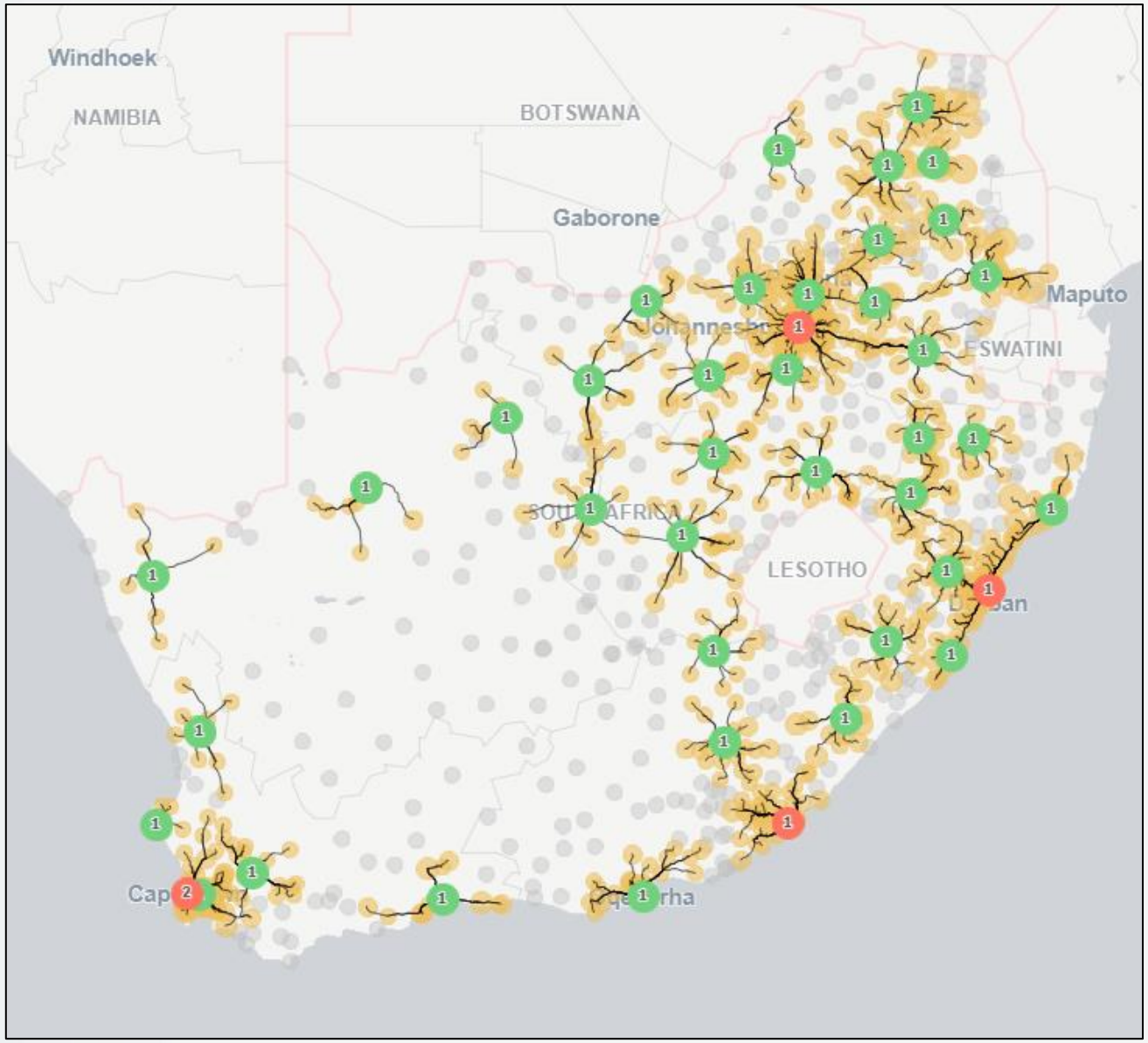
CASH SMART STRATEGY

The Cash Centre Network At A Glance

Minimal: National View

- The Minimal scenario focuses on **optimal configuration,** and models what infrastructure the minimum viable network would require.
- The model is allowed to freely scale capacity **upwards** as required.
- This is a longer term plan.

43 Sites	Optimal Processing Util
5 Destruction facilities	Optimal Peak Bay Util
202 Vehicle Bays	



CASH SMART STRATEGY

The Cash Centre Network At A Glance

SOUTH AFRICAN RESERVE BANK

1 INITIAL VIEW
Using proxies

2 ADDED INFRASTRUCTURE CONSTRAINTS
Stronger network realities

3 ADDED GRANULAR TRANSACTION DATA
Smarter demand insights

4 MINIMAL SCENARIO
Maximum constraint exploitation

5 OPTIMISED VIEW
Data-driven network

INITIAL NETWORK VIEW

52
CASH CENTRES

Created using provies for demand and machine capacity

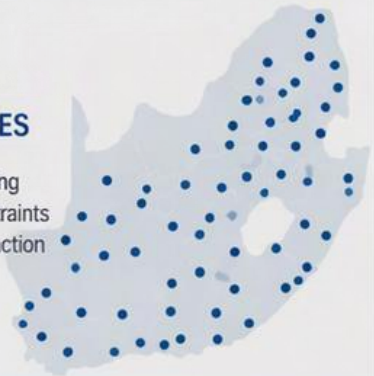


LIMITED VISIBILITY
High-level proxies provided a starting point for network assessment and opportunity identification.

DATA-ENHANCED VIEW

64
CASH CENTRES

Optimised view using infrastructure constraints and granular transaction demand data.



BETTER PLACEMENT. BETTER PERFORMANCE.
A right-sized, data-driven network that improves access, resilience and operational efficiency across South Africa.

MINIMAL SCERARIO

43
CASH CENTRES

Achieved through maximum exploitation of constraints and a reduced infrastructure footprint.



MINIMISE TO OPTIMISE
A leaner network configuration that reduces footprint while maintaining core service capability.

ADDED COIN OPERATIONS (NATIONAL)

Coin operations for sorting and sacheting added nationally

Sorting and sacheting based on available data

Reduced transport and handling

Improved efficiency and operational productivity

DATA-LIMITED TODAY. VALUE UNLOCKED TOMORROW.
While current data is limited, insights already show meaningful reductions in transport and handling. Greater data visibility will unlock even more value.

Note: Cash Aggregators are being engaged on their Cash Centres as well



OPPORTUNITIES

CASH SMART STRATEGY

Multi Service CIT Vehicle HUB

South African Reserve Bank



KEY INFRASTRUCTURE COMPONENTS

- Secure access & perimeter
- Vehicle staging area
- Dedicated CIT parking
- Shared support facilities
- Common infrastructure

POTENTIAL BENEFITS FOR CIT OPERATIONS

- Enhanced safety & security
- Lower operating costs
- Better asset utilisation
- Greater resilience
- Supports industry collaboration
- Scalable for future demand

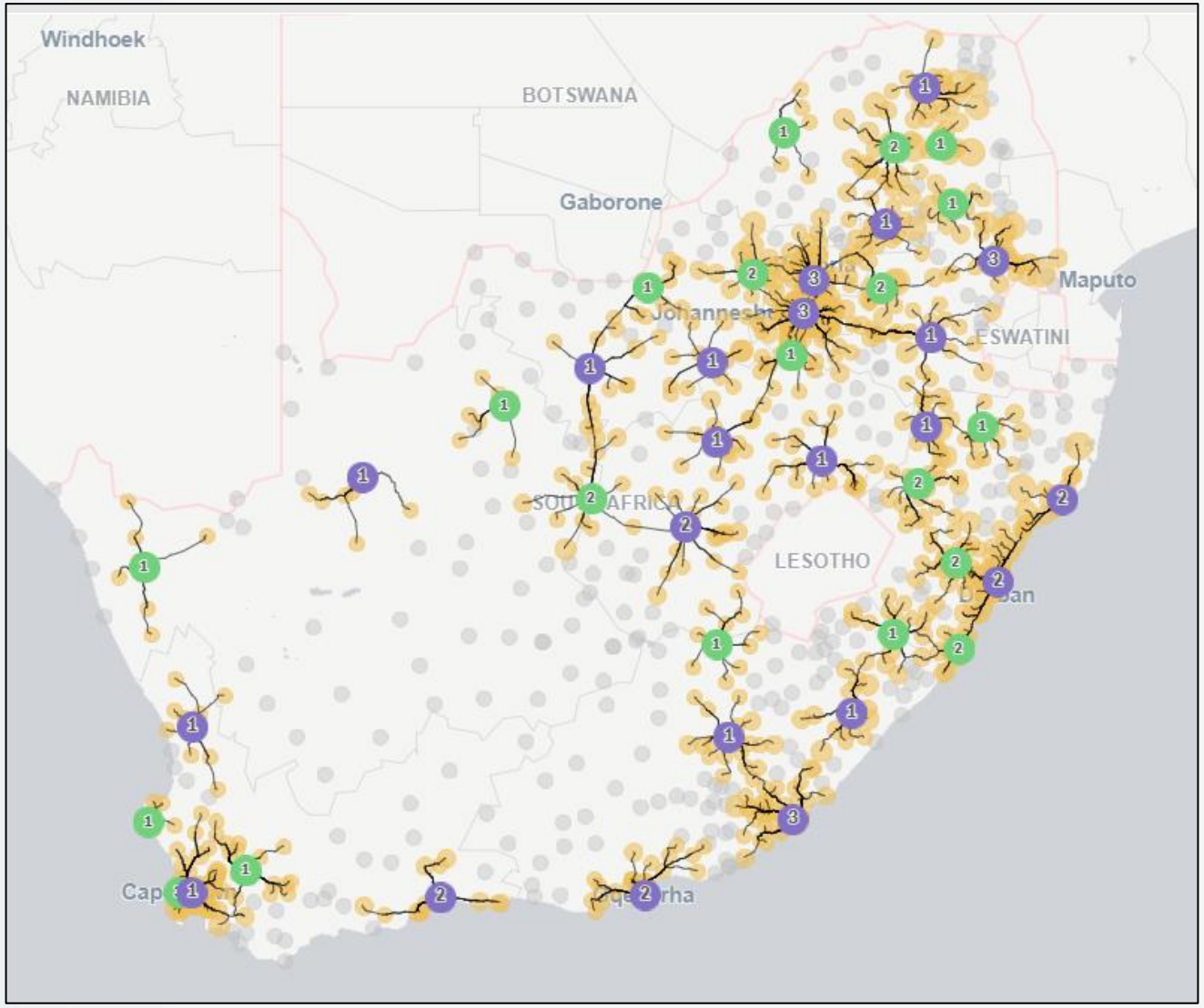
CASH SMART STRATEGY

The Cash Centre Network At A Glance

Coin Network

The Optimised scenario suggests a similar regional distribution of sacheting capability, but consolidates capability within clusters into a single site.

