

CHAPTER 15 TOURISM AND ECONOMIC

This chapter assesses, as appropriate, specific tourism and economic issues at a project scale and/or in relation to toll funding. The assessment of potential impacts is based on the findings of the relevant specialist studies undertaken during the EIA process. The respective specialist reports provide detailed descriptions of the study approach followed, the identified risk sources and potential impacts – see Volumes 3 and 4.

15.1 TOURISM

The following specific tourism issues are assessed at a project scale and/or in relation to toll funding:

- Impacts on towns on the existing N2 that would be bypassed as a result of the relocation of the N2 between Mthatha and Port Shepstone; and
- High-volume tourism versus eco-tourism.

Impacts on bypassed towns on the existing N2

Towns along the existing N2 between Mthatha and Port Shepstone include Qumbu, Mount Frere, Mount Ayliff, Kokstad and Harding. These towns rely primarily on transit traffic along the existing N2 section. Most of the towns on the existing N2 section are undeveloped as tourism destinations. However, Kokstad and Harding have become stop-over destinations.

It is anticipated that the proposed project would result in a decreased number of overnight tourists along the existing N2 between Mthatha and Port Shepstone and an associated negative impact on the potential growth and number of tourism products. The following resultant impacts are anticipated: loss of income to facilities provided for transit tourists; negligible impact on the town of Qumbu as there are no known existing tourism enterprises in the town; a negative impact on small tourism enterprises (such as craft markets) in Mount Frere and Mount Ayliff; negative impacts on future plans and opportunities for tourism; negative impacts on existing tourism facilities in Kokstad and Harding; and impacts at the regional level in terms of KwaZulu-Natal Tourism's strategy for the Kokstad area to be a gateway to KwaZulu-Natal and the Eastern Cape.

The potential negative tourism impacts on bypassed towns on the existing N2 is deemed to be of **MEDIUM** intensity and significance without and with mitigation. It is considered that tourism promotion along the existing N2 could change the potential negative impact to neutral status.

High-volume tourism versus eco-tourism

The tourism specialist study included a survey of tourism stakeholders, tour operators and accommodation owners regarding the potential tourism impacts of the proposed project, in particular in the Wild Coast area between Port St Johns and Port Edward.

The survey revealed that the current lack of access was regarded as an inhibiting factor to the success of tourism businesses. The majority of respondents felt that improving access to the area was necessary and should happen, as the status quo was not functioning effectively. There were mixed responses regarding the extent to which the condition of roads in the area was an inhibiting factor and to what extent the current plans for the proposed toll highway would be a solution.

The majority of the respondents also felt that the proposed new road would be aligned too close to the coast in the Mkambati Nature Reserve area, and should instead be placed further inland, avoiding the PCE. Several expressed concerns about the loss of habitat for the vulture colonies in the gorges near the reserve and the loss of sensitive ecosystems. The opinion was expressed that these natural resources are tourism resources and impacts to them should be mitigated or avoided. All respondents voiced concern about increased access to environmentally sensitive areas.

The high-speed nature of the road was felt to be a constraint to the growth of tourism businesses as tourists should be encouraged to stop and use facilities instead of just driving through. The condition of secondary gravel roads to many destinations was felt to be a strong deterrent to tourists, and product owners whose businesses depended on these roads felt that although asphaltting these roads may not be possible, maintaining the gravel roads in good condition was important to tourists being able to access their products.

Product owners in the area noted that the proposed new road would be of great economic benefit to businesses in the northern Wild Coast area but felt the conservation value was of equal importance.

Several tour operators interviewed were struggling to sell tours in the study area. They felt that some of the deterrents for tourists were a lack of diverse products, a lack of luxury or high quality products and a perception of safety problems. The lack of access was attributed both to the condition of the existing roads and the great distance to the nearest commercial airports (in East London and Durban). Some mentioned that improving access and the speed and safety of roads would attract the Durban and South Coast markets into the northern parts of the Wild Coast.

