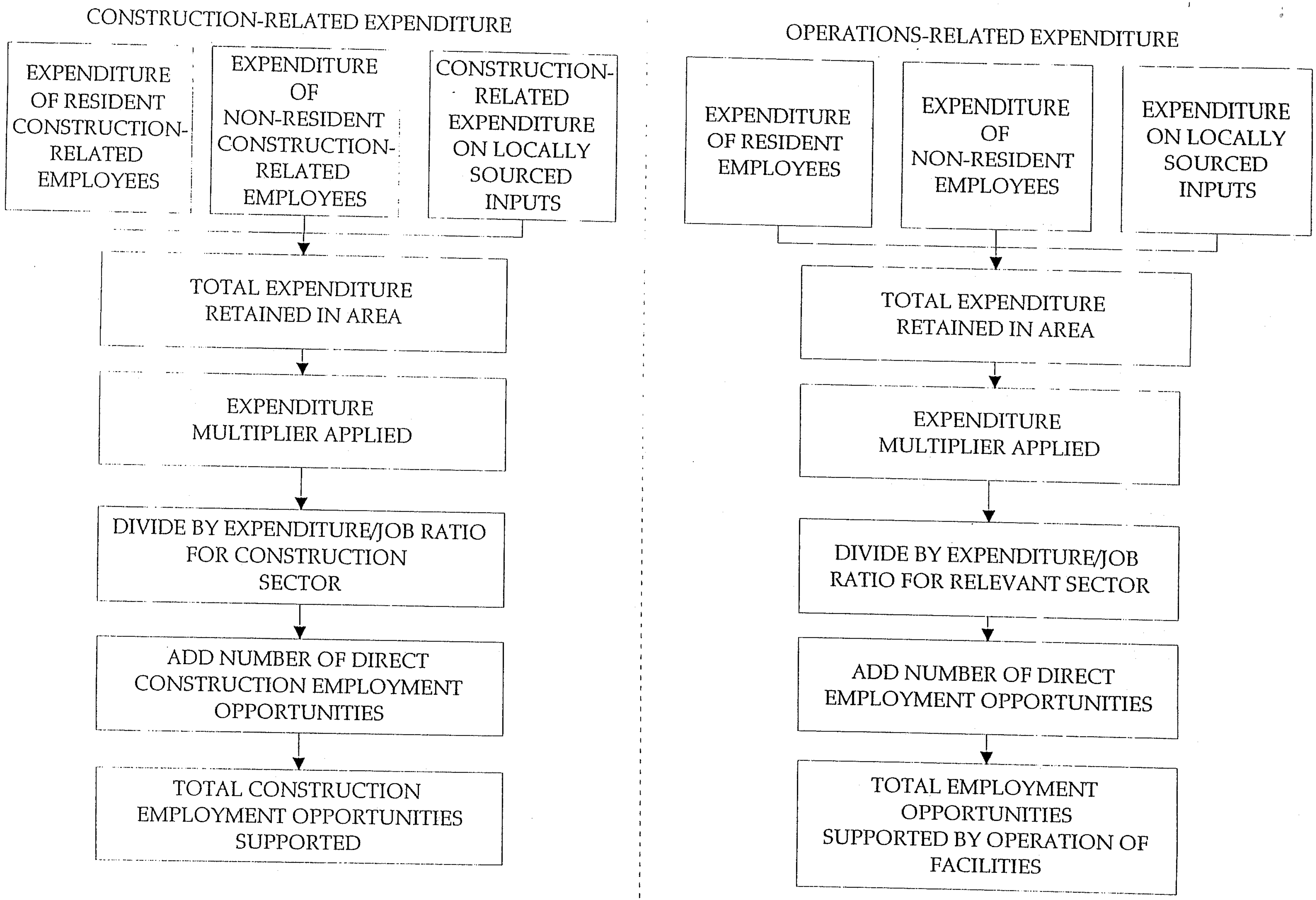

Figure 2. Generic Process Flow for an Economic Impact Assessment

5.1.2 Operations-Related Expenditure

For the Baralink area, the expenditure relating to the operational activities within various market sectors and the employment opportunities supported is summarised in the table below.

Table 5. Operations-related Expenditure and Employment Opportunities

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
EXPENDITURE (R MILLION)	6	21	33	50	73	95	162	208	247	287
DIRECT EMPLOYMENT SUPPORTED	504	1241	1703	2181	2824	3287	4060	4670	5210	5800
INDIRECT EMPLOYMENT SUPPORTED	75	254	408	625	530	1193	2170	2832	3355	2941

5.2 OVERALL ECONOMIC IMPACT

Within the Baralink area, an estimated 13 856 direct employment opportunities would be created over the ten year period as a result of the construction of transport and services infrastructure and the market-related development, of which 5 783 would be resident within the Baralink area. The number of direct job opportunities per annum ranges from a minimum of 800 (year 3 and 4) to a maximum of 2200 (year 6). At least 1 300 construction workers could be employed on a continuous basis from year 5 to year 9. The total additional employment that could be supported by construction-related activity over the 10-year period is estimated at 7 263, with a peak of 1 200 employment opportunities generated in year 6.