This reduces the number of sacheting locations to 22 from 40.



CASH SMART STRATEGY

The Way Forward



- Engaged with industry to improve the variables within the model
- Constraints have been included
- Understanding Model logic to better suit operational realities
- Reviewing last mile logistics impact and we are in the process of route optimization studies along with concept designs to improve logistics efficiency.
- Security remains a top consideration and is an ongoing matter for inclusion.
- Cash Aggregators are being engaged on the modelling

We will engage further with industry on concepts that support Cash Centre operations and logistics as we start with route optimisation as well as further security considerations.

CASH
SMART
PROGRAMME



South African Reserve Bank

ATM As Is Analysis - Cash Lekgotla 2

12 October 2026

CASH SMART PROGRAMME

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01.

ATM Data Limitations and Assumptions

How was the analysis developed and what data was used?

02.

Geo-spatial ‘As Is’ Analysis outcomes

What does the geo-spatial analysis tell us about the current ATM network?

03.

Recent Strategic Decisions

How has the White Label ATM model evolved following industry consultation?

CASH SMART PROGRAMME

About the data

SOURCE · METHODOLOGY · ASSUMPTIONS · LIMITATIONS

This analysis is based on ATM and branch data contributed by Banks and Independent ATM Deployers (IADs) to the Currency Management Department (CMD), which was then provided to PayInc and its consultant for analysis.

DATA CONTRIBUTION FLOW

Banks and IADs
Contributed ATM and branch data

→

Currency Management Department (CMD)
Consolidated data

→

PayInc
Received data for analysis (and its consultant)

ATM DATA COVERAGE

NATIONAL SCOPE



~27,600
ATMs with data obtained from Banks and IADs

out of

~31,000
total ATMs deployed in South Africa

~3,000
(the balance, ~11%) relate to ATMs for which CMD had geo-spatial information from prior research.

Location information for this additional 11% was provided at a Municipal level (by count) by CMD. Approximate estimated locations are available for some aspects of the analysis and their transactional and other attribute data can be inputted.

BRANCH DATA

2,170
branches with data

Branch data includes:

- Location
- Transactions
- Costs
- Asset attributes



GEOGRAPHIC LEVELS OF ANALYSIS

Analysis is based on a geo-spatial framework, aggregated to administrative geographies.

Police districts
>1,100
police districts in South Africa

Lowest level of analysis for the purpose of this presentation.

Local municipalities
> 200
local municipalities in South Africa

Some analysis is elevated to a municipal level.

KEY ASSUMPTIONS

Core assumptions applied in the analysis.

Analysis based on sample
The analysis is ostensibly based on the ~27,600 ATMs (>89%) with data obtained from Banks and IADs.

Geo-spatial analysis
Beyond individual ATM longitude and latitude, geo-spatial analysis is performed at a police district level.

Use of COGTA categories
COGTA's five-tier urbanisation categories are used to classify areas (Strictly Urban, Predominantly Urban, Semi-Urban Blend, Predominantly Rural, Strictly Rural). These help contextualise access and usage patterns across different area types.

DATA LIMITATIONS

Important considerations and constraints.

- **Approximate locations:** The additional ~11% of ATMs are available at a Municipal level by count, and only approximate estimated locations are available for some aspects of the analysis.
- **Imputed data:** For many statistics, this imputed data is excluded.
- **Granularity:** The lowest level of analysis is the police district. More granular (individual ATM) geo-spatial analysis is not used beyond longitude and latitude.
- **Coverage:** Analysis is based on ~89% of ATMs with full data. Results may not fully represent the entire ATM population.
- **Data dependent on contributor quality:** The analysis relies on data provided by Banks and IADs to CMD. Inconsistencies or gaps in source data may affect certain metrics.

COGTA URBANISATION CATEGORIES

Five-tier spatial gradient used in the analysis.

1. Strictly Urban
2. Predominantly Urban
3. Semi-Urban Blend (Peri-Urban)
4. Predominantly Rural
5. Strictly Rural (Deep Rural)



These categories, as defined by COGTA, provide a nuanced view of South Africa's urban–rural landscape and help contextualise access, usage and infrastructure needs.

CASH SMART PROGRAMME

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ATM Network Accessibility and Coverage

ATM coverage is broad nationally, with 95.4% of adults living in a police district with an ATM, but access remains uneven. **Rural areas have materially fewer ATMs, provincial coverage varies; 126 of 213 municipalities are below the national average. Future ATM placement should focus on closing identified access gaps rather than simply increasing the overall number of ATMs.**

CASH SMART PROGRAMME

Network footprint: ATMs Footprint analysis

South African Reserve Bank

Items 2.1 ATM Distribution and 2.2 Density · ATMs by police district province · branches from the branch master

33.07k
access points: 30.9k ATMs + 2.17k branches

2.53
ATMs per 100 km² nationally

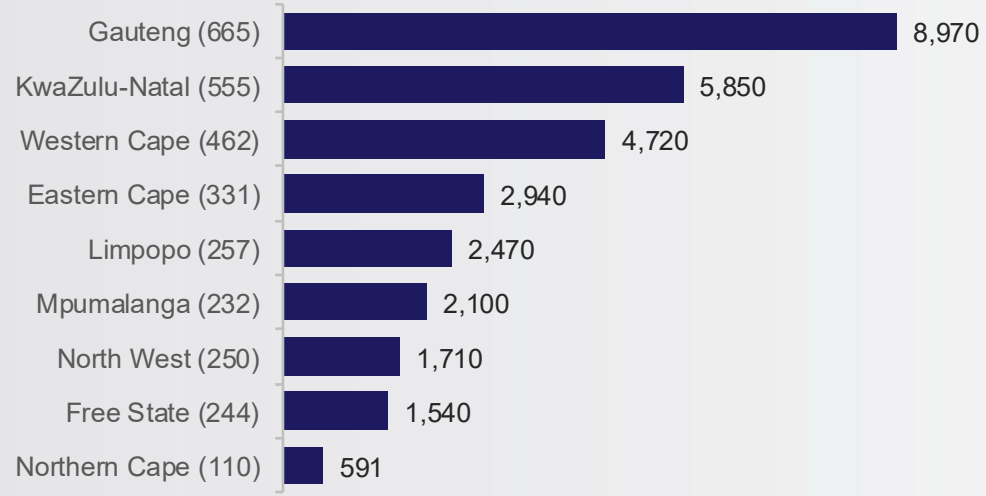
26.5
average ATMs per police district

67.65
ATMs per 100k adults (national)

Figures are impacted significantly by large areas with low ATM density

ATMs by province

ATM count · **bank branches in brackets**



ATM distribution amongst provinces

There are 2.53 ATMs per 100 km² nationally, and 2.71 access points once branches are added. Northern Cape, a third of the country's land, has 591 ATMs and 110 bank branches.

ATM concentration

Gauteng, KwaZulu-Natal and Western Cape hold 19,540 ATMs, 63% of the ATMs, for 58% of adults. Gauteng alone has 8,970, more than KwaZulu-Natal and Eastern Cape combined.

Bank branch impact on reach

The 2,170 branches lift access points per 100k adults from 67.65 to 72.4. Gauteng, KwaZulu-Natal and Western Cape also lead on branches (1,682 of 2,170), so branches mostly deepen access where ATMs already are.

Population coverage: Four out of nine provinces are above the national ATM density average

Items 2.3 Density by Population, 2.4 Population Coverage and 2.5 Population per ATM · national rate 67.65 ATMs per 100k adults

67.65
ATMs per 100k adults (national)
(ATM/100k Adults)

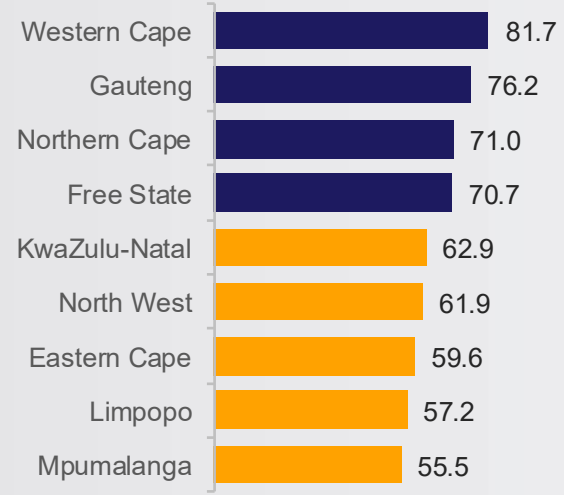
1,478
adults per ATM nationally
(Adult/ATM)

95.4%
of adults live in a district with an ATM

2.09M
adults in the 198 police districts with no ATM

ATMs per 100k adults by province

Orange = below the national 67.65 · navy = at or above

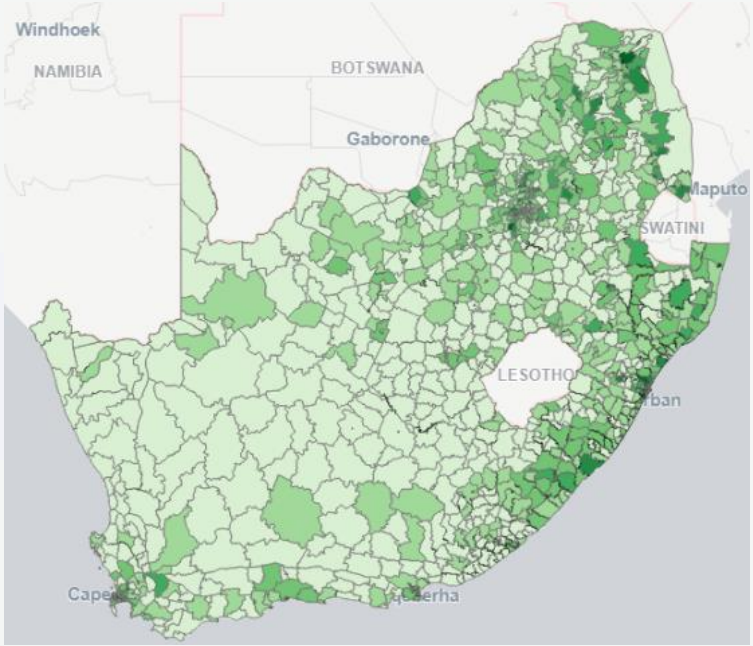


Provincial spread

Western Cape (81.7) and Gauteng (76.2) sit well above the national rate. Mpumalanga (55.5) and Limpopo (57.2) are 15–18% below it, and five provinces fall short of the national level.

