

1. MOTIVATION FOR A SOCIAL COMPACT RELATED TO THE SIR LOWRY'S PASS VILLAGE DEVELOPMENT

The Sir Lowry's Pass development is not only considered as a catalytic project for Sir Lowry's Pass Village from an investment perspective, but the novelty and positioning of the project elevates it to a level that maximises socio-economic change in a community that requires upliftment, social cohesion and opportunity. It is not positioned as a high-end income village or housing development with luxury houses, but a development that focus on the middle-income segments of the market, the so-called blue-collar workers that are sensitive to elevated levels of unaffordability of homeownership and even rental levels in many cases.

The City of Cape Town is already providing social housing in the area and the proposed Sir Lowry's Pass project is intended to bridge the gap with the provision of housing for the middle-income market segment.

Sir Lowry's Pass Village is in close proximity to the affluent areas of Somerset West and Gordon's Bay, but the property market is markedly different. By way of an example, a property in the Blue Rock security estate in Sir Lowry's Pass sells for approximately R9 318 per m², or Forest Walk in Sir Lowry's Pass at R9 925 per m². A property in Pinecreek, an estate off Sir Lowry's pass Road 4.5 km from the village sells at R15 235 per m² (source: Property 24.co.za) The estates differ more in location than the property offering, with the average price differential between the two estates in Sir Lowry's Pass Village and Pinecreek being 58.33%.

This is an important differential when considering development in terms of household income levels and the value proposition for the project is therefore not comparable to developments in Somerset West or even as we see above, in locations in relative close proximity to Sir Lowry's Pass Village.

The Sir Lowry's Pass development is positioned as a middle-income development with the aim of addressing the gap in the market for middle-income earners to obtain property ownership. Not only does the development envisage to plug a gap or fulfil a need in the middle-income market, but would make a difference in the community through various initiatives required to create a sense of community, ensure sustainability and enhance cohesion.

In terms hereof, a portion of 5 ha (representing 13,03% of the 38.4 ha comprising the site) is designated for Community Use and managed through a Public Benefit Organisation (PBO). The 5 ha is sub-divided into an urban park and sports fields of 3.98 ha, as well as a sports facility and crèche. In the evenings, the crèche will be utilised as a training facility for waiters and offer rape counselling and child welfare support, a much-needed social service in the area.

Funding for the proposed activities on the portions designated for the community will be sourced through partnerships with NGOs, PBO's and donors that would consider the use of the property for the purposes of upliftment. The nature of the transaction would be a land donation and offering an opportunity to create community and social facilities that enhance and uplift the local Sir Lowry's Pass community.

A further 2 ha of the site adjacent to the town will offer mixed-use opportunities, but also focused on the community residing within the development and the people living in town.

Service provision:

A further benefit of the Sir Lowry's Pass development is the requirement for infrastructure and bulk services. A calculation of the bulk engineering services component of the Development Charges payable to the City of Cape Town is R51.9 million. Service for the development are lacking or capacity is minimal. Electricity provision and sewerage are particular limitations for the project. Electricity will have to be acquired by extending the supply line from Somerset West to the site. Any investment in electrical infrastructure will also benefit other developers that wish to develop in the area and a shared-service and resources should therefore be considered. A further matter for consideration in terms of service provision is the nature and scope of the development aimed at a market segment deeply in need of affordable housing opportunities.

The development will also result in socio-economic benefits for persons living in Sir Lowry's Pass Village during the construction and operational phases. The following sections indicate the impact of an estimated investment

of R811 million over a period of 11 years with the first year allocated for bulk infrastructure provision.

2. TEMPORARY EMPLOYMENT OPPORTUNITIES

2.1 Scope and consequence of impact

The assessment of the employment contribution is at best very risky. The results are driven largely by its assumptions, which entail the following:

- The structure and composition of the Western Cape economy will remain unchanged. This is necessary to enable the use of multiplier analyses.
- No significant political and other administrative changes will take place on a national or provincial level.
- An initial period of 11 years is assumed for the assessment of employment.
- The supply of skilled labour will be a limiting factor in the construction process.
- Leakages to other areas of the Cape Town metropole are assumed zero when considering the expenditure impact in the Helderberg District and on Sir Lowry's Pass. The employment impact will therefore be inflated (higher than the impact on Cape Town).

