

SAFER JOURNEYS TO SCHOOLS IN CAPE WINELANDS

(Developed by Pendulum Consulting on behalf of the Cape Winelands District Municipality and presented by Lynne Pretorius, Pendulum Consulting.)

Abstract

Due to increased non-motorised transport (NMT) and learner travel awareness generated by the National Land Transport Transition Act (NLTTA), and the development of the provincial NMT Strategy for the Western Cape Province, the Cape Winelands District Municipality (Cape Winelands) recognised the need for a comprehensive policy framework that would address the travel needs of learners. The primary objective of this policy document was to develop a framework referred to as the Safer Journeys to Schools in the Cape Winelands. This Safer Journeys to School Programme is an initiative by the Public Safety and Planning Department of the Cape Winelands District Municipality to improve the travel conditions for learners in the district.

Travel conditions for learners in the Cape Winelands district vary significantly. There are differences in the way learners travel to school and the environment through which they travel, particularly between urban and rural areas. The majority of learners in the Cape Winelands still walk to school. These trips are often uncomfortable because of long distances and unsafe because they take place along roads where vehicles often travel at high speeds. The Safer Journeys to Schools in Cape Winelands Programme was developed to meet these travel challenges facing learners. Its aim: to make journeys between home and school safer and more comfortable.

This paper sets out to briefly describe the existing learner travel conditions and the responding policy framework to improve travel conditions for learners in the Cape Winelands. The policy framework consists of various areas of intervention and supportive strategies, which were identified to improve travel for learners in the district.

1. INTRODUCTION

Due to increased non-motorised transport (NMT) and learner travel awareness generated by the National Land Transport Transition Act (NLTTA), and the development of the provincial NMT Strategy for the Western Cape Province, the Cape Winelands District Municipality (Cape Winelands) recognised the need for a comprehensive policy framework that would address the travel needs of learners.

The primary objective of the policy document is to develop a framework referred to as the Safer Journeys to Schools in the Cape Winelands that will facilitate the implementation of learner travel improvements projects at schools in the Cape Winelands.

2. METHODOLOGY

Interviews were conducted with senior staff and learners completed a questionnaire at pre-selected schools. The information gathered was used to develop a qualitative understanding of the issues relating to learner travel, and this was used to develop a policy response to the needs of learner travel and ways to improve the journey between home and school.

- The interviews with senior school staff and learners were conducted during the period 25 October to 12 November 2004. Currently there are 284 schools in the Cape Winelands area. All the schools could not be visited as part of the scope of this assignment and 13 schools were selected. This constitutes 5% of the number of schools in the district.

- The choice for the number of interviews and the particular schools selected to conduct the interviews and surveys at were based on the number of municipalities and the typical environments that the schools were located in. School locations were categorised as urban, semi-rural (situated close to a town) and rural, as the environment and conditions are significantly different for these particular settings.
- A number of learners were interviewed at each school. An educator assisted in the completion of the sample survey sheet. Learners were selected with varying gender, age, mode of transport to and from school and residential location.
- Generally, the number of learners surveyed at each school ranged between 10 and 20. Out of the estimated 132 000 learners in the Cape Winelands District, about 194 learners completed the questionnaire, which constitutes less than 1% of the entire learner population. The 194 learners interviewed had an approximate 50/50 gender split and approximately two thirds lived in a rural setting (i.e. on a farm) and about one third lived within a town. The age variation is illustrated in Figure 1.

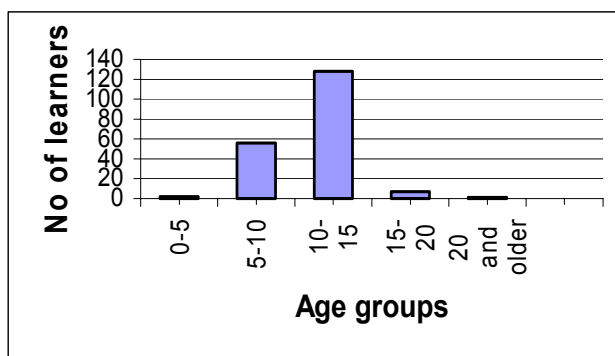


Figure 1: Number of learners per age group interviewed

3. STATUS QUO

3.1 General

According to the census 2001, 93% of all learners in the age group 7-16 (mandatory school-going age group) are attending school. Learners in the Cape Winelands area generally attend schools located in either an urban or rural environment. Of the learners in the mandatory school-going age, 66% attend a school located in an urban environment. 94% of these learners actually attend school. Of the 34% of learners in the mandatory school-going age group in the rural environment, 90% are attending school.