ATM reach concentration

Nationally there are 1,478 adults per ATM. In Western Cape it is 1,224; in Mpumalanga it is 1,803 and in Limpopo 1,749, so each ATM there serves about 45% more adults than in Western Cape.



Districts without an ATM

The 2.09M adults with no ATM in their district are spread over 16.5% of the land. Eastern Cape and KwaZulu-Natal hold about half of them; Eastern Cape alone has 60 such districts.

Source: ATM data collected by the SARB, analysed by PayInc.

CASH SMART PROGRAMME

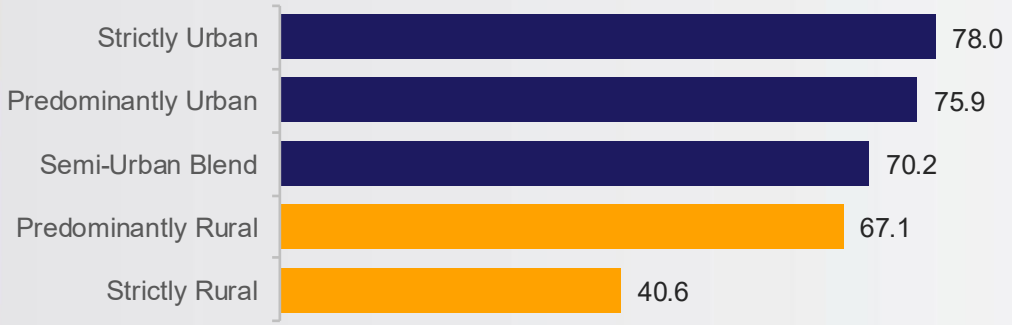
Urban vs Rural Access: Rural areas are comparatively underserved with ATMs

SOUTH AFRICAN RESERVE BANK

Items 2.7 Urban/Rural Access and 2.9 Branch vs ATM Coverage · settlement type from the municipality categorisation

ATMs per 100k adults by settlement type

National average 67.65 · orange = below national



Share of adults vs share of ATMs

Settlement types in order of access

Settlement type	Adults	ATMs	ATM count
Strictly Urban	42.3%	48.8%	15,065
Predominantly Urban	14.0%	15.8%	4,868
Semi-Urban Blend	8.0%	8.3%	2,572
Predominantly Rural	14.7%	14.6%	4,504
Strictly Rural	21.0%	12.6%	3,890

Strictly rural adults access

Strictly rural areas hold 21% of adults but 12.6% of ATMs: 40.6 ATMs per 100k adults against 78.0 in strictly urban areas. The other four settlement types range from 67 to 78, close to or above national.

Strictly Rural gaps in provinces

Strictly rural areas of Northern Cape (21.0), North West (24.8) and Mpumalanga (30.8) have the lowest provincial rates. In contrast, **predominantly rural areas** of Western Cape (88.1) and Limpopo (82.4) sits above national.

Branch reach vs ATM reach pattern

There are 4.75 branches per 100k adults, and 32% of adults (14.61M) have no branch in their district. Mpumalanga has the lowest ATM rate but the highest branch access (79.6% of adults); Northern Cape is lowest at 44.0%.

Avg ATM/100k adult by settlement type

Province	Predominantly Rural	Predominantly Urban	Semi-Urban Blend	Strictly Rural
Eastern Cape	60.76	–	–	44.42
Free State	59.29	75.27	77.31	–
Gauteng	66.82	65.11	63.53	–
KwaZulu-Natal	56.89	68.77	74	37.32
Limpopo	82.38	75.36	40.63	49.76
Mpumalanga	64.51	82.97	71.68	30.77
North West	58.55	80.41	61.18	24.79
Northern Cape	73.63	83.43	–	21.01
Western Cape	88.11	86.39	86.79	–

Source: ATM data collected by the SARB, analysed by PayInc.

CASH SMART PROGRAMME

Uneven ATM access: where the gaps are concentrated

SOUTH AFRICAN RESERVE BANK

Municipality and provincial view · ATM Service Index = municipality ATMs per 100k adults ÷ national rate (1.00 = national)

126
of 213 municipalities = below the national avg.

20.37M
adults (44.6%) live in these municipalities

10.12k
ATMs serve them today

~3,650
more ATMs would bring them to the national rate

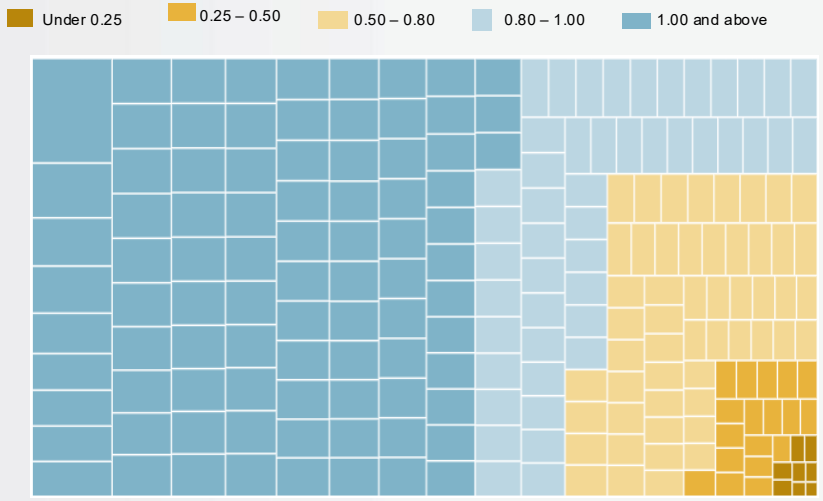
62.24
Average ATM per 100k adults per municipality (National average **67.65**)

Largest municipal shortfalls

ATMs needed to reach the national rate

Municipality	Province	Shortfall
Bushbuckridge	MP	202
Makhuduthamaga	LIM	133
Collins Chabane	LIM	128
Nkomazi	MP	128
Thembisile Hani	MP	114
Dr JS Moroka	MP	111
Ingquza Hill	EC	105
Nyandeni	EC	103

Municipal service index
1 = national rate, 67.65 ATMs per 100k Adults



Gaps analysis

All eight largest shortfalls are in Mpumalanga, Limpopo and Eastern Cape. Together these three provinces are about 1,330 ATMs below their share of adults, while Gauteng and Western Cape hold about 1,810 more than theirs.

How to read “ATMs needed”

Reaching the national average is a reference point, not a target. It does not yet reflect ATM demand or travel distance

Notes: adults aged 15+ (45.68M). Figures reflect the correction of 14 police districts to their municipalities on 14 Oct 2026, and include the 3,917 additional ATMs. Kareeberg (NC) is the only municipality with no ATM; Gamagara (NC) has the highest index.



ATM utilisation and demand

ATM demand is uneven across locations, with some areas showing high utilisation despite relatively low ATM availability. Branch ATMs also remain important for deposits. **This points to the need to align ATM capacity and functionality more closely with local patterns of demand.**

CASH SMART PROGRAMME

Withdrawals: Activity is strongest in Gauteng, urban areas and branches

South African Reserve Bank

Items 3.1 Withdrawal Volume and 3.2 Cash Withdrawal Value · Qlik sheet: Cash Activity Withdrawals · all 30,899 ATMs · adults aged 15+

1.13bn
Total # of withdrawals

R998.8bn
total withdrawal value

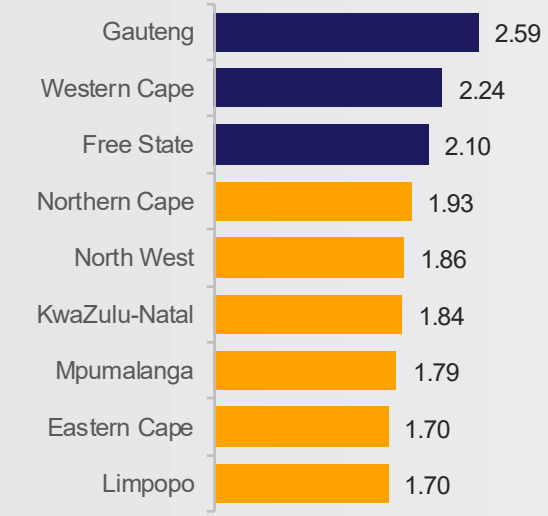
2.06
Monthly withdrawals per adult (national)