Tour operators that have more successful operations in the study area tend to deal chiefly in adventure and eco-tourism tours and trails. They are locally based and collectively handle about 3 500 tourists a year. Visitors are willing to endure the lack of facilities to experience the “unspoilt” environment. Tour operators claimed that eco-tourism business had been on the increase and that the majority of their clients were foreign tourists. Eco-tourism operators in the Wild Coast were of the opinion that the plans for the proposed toll highway and the mine at Xolobeni were currently affecting eco-tourism business as foreign tourists were under the impression that the area was under threat and may no longer offer the same experience. The volumes were fairly low but tour operators felt that the potential was great if marketing improved and the global trend towards responsible tourism bears bore fruit.

Many respondents expressed mixed feelings about the possibility of the proposed project resulting in an increase in volumes of tourists in the area, noting on the one hand that high-volume tourism was important to the economic development in the region, and on the other hand higher volumes of tourists and larger tourism developments could, in the long term, cause the region to become something other than what it is currently marketed as, i.e. the Wild Coast, an area which is distinguished by its lack of development and its eco-tourism offerings.

Respondents expressed the need for thorough land use planning management of all development in the area that could result from increased access and traffic volumes in order for the Wild Coast to retain its natural heritage. The opinion was also expressed that the Wild Coast SDI raised the expectations of communities regarding eco-tourism and these expectations have not been met. Some stakeholders felt this was the reason communities were putting more weight behind other developments as many have discounted eco-tourism as a means of economic growth.

The tourism specialist believes that there is room for more intensive tourism developments on the Wild Coast as well as eco-tourism enterprise. This is seen to be particularly the case if the proposed Wild

Coast/Pondoland National Park plans go ahead, but with the number of nature reserves in the area it is considered that eco-tourism will be viable with or without the proposed Park.

It is considered that intensive tourism developments should be built along sustainable development principles. The location of intensive tourism development should be planned carefully in order for it to pose a low threat to the environment. Most of the development control measures would be beyond the scope of the management of the proposed toll highway. However, SANRAL's involvement in the location of possible future access roads to the coast, waterfalls or other attractions should be considered in light of enabling access for tourism enterprise. SANRAL should also co-ordinate activities with municipalities and communities to ensure plans are in place to manage tourism developments so as to prevent uncontrolled development.

15.2 ECONOMIC

The following specific economic issues are assessed at a project scale and/or in relation to toll funding:

- Economic justification and financial viability of the entire project and of the widening of the existing N2 between the Winklespruit and Isipingo interchanges;
- Increased one-off national income resulting from investment in the proposed project;
- Recurring non-user benefits and total developmental benefits of the proposed project;
- Impacts on businesses along the route and in the region;
- Impacts on towns on the existing N2 and R61 that would be bypassed and impacts on towns that would be linked by the proposed new route ;
- Impacts on prices of goods and services;
- Impacts of the proposed greenfields routes on the existence value of the affected areas; and
- Overall economic sustainability of the proposed project.

The economic specialist study indicates that sensitivity analyses dealing with various mitigation/enhancement measures were not performed, as these would have led to a multitude of assessment outcomes, which was considered to not have served as effective guidance in later decision-making. The assessment ratings given below thus apply to both without and with mitigation/enhancement scenarios.

Economic justification and financial viability of the entire project and of the widening of the existing N2 between Winklespruit and Isipingo Interchanges

Assessment

The road sections which constitute the existing and proposed alignments of the proposed toll highway vary from two-lane rural roads to six-lane freeways with full control of access, including sections with climbing lanes, two-lane freeways and urban road sections through Butterworth, Dutywa and Mthatha. Three scenarios were considered in the analysis, namely the “do nothing” option, the “proposed project with the economic costs and benefits” and the “proposed project with the financial costs and benefits”.

An analysis of the modelled traffic volumes (as provided by the traffic specialist) indicated the following traffic patterns:

- A total of 536 new vehicle trips per day would be generated between East London and Port Shepstone;
- A total of 284 new vehicle trips per day would be generated between Port Shepstone and Durban;

- A total of 870 vehicle trips per day would be attracted from the existing N2 between Mthatha and Port Shepstone to the proposed new route via Lusikisiki; and
- A total of 674 vehicle trips per day would be attracted from the existing R61 via Bizana to the proposed new route.

