A CATCHMENT STUDY AROUND THE LOCATION OF TVET COLLEGES.



UNIVERSITY of the WESTERN CAPE

PROVINCE: MPUMALANGA TVET COLLEGE: Gert Sibande TVET College 1 CONTENTS

2		INTR	ODUCTION			
3		DAT	A AND METHODOLOGY			
	3	.1	DATA			
		3.1.1	CIPC			
		3.1.2	STATISTICS SOUTH AFRICA (STATSSA)			
		3.1.3	AFRIGIS			
	3	.2	METHODOLOGY			
		3.2.1	CATCHMENT AREA 8			
		3.2.2	INFOGRAPHICS			
		3.2.3	INFOGRAPHIC VISUALS			
4		MPU	MPUMALANGA			
	4	.1	PROVINCE OVERVIEW			
5		GER	T SIBANDE TVET COLLEGE 11			
	5	.1	COLLEGE OVERVIEW 11			
	5	.2	DETAILED OVERVIEW OF EACH CAMPUS 12			
		5.2.1	Gert Sibande TVET College : Head Office 12			
		5.2.2	Gert Sibande TVET College : Balfour Campus 18			
		5.2.3	Gert Sibande TVET College : Standerton Campus 24			
		5.2.4	Gert Sibande TVET College : Evander Campus 30			
		5.2.5	Gert Sibande TVET College : Perdekop Campus			
		5.2.6	Gert Sibande TVET College : Ermelo Campus 42			
		5.2.7	Gert Sibande TVET College : Sibanesetfu Campus 48			

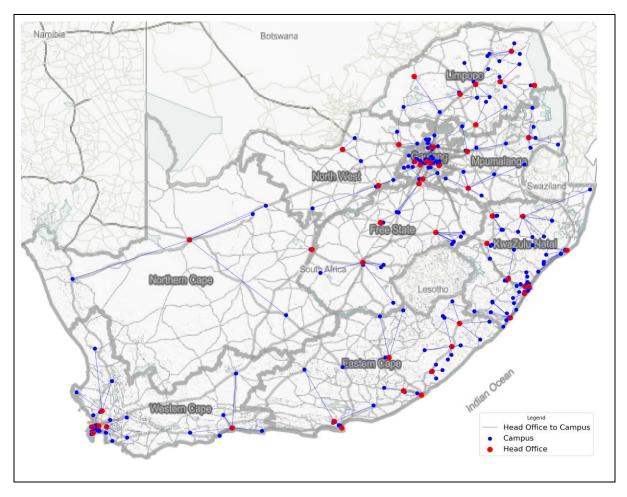
2 INTRODUCTION

The University of Western Cape requested a study on the Geographic Profiling of TVET colleges across South Africa. The purpose of this study was to profile each college to identify business and commercial activities within a nearby vicinity. As part of the study, AfriGIS sourced and prepared data in order to understand the economic potential in an area taken the current business footprint into account.

The outcome can be used as basis to improve/adjust course availability at specific study centrums to ensure successful employment after studies have been completed.

The below map shows the geographic distribution of the TVET colleges across South Africa

South Africa: TVET Locations

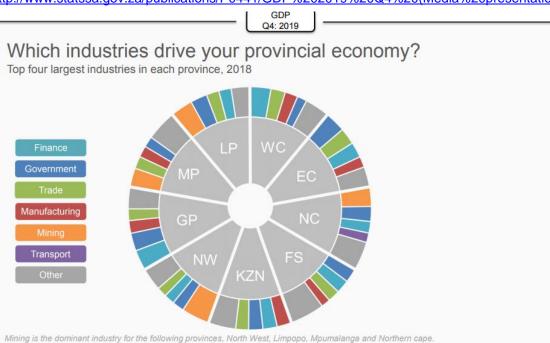


Some of the main industries especially looking at the asd Gross Domestic Product (GDP) are categorized under the following groups:

- Primary Industries
 - o Agriculture, forestry and fishing
 - Mining and quarrying
- Secondary Industries
 - Manufacturing
 - Electricity, gas and water
 - Construction
- Tertiary industries
 - Trade, catering and accommodation
 - Transport, storage and communication
 - Finance, real estate and business services
 - o Personal services
 - General government services
 - All industries at basic prices
 - o Taxes less subsidies on products

Top 4 Industries in each Province: Sourced from StatsSA:

http://www.statssa.gov.za/publications/P0441/GDP%202019%20Q4%20(Media%20presentation).pdf



Finance is the dominant industry for the following provinces, North West, Empopo, inpumalanga and Northern Finance is the dominant industry in Gauteng and Western Cape





3 DATA AND METHODOLOGY

3.1 DATA

The geographic profiling considers factors such as business descriptions, points of interest and demographic data. The data was mainly sourced from CIPC (Companies and Intellectual Property Commission), StatsSA and AfriGIS.

3.1.1 CIPC

CIPC data was used to profile registered companies in the near vicinity of TVET colleges. The CIPC stores and maintain information of a vast list of registered companies. However, the task falls on the owner of each company to provide relevant information about the company. This includes providing a SIC Code which can be linked to a business category. Unfortunately, most of the SIC Codes provided links to a too broad description to be used in this study. There is however a business description field, which is used to describe what the business does. Therefore, most of the CIPC analysis was based on descriptions, rather than fixed categories.

3.1.2 STATISTICS SOUTH AFRICA (STATSSA)

StatsSA conducted a national census back in 2011. During this census StatsSA gathered, stored and processed a large volume of demographic data. The data included both personal and household information such as the total population, age, income, dwelling types, employment status and much more. StatsSA made the data available for public use on different geographical levels, of which the SAL or small area layer was the smallest geographical boundary which was used to convey census data to the public.

The current project therefore uses the SAL geographical boundaries to conduct the relevant census information. The role of demographic data in the current project are to provide economy and general living condition insights of the surrounding TVET college areas.

3.1.3 AFRIGIS

AfriGIS has a vast data store of many different types of geographical data such as political boundaries, a routable street central line and points of interest. The current study focusses on activity in an area and therefore obtained most of the information from the points of interest layer.