Demand for labour (employment) in economic terms is considered as a derived demand; a forecast for labour demand can therefore be derived from the planned increase in spending. The basic assumption focuses on the relationship between growth in nominal spending and growth in labour demand. If growth in labour demand equals the growth in nominal spending, labour productivity will stay constant. If labour productivity increases, the demand for labour will grow at a slower rate than nominal spending.

Three scenarios are evaluated: Firstly, it is assumed that productivity stays constant and the additional labour demand follows the long-term trend of employment per Rand Million of Gross Value Added (GVA) considered from 1995 (**Figure 1**) for the Construction Sector of the Cape Town Metropolitan Area and Helderberg District. Secondly, labour productivity increases per annum and labour demand therefore increases by 0.90 using an adjusted power function trend. Thirdly, labour demand is forced to increase by 1.1 above the long-term trend, which is caused by external influences. Only total labour demand will be considered; no race, gender or skill level is considered. It is also assumed that the majority of new job opportunities are created only for the year in which the capital expenditure occurs. Additionally it is assumed that some job opportunities are of a more permanent nature. The ratio of capital expenditure in a specific year to total capital expenditure over the 11 year period is used to determine the "carry forward" number of jobs created in a specific year. In short, it means that in some years if capital expenditure is lower than the previous year there will be a reduction in temporary jobs or job losses.

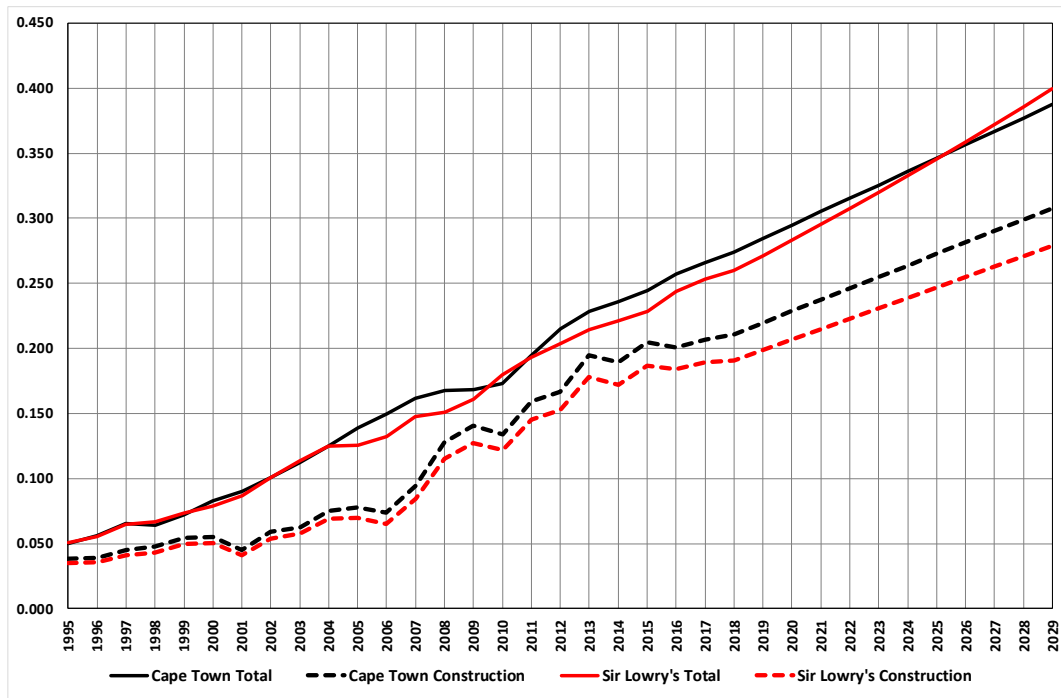


Figure 1: GVA at current prices per employee for the Construction Sector in the Cape Metropolitan Area and Helderberg District with forecasts from 2019 to 2029 estimated by fitting an adjusted linear trend
 Source: Derived from Quantec data (2019), own calculations

Figure 2 indicates the number of jobs that could be sustained per annum by the development aligned with the estimated capital expenditure within the Cape Town Metropolitan and Helderberg economy due to the development with reference to Scenario 1: Constant Productivity.

