The Urban Challenge

70% of South Africans will live in cities by 2030

35% of Joburg's water lost to ageing infrastructure

R1.2 Trillion infrastructure backlog across municipalities
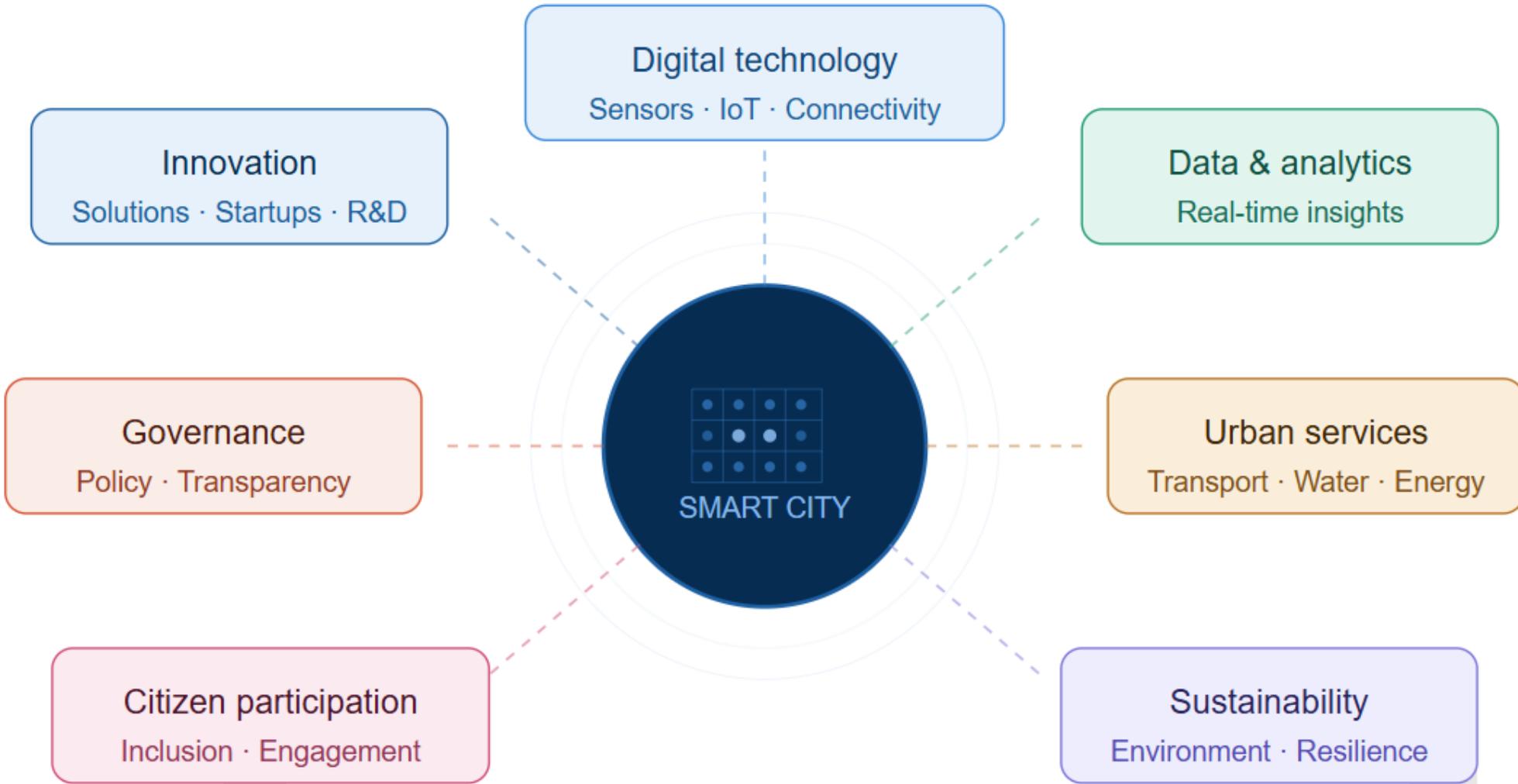