The total financial cost (2007) of the proposed project was calculated as R 6,418.28 million while the economic cost was calculated as R 5,779.56 million (see Table 7 in economic specialist report, Volume 4, Appendix 13). The construction cost schedule assumed a three year construction period in which it was expected that that the largest sum would be spent on structures in the final year.

The economic and financial analyses were performed for a 30-year analysis period, an 8 % discount rate, a three-year construction period, and no residual value. The following economic and financial indicators of viability were used: (1) Net Present Value (NPV); (2) Internal rate of Return (IRR), and (3) Benefit/Cost ratio (B/C).

The results of the analyses for the entire project, at the expected traffic growth rates (see section 1.4.2 in the economic specialist report) are presented in Table 15.1 below.

Table 15.1: Economic and financial analysis (2007) of the entire project

ITEM	ECONOMIC ANALYSIS	FINANCIAL ANALYSIS
NPV	R 5,510.1 million	R 1,716.2 million
IRR	15.4 %	10.4 %
B/C	2.12	1.31

The economic analysis indicates that the proposed project, given the various assumptions (of which the most critical were those related to the value of time and the traffic growth rate), would definitely be economically justified, with an IRR of 15.4 %. The proposed project is also considered to be financially viable, with an IRR of 10.4 %. In the financial analysis it was assumed that the toll income would be 75 % of the total savings in road user costs.

The results of the economic analysis for the 14.6 km freeway section between Winklespruit and Isipingo Interchange are shown in Table 15.2.

Table 15.2: Economic analysis (2007) of the freeway section between Winklespruit and Isipingo Interchange

ITEM	ECONOMIC ANALYSIS
NPV	R 1,137.7 million
IRR	37.9 %
B/C	4.82

Based on the findings of the economic analysis, it is concluded that the freeway section between Winklespruit and Isipingo Interchange would, similarly, be economically justified, with an IRR of 37.9 %.

Mitigation

The economic specialist study indicates that sensitivity analyses dealing with various mitigation measures were not performed, as these would have led to a multitude of assessment outcomes, which was considered to not have served as effective guidance in later decision-making. However, considerations for mitigation in relation to aspects of toll tariff determination were highlighted, as follows:

The proposed new toll highway should benefit all users (along the entire length of the road) if the principle that “the toll fee is less than the road user benefits” is applied. Benefits include (1) reductions in road user costs (where road user costs comprise vehicle operating cost plus travel time cost plus accident cost) and/or (2) road user revenue increases as a result of new road usage (sometimes called “productivity bonuses” or “road bonuses”). Examples of the latter would be when a new road enables business users to achieve an extra business or revenue-earning trip in a given time period or where new destinations come into reach or where new business is generated.

The largest portion of the benefits to road users would accrue in the Eastern Cape because this would be where the major distance saving would occur and most new business would be created.

Road users in the vicinity of toll plazas who would use the road for a distance shorter than that for which the fee is calculated, will be impacted negatively. This is where discounts may have to be negotiated. The magnitude of these impacts would depend on the location of the toll plazas, the access points to the road, the distances involved and the frequency of road usage.

The frequent users in the KwaZulu-Natal section of the route would be mostly concentrated on the freeway sections just south of Durban. Their benefits would be derived from the addition of two lanes to the existing freeway that would reduce the congestion on this section of the road. This would reduce the vehicle operating costs and time costs of users. Again, if a road user were to drive the full distance for which the toll fee was calculated, there should be a positive benefit. Discounts for specific groups would probably have to be negotiated. The discount for frequent users could be in the form of a monthly fee.

The majority of vulnerable people use bus and taxi transport and special rates for these types of vehicles may have to be considered. The introduction of discounts for commuters would reduce the negative impact of tolling on their total cost of transport. In the Eastern Cape buses comprise up to 2.5% of traffic, with taxis between 13% and 18%. In KwaZulu-Natal these figures are much smaller (buses are 0.3% and taxis between 2 and 3% of the total traffic). It can be argued that the public passenger transport operator would still have a saving in road user cost and therefore it would not be necessary to charge passengers extra. The fact is, however, that the travel time savings, which are quite high for these high-occupancy vehicles, comprise approximately half of the benefits and are mostly benefits for the passengers.

