



Executive Summary Report

1. Project Description & Strategic Case

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

1.1 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)

1.2 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 forequity 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.

1.3 Sector Specific Analysis

- **Inadequate transportation infrastructure**

1.4 Market Size And Demand Analysis

1.4.1 Total Addressable Market (TAM)

- **Population served by a transport corridor**

The purpose of the project is to assess the viability of pilot P&R schemes in Cape Town and Stellenbosch as short-term interventions that encourage modal shift from private vehicles to public

transport, reduce congestion, and inform future large-scale rollouts.

The Cape Town pilot will focus on the Southern Line rail corridor with identified sites being Heathfield (94 bays) and Fish Hoek (111 bays).

The Stellenbosch pilot will cover the routes of the R44 (Somerset Mall to Stellenbosch CBD) and R304 (Koelenhof to Stellenbosch CBD). Sites will include Somerset Mall, Irene Circle and Koelenhof. Currently 90% of commuters use private vehicles with minimal rail/bus services being available.

- **Data sources**

- **Demographic**
- **Geographic**
- **Economic**

1.4.2 Served Available Market (SAM)

1.4.3 Demand Forecasting

- **Projections of usage over time**

- **traffic volumes**

The **market and demand analysis** for P&R facilities highlights a strong potential for uptake among “choice users” - commuters who currently drive private vehicles but would switch to rail or shuttle services if offered secure, convenient, and cost-effective alternatives. These individuals typically work in Cape Town’s CBD or Southern Line hubs, fall within the 20–50 age range, and face long, costly commutes due to congestion on major routes like the M3, M5, and Main Road. Rising fuel prices and high CBD parking fees further incentivise modal shift. Survey data reinforces this potential, with 64% of respondents willing to drive up to 10 minutes to access a P&R facility, provided security, reliability, and convenience are assured. Catchment analysis applied a five-minute drive-time buffer to intercept traffic before it enters congested corridors, while demand screening using EMME transport models and historical boarding data identified 15 high-potential stations from Kenilworth to Fish Hoek. For Stellenbosch, proposed shuttle headways of 10–25 minutes ensure competitive travel times. Overall, the analysis confirms substantial latent demand, indicating that strategically located, well-managed P&R facilities can significantly reduce congestion and boost public transport use.

This analysis supports WCIF’s mission of infrastructure-led growth and spatial justice by targeting high-congestion corridors and improving access to affordable, efficient transport. It reflects the panoptic principle of innovation in service design (e.g., electric shuttles and digital monitoring), and the principle of creating stakeholder value through cost savings and improved commuter experience. Embedding transversal governance in planning and implementation is evident. Additionally, the emphasis on reducing emissions and promoting modal shift aligns with WCIF’s climate resilience and sustainability objectives under Principle 2, ensuring that infrastructure solutions are adaptive, inclusive, and future-ready.

2. Project Status & Implementation

2.1 Regulatory & Environmental Approvals

2.1.1 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

2.1.2 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

2.1.3 Other Relevant Entities

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

2.2 Identify Key Stakeholders

2.2.1 Government

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

2.2.2 State-Owned Entities

- **PRASA**
Passenger Rail Agency of South Africa Essential for rail-linked P&R facilities and service coordination.

2.2.3 Private Sector

- Private Landowners
- **Transport Operators**
Potential partners for shuttle services and facility management.

2.2.4 Civil Society

- Civil society organizations advocating for community needs
- **Minibus Taxi (MBT) Associations**
Critical for cooperation and avoiding service conflicts. Early engagement is necessary to secure buy-in and explore partnership opportunities.
- **Communities and Commuters**
 - o Residents and workers in catchment areas who will use P&R services.
 - o Community groups and civic organizations for feedback and advocacy.