The points of interest layer have many different categories to describe the type of activity accompanied with geographical location information. The categories are described on 4 levels namely category, type 1, type 2 and type 3 where category is a broad description of the types and type 2 and type 3 are subcategories of the type 1 activity. The following describes the hierarchy of the category and type 1 fields:

POINTS OF INTEREST CATEGORY: COMMERCIAL

TYPE 1 : ACCOMMODATION TYPE 1 : AUTOMOTIVE TYPE 1 : COMMERCIAL TYPE 1 : ENTERTAINMENT TYPE 1 : FILLING STATION TYPE 1 : MINE TYPE 1 : PLANT **TYPE 1 : RECREATION TYPE 1 : SERVICES TYPE 1 : STORES CATEGORY: HUMAN INFRASTRUCTURE TYPE 1 : EDUCATION TYPE 1 : GOVERNMENT TYPE 1 : MEDICAL TYPE 1 : PLACE OF WORSHIP TYPE 1 : RESIDENTIAL TYPE 1 : SOCIAL SERVICES** TYPE 1 : TOURISM ATTRACTION

TYPE 1 : TRANSPORTATION

Type 2 have 401 subcategories of Type 1 such as Fast food outlets, Shopping Centre and Mobile. Type 3 have a further 1322 subcategories of Type 2 such as KFC, Mcdonalds, Hyper Centre, Neighbourhood Centre, Vodacom, MTN etc.

The points of interest layer also contains a spatial confidence level which describes the spatial accuracy of each point. The confidence levels are as follows:

Confidence Level Technical Description

Accurate Erf-Portion Level
 Erf Level
 Street Corner
 Within 5 of Street Number
 Street Name & Suburb
 SG Town
 Suburb
 Town
 Municipality or District
 Province

Due to the nature of the current project it was decided to include points of interests with a

confidence level of 7 and below.

3.2 METHODOLOGY

3.2.1 CATCHMENT AREA

A catchment area around each TVET college was created using various straight line distances. The distances included in the current study were:

- 0km to 2km
- 2km to 5km
- 5km to 10km
- 10km to 15km
- 15km to 30km
- 30km to 50km

Note: For display purposes, the 0km to 2km and 2km to 5km were combined in the map legend.

3.2.2 INFOGRAPHICS

The first set of infographics are based on the CIPC data. All registered business within each catchment distance were extracted and analyzed per college. Key words were extracted from the description field within the CIPC data. The key words were then grouped and sorted by the count of times used. Only the top 20 words are presented in the graphs. A word cloud was also generated using the count of each word as a size scale.

The second set of infographics are created from the census data. The demographic data were extracted from all the SAL center points within each distance band from the TVET College. This includes dwelling types, household income bands and employment status.

The third set of infographics are analyzed from the AfriGIS points of interest layer. This includes the top 20 Type 1 and Type 2 categories in points of interest as well as the top 20 Type 2 and Type 3 of the points of interest belonging to the commercial category. Furthermore, the following list of types of points of interest were also excluded from the commercial points. These types were found to be prominent at most colleges but is too general or have no found to be none essential to the current study.

Points of interest types excluded from commercial analysis:

- Stores
- Entertainment
- Clothing
- Restaurant
- Fast Food Outlets
- Supermarket
- Specialty food
- Liquor
- Shoes
- Convenience
- Shopping Centre
- Ticket Station
- Other

3.2.3 INFOGRAPHIC VISUALS

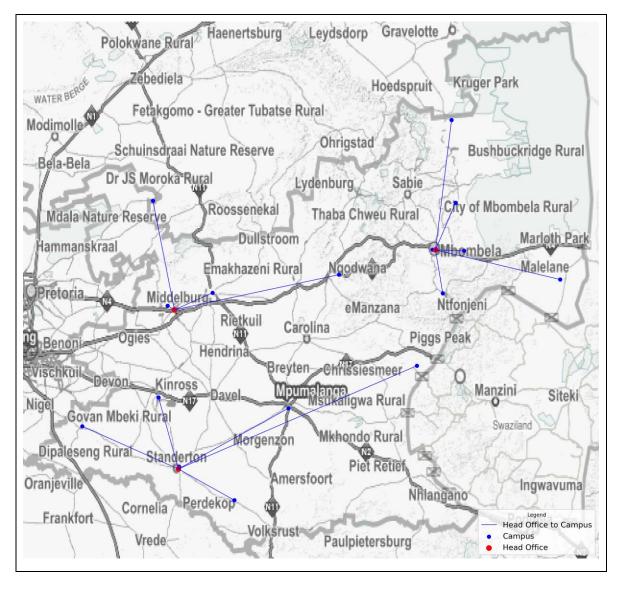
This document contains three main visual infographic types in order to explain and simplify the amount of data to the reader. The visual types of infographics are maps, graphs and word clouds.

The maps display the locations of each of the TVET colleges as well as straight line distances from each college. The distance bands were divided into 2, 5, 10, 15, 30 and 50km bands. The graphs depict counts of CIPC, demographic and points of interest data within each of the latter mentioned bands. Word cloud infographics display and quantify the most frequent used words. The word cloud was generated using business descriptions, demographic types and points of interest categories within 30km in the Gauteng, Western Cape and Kwa-Zulu-Natal Provinces and 50km in the Northern Cape, Eastern Cape, Free State, Limpopo and Mpumalanga Provinces.