Cross-subsidisation in the Eastern Cape should be kept to a minimum because there would be no alternative route to the users between East London and Mthatha. Since there is an alternative route on the sections in KwaZulu-Natal the market would soon show through-traffic diversions if cross-subsidisation was too high. If cross-subsidisation were kept to a minimum, as proposed, every road user would be paying less than the amount he/she is saving or gaining through increased revenue as a result of the proposed toll highway.

Greater road capacity would not only reduce present traffic congestion, but also postpone future congestion on the KwaZulu-Natal section of the road. Suppliers of manufactured goods in KwaZulu-Natal would find new business in the Eastern Cape. KwaZulu-Natal would, therefore, gain in their capacity as road users and non-road-users.

One-off national income resulting from investment in the proposed project

Investment expenditure on the proposed toll highway would generate additional income which would exceed the initial investment amount. This is known as the income-multiplier effect of investment. The income-multiplier can be described as the relationship between the change in income and the investment expenditure which generated it.

The economic analysis (see section 2.4 of economic specialist report) indicates that the income-multiplier effect would increase the present (2007) value of the investment amount of R 4,309 million to an eventual one-off gross income of R 17,884 million. After deduction of this investment amount, the net increase in one-off income is expected to equal R 13,575 million. From an economic perspective, it is considered that investment in the road would afford government a “very good” opportunity to effectively generate income/wealth in the Eastern Cape and KwaZulu-Natal.

Estimation of the potential for job generation by the proposed project indicates that approximately 6 800 project-related jobs would be created annually during the construction phase. There is also a high potential to generate up to 21 300 indirect or non-project-related jobs annually during the construction phase, which would result in a total employment creation of 28 100 jobs annually during construction. The significance of the generation of project-related and non-project-related employment during the construction phase is thus rated as **POSITIVE HIGH**.

Recurring non-user benefits

The extent to which economic activity is accelerated on a recurring or a continuous basis can be approximated by the product of (a) the financial value of road use benefit less the value of non-working time and (b) the net regional income-multiplier (i.e. accelerator).

From the above analysis of the economic justification and financial viability of the proposed project, it is deduced that the present (2007) financial value of user benefits (minus the value of non-working time) accruing to users during the service period of the road (i.e. from beginning year 4 to end year 30) would amount to approximately R 5,973 million. With a local net regional income accelerator of 2.65 (in the service area of the road), the expected present (2007) value of the regional developmental economic benefits during the service period of the proposed toll highway would amount to R 15,829 million. By applying a real discount rate of eight percent this value would be equivalent to an amount of R 1,447 million per annum.

The present (2007) value of the net developmental economic benefits which the road would yield is calculated as the total of the net income-multiplier effect of the investment amount of R 13,575 million and the present value of accelerated business income of R 15,829 million during use of the proposed toll highway. These add up to a single 2007 value of R 29,404 million. Over the 30-year analysis period of the proposed project, at a real discount rate of eight percent, this value is equivalent to additional national domestic income of R 2,612 million per annum. For a predominantly “rural” road project this is considered a large quantum, and the significance thereof is rated as **POSITIVE HIGH**.

During the service period of the road (i.e. from beginning year 4 to end year 30) there would be a probable opportunity to generate approximately 900 directly road-related jobs annually. These employment opportunities would be related to the maintenance of the road and the road reserve, tolling staff, direct traffic control and law enforcement, and staffing of road-side services. In addition to the road-related employment opportunities, it is estimated that usage and operation of the road would generate approximately 18 000 indirect job opportunities per annum, resulting in an average employment creation of 18 900 jobs annually during the service period of the road. This economic impact is rated as being of **POSITIVE HIGH** significance in the long term.

Impacts on businesses along the route and in the region

Due to the reduction of generalised travel costs, the generation of new business activities and additional land use development, the following economic sub-sectors in the Eastern Cape and KwaZulu-Natal would

enjoy increased income: (1) agriculture, (2) forestry, (3) manufacturing, (4) construction (i.e. property development), (5) finance and real estate, and (6) trade, tourism and catering. The estimated present (2007) value of this additional income (as mentioned above) is approximately R 15,829 million (R 1,447 million per annum at a real discount rate of 8 %).