2.2.5 Other Stakeholders

3. Governance, Policy & Enabling environment

3.1 Legal and Regulatory Framework

3.1.1 Procurement and Supply Chain Management

- Competition Act
- Environmental Feasibility

3.1.2 Legal and Regulatory Feasibility

- Zoning, land-use rights, servitudes, and municipal approvals

3.1.3 Environmental and Land Use Planning

- Western Cape Land Use Planning Act (LUPA)
- Environmental Impact Assessment (EIA)

3.1.4 Public Finance and Governance

- Public Finance Management Act (PFMA)
- Provincial Treasury Instructions and Budget Guidelines
- National Treasury PPP Framework & Practice Notes

3.1.5 Transport and Infrastructure

- Western Cape Road Traffic Act
- Related transport regulations

3.2 Governance policies

- WCIF 2050
- Municipal Planning By-Laws

3.3 Investment Needs

3.3.1 Infrastructure Development

- Roads, bridges, and public transport systems.
- Digital and Operational Infrastructure

3.3.2 Human Settlements

- Transit-Oriented Support Functions (improving mobility access between residential areas and economic nodes)

3.3.3 Green Economy

- Low-Carbon and Resource-Efficient Mobility

3.3.4 SMME and Entrepreneurship Support

- Enterprise Participation through Inclusive Procurement

3.4 Policy Incentives

3.3.1 Sector-Focused Incentives

- Green Economy: Incentives for renewable energy, water efficiency, and waste-to-energy projects.
- Public-Private Partnerships (PPP)
- Economic Inclusion
- Inclusive Infrastructure Development

4. Financial requirements & Funding strategies

4.1 Cost-Effectiveness Analysis (CEA)

4.2 Cost-Benefit Analysis (CBA)

Estimated Duration		3 Year(s) & 0 Month(s)						
Item / Activity	Type	Category	Timeframe	Description	Amount	Discount Amt	Present Value (PV)	Net Benefit
Cape Town Pilot (Heathfield & Fish Hoek)	Cost	Capital	Year 1	o Infrastructure upgrades: paving, lighting, CCTV, signage o Technology: live occupancy tracking, online booking	R 14,960,000	R 0	R 1	R 1
Stellenbosch Pilot (Somerset Mall, Irene Circle, Koelenhof)	Cost	Capital	Year 3	CAPEX: ±R72.44 million (Year 1); ±R166 million over 3 years o Parking facilities, EV shuttle fleet (19 buses), charging infrastructure	R 166,000,000	R 0	R 72,440,000	R 72,440,000
Cape Town Pilot (Heathfield & Fish Hoek)	Cost	Operational	Year 1	o Security, maintenance, cleaning, monitoring systems.	R 4,300,000	R 0	R 1	R 1
Stellenbosch Pilot (Somerset Mall, Irene Circle, Koelenhof)	Cost	Operational	Year 1	OPEX: ±R20 million annually o Shuttle operations, driver salaries, EV maintenance, depot costs.	R 20,000,000	R 0	R 1	R 1

Item / Activity	Type	Category	Timeframe	Description	Amount	Discount Amt	Present Value (PV)	Net Benefit
P&R Benefit	Benefit	Environmental	Year 1	o Modal shift reduces carbon emissions significantly. o Electric buses in Stellenbosch = zero tailpipe emissions. o Solar PV and EV charging infrastructure support green mobility.	R 1	R 0	R 1	R 1
P&R Benefits	Benefit	Congestion Reduction	Year 1	o Cape Town: Targets Southern Line corridor (M3, M5, Main Road), reducing peak-hour delays and improving productivity. o Stellenbosch: Alleviates severe congestion on R44 and R304, reducing travel times by up to 30%.	R 1	R 0	R 1	R 1

Item / Activity	Type	Category	Timeframe	Description	Amount	Discount Amt	Present Value (PV)	Net Benefit
P&R Benefit	Benefit	Economic Impact	Year 1	o Reduced fuel and vehicle operating costs for commuters. o Lower road maintenance costs due to fewer vehicles. o Job creation in construction, operations, and maintenance. o Ancillary revenue streams: retail concessions, advertising, EV charging fees.	R 1	R 0	R 1	R 1
P&R Benefit	Benefit	Social Benefits	Year 1	o Improved accessibility and safety (CCTV, lighting, universal access features). o Supports spatial justice by improving mobility for underserved communities	R 1	R 0	R 1	R 1