R21,866.87
Annual withdrawal value per adult

R882.71
Average withdrawal value, per transaction

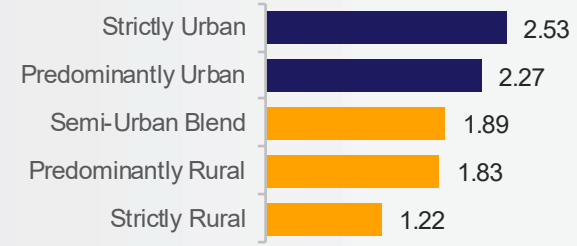
Monthly withdrawals per adult, by province

Orange = below the national 2.06 · navy = at or above



Monthly withdrawals per adult, by settlement

Orange = below the national 2.06

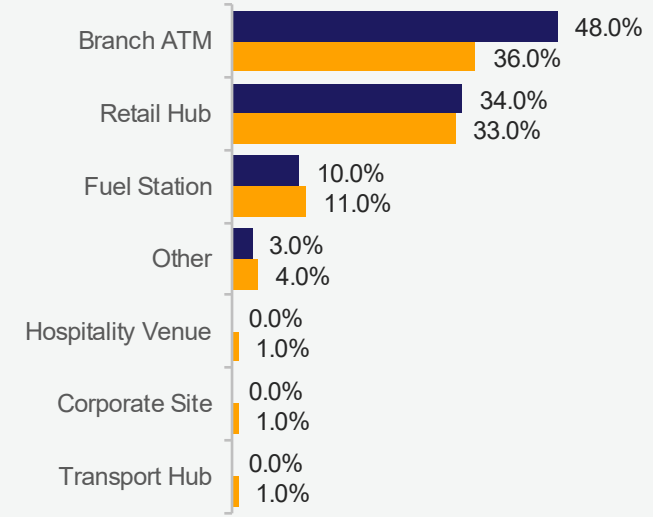


Gauteng highest, Eastern Cape and Limpopo lowest

Gauteng adults make 2.59 withdrawals a month against 1.70 in Eastern Cape and Limpopo. Strictly rural adults make 1.22 against 2.53 in strictly urban areas.

Withdrawal value vs share of ATMs, by site type

Navy = share of withdrawal value · orange = share of ATMs



Notes: per-adult counts are monthly; withdrawal value per adult is yearly. Site-type shares are of all 30,899 ATMs; the 3,917 additional ATMs (13%) have no site type. Per-adult figures count transactions where the ATM is, so adults who travel to another area to transact are counted there.

CASH SMART PROGRAMME

Deposits: Branch ATMs dominate deposits, accounting for 85% of the value of deposits

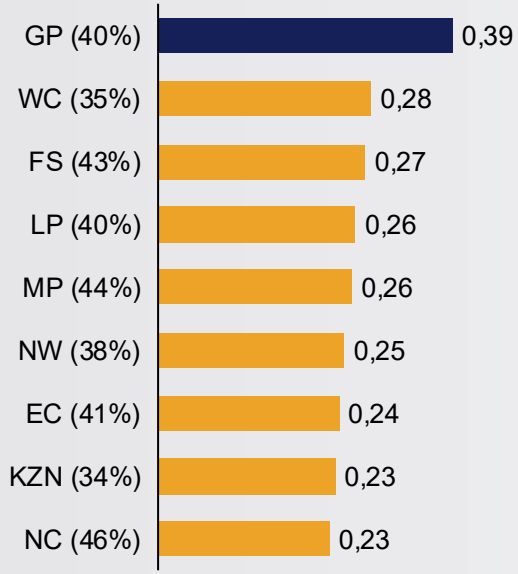
SOUTH AFRICAN RESERVE BANK

Item 3.3 Deposit Activity · Qlik sheet: Cash Activity Deposits · all 30,899 ATMs · adults aged 15+

208.9M	R305.3bn	0.38	R6,684.70	R1,461.42
total deposit transactions	total deposit value	monthly deposits per adult (national)	Annual deposit value per adult	average deposit value

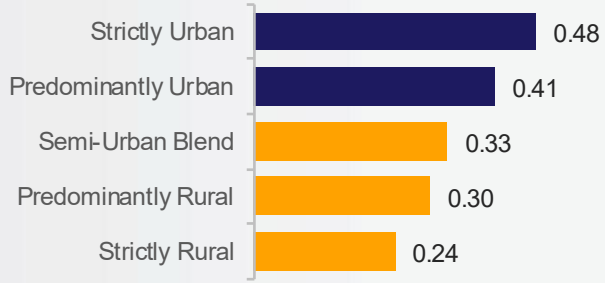
Number of monthly deposits per adult, by province

Orange = below the national 0.38 · (% of the province's ATMs taking deposits)



Deposits per adult, by settlement category

Monthly · orange = below the national 0.38

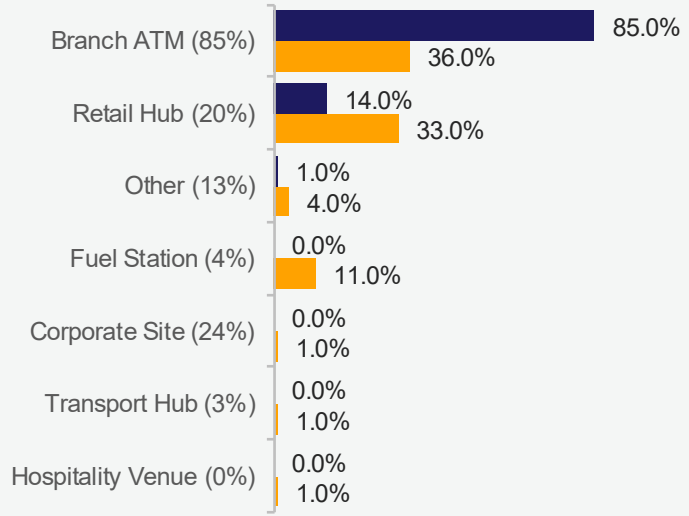


On average an adult deposits 1.14 times every 3 months

Gauteng is highest at 1.55 a quarter. KwaZulu-Natal has the lowest share of ATMs taking deposits (34%) and among the lowest deposits per adult (0.93).

Deposit value vs share of ATMs, by site type

Navy = share of deposit value · orange = share of ATMs · (% of that site type's ATMs taking deposits)



Notes: province chart per quarter, settlement chart per month, as on the sheet. ATMs taking deposits = ATMs that recorded deposits: 39% of all 30,899 ATMs by province, 44% of ATMs with a site type. Per-adult figures count transactions where the ATM is, so adults who travel to another area to transact are counted there.

CASH SMART PROGRAMME

Transaction Activity: declines with lower levels of urbanisation, with marked differences across provinces

SOUTH AFRICAN RESERVE BANK

Item 3.4 Transaction Overview · Qlik sheets: Cash Activity and ATM Utilisation · transactions = withdrawals + deposits

1.34bn
total transactions (Withdrawals + Deposits)

120.0
median daily transactions per existing ATM

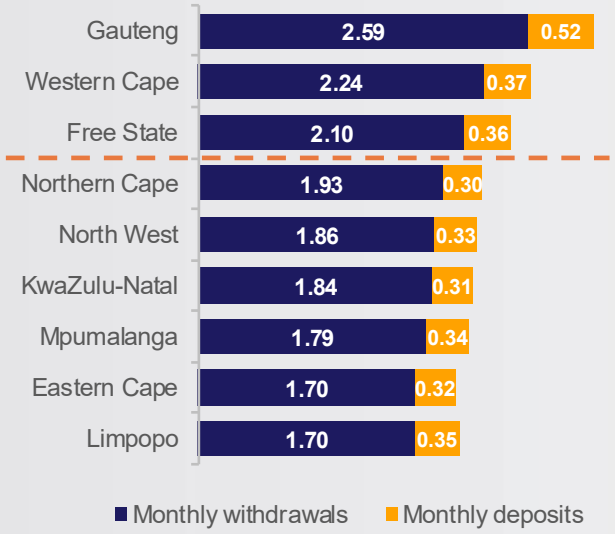
2.45
Average Monthly Transactions per Adult (national)

R1.30tn
total transaction value

R972.91
average transaction value

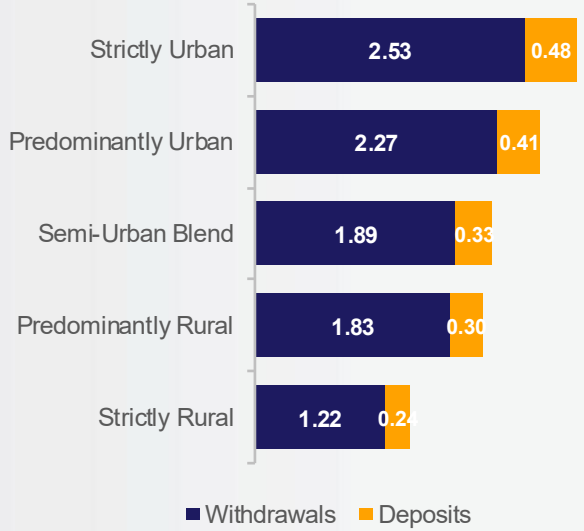
Monthly Transactions per Adult, by Province

Average per adult per month · withdrawals + deposits · national 2.45



Transactions per adult, by settlement category

Withdrawals + deposits



Cash Activity Index by province

1.00 = national · orange = below national

Province	Per adult	Activity Index	Value Index
National	2.45	1.0	1.0
Gauteng	3.11	1.27	1.22
Western Cape	2.62	1.07	1.05
Free State	2.46	1.01	0.97
Northern Cape	2.23	0.91	0.92
North West	2.19	0.90	0.95
KwaZulu-Natal	2.15	0.88	0.91
Mpumalanga	2.13	0.87	0.90
Limpopo	2.05	0.84	0.90
Eastern Cape	2.02	0.83	0.82

Notes: per-adult figures are monthly. Cash Activity Index = province transactions per adult ÷ national; Cash Value Index = province transaction value per adult ÷ national. Median daily transactions per existing ATM (withdrawals + deposits) = 120.0.