The proximity of the proposed new route would be important to road-oriented retail enterprises such as vehicle service and fuel stations, food retailers, lodging and hospitality businesses catering for tourists. Goods consignors may also enjoy benefits in their capacity as non-road-users. These benefits could take the form of lower delivery cost, shorter trip times, more punctual delivery and improved goods (freight) security. These benefits would have a greater value in developing regions (such as the far Eastern Cape region, especially in the greenfields sections of the proposed project) than in developed regions, mainly because of more limited supply of capital. Trip time savings and punctual goods delivery would be beneficial in two ways:

- (1) faster and more punctual deliveries would mean lower storage costs and more effective business logistics service provision, and
- (2) highly perishable products could be distributed over a wider area.

Improved goods security on paved roads resulting from less dust, vibration and knocks during the transport process would enable the suppliers of agricultural, horticultural and dairy products to retain high product quality, while less physical damage with respect to fragile goods would be suffered. The preservation of the quality and quantity of freight would improve the revenue of consignors. It is considered that these factors would have the potential to help mitigate the rise of consumer prices in the service area of the road, especially in the far Eastern Cape.

It is anticipated that the following commodity groups would benefit most: (a) containerised general freight, (b) automotive components, (c) timber and paper, (d) chemicals, (e) fuel, and (f) overnight courier services and express freight consignments of break-bulk items.

It is considered that economic sub-sectors in the study area would experience positive impacts of medium intensity at a regional level in the long term. This impact is thus rated as being of **POSITIVE HIGH** significance.

Impacts on towns on the existing N2 and R61 that would be bypassed and impacts on towns that would be linked by the proposed new route

Based on the modelled traffic volumes it is expected that traffic volumes at towns such as Bizana, Flagstaff and Kokstad would decrease after implementation of the proposed toll highway. The proposed new N2 route would, however, be aligned closer to Port St Johns and would skirt Lusikisiki. Traffic volumes at the latter towns are, in turn, expected to increase after implementation of the proposed toll highway.

The potential impact of the proposed toll highway on the Gross Regional Product (GRP) of each of the towns investigated in the study is shown in Table 15.3.

Table 15.3: Potential impact of the proposed project on the GRP of certain bypassed towns

TOWN	CHANGE IN ANNUAL INCOME	% GRP CHANGE
Bizana	- R 2.31 million	- 0.7
Flagstaff	- R 2.31 million	- 0.9
Kokstad	- R 6.15 million	- 1.8
Lusikisiki	+ R 39.73 million	+ 8.6
Port St Johns	+ R 35.9 million	+ 19.8

Based on the above findings, it is assessed that potential declines in the GRP of towns such as Bizana, Flagstaff and Kokstad could be regarded as negligible and of **LOW** intensity and significance without and with mitigation. The potential positive impact on the local economies of towns such as Lusikisiki and Port St Johns, which would be situated closer to the realigned N2, is deemed to be of **POSITIVE HIGH** significance.

Impact on prices of goods and services

The economic study indicates that the shortening of the existing N2 route between East London and Durban would reduce the delivery cost of all goods that are delivered over a shorter distance. For example, due to new fuel delivery/distribution opportunities, the retail fuel price at Lusikisiki and Port St Johns is expected to drop.

The probable drop in prices of goods and services in the study area is expected to be of low intensity at a regional level in the long term, and would depend on the level of toll tariffs charged. This potential impact is deemed to be of **POSITIVE MEDIUM** significance.

Impact of the proposed greenfields routes on the existence value of the affected area

Both greenfields sections of the proposed road would be situated in areas where places of scenic beauty occur that possess a measure of existence value. Existence value is the level of altruistic desire that something, typically an environmental asset, should continue to exist. In other words, existence value refers to the value individuals place on simply knowing that a resource exists or will continue to exist. This value cannot be inferred from market prices or from observing market behaviour since, by definition, they do not involve any actual behaviour. Furthermore, "futures markets" for environmental services do not currently exist (although such markets may be developed in the future). Thus, these values can only be obtained from stated preference techniques such as contingent valuation, whereby individuals are asked to state their willingness to pay (WTP) to preserve the resource in question, in which case the monetary amount arrived at will have the status of an index number only.