4 MPUMALANGA

4.1 PROVINCE OVERVIEW

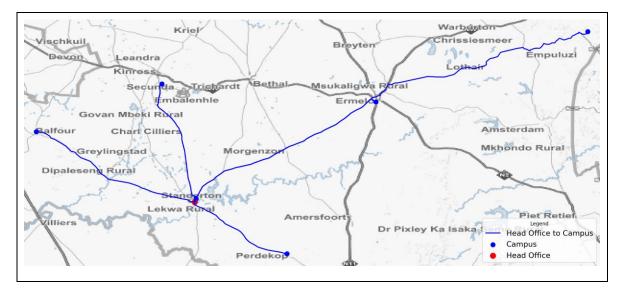
MPUMALANGA: TVET Locations



5 GERT SIBANDE TVET COLLEGE

5.1 COLLEGE OVERVIEW

Gert Sibande TVET College: TVET Locations



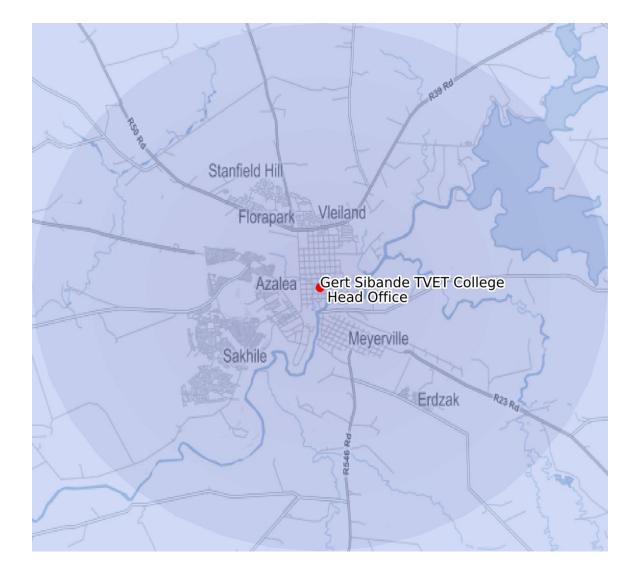
5.2 DETAILED OVERVIEW OF EACH CAMPUS

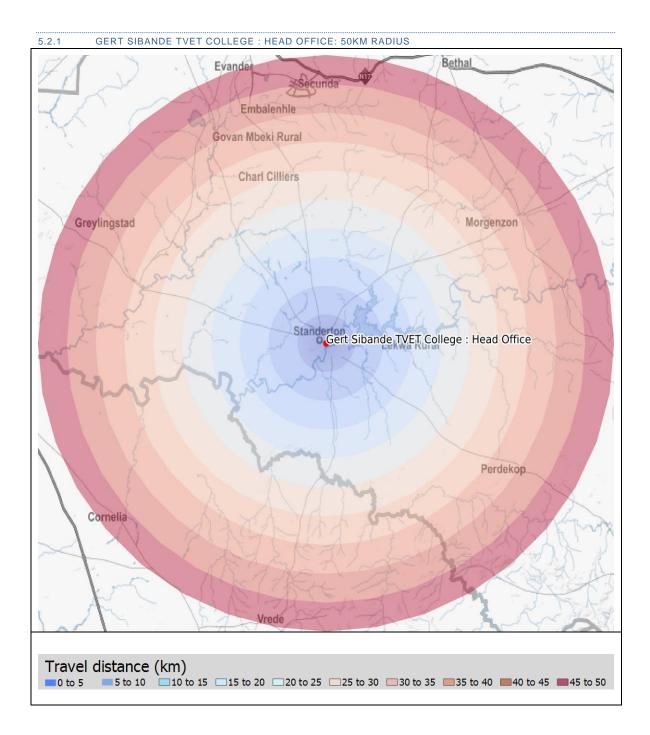
5.2.1 GERT SIBANDE TVET COLLEGE : HEAD OFFICE

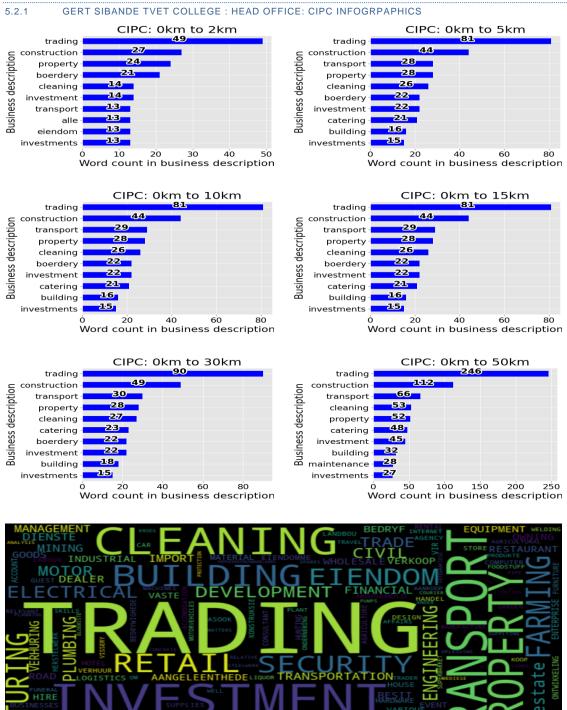


WESTERN CAPE

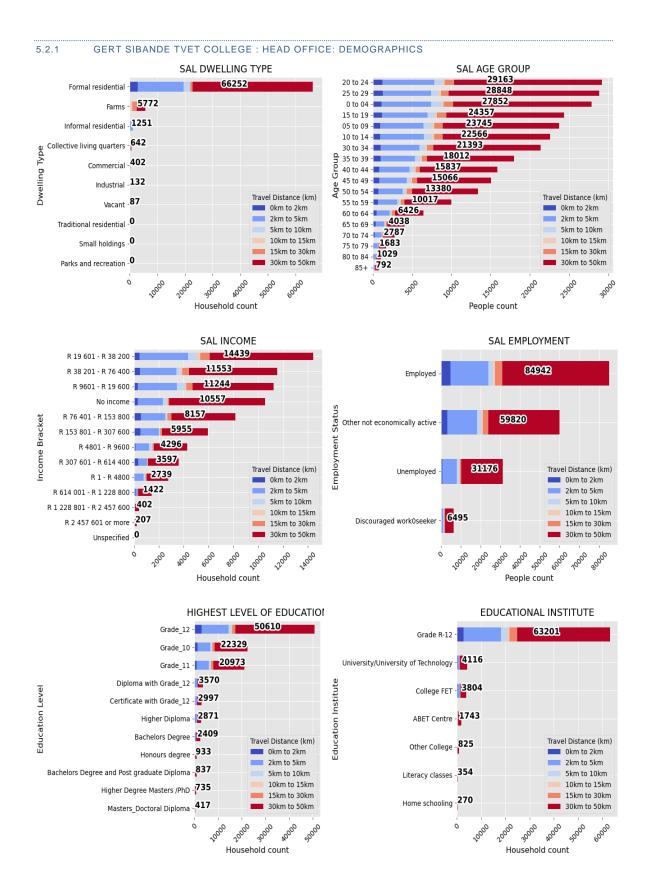
Sub-Classification: B 3 Location Confidence: 1 Province: Mpumalanga Municipality: Lekwa Local Municipality Town: Standerton Address: 18A Beyers Naude Street Standerton Head Office Travel Distance (km): 0.0 Head Office Travel Time (min): 0.0