Learners in this district also come from households that are relatively poor. A comparison of household income categories also indicates that 12% of households have no income and about 55% indicated that their income level is in the range of R4801-R38400 per annum. This illustrates a very low-income base for this district municipality.

3.2 Modal Split

Currently there are 284 schools registered in the Cape Winelands area. This includes 148 urban school and 136 rural schools. Through the interviews with principals and senior staff and surveys conducted with the learners it was realised that learners travel to school in a great variety of modes -

these include walking, cycling, learner subsidised bus transport, private transport (including private school buses), LDVs (light delivery vehicles), trucks and tractors. The estimated modal split is illustrated in Figure 2.

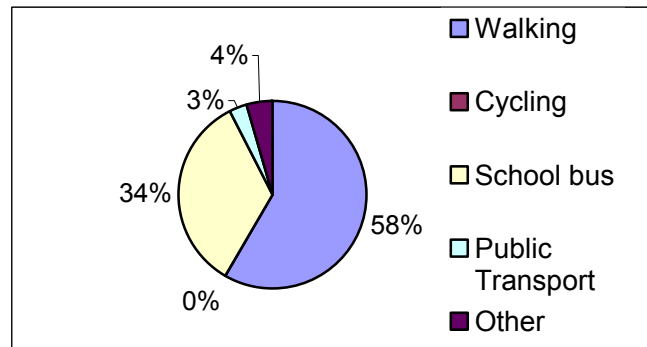


Figure 2: Learner travel modal split

Currently the Western Cape Province is the only province that benefits from a state subsidised learner bus service. The Department of Education has taken a policy position that it is their duty to facilitate learner access to education by placing primary and secondary schools within the reach of learners. This would be undertaken in the following ways:

- In the first instance the learner should attend the school nearest to home.
- If this is not possible, then the department would provide financial assistance toward boarding costs, or
- The department would provide subsidised travel schemes to transport learners to the nearest schools.

3.3 Road Safety

Accident statistics involving pedestrians and cyclists in the Cape Winelands area was requested from the Provincial Government Western Cape. The accident statistics for the period 1 January 2000 - 31 December 2004 was available. The following was noted:

- The average number of accidents involving pedestrians and cyclists are 790 accidents per annum.
- An age profile indicated that 20% of all accidents involving pedestrians and cyclists recorded during the 5-year period were of people younger than 17 years. The most accidents occurred in the age group 26-40 years, which contains about 26% of all pedestrian and cyclists accidents in the Cape Winelands.

The results of analyses of statistics of accidents involving pedestrians and cyclists younger than 17 years are discussed hereafter. An age profile of people younger than 17 years per district is provided in Figure 3. The following was noted.

- A gender comparison of accidents involving pedestrians and cyclists younger than 17 years indicates that 58% are male.
- The age profile (refer Figure) indicates that the largest number of accidents occur in the age group 6-12 yrs, which is synonymous with the primary school learner.