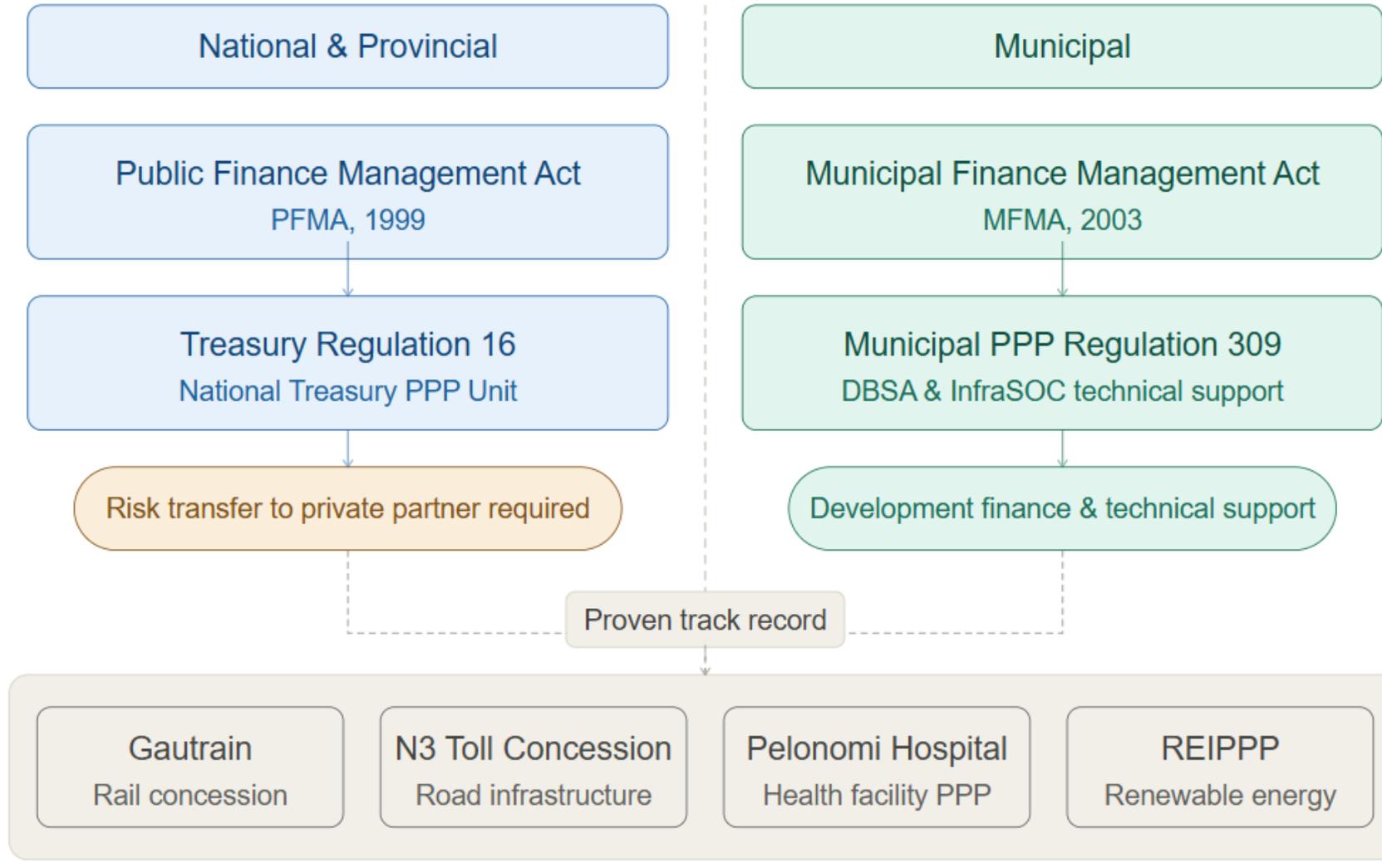**R500 Billion+** economic cost of load shedding per year

- **South Africa's cities cannot afford to wait. Smart infrastructure is not optional.**

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What Is a Smart City?

