



Project Infrastructure Planning

1. Project Details

Project Name	Park & Ride
Location	Stellenbosch Local Municipality
Sector	Social
Department	Department of Mobility
Project Owner	Deidre Ribbonaar
Project Manager	Deidre Ribbonaar

1.1 Background & Justification

The Park and Ride (P&R) initiative is a strategic response to the Western Cape's escalating congestion crisis, focusing on two high-demand corridors: Cape Town and Stellenbosch. These pilots are designed as short-term, implementable solutions that can commence within the 2025/26 fiscal year, serving as proof-of-concept for future expansion. The Cape Town pilot leverages the Southern Line rail corridor to restore commuter rail as the backbone of public transport, while the Stellenbosch pilot introduces P&R facilities integrated with a dedicated electric shuttle service to compensate for limited rail connectivity. Both pilots aim to reduce congestion, encourage modal shift from private vehicles to public transport, and foster long-term collaboration among provincial and local governments, PRASA, and other stakeholders. Monitoring and evaluation systems will track usage, satisfaction, and operational efficiency to ensure scalability.

By prioritizing rail recovery and electric mobility, the project supports WCIF's climate resilience and low-carbon objectives. The panoptic principle of innovation for equity is evident in the adoption of electric buses and digital tools for user experience while the principle of transversal governance is embedded through intergovernmental agreements and stakeholder engagement, ensuring collaborative planning and transparent decision-making.

The **justification** for the selection of Cape Town and Stellenbosch is driven by severe congestion and high private vehicle dependency undermining economic productivity and quality of life. Both areas suffer from spatial legacies of apartheid, urban sprawl, and inadequate public transport options. The collapse of rail services since 2019 exacerbated these issues, shifting demand to road-based modes. The pilots complement ongoing initiatives such as PRASA's rail recovery program and Stellenbosch Municipality's integrated mobility strategies, offering short-term feasibility and diverse learning opportunities for scaling P&R solutions across the province.

This aligns with WCIF's **spatial justice mandate**, addressing historical inequities by improving access to affordable, reliable transport. The panoptic principle of sustainable stakeholder value is reflected in the project's focus on reducing congestion costs, improving commuter safety, and enhancing environmental outcomes. The adaptive design of P&R facilities, which incorporate green infrastructure and allow for future expansion is evident in its commitment to the principle of resilience and regeneration.

1.2 Project Scope

1. Project Purpose & Overall Scope

The scope involves assessing, designing, and preparing for implementation of **pilot Park & Ride facilities in Cape Town (Southern Line) and Stellenbosch (R44/R304 corridors)** to reduce congestion, shift commuters from private cars to public transport, and establish scalable models for future rollouts.

2. Scope of Work - Cape Town Pilot (Heathfield & Fish Hoek)

2.1 Site Development & Infrastructure Upgrades

Work includes upgrading existing infrastructure at Heathfield and developing a new facility at Fish Hoek:

- Paving/repaving and painting of bays
- Universal access features
- Fencing, gates, guard hut, access control
- Lighting upgrades
- CCTV installation
- Basic and directional signage
- Toilet facilities (male/female & accessible)

2.2 Systems & Technology Implementation

- Automated vehicle counting sensors
- Real-time parking occupancy indicator linked to a P&R webpage
- Online user feedback system
- Integration with Mobility Department's Integrated Transport Hub

2.3 Operations & Maintenance Framework

- On-site security staffing (minimum two officers per site)
- Routine maintenance of parking lots, lighting, and amenities
- Cleaning and facilities management
- CCTV monitoring by external security company
- Reporting systems for incidents and user support

2.4 Institutional & Intergovernmental Work

- Negotiation and finalisation of:
 - **Intergovernmental Agreement (IGA)** with City of Cape Town
 - **Memorandum of Agreement (MoA)** with PRASA
 - **Lease/Right-of-Use Agreements** for station land
- Allocation of roles for land use approvals, upgrades, security, and maintenance

2.5 Regulatory & Compliance Requirements

- Zoning confirmation
- Building plan approvals
- Site Development Plans
- Environmental Impact Assessment (if applicable)
- Compliance with parking by-laws, heritage considerations (if needed)

2.6 Marketing & Public Engagement

- Public awareness campaigns (OASIS framework)
- Local media and employer outreach

- Continuous user education on availability, safety improvements, and costs

2.7 Monitoring & Evaluation (M&E)

- Tracking usage levels (vehicle counts)
- Surveys of P&R users and non-users
- Reporting operational and safety metrics
- Using pilot results to refine future rollouts

3. Scope of Work - Stellenbosch Pilot (Somerset Mall, Irene Circle, Koelenhof)

3.1 P&R Facility Development

Each site requires varying levels of development:

- **Somerset Mall:** Minor upgrades to existing parking
- **Irene Circle:** Fencing, lighting, signage, security installation
- **Koelenhof:** Major development (unpaved land, requires full construction)

Infrastructure may include:

- Paving, fencing, lighting
- Ablution facilities
- Covered waiting areas
- CCTV and access control systems
- Shuttle boarding areas

3.2 Shuttle Service Design & Deployment

- Procurement of **19 electric 32-seater buses** (11 on R44, 8 on R304)
- Development of detailed timetables, including peak/off-peak headways (10-25 min)
- Driver recruitment and training (PRDP requirements)
- Vehicle monitoring systems (GPS, performance tracking)

3.3 Technology Systems

- Online booking and payment (long-term)
- QR code access
- Real-time vehicle and shuttle tracking interface
- Integration with data systems (POPIA compliant)

3.4 Institutional & Stakeholder Management

- IGAs with Stellenbosch Municipality and City of Cape Town
- Lease agreements with private site owners
- Engagement and potential contracting of MBT industry to avoid conflict
- Tender processes for operators, security, maintenance, and construction

3.5 Regulatory Compliance

- Operating licences for shuttle fleet under NLTA

- Driver certifications (PRDP)
- Compliance with Road Traffic Act & data laws

3.6 Traffic, Safety & NMT Integration

- Traffic management at P&R sites
- Priority measures (e.g., signal priority, HOV lanes)
- Non-motorised transport improvements (walkways, cycle racks)

3.7 Monitoring & Evaluation

- Usage tracking
- Operational efficiency assessment
- Customer satisfaction surveys
- Ridership reports and cost-performance tracking

4. Cross-Cutting Scope Components (Both Cities)

4.1 Planning & Feasibility

- Demand modelling (EMME)
- Commuter surveys
- Layout and design of sites
- Costing models (CAPEX + OPEX)

4.2 Procurement

- Multi-stage tendering for:
 - Construction
 - Shuttle operations
 - Security
 - Technology systems
- Compliance with PPPF Act and provincial processes

4.3 Risk Management

- Rail reliability (Cape Town)
- MBT industry tensions (Stellenbosch)
- Funding uncertainties
- Regulatory and land approvals delays
- Security risks (vandalism, crime)

2. Objectives & Key Focus Areas

Objective	Key Focus Area
Reduce Traffic Congestion	
Promote Public Transport Uptake & Restore Rail	
Demonstrate Proof of Concept for Scalable P&R Programmes	
Improve Safety, Security, and User Experience	
Support Climate Resilience & Low-Carbon Transition	

Objective	Key Focus Area
Strengthen Intergovernmental & Stakeholder Collaboration	
Enhance Economic Efficiency and Reduce Transport Costs	
Improve Spatial Justice & Accessibility	

3. Project Timeline & Cost

Estimated Duration	3 Year(s) & 0 Month(s)
Estimated Start Date	01 Jan 2026
Estimated Cost	R 180M

4.Project Stage-0 Submission & Approval

Self Approved By: **Deidre Ribbonaar**

Self Approved On: **27 Dec 2025 09:37:14 AM**

Submitted By	
Submitted On	
Signed By	
Approved On	

5. Environmental & Social Considerations

5.1 Environmental Considerations

- Environmental Authorisation Requirements
- Greenhouse gas emissions and deforestation contributing to climate change
- Proper waste management to reduce pollution and health risks
- Sustainable water management to protect quality and prevent scarcity
- Preservation of ecosystem services like clean air, water, and climate regulation
- Land Use & Zoning Compliance

5.2 Social Considerations

- Respect for human rights including labor, land, and indigenous rights
- Impacts on Local Economic Activity
- Assessment of community impacts such as displacement and livelihood loss
- Protection of health and safety from environmental hazards
- Preservation of cultural heritage sites and artifacts
- Promotion of social equity and fair distribution of development benefits
- Engagement with stakeholders throughout the project lifecycle
- Fair labor practices including wages, hours, and working conditions
- Support and compensation for involuntary resettlement

6. Regulatory & Environmental Approvals

6.1 National Level

- South African National Biodiversity Institute (SANBI): Plays a leading role in biodiversity management and research
- Environmental Management Inspectors (EMIs): Responsible for compliance and enforcement of environmental regulations
- National Environmental Management Act (NEMA): Governs environmental management and authorization processes, including Environmental Authorizations (EAs)
- Environmental Management Frameworks (EMFs): Strategic planning tools for land-use and environmental management decisions

6.2 Provincial and Local Levels

- Provincial Environmental Departments: Implement and enforce environmental regulations within provinces
- Municipalities: Play a role in environmental management, especially in land-use planning and development applications