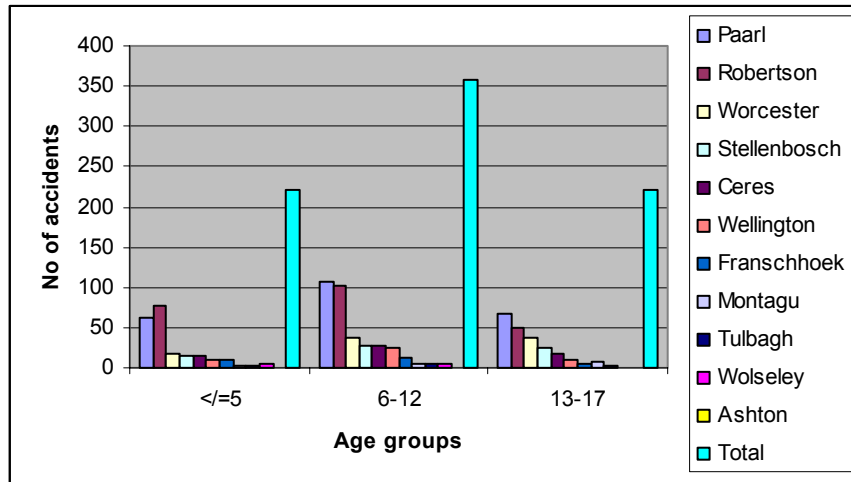


Figure 3: Age profile of accidents involving pedestrians and cyclists younger than 17 years

3.4 Walking

In excess of 50% of all learners walk to school. The travel time for walking to school varies according to whether a school was located in an urban or a rural setting. The majority of urban walking trips were less than 15 minutes, whereas the rural and semi-rural walking trips were in excess of 30 minutes and ranged from 30 minutes to as long as 3 hoursⁱ. Generally the walking school trip distance ranges between within 500m of the school (in the typical urban school location) to 12 km in a rural environment.



The walking environment for learners walking to and from school in the semi-rural and rural areas is not a very safe environment, as they walk along roads with operating speeds in excess of 100 km/h, with statutory speed limits for provincial roads of 100 km/h.

School children warning signs have been observed on the approaches to all schools (those in urban, semi-rural and rural settings), as well as along surfaced and gravel roads. However, this provides little safety for learners, as the travel speeds are still in excess of 50 km/h (which is the critical speed that influences whether the pedestrian will survive an accident with a vehicle) owing to the fact that the road environment accommodates the higher travel speeds.

Although the learners have to walk in a high speed road environment, there appears to be a high level of road safety consciousness amongst the learners and the teaching staff.

- Staff told of their own initiatives to assist learners in crossing the major roads and learners have also indicated an acceptable knowledge and understanding of road safety matters. However, almost all staff mentioned that the inabilities of children and their inherent playfulness are major contributors to the accidents happening when walking between home and school.



- Learners are also encouraged to walk together to improve their personal security, but this can sometimes lead to “bunching” in the road.
- Even though children have been taught to cross at pedestrian crossings, few formal crossings occur in rural areas where schools tend to be located on higher order roads.

The awareness of accidents involving learners during the trip between home and school appears to be low as 61% of learners interviewed indicated that they do not know of learners that were involved in a road accident to and from school.

Gravel roads pose their own threat to the road safety of learners, as one school indicated that the learner accidents that they encounter at their school is due to the dust created on the gravel roads by vehiclesⁱⁱ. The opportunity for the driver and the learner to observe one another is almost reduced to zero on the gravel roads.



3.5 Cycling

Although cycling as a travel mode to school will be reported on, it should be noted that no learners who cycle to school were interviewed.

- With certain exceptions, bicycles are generally not available to learners in the district.
- Generally in the rural areas, the few learners that do cycle, do not own their bicycles. These are borrowed from a family member or family friend.
- Within the more urban areas, a high level of general cycling was observed in the town of Worcester and Ceres. In Worcester, cycling was observed in the centre of town and most cyclists were wearing helmets.
- Very few cycling facilities were observed in the Cape Winelands District Municipality. (Some examples are shown on the right.)
- Owing to the lack of cycling facilities, it is not a comfortable and convenient cycling experience.



Cyclists experience a very unsafe road environment. Almost all the principals that were interviewed as part of this project indicated that they would not promote cycling as a travel mode at their schools due to the following reasons:

- Lack of facilities for cycling. A wide road shoulder was not considered adequate. Properly separated facilities would be preferred.
- Learners' lack of cycling knowledge.
- A bicycle could put a learner's personal security at risk.
- A bicycle becomes a saleable commodity.
- The inherent playfulness of the child.



3.6 State subsidised bus service

Of the 194 learners surveyed approximately 34% travel by state subsidised bus service. A more detailed breakdown of the bus travel times is illustrated in Figures 4 and 5. The following are noted:

- Almost all journeys are generally less than 60 minutes, with the bulk of the journeys being in the range of 15-30 minutes.
- The walking trip times from home to the bus collection point are mostly less than 30 minutes.
- Mostly the learners wait less than 30 minutes for the bus, but waiting times of 45 minutes were also recorded.
- The trip times from the bus drop-off point to the school are all less than 15 minutes as the learners are all generally dropped off at the school premises.