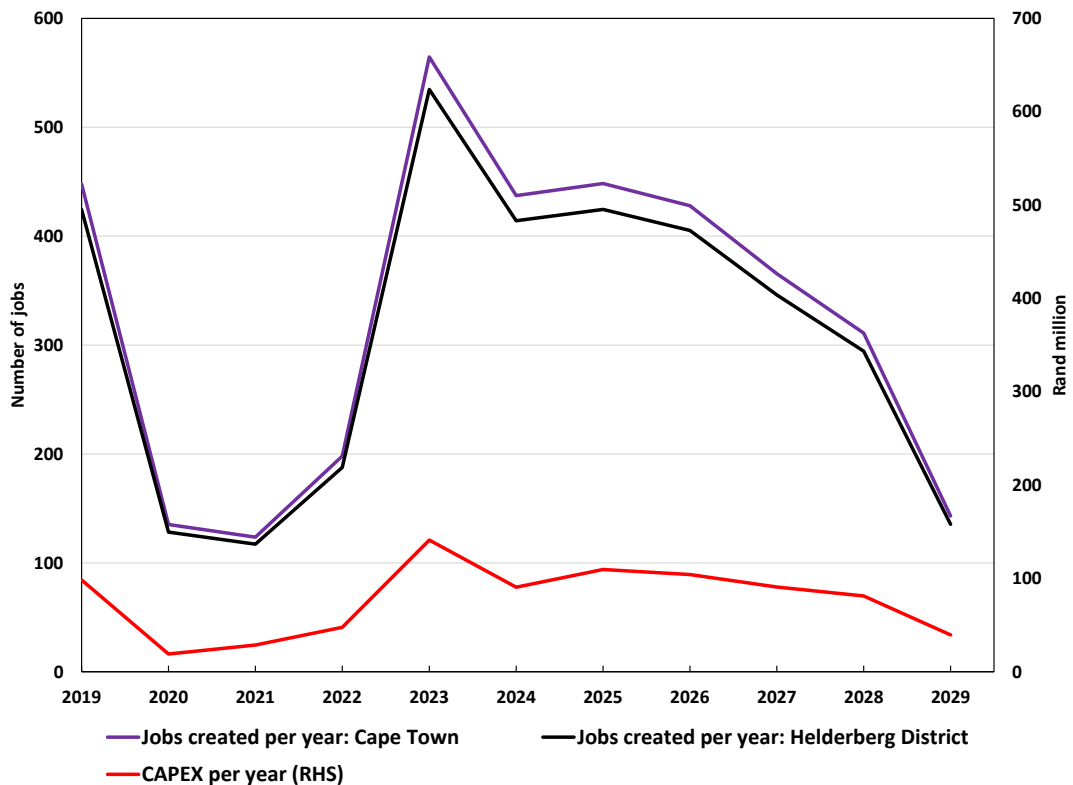


Figure 2: Nett job opportunities aligned to capital expenditure for Helderberg District and the Cape Town Metropolitan Area for Scenario 1: Constant Productivity
 Source: Derived from Quantec data (2019), own calculations

The results summarised in **Table 1** indicate total employment given the assumptions listed above. The realistic outcome is probably the first scenario given the assumptions applied in the analysis. Based on sound business practices, the second scenario with increased productivity and thus lower labour demand, is preferable.