6.3 Other Relevant Entities

- Councils for the Built Environment Professions (CBEP): Regulates professions involved in the built environment

7. Identify Key Stakeholders

7.1 Government

- Department Of Infrastructure
- Provincial Treasury
- Local Government
- Department of Mobility
- Western Cape Government

7.2 State-Owned Entities

7.3 Private Sector

- Construction Companies
- Engineering Firms
- Financial Institutions

7.4 Civil Society

- Civil society organizations advocating for community needs

7.5 Other Stakeholders

8. WCG Sector Priorities

Outcomes	Social	Energy & Water	Economic	Technology	Ecological
Infrastructure investment drives spatial transformation and improves spatial resilience	Short Term 1-5 YRS				
Investment in social infrastructure improves access to health, education, social development, and recreation opportunities	Short Term 1-5 YRS				

Mobility systems and transportation corridors provide safe and efficient connectivity to opportunities, services, and facilities	Short Term 1-5 YRS				
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9. Infrastructure Type

9.1 Hard

Infrastructure Type for the Park & Ride Pilots

The P&R pilots involve **two distinct infrastructure types**, depending on location and mode of public transport integration. These are summarised below.

1. Cape Town: Rail-Linked P&R Infrastructure

Cape Town's P&R facilities are located at **existing rail stations** (Heathfield and Fish Hoek) and therefore rely on **rail-linked, station-adjacent parking infrastructure**.

1.1 Type of Infrastructure

a) Upgraded Station-Adjunct Parking Facilities

- Existing parking lots at stations (e.g., Heathfield) upgraded with:
 - Paving / repaving
 - Fencing and access control
 - Lighting
 - CCTV
 - Universal access (disability-friendly)
 - Signage and wayfinding
 - Basic toilets

b) New Parking Infrastructure (Greenfield)

- A **new P&R facility** at Fish Hoek, on underutilised land near the station.
- The site requires complete development: paving, fencing, lighting, pedestrian access, security office, CCTV.

c) Digital Infrastructure

- Automated vehicle counting (remote microwave sensors)
- Live occupancy tracking webpage
- CCTV monitored by a security provider

d) Supportive Station Infrastructure

- Pedestrian walkways to platforms
- Integrated access to Metrorail services

2. Stellenbosch: Shuttle-Linked P&R Infrastructure

Because Stellenbosch lacks functional rail, its P&R design requires **multi-site parking paired with electric bus shuttle services**.

2.1 Type of Infrastructure

a) Large-Scale P&R Parking Facilities (Somerset Mall)

- Existing mall parking repurposed and upgraded.
- Includes:
 - Bay demarcation
 - Lighting
 - Security installations
 - Access control

- Shuttle boarding areas

b) Moderate-Upgrade P&R Facilities (Irene Circle)

- Existing informal carpool site upgraded with fencing, lighting, signage, security, and shuttle loading areas.

c) Greenfield P&R Facility (Koelenhof)

- A new P&R site constructed on unpaved land requiring full development:
 - Paving
 - Fencing
 - Drainage
 - Lighting
 - Waiting areas
 - Shuttle turnaround loops

d) Electric Shuttle Infrastructure

- **19 electric buses** (32-seater) require:
 - Charging stations (DC fast chargers)
 - Depot/parking (on-site or off-site)
 - Power system upgrades

e) Passenger Interface Infrastructure

- Shuttle stops in Stellenbosch CBD:
 - Eikestad Mall
 - University
 - School precinct
 - Merriman Road

f) Digital Systems

- Online booking (future)
- GPS vehicle tracking
- User feedback platforms
- QR code access (planned)

3. Cross-Cutting Infrastructure Across Both Pilots

3.1 Safety and Security Infrastructure

- CCTV networks
- Security offices / guard huts
- Fencing and gates
- Lighting towers

3.2 Universal Access Infrastructure

- Disabled bays
- Ramps and compliant walkways
- Accessible restroom facilities

3.3 Environmental/Sustainability Infrastructure (Planned Enhancements)

- Solar PV installations for site power
- Grey-water recycling systems
- EV charging stations

4. Summary Table

Region	Infrastructure Type
Cape Town	Upgraded station parking + Greenfield P&R site + rail integration + digital occupancy systems

Region	Infrastructure Type
Stellenbosch	Shuttle-linked P&R sites (mixed-use, upgraded & greenfield) + electric bus charging infrastructure + shuttle stops
Both	CCTV, lighting, fencing, access control, signage, universal access, maintenance & digital platforms

9.2 Soft

9.3 Critical

10. Project Stage-1 Submission & Approval

Self Approved By: **Deidre Ribbonaar**

Self Approved On: **27 Dec 2025 10:24:37 AM**

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