Willingness to pay is constrained by the income level of a respondent, i.e. the respondent's ability to pay. Ability to pay in turn is again constrained by the respondent's readiness to pay, which demonstrates the virtual impracticability of this type of method to evaluate natural features in the greenfields areas of the proposed project.

For the purpose of the economic study the assessments contained in the vegetation and flora, and visual specialist reports in terms of potential impacts on natural features and aesthetics in the surrounding area was used as a proxy for monetary existence value. Since it is anticipated that the proposed toll highway would (1) marginally (negatively) affect the ecological sustainability of the area (on condition secondary impacts can be controlled), (2) the proposed toll highway would have a low overall visual impact for most of the route (with recommended mitigation), (3) two bridges would result in negative visual impacts of medium-high significance, and (4) with mitigation none of the toll plazas would result in high visual impact, it is considered that the probable loss of existence value in the greenfields area would be

substantially exceeded by increased agricultural, forestry and eco-tourism outputs, and other new business in the long term in the area.

The probable loss of existence value in the greenfields sections is rated as being of **MEDIUM** significance at the regional level in the long term.

Overall economic sustainability

The regional income-multiplier effect would increase the present (2007) value of the investment amount of R4,309 million to an eventual once-off regional gross income of R 17,884 million. After deduction of this investment amount, the net increase in one-off regional income is expected to equal R 13,575 million.

Once the road is in operation regional economic income would be accelerated on a recurring basis. The following economic subsectors in the Eastern Cape and KwaZulu-Natal would enjoy increased income: (1) agriculture, (2) forestry, (3) manufacturing, (4) construction (i.e. property development), (5) finance and real estate, and (6) trade, tourism and catering. The estimated present (2007) value of this additional income is approximately R 15,829 million.

The present (2007) value of the net regional developmental economic benefits that implementation and use of the Wild Coast Toll Road would yield is the total of the net regional income-multiplier effect of R 13,575 million, and the present value of accelerated business income of R 15,829 million. These add up to R29,404 million. Over the 30-year analysis period of the road at a real discount rate of eight percent this value is equivalent to additional domestic income of R 2,612 million per annum.

Long-distance travellers are not captive purchasers in towns along the present route - their on-route transactions are incidental and voluntary. Traffic between the Eastern Cape and the Pietermaritzburg area would still use the existing N2 as first-choice route, while the existing link between Mthatha-Kokstad-Durban would remain intact – neither its mobility nor its accessibility function would disappear. Although the proposed new link between Mthatha and Port Edward would attract traffic from the existing N2 route, the newly generated traffic benefits on the proposed new road would by far exceed any reduction of business on the existing road section. (It is estimated that traffic generation in the first year of operation would translate into an economic benefit of over R 500 million in the Eastern Cape Province and KwaZulu-Natal. Of this, approximately R 150 million would accrue to existing and new business between Mthatha, Port St Johns and Port Edward).

Approximately 6 800 project-related jobs would be generated annually during the construction phase. There is a high probability to generate up to 21 300 indirect or non-project-related jobs annually during this phase, resulting in a total employment creation of 28 100 jobs annually during construction. This would have a positive economic impact on a regional level in the short term. The significance of the generation of project-related and non-project-related employment during the construction phase is rated as **POSITIVE HIGH**. During the service period of the road there is the potential to generate approximately 900 directly road-related permanent (sustainable) jobs annually. Usage and operation of the road would generate approximately 18 000 indirect job opportunities per annum, resulting in an average employment creation of 18 900 jobs annually during the service period of the road. This positive economic impact is rated as being of **POSITIVE HIGH** significance in the long term.

In addition to being justified from a micro-economic viewpoint, the project's "very good" one-off income-multiplier effect and significant recurring non-user benefits would support the macro-economic objectives of (1) full employment, (2) economic growth, (3) price stability, and (4) equitable distribution of income. On aggregate it is considered that the proposed project would make a significant contribution to the primary macro-economic goal of improving the wealth of the Eastern Cape and KwaZulu-Natal provinces. In view of

the fact that these benefits would not be diverted or transferred from other provinces, but be generated locally, the average annual net macro-economic gain of R 2,612 million would also accrue to the country as a whole (i.e. the road would be instrumental that South Africa's national product increases by R 2,612 million annually).