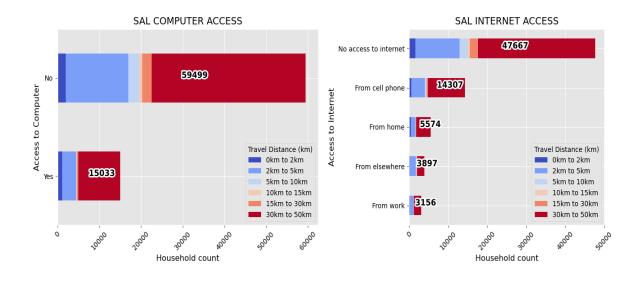


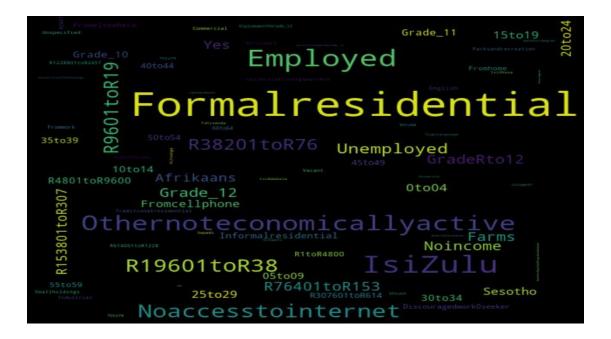


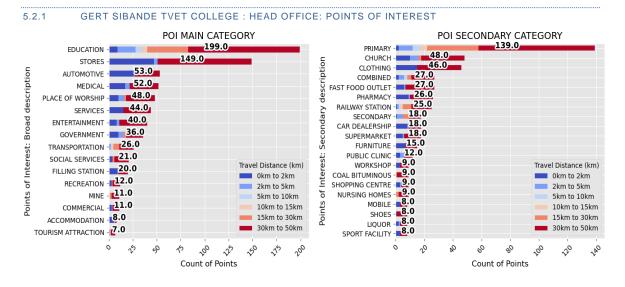


THE ADDRESS ON ANGELEENTHEDE LIQUAR TRANSPORTATION TRAFE OF THE ADDRESS OF THE AD









COMMERCIAL: POI DETAILED CATEGORY 9.0

Þ

Count of Points

6

Travel Distance (km)

0km to 2km

2km to 5km

5km to 10km

15km to 30km

30km to 50km

Ֆ

5.0

4.0

3.0

3.0

3.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

r

LEWIS

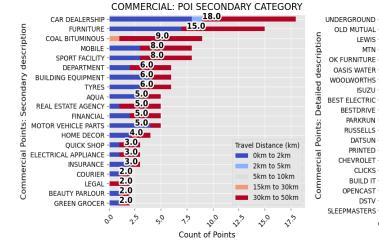
ISUZU

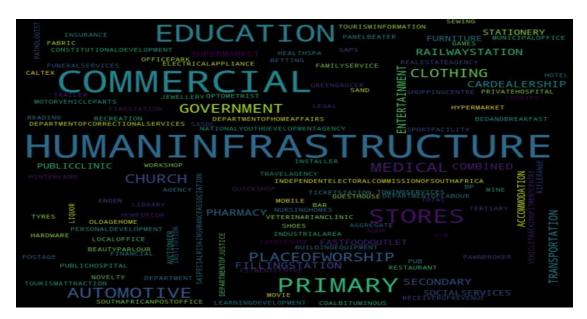
CLICKS

DSTV

0

MTN



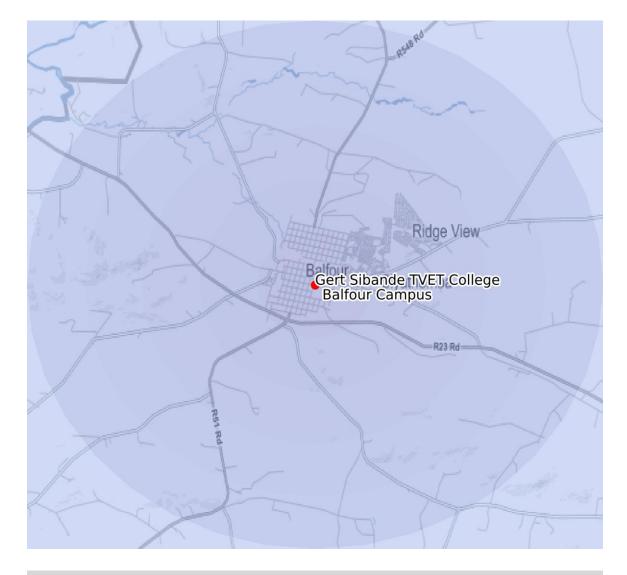


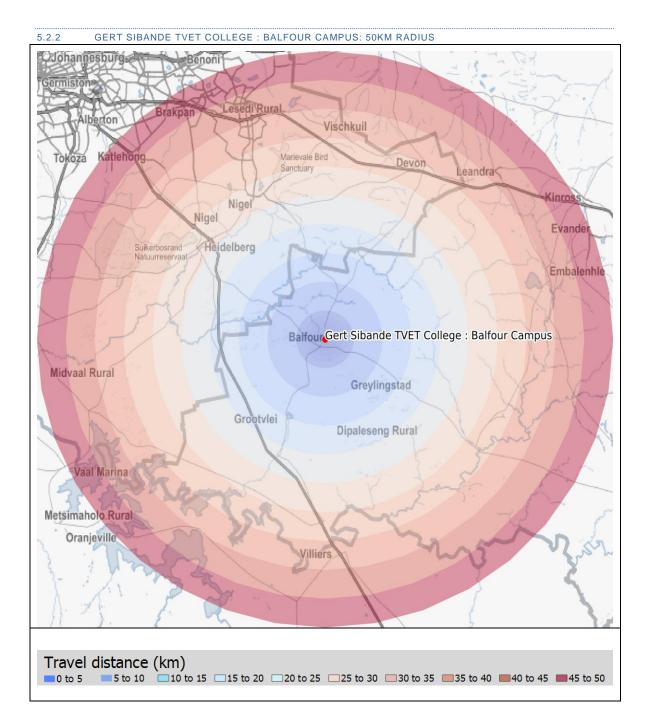
5.2.2 GERT SIBANDE TVET COLLEGE : BALFOUR CAMPUS