Digital technology
Sensors · IoT · Connectivity

Innovation
Solutions · Startups · R&D

Data & analytics
Real-time insights

Governance
Policy · Transparency

SMART CITY

Urban services
Transport · Water · Energy

Citizen participation
Inclusion · Engagement

Sustainability
Environment · Resilience

A city that uses digital technology, data & innovation to improve urban services, enhance sustainability, and increase citizen participation.

South Africa's PPP Framework

National & Provincial	Municipal
Public Finance Management Act PFMA, 1999	**Municipal Finance Management Act** MFMA, 2003
Treasury Regulation 16 National Treasury PPP Unit	**Municipal PPP Regulation 309** DBSA & InfraSOC technical support
Risk transfer to private partner required	Development finance & technical support

Proven track record

Gautrain Rail concession	N3 Toll Concession Road infrastructure	Pelonomi Hospital Health facility PPP	REIPPP Renewable energy

PPP Financing Structures

1 Concession Agreements

Private partner builds & operates; recovers via user fees or availability payments.

Smart lighting · metering

2 Build-Operate-Transfer (BOT)

Technology transfer & skills at handover. Critical for long-term local capacity.

Skills & handover

3 Revenue-Sharing Models

Private partner monetises data & services, shares revenue with the municipality.

Data monetisation

4 Blended Finance

DFI concessional capital de-risks deals to attract commercial investment.

DBSA IDC AfDB

Concessional · De-risking

5 Special Purpose Vehicle (SPV)

Ring-fenced SPV owns, finances & operates. Clean accountability & limited liability.

Ring-fenced · Accountable

Challenges & Risks

- **Governance & Corruption Risk**
- Poor audit outcomes and leadership instability deter private capital. No shortcut to rebuilding investor trust.
- **Regulatory Complexity**
- Municipal PPPs take 3-5 years from concept to financial close. Incompatible with technology innovation timelines.
- **Revenue & Collection Risk**
- Low tariff collection rates collapse concession models. Government guarantees or national backstops required.
- **Digital Divide**
- Smart infrastructure that bypasses poor communities deepens inequality. Inclusive design must be contractual.
- **Data Governance**
- POPIA provides a framework but Smart City data ecosystems demand careful, city-specific application.

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The Path Forward: 5 Recommendations

- **1. Standardise PPP Procurement**
- National Treasury to develop Smart City-specific model contracts municipalities can adapt.
- **2. Strengthen Municipal Capacity**
- DBSA & Infrastructure South Africa to provide systematic technical assistance to municipalities structuring deals.
- **3. Create a Smart City Fund**
- A blended finance vehicle capitalised by government, DFIs & international climate finance to de-risk private investment.
- **4. Pilot and Scale**
- Identify 2-3 well-governed cities as Smart City PPP pilots. Build case studies, prove bankability, then roll out nationally.
- **5. Put Citizens at the Centre**
- Every PPP contract must include measurable service delivery outcomes — not just financial returns.

Three Key Discussion Points

- **1. Can SA's PPP framework keep pace with Smart City technology?**

- Procurement timelines of 3-5 years are incompatible with urban technology innovation cycles. How do we modernise deal-making without sacrificing accountability?

- **2. Who carries the risk — and who captures the reward?**

- Smart City PPPs generate data, efficiency savings, and long-term infrastructure value. How do we fairly allocate risk and reward between investors, municipalities, and citizens?

- **3. How do we ensure Smart Cities don't deepen inequality?**

- Without deliberate design, smart infrastructure can entrench spatial divides. What contractual and financial mechanisms ensure benefits reach all residents?

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Smart Cities. Smarter Partnerships. Better Cities for All.

- PPPs are not a silver bullet — they are a tool.

- Used well, they can mobilise the capital, technology, and efficiency that South African cities urgently need.