Table 1: Employment outcomes for different scenarios based on estimates of capital (construction) expenditure per year at current prices: Cape Town Metropolitan Area and Helderberg District

		Scenario 1:	Scenario 2:	Scenario 3:	Scenario 1:	Scenario 2:	Scenario 3:
		Productivity constant	Productivity increases	External influences on demand	Productivity constant	Productivity increases	External influences on demand
	CAPEX Year 1	98.40	98.40	98.40			
	Employment in 2018	104220	104220	104220	Employment contribution per year		
Year	Trend value Cape Town: Construction						
1	0.21979	104668	104623	104712	448	403	492
	CAPEX Year 2	19.09	19.09	19.09			
2	0.22859	104355	104342	104369	135	122	149
	CAPEX Year 3	28.63	28.63	28.63			
3	0.23739	104344	104331	104356	124	111	136
	CAPEX Year 4	47.72	47.72	47.72			
4	0.24619	104418	104398	104438	198	178	218
	CAPEX Year 5	141.10	141.10	141.10			
5	0.25499	104784	104728	104841	564	508	621
	CAPEX Year 6	90.67	90.67	90.67			
6	0.26379	104657	104614	104701	437	394	481
	CAPEX Year 7	109.52	109.52	109.52			
7	0.27259	104668	104624	104713	448	404	493
	CAPEX Year 8	104.19	104.19	104.19			
8	0.28139	104648	104605	104691	428	385	471
	CAPEX Year 9	90.87	90.87	90.87			
9	0.29019	104586	104549	104622	366	329	402
	CAPEX Year 10	81.33	81.33	81.33			
10	0.29899	104531	104500	104562	311	280	342
	CAPEX Year 11	39.61	39.61	39.61			
11	0.30779	104363	104349	104377	143	129	157
	Total				3459	3113	3805
	CAPEX Year 1	98.40	98.40	98.40			
	Employment in 2018	9154	9154	9154	Employment contribution per year		
Year	Trend value Helderberg District: Construction						
1	0.19876	9649	9600	9699	495	446	545
	CAPEX Year 2	19.09	19.09	19.09			
2	0.20676	9304	9289	9319	150	135	165
	CAPEX Year 3	28.63	28.63	28.63			
3	0.21476	9291	9277	9304	137	123	150
	CAPEX Year 4	47.72	47.72	47.72			
4	0.22276	9373	9351	9395	219	197	241
	CAPEX Year 5	141.10	141.10	141.10			
5	0.23076	9778	9715	9840	624	561	686
	CAPEX Year 6	90.67	90.67	90.67			
6	0.23876	9637	9589	9685	483	435	531
	CAPEX Year 7	109.52	109.52	109.52			
7	0.24676	9649	9600	9699	495	446	545
	CAPEX Year 8	104.19	104.19	104.19			
8	0.25476	9627	9579	9674	473	425	520
	CAPEX Year 9	90.87	90.87	90.87			
9	0.26276	9558	9517	9598	404	363	444
	CAPEX Year 10	81.33	81.33	81.33			
10	0.27076	9497	9463	9532	343	309	378
	CAPEX Year 11	39.61	39.61	39.61			
11	0.27876	9312	9296	9328	158	142	174
	Total				3822	3440	4204

Note: Once an allocation of the capital expenditure envisaged per annum over the timeframe of the project is known, these figures could be revisited to enable more accurate calculations. Note that if there is no or a reduction of capital expenditure in any year, there will be a reduction or limited employment.

Source: Quantec data (2019), own calculations

The findings of the employment analysis are considered in the context of the entire development with capital expenditure phased in over an 11-year period. Based on the different scenarios, the project could initially (Year 1) sustain 448 jobs within the Cape Town Metropolitan Area if productivity remained constant, increasing to 492 annual jobs if external influences on demand are considered. The extra employment from Year 1 to Year 2, etc., depends on two factors, namely the capital expenditure of that year as well as the trend value as derived from **Figure 1**. It is imperative to understand that the phasing of the project results in an incremental increase in the number of jobs created; some overlap between the phases may occur. Therefore, total employment for the project can be less than the sum of the 11 years.

The impact for the Helderberg District based on the different scenarios suggest that project could initially (year 1) sustain 495 jobs if productivity remained constant, increasing to 545 if external influences on demand are considered.

Over the 11 year period envisaged for the completion of the project at the District level based on the different scenarios, the project could sustain 352 jobs per annum on average if productivity remained constant, increasing to 382 jobs per annum on average if external influences on demand are considered. Once again, it is imperative to understand that the phasing of the project results in an incremental increase in the number of jobs created. Some overlap between the phases may occur, but this is uncertain at this stage.