Employment would also be generated as a result of the operations of facilities within market sectors. A total of 31 480 direct employment opportunities could be supported during the first ten years of the proposed development. Although the first year would only create just over 500 employment opportunities, an average of 580 jobs would be created for each year of development. It is anticipated that employment will be sustained due to a synergy created by the economic activity. An estimated 14 383 additional employment opportunities could be supported on a continuous basis according to the Baralink development scenario, if the regional economy does not deviate substantially from the forecast trends.

The model indicates that net economic impact due to construction activity peaks in year 6. This is due to the proposed regional retail development at the Orlando Power Station (see Baralink: Marketing Strategy: Section V) coming on stream if the planning process is completed in time. Provision of transport and services infrastructure for medium-term development, in particular housing which accelerates in the last 5-year period of the model, also comes on stream in year 6. The effect of retail development also plays a significant role in retaining local earnings. It is assumed that as persons become more familiar with places of purchasing goods, more income is spent within the Baralink area and less leakage occurs.

The largest generator of operational employment, over the first 10 years, is the commercial sector. An estimated 10 313 employment opportunities could be supported during this time as a result of meeting the applicable demand, resulting in almost 1900 full-time employment opportunities at the end of year 10. Indications are that the industrial sector will offer a significantly smaller number of employment opportunities, namely 7 237 over the first 10 years, peaking at 420 jobs in year 10.

We have attempted to relate the employment opportunities to the current situation of employment in the Baralink area. The market demand analysis estimates there are approximately 90 000 households supporting about 500 000 people in the Baralink area. Although the current unemployment rate per household for the Baralink area is unknown, an empirical value of 1.6 earners per household indicates that the potential employment opportunities as derived from the expenditure would support a substantial number of households. This is summarised in the table below.

Table 6. Number of Households Supported in the Baralink Area.

YEAR	DIRECT EMPLOYMENT	INDIRECT EMPLOYMENT	TOTAL	NUMBER HOUSEHOLDS SUPPORTED
1	1400	310	1700	1000
2	2400	600	3000	1800
3	2500	720	3200	2000
4	3000	1020	4000	2500
5	4500	1430	6000	3700
6	5500	2500	8000	5000
7	5500	3000	8500	5300
8	6200	3800	10000	6250
9	6850	4300	11000	6800
10	7100	3700	11000	6800

6. CONCLUSION

As initially stated, the development scenario on which this model is based has the objective of maximising the economic value of the Baralink area. The results of the economic impact model describe this scenario, however an alternative scenario would result in a different set of results.

The model serves to provide an understanding of the dynamics associated with the potential for development of the land parcels and identify the actions that would need to be taken to develop a local economy. The objective of this being to reduce the reliance of households in the area on financial flows generated in other areas of the metropolitan; and over a longer timeframe to generate a centre of commercial, retail, industrial, office and other market-related activities in the Baralink area that is economically and physically integrated with the Greater Johannesburg metropolitan area.

6.1 BUSINESS PARAMETERS

The assumptions relating to business-related parameters that were initially incorporated into the model were from previous economic model studies undertaken in areas that were already well served by infrastructure and economic structures that provide underlying value to an area.

These parameters were however subsequently found not to be representative of the prevailing conditions in and around the Baralink area and the model was revised utilising parameters that were derived from enterprises in areas of Johannesburg that are closer in character to the Baralink area.

These provided results that we believe are a closer approximation of economic conditions that businesses will confront if they are to establish themselves in the southern areas of Johannesburg and include:

- Significantly lower rentals that can be achieved across all land uses
- Cost of labour as a proportion of total costs
- Cost of non-labour inputs to production processes, particularly the impact of transportation costs of raw materials and the cost of moving products to market
- The percentage of employees that would reside locally

This indicates that enterprises establishing themselves in the Baralink area will have a different structure than enterprises established in other areas of the metropolitan. The market demand analysis and the regional economic review supports this view and reinforces the belief that the SMME sector could be the growth point of the Baralink economy and this needs to be accommodated in the planning of the area.

6.2 SOCIO-ECONOMIC BENEFITS

The model indicates that expenditure relating to both the construction and operational stages of development has the potential to generate substantial employment opportunities within the Baralink area. However for this to occur, the relevant infrastructure and development planning has to be initiated as indicated by the various development time horizons.

The potential employment opportunities as derived from the model suggest that development in the Baralink area would support a significant number of households.

6.3 Public Sector Investment

The extent and ultimate success of the development of the Baralink area will however depend on the improvement of accessibility to and within the area. Transport infrastructure has been linked to the extent and type of development that is proposed, and is an important component of the development scenario.