CASH SMART PROGRAMME

Financial vs non-financial activity: cash remains the main ATM activity, while non-financial VAS use varies with urbanisation

SOUTH AFRICAN RESERVE BANK

Item 3.5 Financial vs Non-Financial Usage · Qlik sheet: Financial vs Non-Financial Activity · 23,266 ATMs that report value-added services (VAS)

75.3%
ATMs reporting VAS (23,266 of 30,899)

80.3%
cash transactions (withdrawals + deposits)

67.8%
withdrawals

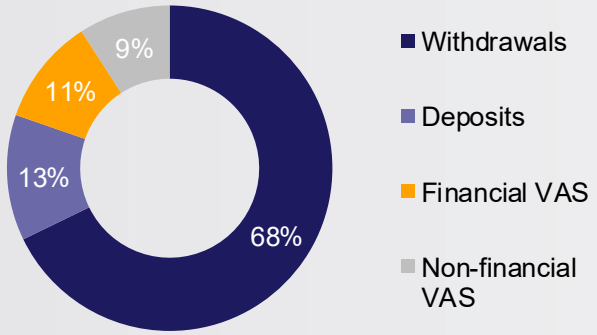
12.5%
deposits

10.6%
financial VAS (payments)

9.1%
non-financial VAS (enquiries)

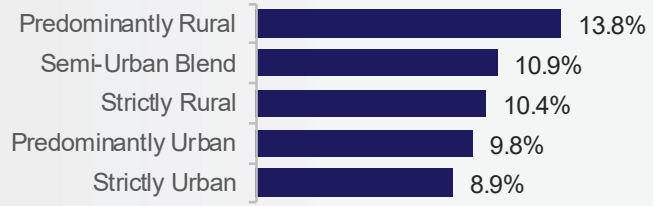
Transaction mix

Share of all transactions at ATMs reporting VAS



Non-financial share, by settlement type

Share of each settlement type's transactions



Four in five transactions are cash transactions

80.3% of transactions at VAS-reporting ATMs are withdrawals (67.8%) or deposits (12.5%). Financial VAS is 10.6% and non-financial VAS 9.1%.

Rural areas use ATMs more for enquiries

Non-financial use is highest in predominantly rural areas (13.8%) and lowest in strictly urban areas (8.9%).

Notes: financial VAS = payments at the ATM (e.g. electricity, vouchers); non-financial VAS = no money moves (e.g. mini statements). VAS fields hold yearly figures. 3,716 bank ATMs and the 3,917 additional ATMs report no VAS; blanks may mean no VAS capability (to be confirmed byPayInc). Cardless withdrawals are not separated in the data.

CASH SMART PROGRAMME



High-demand clusters: ATM supply vs demand

South African Reserve Bank

Item 3.6 High Demand Clusters · Qlik sheets: Cash Activity Insight and ATM Utilisation · municipality view · 1.00 = national

68
municipalities: few ATMs, high transactions

24
municipalities: many ATMs, high transactions

57
municipalities: few ATMs, low transactions

63
municipalities: many ATMs, low transactions

Municipalities with the highest Demand Index

Median transactions per ATM vs the national median · above 1.00 = busier than the typical ATM

Municipality	ATMs per 100k	Demand Index	Supply Index
National	**67.65**	**1.00**	**1.00**
Maphumulo	22.03	**1.74**	0.33
Makhuduthamaga	27.07	**1.54**	0.40
Karoo Hoogland	68.91	**1.51**	1.02
Nquthu	30.40	**1.45**	0.45
Kgetlengrivier	40.65	**1.39**	0.60
Richmond	40.65	**1.38**	0.60

Municipalities with the lowest Demand Index

Below 1.00 = quieter than the typical ATM

Municipality	ATMs per 100k	Demand Index	Supply Index
National	**67.65**	**1.00**	**1.00**
Kamiesberg	51.07	**0.06**	0.75
Khâi-Ma	71.26	**0.07**	1.05
Magareng	55.83	**0.12**	0.83
Impendle	56.95	**0.21**	0.84
Kou-Kamma	128.36	**0.23**	1.90
uMfolozi	6.78	**0.23**	0.10

How to read the indices

Supply Index = ATMs per 100k adults ÷ national 67.65 · Demand Index = daily transactions per ATM ÷ national median (about 120 a day) · 1.00 = the national reference, not good or bad.

Maphumulo: few ATMs, busy ATMs

Maphumulo has 22.03 ATMs per 100k adults, a third of the national 67.65 (Supply 0.33), while its typical ATM handles 208.7 transactions a day, 1.74 times the national median (Demand 1.74).

Notes: Demand uses existing ATMs with transactions (withdrawals + deposits) and compares medians. Quadrants: all 212 municipalities with ATMs; few ATMs = below 67.65 per 100k adults; high transactions = above the national median of 120.0 a day.

CASH SMART PROGRAMME

ATM utilisation: ATMs by daily transactions

South African Reserve Bank

Item 3.7 Low Utilisation ATMs · Qlik sheet: ATM Utilisation · daily transactions = (withdrawals + deposits) ÷ 365 per ATM

1.34bn
total transactions

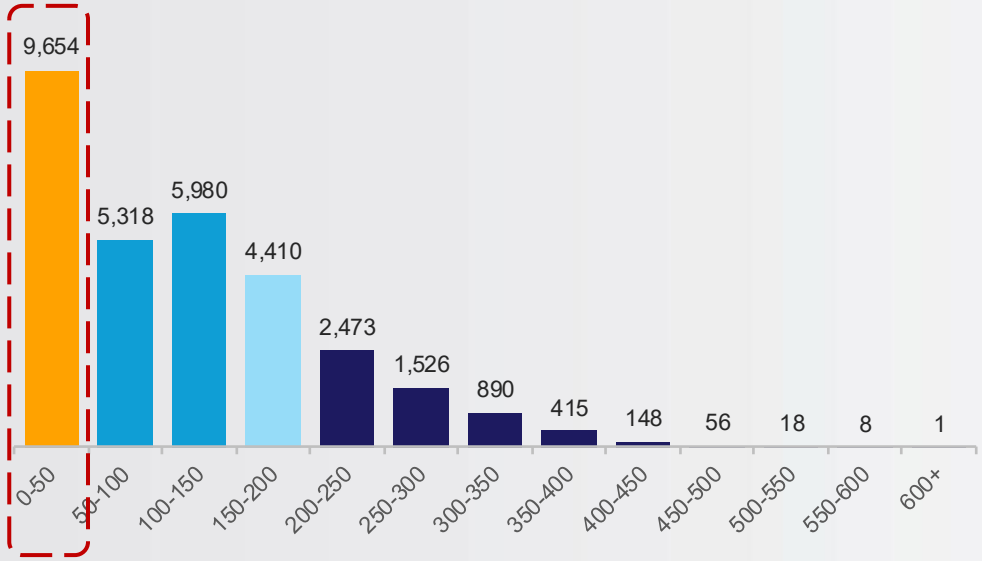
120.0
median daily transactions per existing ATM

3.94k
very low use ATMs (under 30 transactions a day)

543
very high use ATMs (over 360 transactions a day)

ATMs by number of daily transactions

Buckets of 50 transactions a day · orange = 0–200, where about 82% of ATMs sit



Transaction bucket bands

As used on the ATM Utilisation map

Band	Daily transactions per ATM
Very Low	0 – 50
Low	50 – 100
Normal	100 – 200
High	200 – 300
Very High	300+

0–50 is the largest bucket

9,654 ATMs handle 0–50 transactions a day, including the 3,917 additional ATMs at PayInc's standard 31.8 a day. At the top end, only 1 ATM handles 600+ a day.

Notes: the chart counts all 30,899 ATMs; the 3,917 additional ATMs carry PayInc's standard values (11,590 withdrawals a year, 31.8 a day). Medians and use bands are existing ATMs only: very low = under 25% of the 120.0 median (30 a day); very high = over 3× (360 a day). 2 ATMs have no transaction data.



ATM age profile

ATM age is broadly consistent across provinces and site types, , but distinct age cohorts have resulted in a significant replacement requirement

CASH SMART PROGRAMME

ATM age profile: ATM age is not evenly or normally distributed, with younger and older cohorts

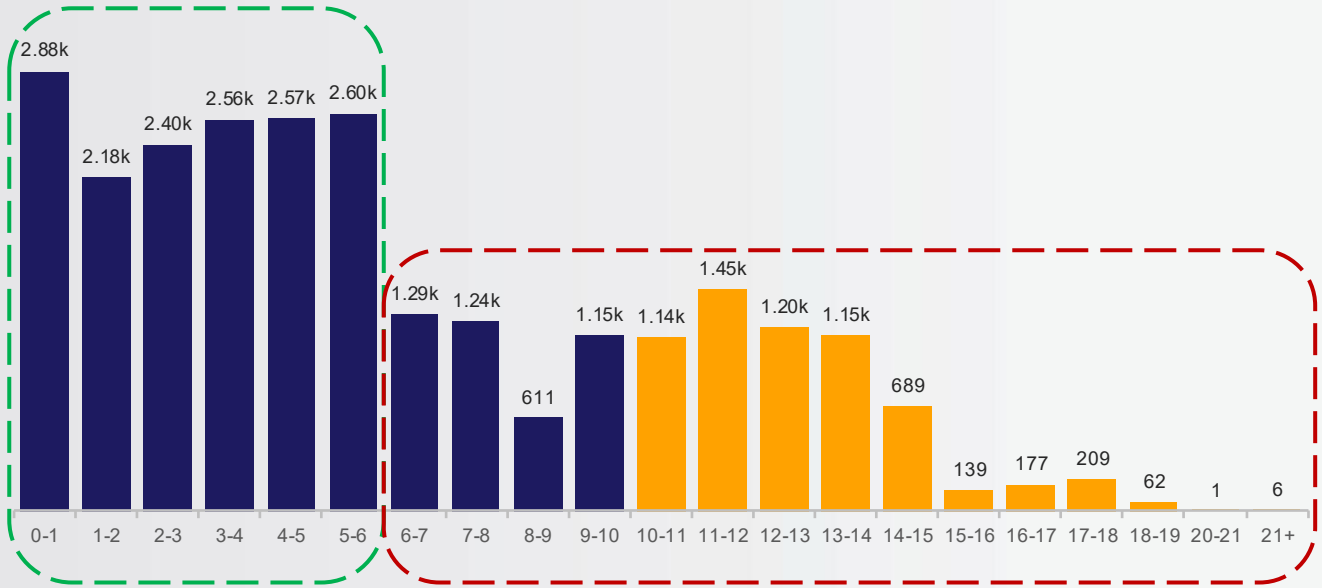
South African Reserve Bank

Item 5.1 ATM Age Profile · Qlik sheet: ATM Age & Replacement Timing · existing ATMs with a known age

25.7k	6.09	9.82	8.01k	46%
ATMs with a known age	average age of ATMs (years)	average age of written-off ATMs (years)	ATMs fully written off (R0/R1)	of ATMs with a book value are written off

ATM count per age bucket

Years since installation · orange = 10 years and older, past the 9.82-year end-of-life age



The newest buckets are the largest

2.88k ATMs are under 1 year old and each bucket from 1 to 6 years holds 2.18k–2.6k. Counts drop to 1.29k at 6–7 years.