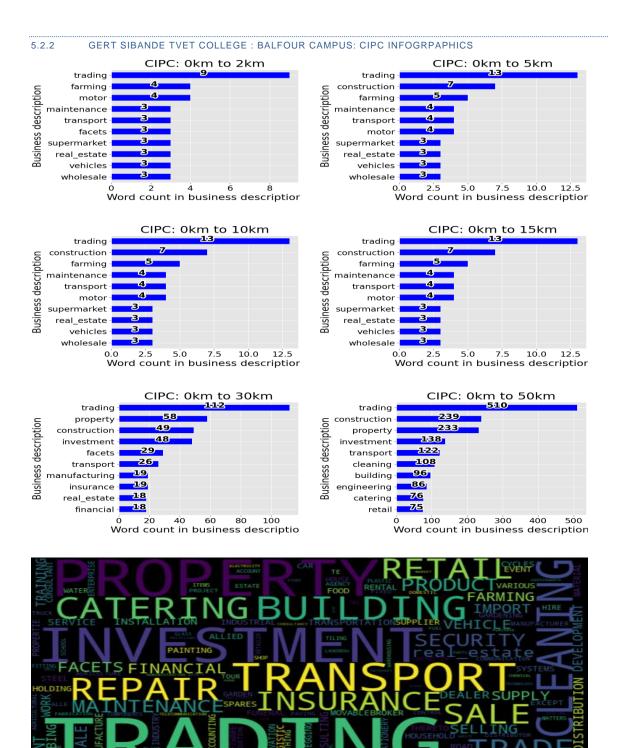


WESTERN CAPE

Sub-Classification: B 3 Location Confidence: 4 Province: Mpumalanga Municipality: Dipaleseng Local Municipality Town: Balfour Address: 110 Minnaar Street Balfour 2410 Head Office Travel Distance (km): 75.18 Head Office Travel Time (min): 91.0