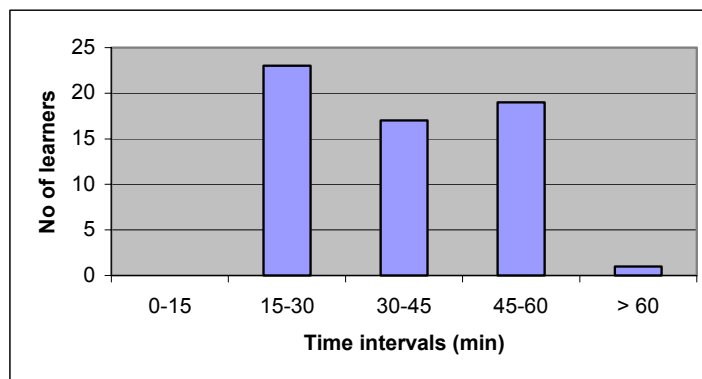


Figure 4: Bus travel times for learners on state subsidised bus

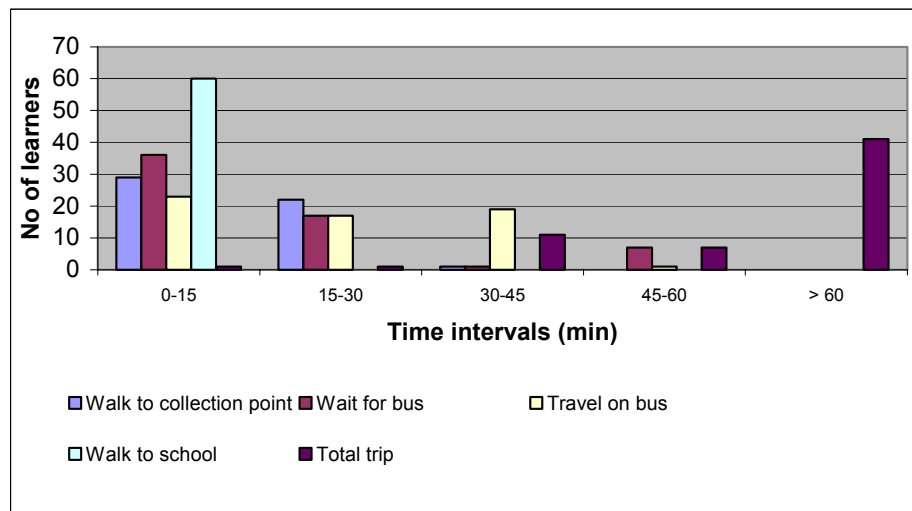


Figure 5: Total trip travel times for learners using state subsidised bus service

One of the key shortcomings of the state-subsidised bus service is that not all learners qualify for this service. According to the Department of Education's strategy only those registered learners that live more than 5 km from their schools qualify for the subsidy. However, the distance that learners walk

from their homes to the bus collection point is not taken into account. Principals have indicated that some learners still have to walk distances in excess of 2 km to reach the bus collection point.

3.7 Public transport

As part of the Cape Winelands District Municipality Current Public Transport Recordⁱⁱⁱ (CPTR) compilation, the CPTR indicated that a total of 1220 learners in the Cape Winelands were using forms of public transport.

Of the learners interviewed, only 3% of the learners were using public transport and their journey durations were mostly less than 45min. The public transport service is generally available to learners, especially those in the urban and semi-rural areas, but often too costly to afford. The public transport fares vary from R6-R11 per return trip or about R120 per month, and this can form a significant portion of the monthly income of a poor family.

The public transport environment is generally not well-suited for the needs of learners, especially the younger ones. Learners are dropped off and collected next to the road where there are often no shelters and they have to share space and capacity with other regular commuters.