A second group is 10–15 years old

The 10–11 to 14–15 year buckets hold 689 to 1.45k ATMs each, peaking at 1.45k at 11–12 years.

Written-off ATMs are 9.82 years old on average

8,005 ATMs are fully written off (book value R0 or R1), 46% of the 17,252 ATMs with a book value. Replacing them would cost R3.11bn.

Notes: Written off = book value R0 or R1 (R1 is the accounting placeholder for fully depreciated assets). End-of-life age = 9.82 years, the average age of written-off ATMs. Book value is available for 17,252 existing ATMs (64%): 77% of bank ATMs, 9% of IAD ATMs, none for Triton or Hitachi, so replacement figures mainly reflect the bank fleet.

CASH SMART PROGRAMME

ATM age by province and site type: Relatively uniform, with limited variation across provinces and deployment types

South African Reserve Bank

Item 5.1 ATM Age Profile · Qlik sheet: ATM Age & Replacement Timing · average age in years

6.09
national average age (years)

6.68
Free State, the oldest province

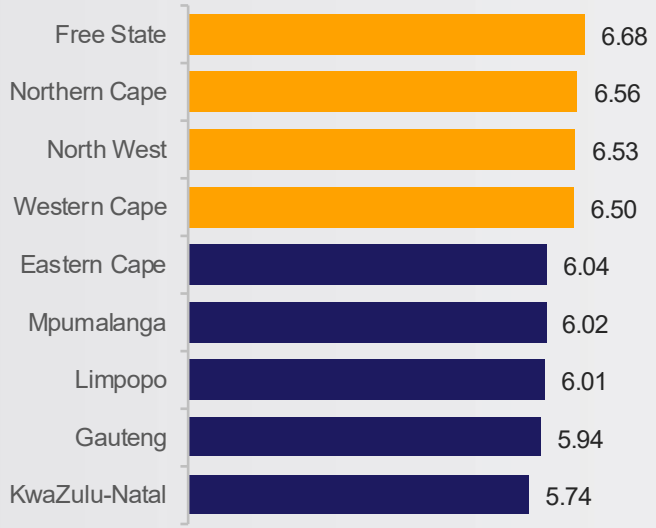
5.74
KwaZulu-Natal, the youngest province

6,425
ATMs older than the end-of-life age

25%
Share of ATMs older than 9.82

Average ATM age per province

Years · orange = older than the national 6.09



ATMs past end-of-life age per deployment type

Older than 9.82 years · sorted by share

Deployment type	Known age	Past 9.82 yrs	Share
Totals	**25,647**	**6,425**	**25%**
Hospitality Venue	420	131	31%
Retail Hub	10,195	2,866	28%
Fuel Station	3,306	787	24%
Branch ATM	10,294	2,348	23%
Corporate Site	156	33	21%
Other	1,175	247	21%
Transport Hub	101	13	13%

Free State has the oldest ATMs

Free State (6.68), Northern Cape (6.56), North West (6.53) and Western Cape (6.5) are older than the national 6.09. KwaZulu-Natal is the youngest at 5.74.

Hospitality and retail sites have the largest share of older ATMs

31% of hospitality venue ATMs and 28% of retail hub ATMs are past the end-of-life age, against 23% of branch ATMs and 13% at transport hubs.

Notes: End-of-life age = 9.82 years, the average age of written-off ATMs. This table uses age; the written-off count (8,005) uses book value R0 or R1.

CASH SMART PROGRAMME

Replacement pipeline: A significant share of the ATM Estate is already due for replacement

South African Reserve Bank

Item 5.2 Replacement Pipeline · Qlik sheet: ATM Age & Replacement Timing · written off (R0/R1), then time until the 9.82-year end-of-life age

8.01k
already due (written off R0/R1)

6.22k
past end-of-life age (9.8 Years)

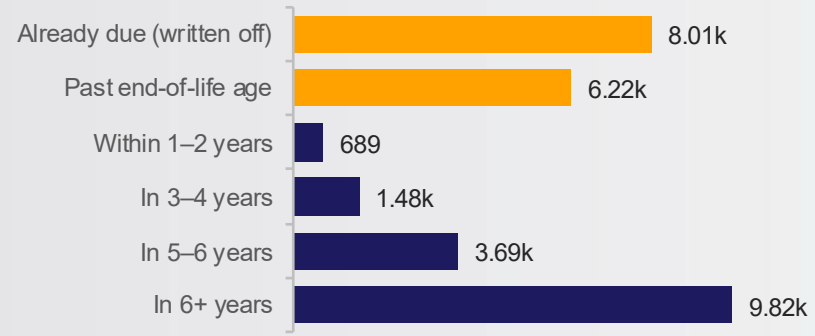
689
due within 1–2 years

1.48k
due in 3–4 years

3.69k
due in 5–6 years

Replacement pipeline

ATMs by status · orange = due now (written off or past end-of-life age)

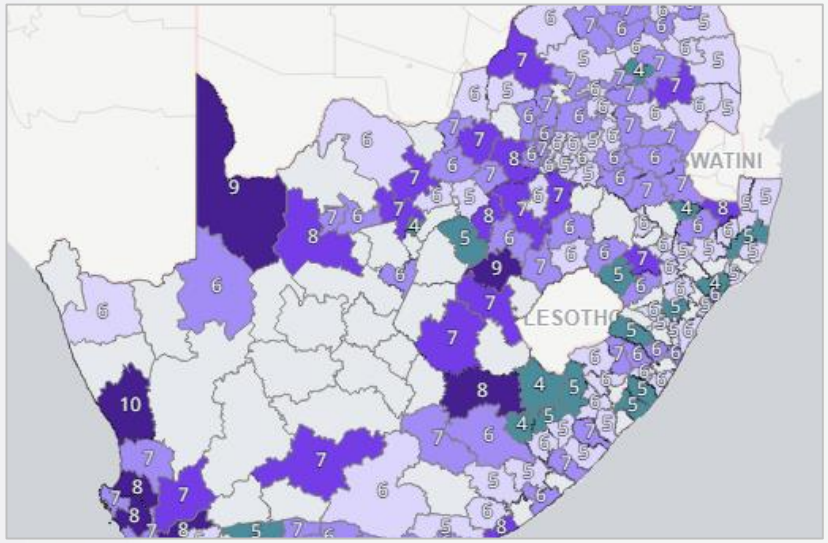


10.02k ATMs are due now

8.01k are written off (R0/R1) and 6.22k are older than 9.82 years; 4.21k are both. Another 689 reach that age within 1–2 years.

Average age of ATMs per municipality

Years, as labelled on the Qlik map · darker purple = older, teal = younger



Reading the map

Each number is the municipality's average ATM age in years. The oldest labels shown are 9 and 10 years.

Notes: Written off = book value R0 or R1 (R1 is the accounting placeholder for fully depreciated assets). End-of-life age = 9.82 years, the average age of written-off ATMs. Written off and past end-of-life age overlap (4.21k ATMs are both); the 1–2, 3–4, 5–6 and 6+ year groups exclude written-off ATMs.

CASH SMART PROGRAMME

Contents



01.

ATM Data Limitations and Assumptions

How was the analysis developed and what data was used?

02.

Geo-spatial ‘As Is’ Analysis outcomes

What does the geo-spatial analysis tell us about the current ATM network?

03.

Recent Strategic Decisions

How has the White Label ATM model evolved following industry consultation?

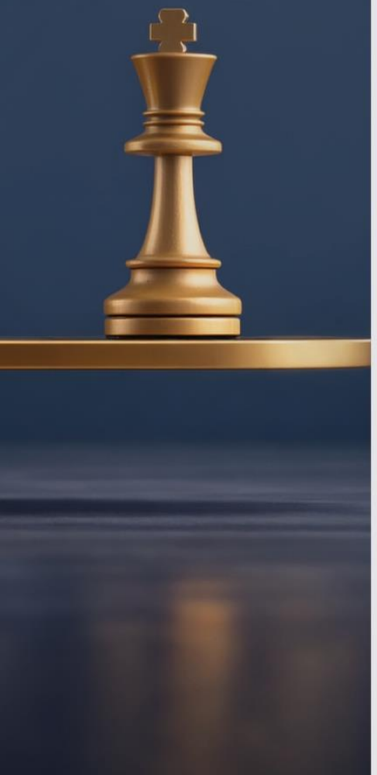


Decisions on the WL ATM Model

After wide consultation, the White Label ATM strategy has been updated to balance flexibility for financial institutions (FIs) with safeguards that preserve the NCU model.

- FIs may retain branch-attached ATMs, subject to common operating rules, capability transfer and transition support.
- NCU ATMs will focus on core cash services, with discretionary VAS excluded with ongoing review.