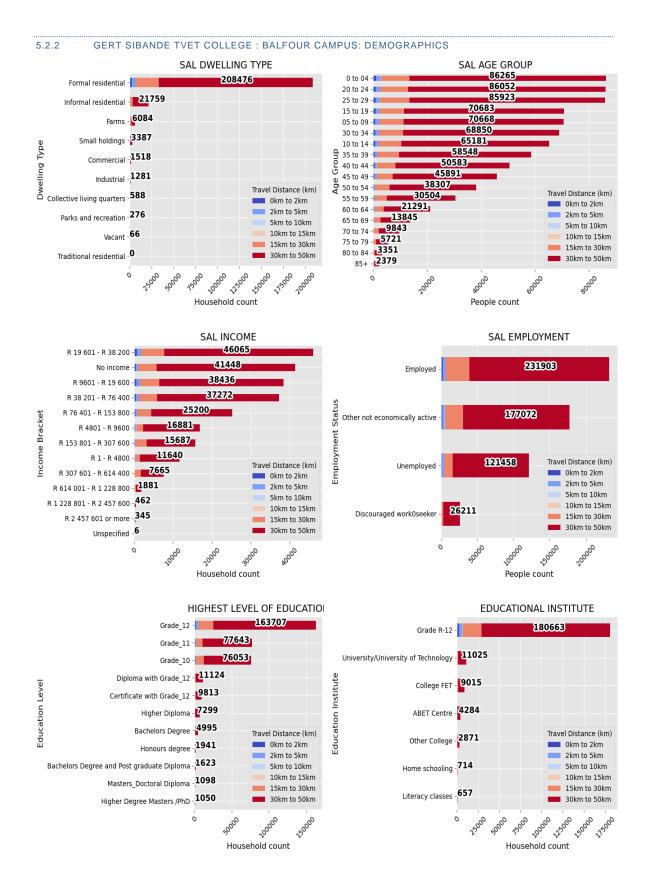


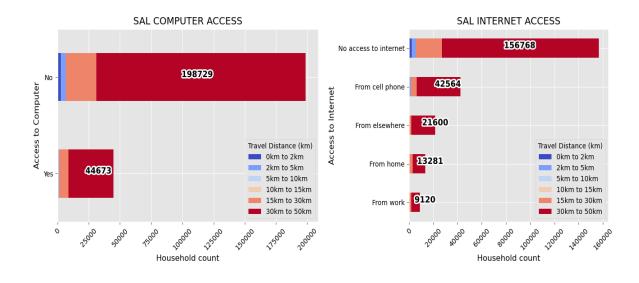


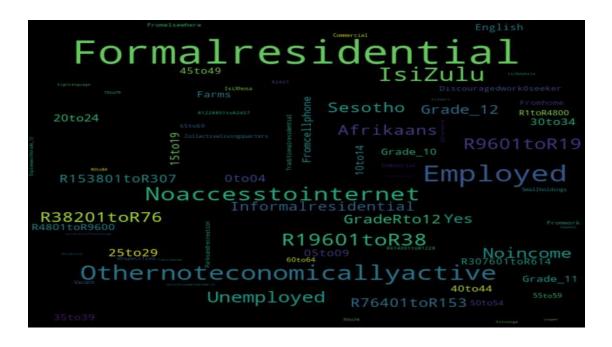
EXPOR

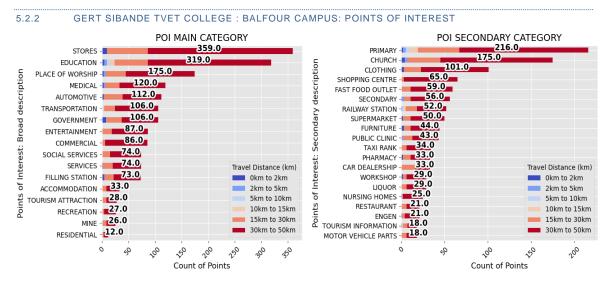
ΤI

GOOD

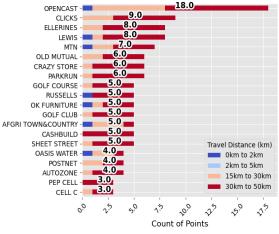


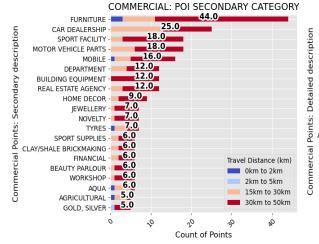






COMMERCIAL: POI DETAILED CATEGORY





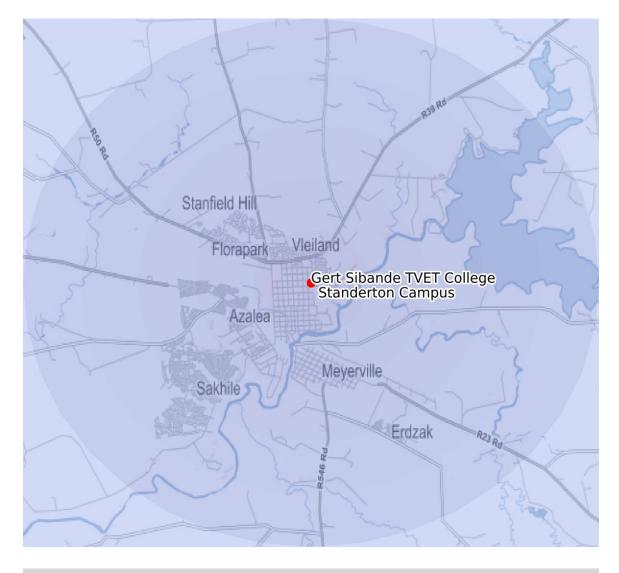
PRIMARY AGRICULTURAL PLUMBER CLOTHING	MUNICIPALOFFICE RIFLERANGE	DEPARTMENT
	BUSINE FUNERALS	
COMMERCIAL		
E STATES S	FURNITURE	U BP
BUESTHOUSE HINTERLAND AGGREGATE	SPORTFACILITY	INI GOLD
DEPARTMENTOFCORRECTIONALSERVICES NOTORVEHICLEPARTS		CCC
PRIVATEHOSPITAL TERTIER WOBILESERVICE HOMEDE	COR INSTALLER	ILI
SUPERMARKET ACCOMMODATION EDUCAT	ION	PUBLICCL TRAVELAGENCY 081LE
TRANSPORTATION DEPARTMENTOFLABOUR HIST		SECONDARY
BENTONITE SARS DEPARTMENTOFDEFENCE SHOEREPAIRS SPECIALITY	AUTOMOT1	
CTODEC COFFEESHOP CONSTITUTIONALDEVELOPMENT RETI	REMENTFACILITY	FIG
	ACEOFWOR	SHTP
CEMETERY REALESTATEAGENCY SHOWALEANING		TATION
	HOTEL	TWARE
TOWINGSERVICES CHURCH RESTAURAN		DBREAKFAST
CIVICCENTRE COALBITUMINOUS VETER	INARIANCLINIC	THA
OUTDOORSUPPLIES CADDEAL EDSHTD		RE
		INDUSTRIALAREA
NATIONALYOUTHOEVELOPMENTAGENCY SAND		
		CLAY
LIQUOR LOCKSMITH		SANDĂ
STATIONER MOVI	ERENTAL POSTAGE	SHOES
INDEPENDENTELECTORALCOMMISSIONOFSOUTHAFRICA WORKSHOP		YRES

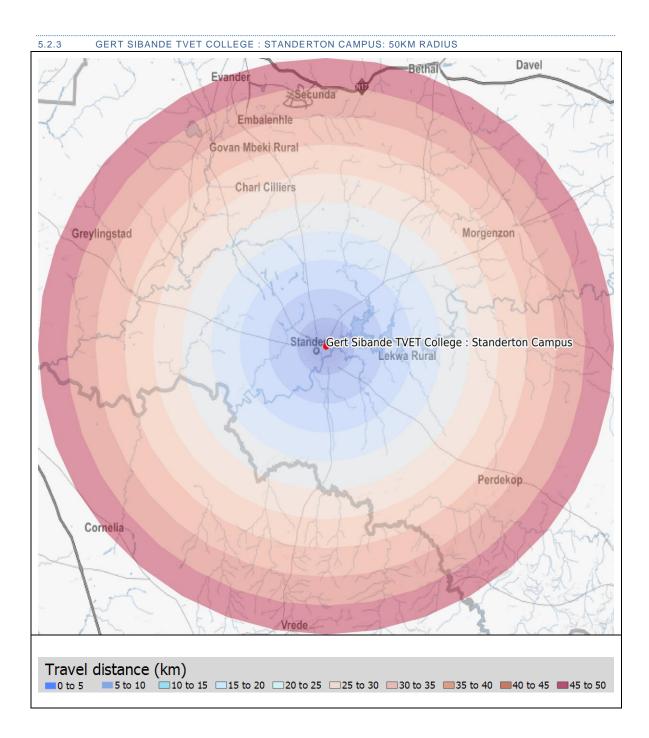
5.2.3 GERT SIBANDE TVET COLLEGE : STANDERTON CAMPUS