4.3 Risk Evaluation

Risk Category	Likelihood	Impact Severity	Risk Score	Timeframe
Governance / Land	1	4	4	Planning
Financial	2	3	6	Operation
Rail Service	5	5	25	Operation
Perception / Market	5	5	25	Pre-Launch & Operations

Adoption	4	5	20	Pre-Launch & Operations
Competition	5	4	20	Operation
Demand	4	5	20	Operation
Stakeholder (MBT)	5	5	25	Pre-feasibility & Construction

4.4 Economic Multipliers

Sector / Scenario	GDP Impact	Employment Impact	Key Drivers	Notes
Primary Sector	Moderate	Moderate	Roads, rail, ICT	Construction spend (R15m Cape Town; R72m Stellenbosch) stimulates civil works, technology, and EV supply chains.
Secondary Sector	Moderate	Moderate	Construction, manufacturing	Supplier industries (materials, security systems, EV charging infrastructure) benefit from procurement
Induced Effects	Moderate	Moderate	Construction / Operations	Jobs created in construction and operations increase household income ? higher local consumption
Long-Term Multiplier	Long-term	Moderate	Roads, rail, ICT	Reduced congestion lowers logistics costs, improving regional competitiveness and attracting investment

4.5 Macro-Economic Benefits

Benefit Category	Estimated Impact	Sectoral Relevance	Policy Alignment
Congestion Cost Savings	Improved employment and service access	Utilities, Social Infrastructure, Construction	Economic Reconstruction and Recovery Plan (ERRP)
Fuel & Vehicle Operating Cost Reduction	Strategic alignment with national goals	All sectors	National Development Plan (NDP)
Environmental & Compliance Benefits	Strategic alignment with national goals	Environmental	National Development Plan (NDP)
Employment Creation	Improved employment and service access	All sectors	Economic Reconstruction and Recovery Plan (ERRP)
Public Health & Productivity Gains	Strategic alignment with national goals	All sectors	National Development Plan (NDP)

5. Financial requirements & Funding strategies

5.1 Project Guestimate

Estimated Cost	R 180M
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5.2 Total Project cost breakdown

5.2.1 Capital Expenditure (CAPEX)

Description	Estimated Cost (ZAR)	Notes
Land Acquisition & Site Prep	R 0	
Design & Engineering	R 0	
Construction & Civil Works	R 0	
Equipment & Materials	R 0	
Utility Connections	R 0	
Contingency	R 0	

5.2.2 Development Costs

Description	Estimated Cost (ZAR)	Notes
Feasibility Studies	R 0	
Legal & Regulatory Compliance	R 0	
Stakeholder Engagement	R 0	
Project Management	R 0	

5.2.3 Operational Expenditure (OPEX)

Description	Estimated Cost (ZAR)	Notes
Staffing & Operations	R 0	
Maintenance & Repairs	R 0	
Utilities & Consumables	R 0	
Insurance & Monitoring	R 0	

5.2.4 Financing Costs

Description	Estimated Cost (ZAR)	Notes
Interest During Construction	R 0	
Financial Fees	R 0	

5.2.5 Lifecycle & Decommissioning

Description	Estimated Cost (ZAR)	Notes
Asset Replacement	R 0	
Decommissioning	R 0	

5.2.6 Inflation & Escalation

Description	Estimated Cost (ZAR)	Notes
Adjustments based on Treasury guidelines	R 0	

5.3 Funding sources

[Funding Strategy Guide for Infrastructure Projects](#)

5.4 Revenue Model

5.4 Innovative financing mechanisms

[Innovative Financing Mechanisms for Infrastructure Projects](#)

6. Project feasibility, approvals & infrastructure planning

6.1 Technical Feasibility

Cape Town Pilot (Heathfield & Fish Hoek)

- **Rail Integration:** Southern Line corridor offers the most reliable rail service, making these stations ideal for P&R facilities.
- **Site Readiness:** Both sites have sufficient land availability and direct access to major arterials (M3, M5, Main Road), ensuring ease of integration.
- **Infrastructure Requirements:** CCTV, lighting, signage, and security systems are achievable within current technology standards. Digital tools for real-time occupancy tracking and wayfinding are readily deployable.
- **Construction Complexity:** Heathfield is an upgrade (lower complexity), Fish Hoek is a greenfield site (higher complexity, longer timeline).