CASH SMART PROGRAMME



The WLA strategy has been updated to allow flexibility with safeguards that protect the NCU model

SOUTH AFRICAN RESERVE BANK

Two strategic decisions relating to the White Label ATM Strategy

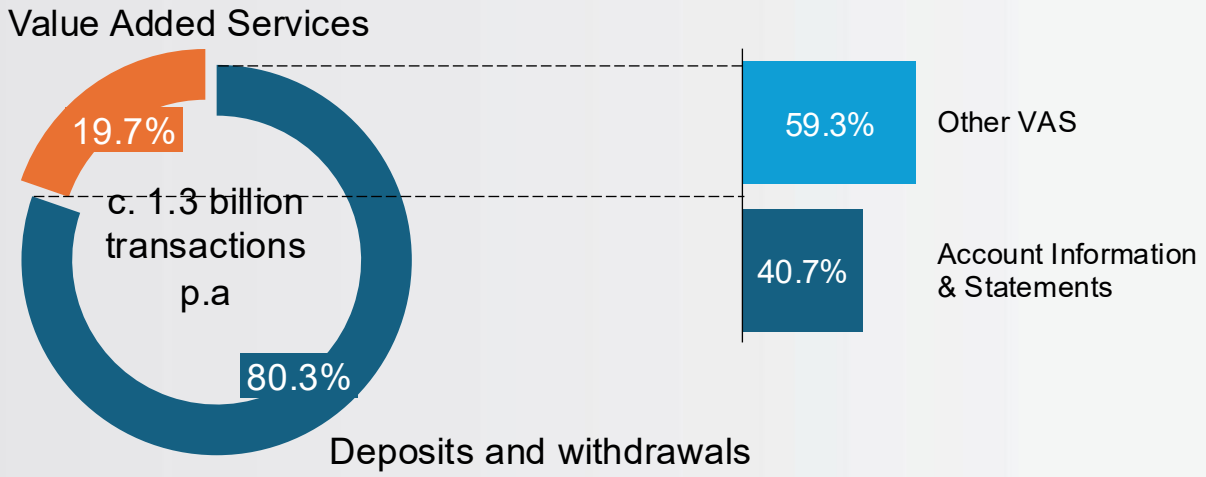
Decision sought	Rationale	Trade-off/Risk	Condition for approval
Enable banks to retain branch-attached ATMs	• Avoid costly brand-separation alterations where required • Preserve critical branch infrastructure • Retain low-cost branch servicing • Recycle suitable branch deposits	• Critical skills stay with banks • Duplication persists • The NCU may inherit a comparatively high cost off-site estate	• Retention of ATMs conditioned on capability-transfer and transition-support commitments. • Apply common operating rules to ATMs (including retained bank and NCU ATMs).
Reaffirm no discretionary VAS on NCU ATMs	• About 1 in 5 transactions are reportedly VAS • Most are cardless withdrawals • Cardless withdrawals are already part of the NCU product portfolio • The broader discretionary VAS case remains unproven • At least some of the VAS can be covered at branch-attached ATMs	• Loss of local services or income • Misclassification of essential cash functions	• Retain card-less withdrawals within the NCU's core ATM products set. • Review exclusions against demonstrated customer needs and NCU viability on an ongoing basis

CASH SMART PROGRAMME

VAS largely comprises account information, some of which is accommodated within WLA services

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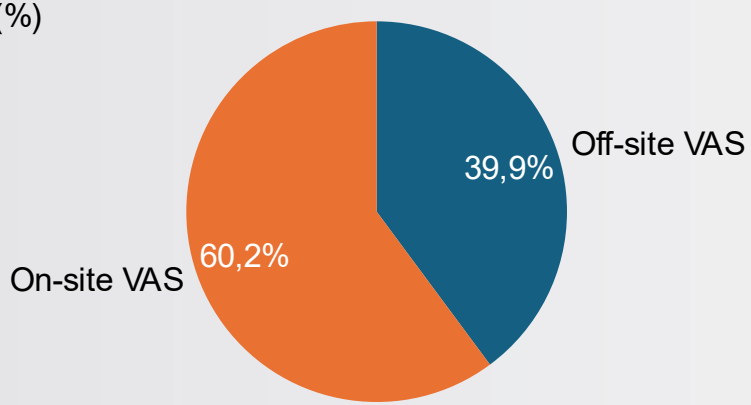
ATM value added services (VAS) relative to deposits and withdrawals
(%)



Key insights about VAS

- VAS importance varies by institutional strategy and market position, but typically accounts for 2 in 10 transactions.
- Smaller deployers tend to demonstrate how niche offerings can result in an outsized VAS contribution.
- However, much of the **VAS consists of account information and statements**, much of which is already accommodated in the product suite of the WLA Strategy.

On-site (Branch) versus Off-site VAS Transactions
(%)



- Enabling banks to retain branch ATMs ensures that over 60% of VAS capability is at the discretion of each financial institution

Data supporting these graphs was sourced through a secondary survey of financial institutions, specifically targeting VAS offerings at a consolidated level

CASH SMART PROGRAMME

National standards can enable open access and funded small value ATM transactions

SOUTH AFRICAN RESERVE BANK



Proposed principles for NCU ATMs, bank branch ATMs and independent deployers/operators (IAOs)

Principle	Common Customer/ Service Requirements
Universal access	• Customers of all approved issuers can access core services regardless of ownership or operator
Same minimum service and standards	• Common service bands and transparent charges.
Free small-value withdrawals	• R0 for card and card-less withdrawals at or below specific amount. • No operator surcharge

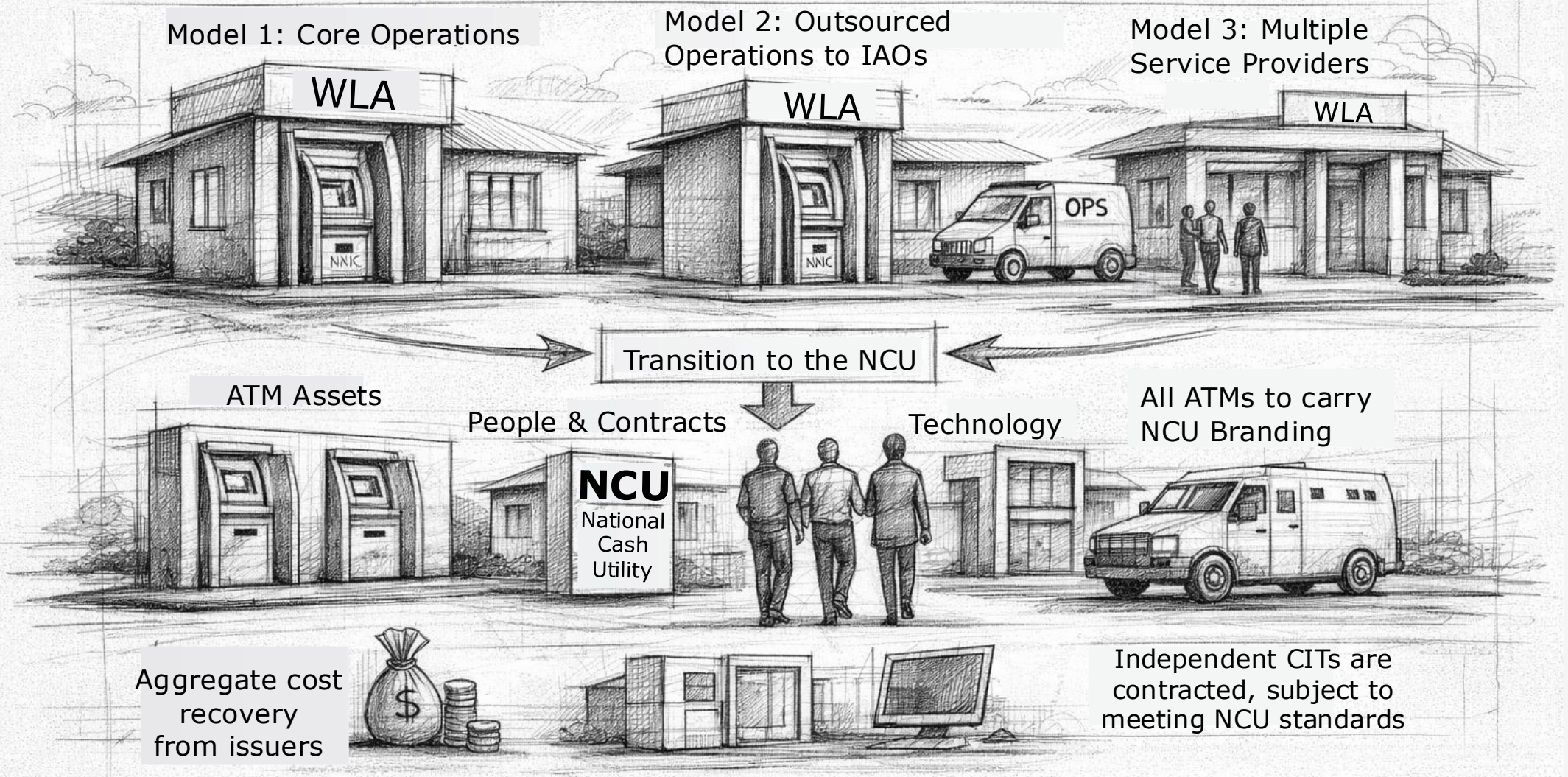
CASH SMART PROGRAMME

WHITE LABEL ATM MODELS

NCU Ownership of all ATMs in South Africa (Including Bank Branch ATMs)

Cash Proximate Services (for later consideration)

WLA Services: Balance Enquiry, Withdrawal, Deposit, Mini-Statement Print, Cardless ATM Withdrawal | Banknote and Coin



IAOs: Independent ATM Operators

CASH SMART PROGRAMME

WHITE LABEL ATM STRATEGY ON A PAGE

SHARED INFRASTRUCTURE · GREATER ACCESS · LOWER COST · A MORE RESILIENT CASH ECOSYSTEM

South African Reserve Bank

STRATEGIC GOAL — **Establish WLAs as a shared national cash access layer within the Cash Smart Strategy.**

1. IMPROVE ACCESS TO CASH
Preserve and enhance equitable access to cash, particularly in underserved locations.

2. IMPLEMENT COST OPTIMISATION
Reduce structural inefficiencies and cost duplication in ATM deployment, operations and cash logistics.