3.8 Other modes

Other modes of transport used by learners to travel to and from schools include trucks, light delivery vehicles (LDVs) and tractors. Trucks, LDVs and tractors all generally used in the rural semi-rural environments. They are owed by farmers of the nearby farms and are also used to transport learners to school. This service is not available on a regular basis and is mostly used to transport learners when it rains.

Although convenient, the use of tractors, LDVs to transport learners are unsafe as learners are exposed and unrestrained. Also, should one of these vehicles be in an accident while transporting learners, the casualty numbers could be quite high depending on the number of people being transported. Although the potential for fatalities and casualties are quite high when using this mode, the learners and staff interviewed reported an acceptable level of safety.

4. POLICY DEVELOPMENT

4.1 Context of policy framework for learner travel

A review of transport-related policy and guiding documentation that pertains to learner travel has indicated that the policy framework on national and provincial levels clearly provides the policy framework for learner travel to be addressed. However, this theme is lacking in implementation initiatives.

- The National Department of Transport (NDoT) Green Paper on Transport^{iv} of 1996 states as its vision: "Provide safe, reliable, effective, efficient and fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers at improving levels of service and cost in a fashion which supports government strategies for economic and social development whilst being environmentally and economically sustainable." Learner travel is not directly referred to; however, it requires that transport operations should support government strategies for social and economic development and also being environmentally and economically sensitive, of which education and access thereto is one of its key underlying pillars.

- The Rural Transport and Development Strategy for South Africa^v (2002) has identified the need to address learner travel as a major challenge in developing rural transport. Firstly, it identifies the need for access from the rural village and school to the nearest town centre. A second challenge focuses on the provision of general transportation infrastructure that includes transport of learners.
- Furthermore, the Road to Safety 2001-2005^{vi} strategy has as its mission “To ensure an acceptable level of quality in road traffic, with the emphasis on road safety, on the South African urban and rural road network.” A key outcome required of this strategy is identified as “We want safer pedestrians and cyclists”. The Shova Kalula (Pedal Easy) Project forms part of the programme to promote the safety of cyclists and pedestrians. This is a national initiative specifically targeting the transport needs of learners in South Africa’s disadvantaged rural and urban settings.

In response to the national and provincial initiatives to undergo integrated transport planning in accordance with the statutory requirements stipulated in the NLTTA, consultants were appointed by the Provincial Government of the Western Cape to develop a range of public transport plans and an integrated transport plan for the Cape Winelands. Through this planning process the challenge of learner travel in the district has surfaced time and again. The Public Transport Plan has identified learner transport as a key area of intervention and has also identified the need for a detailed investigation into the provision of improved public transport services for learners in rural areas. The policy development framework for Safer Journeys to Schools in Cape Winelands rests within this policy context and is illustrated in Figure 6 and further discussed hereafter.

4.2 Vision, Mission and Objectives

4.2.1 Vision

In support of the objective of the Spatial Development Framework to improve and create access to opportunities, it is the proposed vision of this framework addressing learner travel to

“...Improve and create access to opportunities through education.”

The Rural Transport and Development Strategy for South Africa also identified making the big jump in access opportunities from the rural settlement to the town as a strategic challenge facing our rural districts. This “big jump” can also be achieved through access to education and thus the proposed vision is also in support of this strategic challenge.

4.2.2 Mission

This can be accomplished through improving the journey to school by providing a safe and comfortable link or connection between home and school. It is the purpose of this framework to outline various strategies and initiatives to improving the travel experience between home and school for the learner.

4.2.3 Objectives

Objectives in support of the vision and the mission are as follows:

- Improve the level of service (including transport operational level of service, as well as the coordination of transport services) learners and parents are currently experiencing.
- Improve the environment that learners move within between home and school
- Improve comfort and convenience experienced by learners while undertaking the journey between home and school.
- Improve road safety conditions along the route

4.2.4 Areas of Interventions and Strategies

Areas of intervention as listed below, and supportive strategies as indicated in Table 1, were identified. Actions or programmes in support of the strategies would assist in realising the objectives. These are discussed hereafter.

- Engineering/ Environment
- Education, communication and awareness
- Transport service delivery
- Institutional integration
- Traffic law enforcement
- Evaluation and Monitoring

Two approaches can be followed in developing strategies in support of the areas of intervention, namely, a high level strategic approach, as well as an implementation focussed approach. These two levels of approaches were incorporated as the applications thereof are different.