Based on Scenario 1 that reflects constant productivity, **our analysis of the impact on the Cape Town Metropolitan Area indicates an estimated total of 314 jobs per annum on average during the construction period of 11 years, or 352 jobs per annum on average when the impact on the Helderberg District is considered.** These temporary job opportunities include direct, indirect and induced employment creation impacts.

2.2 Economic Sector analysis of employment: Helderberg

An alternative approach to analysis of employment impacts is to consider the effect of the combined spending on the Helderberg District from the three broad categories of any economy: Primary; Secondary and Tertiary. The detail sectors per broad category are:

TOT: Total	SC12: Furniture and other manufacturing [SIC: 391-392]
PRIM: Primary sector [SIC: 1-2]	SD13: Electricity and gas[SIC: 41]
PA01: Agriculture, forestry and fishing [SIC: 1]	SD14: Water [SIC: 42]
PB02: Mining and quarrying [SIC: 2]	SE15: Construction [SIC: 5]
SEC: Secondary sector [SIC: 3-5]	TER: Tertiary sector [SIC: 6-9, 0]
SC03: Food, beverages and tobacco [SIC: 301-306]	TF16: Wholesale and retail trade [SIC: 61-62]
SC04: Textiles, clothing and leather goods [SIC: 311-317]	TF17: Catering and accommodation services [SIC: 63]
SC05: Wood, paper, publishing and printing [SIC: 321-326]	TG18: Transport and storage [SIC: 71]
SC06: Petroleum products, chemicals, rubber and plastic [SIC: 331-338]	TG19: Communication [SIC: 72]
SC07: Other non-metal mineral products [SIC: 341-342]	TH20: Finance and insurance [SIC: 81-82]
SC08: Metals, metal products, machinery and equipment [SIC: 351-359]	TH21: Business services [SIC: 83]
SC09: Electrical machinery and apparatus [SIC: 361-363]	TI22: General government [SIC: 91, 94]
SC10: Radio, TV, instruments, watches and clocks [SIC: 371-376]	TJ23: Community, social and personal services [SIC: 92, 95-6, 99, 0]
SC11: Transport equipment [SIC: 381-387]	

The method used is:

- 1 Fit a trend to both the employment and GVA of Helderberg area: Total as well as the construction sector.
- 2 Adjust the trend so that the 2018 trend value and actual value corresponds.
- 3 Calculate the GVA per employee, fit a trend and adjust so that the 2018 trend value and actual value corresponds.

These trends are illustrated in Figure 3.