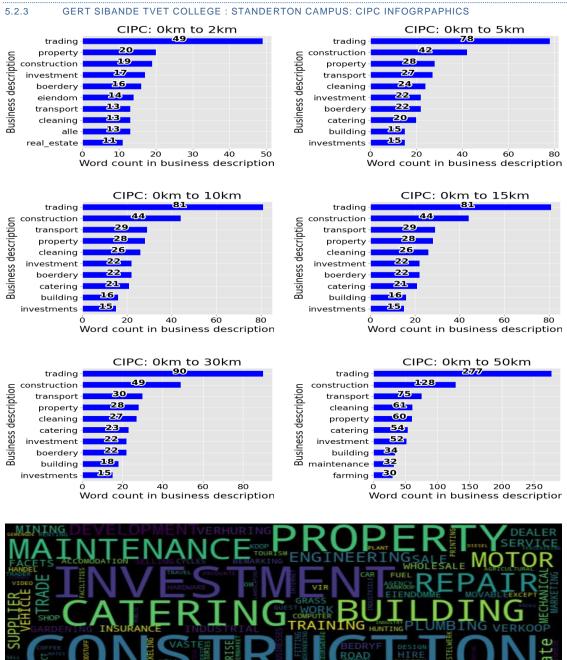


WESTERN CAPE

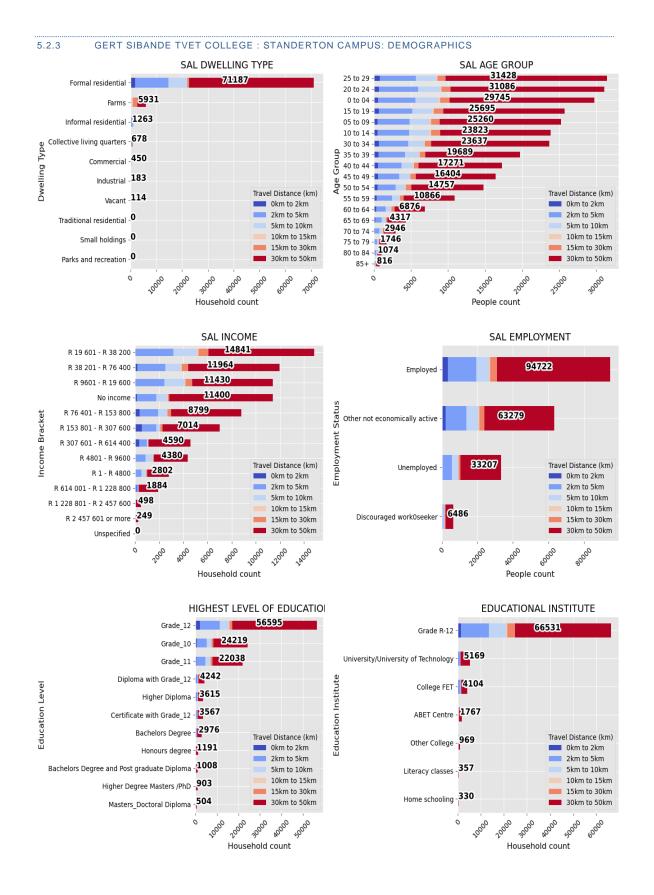
Sub-Classification: B 3 Location Confidence: 1 Province: Mpumalanga Municipality: Lekwa Local Municipality Town: Standerton Address: 2 Kruger Street Standerton 2430 Head Office Travel Distance (km): 2.19 Head Office Travel Time (min): 5.82

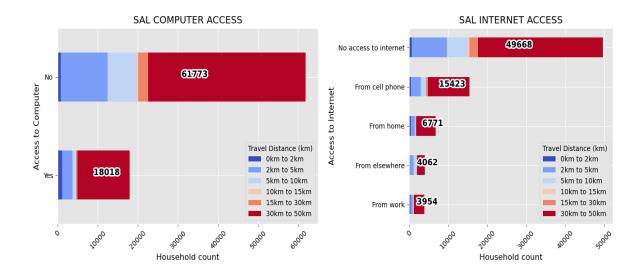


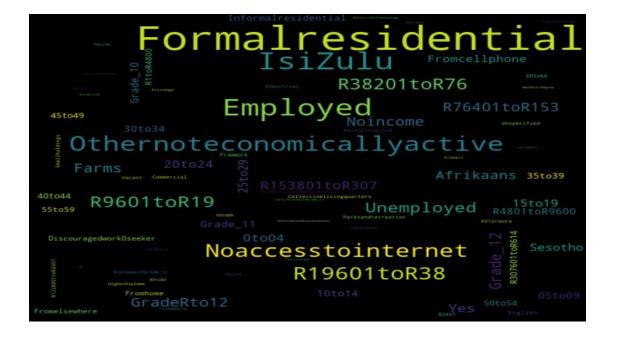


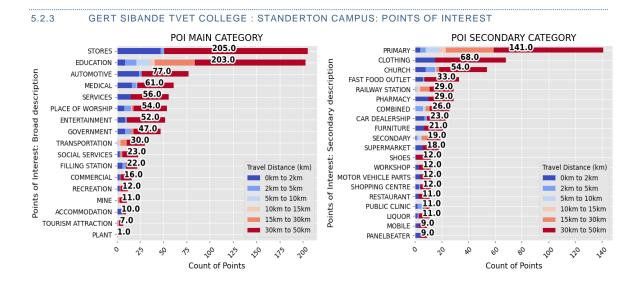






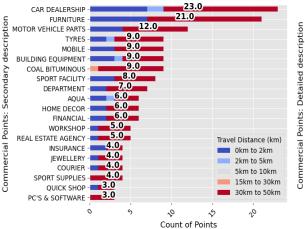






9.0 UNDERGROUND 6.0 OLD MUTUAL 4.0 Detailed description LEWIS OASIS WATER 4.0 3.0 SLEEPMASTERS 3.0 OK FURNITURE 3.0 AUTOZONE 3.0 CLICKS 3.0 MTN -2.0 NISSAN 2.0 PARKRUN Points: 2.0 OPENCAST 2.0 BUILD IT 2.0 PERFECT WATER -Commercial Travel Distance (km) 2.0 PG GLASS -0km to 2km 2.0 PLANET NAILS -2km to 5km 2km to 5km 2.0 BRADLOWS & MORKELS -5km to 10km 5km to 10km 2.0 PRINTED 15km to 30km 15km to 30km WOOLWORTHS 2.0 30km to 50km 30km to 50km 2.0 MIDAS -20 0 r D. ዓ 6 Count of Points