3. MANAGED TRANSITION TO WLAs
Lay the foundation for long-term industry utility models without disrupting near-term access to cash.

4. MAINTAIN CUSTOMER TRUST
Security maintained or improved, demand fulfilment maintained, costs to customer reduced, service levels maintained or improved.

ALIGNMENT TO PUBLIC INTEREST, SYSTEM RESILIENCE AND COST SUSTAINABILITY

NCU ATMs | Managed services on all

01 NCU CORE FLEET
NCU owns and operates enhanced ATMs.



- Nationwide coverage
- Focus on underserved areas
- Higher availability and reliability

02 NCU OUTSOURCED FLEET
Operators deliver under NCU standards and SLAs.



- Standardised SLAs
- Security and compliance
- Common customer experience

COMMON WLA FRAMEWORK
Standards • Interoperability • Security • Customer protection • Data and reporting • Audit and oversight

NCU retains strategic direction, access and data alignment, runs a core fleet and oversees owners, operators and service providers. **Managed services apply to all NCU ATMs.**

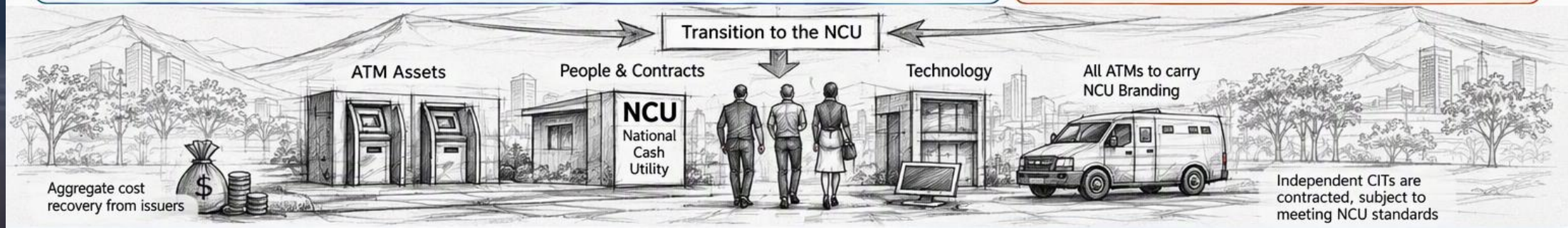
OWNER OPERATORS | Same WLA framework

03 OWNER-OPERATED ATMs
Independent owners may own and operate ATMs.



- Broader participation
- Extends reach into local communities
- Subject to the same WLA framework and oversight

REFINED OWNERSHIP SCOPE
Independent operators may own and operate ATMs. Subject to the same WLA framework and oversight.



WLA SERVICES: Balance Enquiry · Withdrawal · Deposit · Mini-Statement Print · Cardless Withdrawal · Banknote & Coin

A MORE INCLUSIVE, RESILIENT AND CASH SMART SOUTH AFRICA

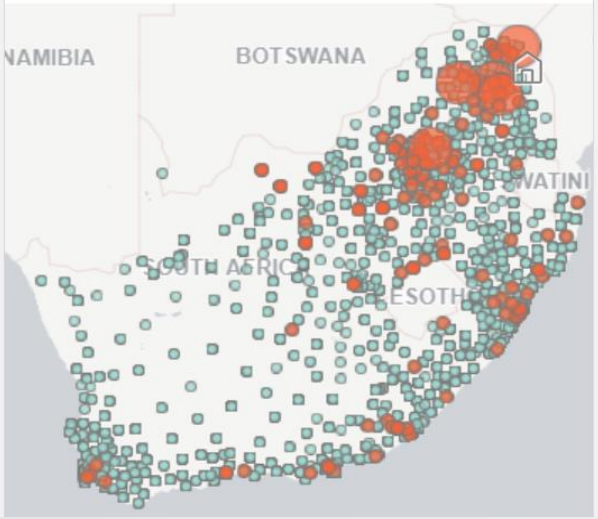
CASH SMART PROGRAMME

Many other geo-spatial views available interactively

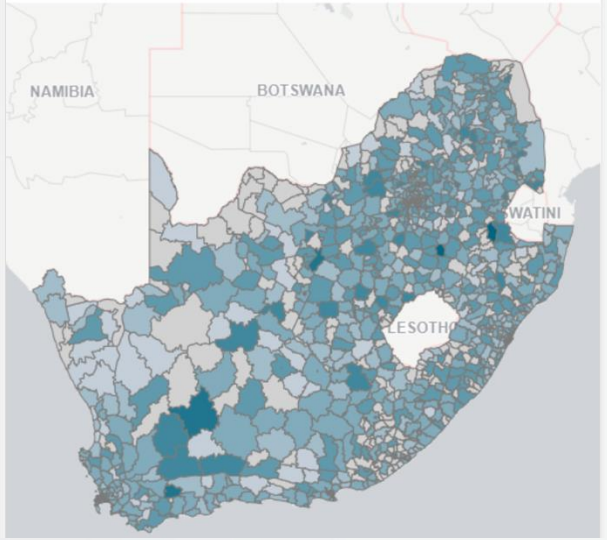
South African Reserve Bank



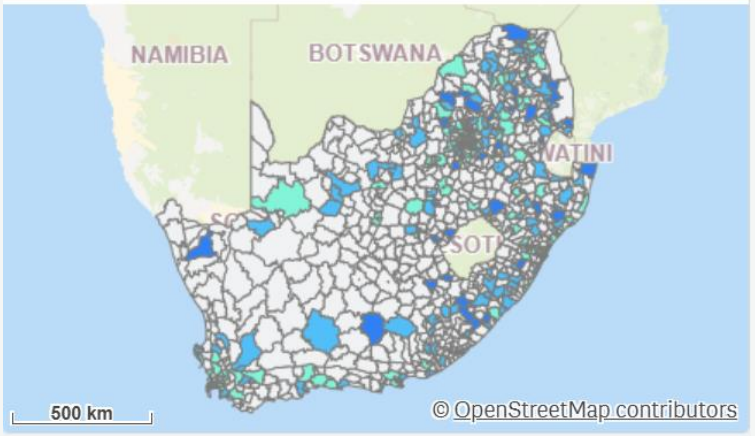
Security Incidents Map



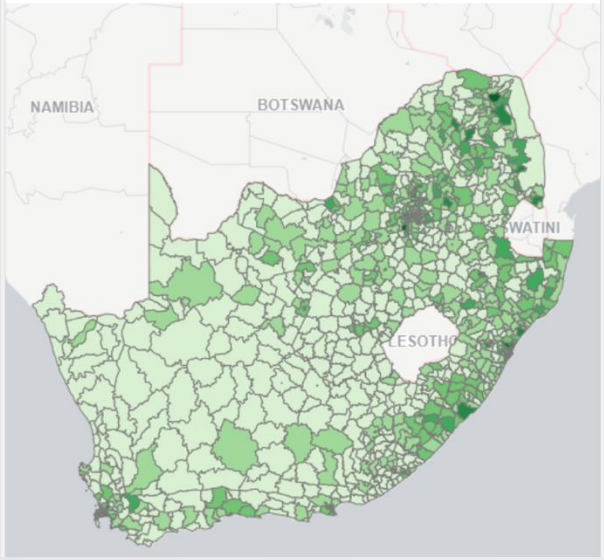
Average Replenishment Trips Per ATM by Police District



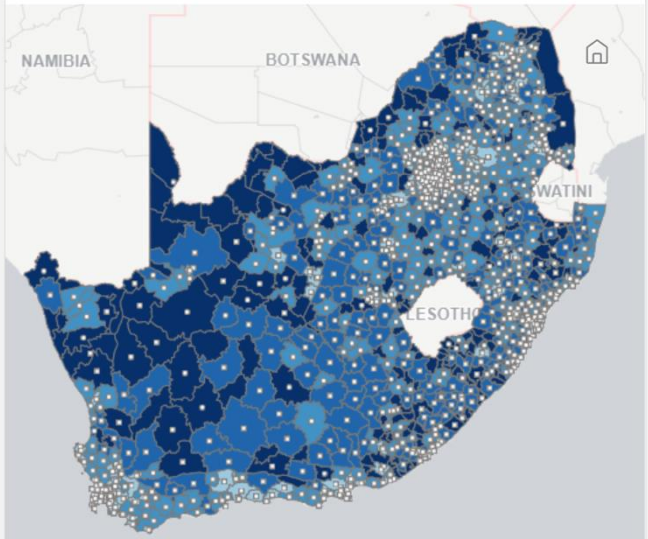
Share of ATM Sites Held by the Largest Landlord, by Police ...



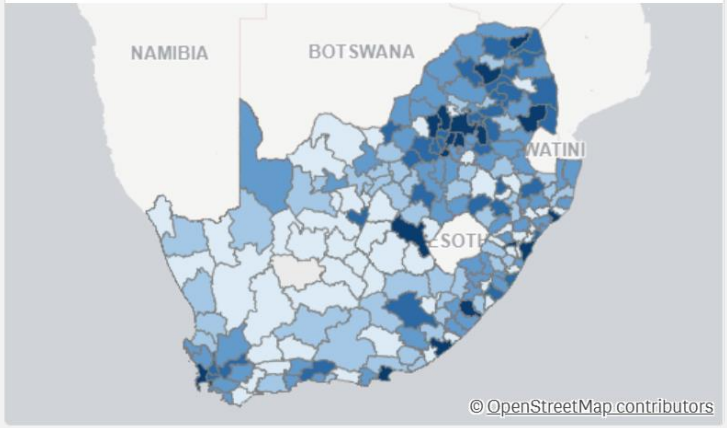
Population Density by Police District



ATM Distance Mapping Overview



Total Yearly Transaction per Municipality









Cash Lekgotla 12 November 2026 Slide Pack



END

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