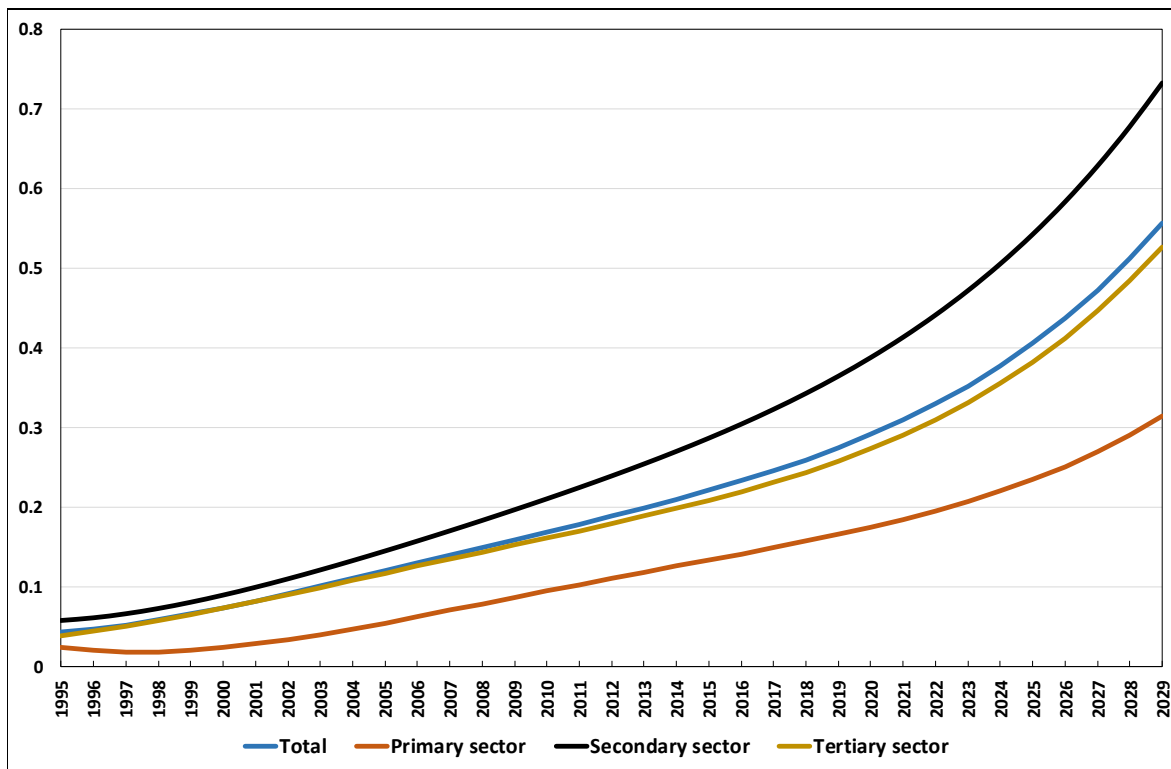


Figure 3: GVA per employee trends for selected economic sectors in the Helderberg District

These GVA per employee trend values as well as the forecast of total expenditure for the period 2019 to 2029 adjusted with the total GVA multiplier are then used to derive the change in employment. This is summarised in the Table 2 Each column indicates the extra employment of the year based on the expenditure of the year.

Table 2: Employment impact of Sir Lowry's Pass development for main economic sectors with an without the multiplier effect

	Primary	Secondary	Tertiary	Total without multiplier effect	Total with multiplier effect
2019	11	69	382	358	462
2020	2	28	109	109	139
2021	3	39	155	155	198
2022	5	62	245	244	311
2023	13	174	682	682	869
2024	8	105	412	412	525
2025	9	119	467	467	595
2026	8	106	415	415	529
2027	6	86	337	337	430
2028	5	71	280	280	357
2029	2	32	126	126	161

The interesting observation is that the tertiary sector is by far the choice sector of employment and this is logical when considering that 72.7% of output in 2018 was generated in the tertiary sector; about 25.1% in the secondary sector and just 2.2% in the primary sector. The column "Total without multiplier" was generated to illustrate/compare with the last column (sum-total of the first three columns) the difference that is achieved when disaggregation is applied.

2.3 Operational employment

The Sir Lowry's Pass Development could create and sustain jobs during operations. These jobs related to the nature and scope of activity that will form part of the development. In the absence of credible data in South Africa, we applied employment densities derived from research conducted by the Home and Community Agency (HCA) in the UK (2015). For the purposes of this analysis, we adopted the HCA ratio of full-time equivalent jobs per 1000 increase in the population for residential development, which indicates the creation of 100 jobs for every 1000 increase in the population and for the more commercial-oriented uses a density of 1 full-time equivalent job per 45 m² of Gross lettable Area (GLA). The application of these densities based on 1000 residential type units and an estimate of 25 092 m² of GLA suggest that the Sir Lowry's Pass development once fully constructed and operational could sustain approximately 860 full-time equivalent jobs.

3. CONTRIBUTION TOWARDS LOCAL ECONOMIC INCOME

3.1 Scope and consequence of impact

The construction costs for the proposed Sir Lowry's Pass project are based on quantity surveyor (QS) estimates provided in the Rode Report (2019:1). Infrastructure for the entire project is allocated to the different components and includes an estimate of professional fees. It is assumed construction would commence once all environmental and planning processes have been completed and an Environmental Authorisation is issued by the relevant authorities.