Stellenbosch Pilot (Somerset Mall, Irene Circle, Koelenhof)

- **Shuttle-Based Model:** Rail connectivity is limited; electric shuttle solution is technically viable with current EV technology.
- **Charging Infrastructure:** Requires depot and inter-peak charging strategy; Somerset Mall identified as primary charging hub.
- **Fleet Management:** 19 electric buses planned; headways of 10–15 minutes during peak periods ensure competitive travel times.
- **Digital Integration:** Online booking, QR ticketing, and real-time tracking systems align with provincial smart mobility objectives.

6.2 Master plan integration

Alignment with WCIF 2050 Vision:

- Supports **spatial justice** by improving access to affordable, reliable transport in high-demand corridors.
- Advances **climate resilience** through modal shift and zero-emission shuttle operations.
- Embeds **panoptic principles**: innovation for equity (EV buses, digital tools), resilience and regeneration (green infrastructure), and transversal governance (multi-stakeholder agreements).

Integration with Existing & Future Networks:

- Cape Town: Links to PRASA rail recovery program and future MyCiTi expansion; potential for integrated ticketing and feeder services.
- Stellenbosch: Complements municipal integrated mobility strategies; scalable for non-rail corridors.
- Both pilots designed as **proof-of-concept** for multimodal hubs, supporting compact, transit-oriented development.

Regulatory & Approvals:

- Compliance with NLTA, municipal planning by-laws, NEMA (EIA), and National Building Regulations.
- Approvals required: land-use rights, environmental authorisations, heritage clearances, building plan approvals.
- Early engagement with municipalities and PRASA critical to avoid delays; integrate regulatory timelines into project schedule.

6.3 Alternative Evaluation

6.4 Infrastructure Planning Prioritization

7. Delivery Mechanism & procurement strategy

7.1 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				

7.2 Community Participation

7.3 Procurement methods

- **Procurement Strategy**

Procurement Strategy

- **Structured Work Packages**
 - **Package A:** Civil works & infrastructure upgrades.
 - **Package B:** Security systems & technology integration.
 - **Package C:** Shuttle operations & fleet maintenance.

- **Public-Private Partnerships (PPPs)**
 - Engage private operators for shuttle services, EV infrastructure, and facility management under risk-sharing frameworks.
 - Incentivize investment in technology and sustainability.
- **Competitive Tendering**
 - Transparent process under provincial procurement regulations.
 - Evaluation criteria: cost, technical capability, sustainability, service quality.
 - Contracts include **KPIs** for reliability, safety, and customer satisfaction, with penalty/incentive mechanisms.
- **Market Sounding**
 - Conduct campaigns to gauge private sector interest before finalizing tender specifications.
- **Procurement Documentation**
 - Prepare detailed tender specs, evaluation criteria, and PPP feasibility assessment aligned with National Treasury guidelines.

- **Bidding Process**

National Treasury guidelines.

- **Supplier Selection**

National Treasury guidelines.

7.4 Risk sharing mechanisms

8. Special (eg. gender) procurement actions and social impact

8.1 Social Benefits

8.1.1 Inclusive Economic Development

- Encourages job creation through public procurement and infrastructure projects
- Supports SMMEs, women- and youth-owned enterprises

8.1.2 Public Participation and Equity

- Ensures community involvement in planning and decision-making
- Promotes equitable access to services and opportunities

8.2 Sustainability And Environmental Compliance

8.2.1 Environmental and Land Use Planning

- Western Cape Land Use Planning Act (LUPA)
- Environmental Impact Assessment (EIA)