Historically investment in transportation infrastructure has been by the public sector, however given the financial situation of local authorities the options for private finance initiatives need to be investigated, particularly if the view is taken that transportation infrastructure investment can support private sector investment in Baralink and will contribute substantially to the overall development of the area.

The improvement of transportation infrastructure into and within the Baralink area will provide an important signal to the private sector that investment in the area is being encouraged, and will provide an enabling environment to small entrepreneurs in terms of mobility of people and goods.

The current status of the services infrastructure could be a major constraint to development, as insufficient reliable data regarding capacity and current status exists. Historically investment in the Soweto area has been inadequate to support development and the public sector will need to support investment through the provision of essential services. This will also have the effect of improving the quality of the environment for the local communities.

The decision by the public sector to invest in infrastructure will not be in terms of a required return on an investment. The decision will be driven primarily by the view that the expenditure will support private sector investment, and that this combination of investment will be sufficient to assist in the achievement of the development objectives for the area in the long-term.

We believe that the Baralink Economic Impact Assessment and Implementation Strategy has provided the investment community with a vision and a framework within which investment decisions can be made that will prove to be mutually reinforcing, and will over time provide the required returns and also achieve the objective of maximising the economic value of the Baralink area.

APPENDIX 1

DEFINITION OF MARKET SECTOR CATEGORIES

Commercial
"Commercial" means a building designed for use, or a building and land that is used for distribution centres, wholesale trade, warehouses, storage, computer centres, removal and transport services, and laboratories and all uses which are ancillary directly related to and subservient to main use.

Industrial
"Industrial" means the making, manufacturing, producing, building, assembling, compiling, printing, processing, treating, adapting, repairing, renovating, rebuilding, altering, ornamenting, painting, polishing, finishing, cleaning, dying, washing, breaking-up, disassembling, sorting, packing or placing in containers, chilling, freezing or storing in cold storage of a movable article or part of such article.

Residential
"Residential" means an area holding or zoned to hold Dwelling Units. "Dwelling Unit" means an interconnected suite of rooms including a kitchen or scullery, generally designed for occupation by a single family.

The Baralink study has identified three types of residential units:

Type of Housing	Stand Size	Dwelling Size	Subsidised?	Cost per m^2
Mortgaged	500 m^2	85 m^2	No	R 1800
Affordable	250 m^2	60 m^2	Partially	R 1100
Low Cost	150 m^2	40 m^2	Fully	R 1000

Medical
"Medical" purposes means a building designed for use or a building or land that is used for consulting practices associated with restoring or preserving health.

Offices
"Offices" includes professional suites, medical consulting rooms, banks and building societies.

Retail
"Retail" purposes means a building designed for use or a building or land which is used for trading goods directly to the public. In order for certain goods to be traded efficiently, certain retail facilities are only used for storage.

Educational
"Educational" includes facilities used to transfer knowledge, and support structures thereof. Such facilities include libraries, lecture theatres, classrooms, halls, canteens, dormitories or residential buildings, recreational and sporting facilities etc.

Hotel
"Hotel" means an area holding or zoned to hold unit structures deigned for the temporary stay of persons. Such structures would include bedrooms with adjacent bathrooms, waiting areas, a reception, a laundry, a kitchen, restaurants and bars. Sufficient parking would also be required for persons staying over.

Public Open Space

"Public Open Space" includes areas where development is limited or prevented for a number of reasons. Such areas could be acting as floodplains, buffer zones or are areas used for recreational purposes.

APPENDIX 2

MODEL INPUT VARIABLES

DATA CATEGORY	DATA SOURCE
Rent	Market Survey
m^2 per Employee	Survey and previous reports
Salaries	CSS P0271 1999
Expenditure/Job	CSS 00-90-07 (1995) and inflated using CPI from Reserve Bank
Rent/Expenses	Market Survey

1999 prices (base year)

Sector	Rent (Rands/m^2/annum)	m^2/Employee	Salaries (R/Annum)	Rent/Expenses (%)	Expenditure/Job
Construction	N/A	N/A	28779	N/A	62401
Maintenance	N/A	500	28779	N/A	62401
Retail – Regional	720	38	38094	9	61996
Retail – Neighbourhood	420	37	38094	8	61996
Commercial	144	40	68883	8	71774
Industrial	96	38	48877	7	94208
SMME	120	23	43485	6	78005
Offices	216	30	68638	9	105311
Hotel	Room Rate = R120	1 per 5 rooms	38094	Running cost : Revenue = 85%	61996

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Rent/Expenses	Market Survey

Market related 1999 prices (base year)

Sector	Rent (Rands/m^2/annum)	m^2/Employee	Salaries (R/Annum)	Rent/Expenses (%)	Expenditure/Job
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