As far as the construction phase is concerned, we have assumed that part of the initial investment is partly sub-contracted to construction enterprises operating within the Helderberg District. These industries spend part of the initial investment on imported materials and the rest on paying wages, salaries and rentals to workers and owners in the local construction sector (and related industries). The initial increase in income that sets in motion a multiplier process also accounts for forward and backward linkages between sectors operating in the Provincial and local economies, with specific reference to the Construction Sector.

Theoretically, there are basically two approaches that can be used:

The first, and most simplified, is to analyse the percentage contribution of each subsector of the regional economy to Regional Gross Value Added (RGVA) as well as the annual growth rates. The simplest manner of forecasting will then be to extrapolate the growth trend by fitting a mathematical function to the historical data. In the same manner, employment and other economic variables can be considered. The most important limitation of this method is that the relevant data is only available in annual format and is preliminary for the latest three years – similar to other national economic data. The reason for this is nestled in the manner that the statistics are generated (i.e. derived from national statistics).

In order to overcome the limitation stated above, we used Social Accounting Matrix (SAM) multipliers measure the value of all production and consumption linkage effects. Social Accounting Matrix (SAM) multipliers are an extension of the classic Leontief input-output model. While the Leontief model concentrates on inter-industry production linkages, SAM-based models also include consumption linkages by making institutions like households and the government "endogenous". The SAM multiplier approach therefore makes use of information on household factor endowments and income distribution. They capture direct and indirect effects in the first and all subsequent rounds of the circular income flow. More specifically, multipliers translate initial changes in exogenous demand (for example, increased agricultural export demand) into total production and income changes of endogenous accounts. **Figure 5** illustrates this process.