- The strategic approach includes aspects and areas where the responsibility for action or intervention does not lie with the district municipality or local municipalities, but with provincial and national governments, or even external to the transport sector. In this case, the Cape Winelands can merely facilitate the process.
- An implementation-focused approach includes those actions or programmes where the responsibility either lies at municipal level or within the transport sector. The Cape Winelands are responsible for the implementation of the project.

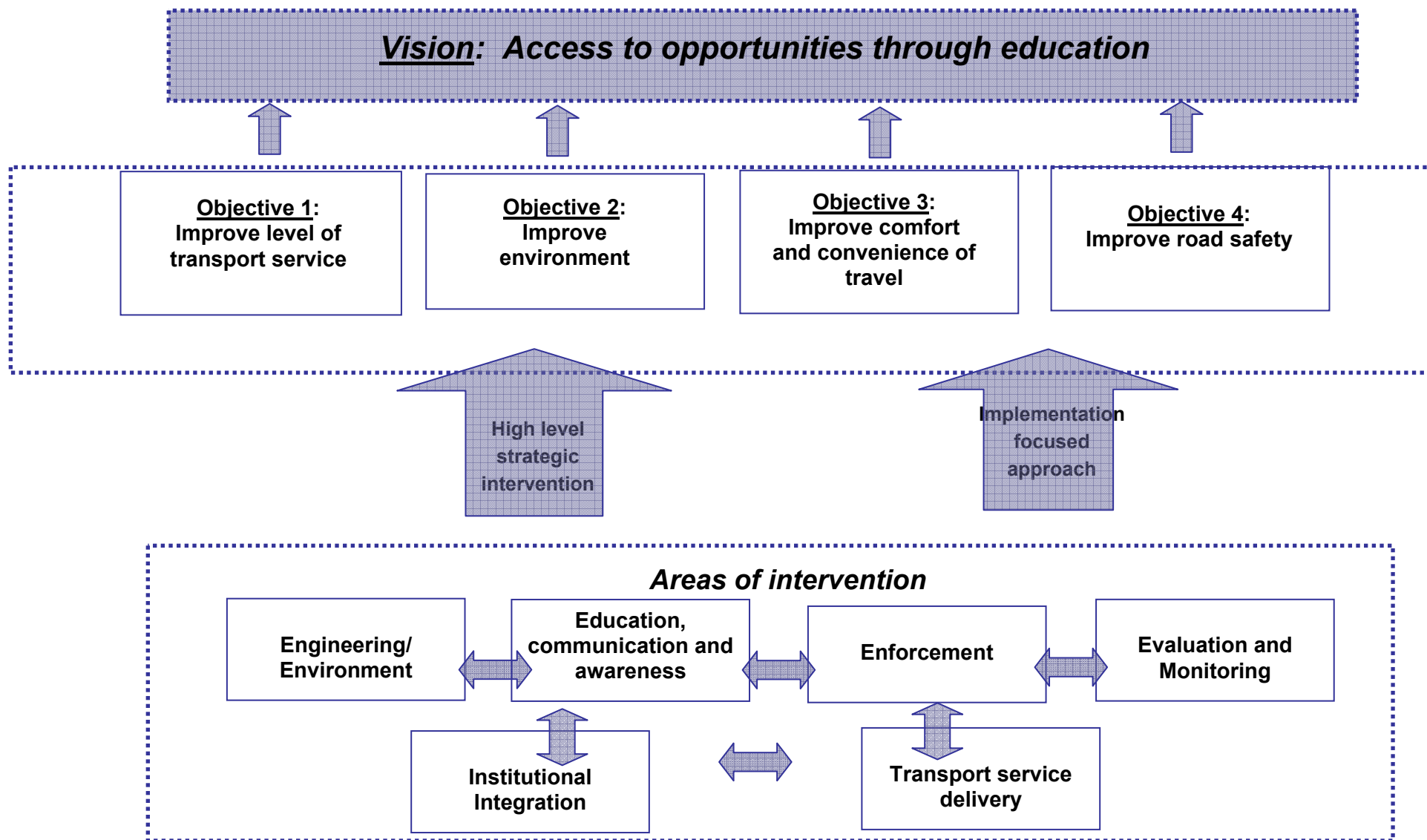


Figure 6: Policy development framework

Table 1: Strategies

<i>Strategies</i>	<i>High level strategic interventions</i>	<i>Implementation focused interventions</i>
Engineering/ Environment		
1. Improvement of the environment that learners move within when travelling to school.	<ul style="list-style-type: none"> Assess road network classification where appropriate. 	<ul style="list-style-type: none"> Improve infrastructure for all modes of transport (motorised and non-motorised). Improve signage at schools Improve visibility Identify learner hazlocs and implement remedial measures Review speed limits Maintain road environment Develop pedestrian and cycle networks
2. Improvement of school accesses	<ul style="list-style-type: none"> Develop and maintain partnerships with government agencies such Public Works and Education. 	<ul style="list-style-type: none"> Improve infrastructure at accesses to schools Initiate and support learner patrols
3. Promote integrated land use planning	<ul style="list-style-type: none"> Assess location of new schools Improve sectoral integration during project development 	<ul style="list-style-type: none"> Improve sectoral integration during project implementation.
4. Recognise the different needs of rural and urban areas	<ul style="list-style-type: none"> Develop appropriate solutions for rural and urban environments, considering principles of Integrated Rural Access Planning (Refer Error! Reference source not found.). 	<ul style="list-style-type: none"> Road access guidelines
Education, communication and awareness		
5. Actively participate in and initiate awareness raising and educational campaigns	<ul style="list-style-type: none"> Improve interaction between role players at different spheres of government. Ensure community involvement Sensitise role-players, officials and practitioners about the travel needs of learners. 	<ul style="list-style-type: none"> Participate and initiate awareness raising campaigns at pre-, during and post-project stages. Ensure community involvement Continue to educate school staff of their role to educate learners about the dangers and responsibilities of the road environment, i.e. "Train the trainer".