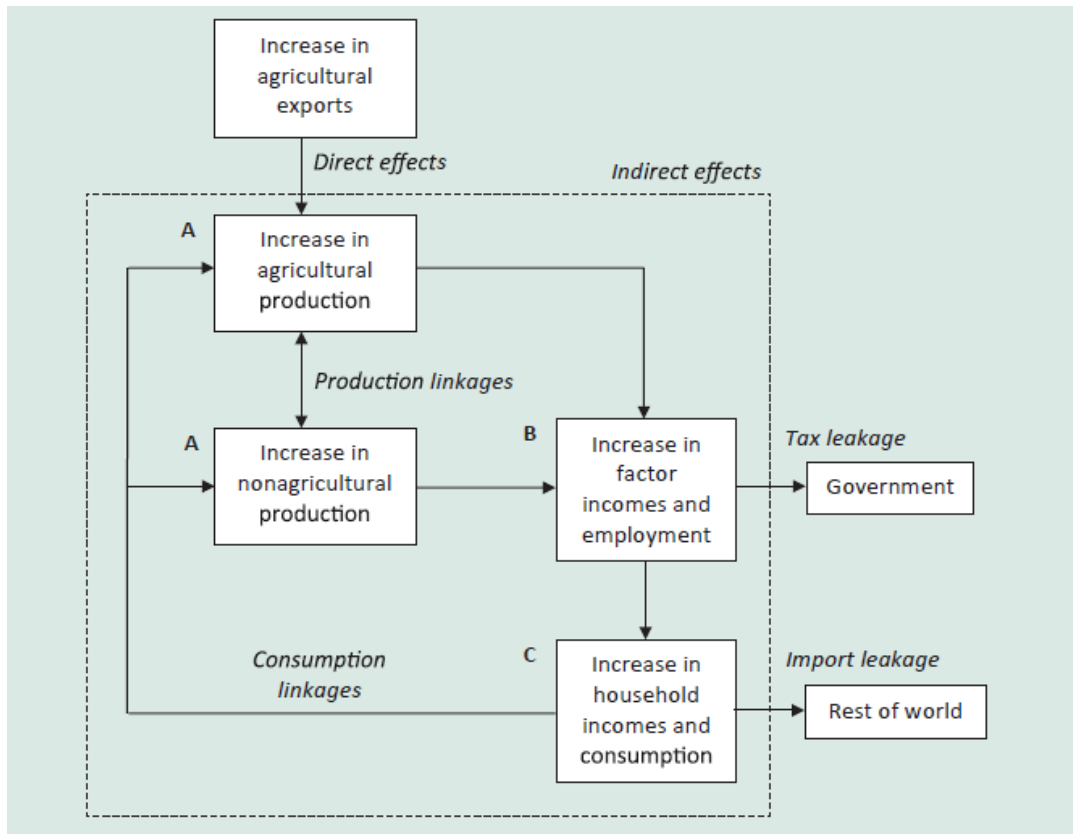


Figure 4: Circular flow of income in the multiplier process

Source: Breisinger et al., 2009

Three types of multipliers can be distinguished from the figure. First, an output multiplier combines all direct and indirect (consumption and production) effects across multiple rounds and reports the final increase in gross output of all production activities. In **Figure 4**, this is the combined increase in agricultural and non-agricultural production (the two boxes marked "A"). Second, a Gross Domestic Product (GDP) multiplier measures the total change value-added or factor incomes caused by direct and indirect effects (the box marked "B"). Finally, the income multiplier measures the total change in household incomes (the box marked "C").

The size of a multiplier depends on the structural characteristics of an economy. For example, a key determinant is the share of imported goods and services in households' consumption demand. If households consume domestically produced goods, then increasing household incomes will benefit domestic producers and the circular flow of income will lead to further rounds of indirect linkage effects. However, if households demand imported goods, foreign producers will benefit and the indirect linkage effects will be smaller. Import demand is therefore a leakage from the circular flow of income. Similarly, when government taxes factor incomes, it limits how much of the returns to production are earned to households, and so reduces consumption linkages. Ultimately, these kinds of leakages cause the round-by-round effects to slow down more quickly and reduce the total multiplier effect.

An assessment of the construction cost estimates suggests that an initial amount of R 680 million will be introduced with varying expenditure over the period envisaged for the construction, i.e. 11 years. The total capital expenditure is estimated to be R 811 million (including infrastructure). No contingency and escalations have been applied.

Table 3 provides an estimate of the economic impact based on the methodological principles discussed as part of the approach used for determining the impact for the Lucullus project

Table 3: An indication of the assumptions and preliminary impact of initial construction costs on the Cape Town Metropolitan Area and Helderberg District economy due to the proposed Sir Lowry's Pass development

Construction costs	
Construction cost (excl. infrastructure & Fees) (R' million)	R 811
Infrastructure (internal and external)	Included in construction cost
Total construction cost (excluding VAT) (R 'million)	R 811
Initial import leakage (Western Cape)	20%
Net total capital expenditure (R' million)	R 680
Cape Town	
Multiplied increase in net capital expenditure (R' million) which assumes an open economy with no significant constraints	R 11 746
Helderberg District contribution to Cape Town GVA	
Attributable GVA increase for Helderberg District due to the initial capital expenditure stated above (R' million)	R 724
	6.16%

Note: The multiplier adopted for the assessment is an output multiplier

Source: Multi-Purpose Business Solutions

Estimated values for the initial capital investments include material costs, contractors' fees, wages and salaries, allowance for an escalation factor and contingencies. Initial import leakages are assumed to equal 20% of total construction expenditure (including wages and salaries). In this manner, we are able to capture the inter-regional effects caused by the extended outreach for goods and services from other provinces in South Africa and the rest of the World. The income multiplier is based partly on estimated consumption and import propensities and direct and indirect tax propensities for the region. Our assessment for the construction phase is based on the Cape Town Metropolitan Area and an attributable portion of the GVA is allocated to the Helderberg District based on the contribution of the Helderberg District to the Cape Town economy.

A combined initial investment of R811 million (R 680 million net of the initial import leakage) will give rise to a multiplied output increase in GVA of R111 746 million in the Cape Town Metropolitan Area. The GVA contribution of the Helderberg area to Cape Town Metropolitan economy in 2018 was approximately 6.16% (Quantec, 2019). Based on the initial direct expenditure, a propensity to import goods and services, and the contribution of the Helderberg District to the Cape Town Metropolitan Area, **approximately R 724 million will accrue to the Helderberg over and above the initial direct capital expenditure related to the project.** Note the latter figure represents a snapshot and does not take the period into account for the completion of the said components.