6. Focus on all users, learners and drivers		
Traffic Law Enforcement		
7. Improved traffic law enforcement	<ul style="list-style-type: none"> Develop and improve on partnerships/ relationships between education, traffic law enforcement and engineering sectors 	<ul style="list-style-type: none"> Enforce priority areas Assist learners with the crossing of hazardous roads Continuously share information
Evaluation and Monitoring		
8. Continuously monitor interventions	<ul style="list-style-type: none"> Inform decision-makers on results of monitoring 	<ul style="list-style-type: none"> Evaluate effectiveness of measures.

Institutional Integration		
9. Promote and support institutional and sectoral integration.	<ul style="list-style-type: none"> • Create and maintain continuous discussions with various role players. • Explore innovative funding sources • Establish partnerships with non-government organisations. 	<ul style="list-style-type: none"> • Develop and improve on relationships with farmers, community leaders and organisations.
Transport service delivery		
10. Incorporate learner subsidised transport service into a subsidised public transport for the district.	<ul style="list-style-type: none"> • Investigate the role of a single government agency responsible for transport in the district. • Promote and support the development of a public transport service for the region. • Promote and support integration between the various government agencies responsible for transport. 	
11. Promote and support multi-modal approach to transport service delivery.	<ul style="list-style-type: none"> • Support the development and management of walking buses and cycle buses. • Introduce the concept of travel plans to schools and assist with the implementation and management thereof. • Improve on and coordinate the contribution of rural transport means such as LDVs, trucks and tractors. 	<ul style="list-style-type: none"> • Recognise and address the contribution of all modes at project implementation stage.
12. Recognise the role of non-motorised (NMT) transport in learner transport.	<ul style="list-style-type: none"> • Promote NMT in the district. • Integrate NMT with other forms of transport. 	<ul style="list-style-type: none"> • Ensure NMT considerations during project implementation. • Motivate for bicycle storage facilities at schools.
13. Provide and improve on the support given to schools	<ul style="list-style-type: none"> • Develop partnerships with schools. • Develop partnerships with farmers/ corporates to provide support in terms of funding, clothing, equipment, etc. • Investigate the concept of a top-up transport subsidy. 	

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