COMMERCIAL: POI DETAILED CATEGORY



COMMERCIAL: POI SECONDARY CATEGORY

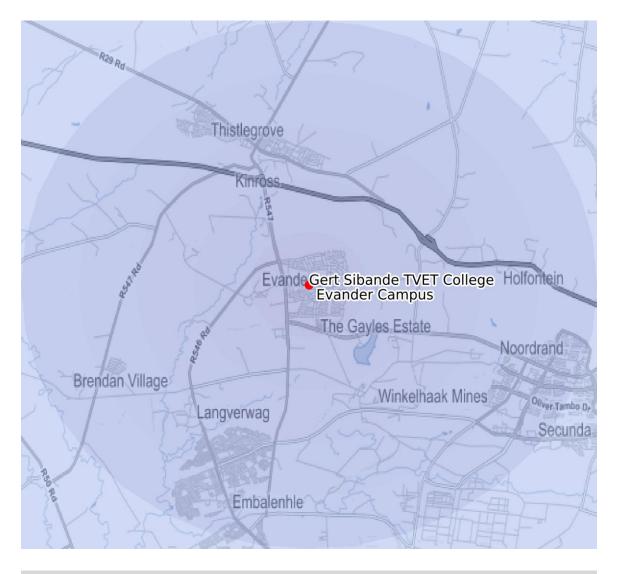


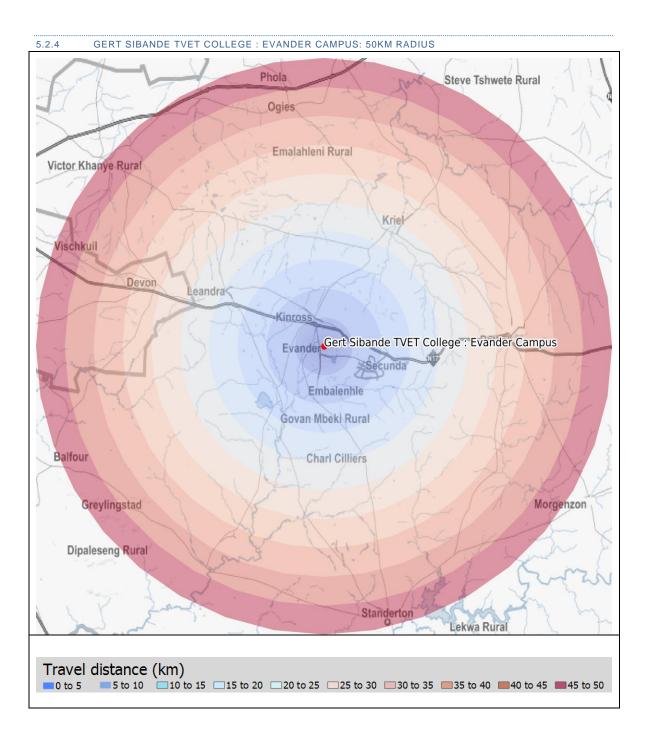
5.2.4 GERT SIBANDE TVET COLLEGE : EVANDER CAMPUS

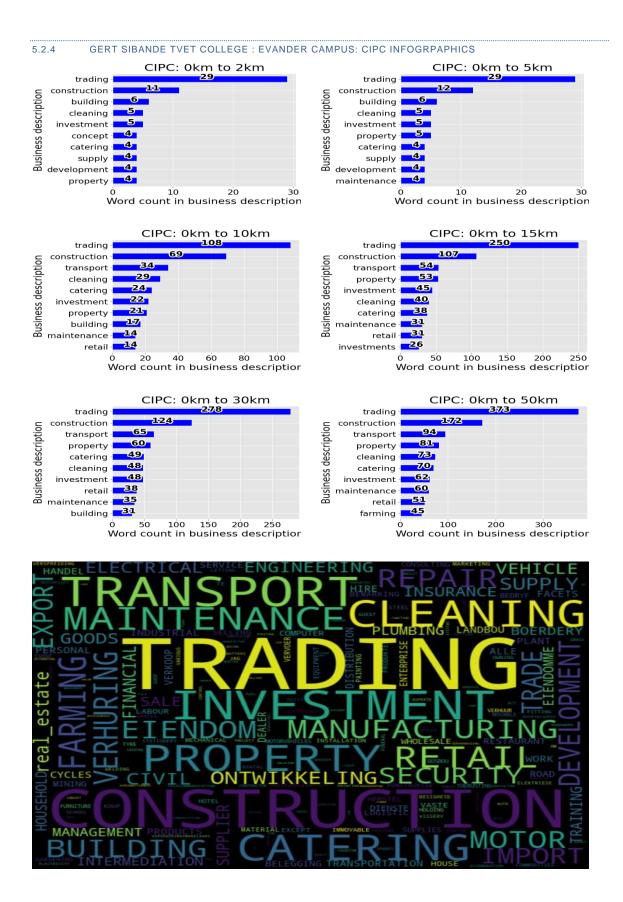


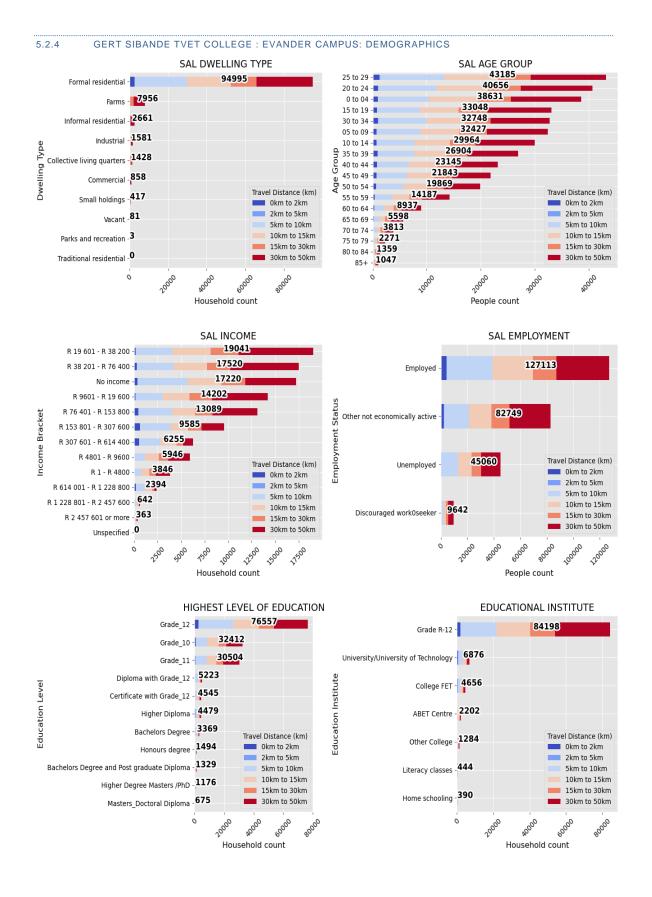
WESTERN CAPE

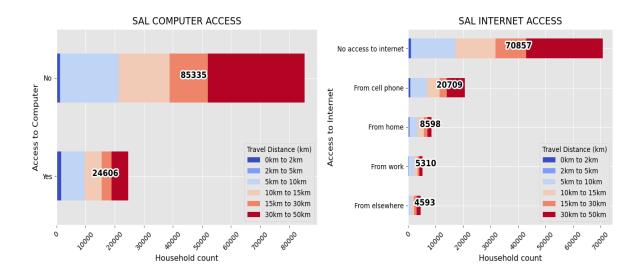
Sub-Classification: B 1 Location Confidence: 1 Province: Mpumalanga Municipality: Govan Mbeki Local Municipality Town: Evander Address: 37 Rotterdam Road Evander 2280 Head Office Travel Distance (km): 59.48 Head Office Travel Time (min): 66.63

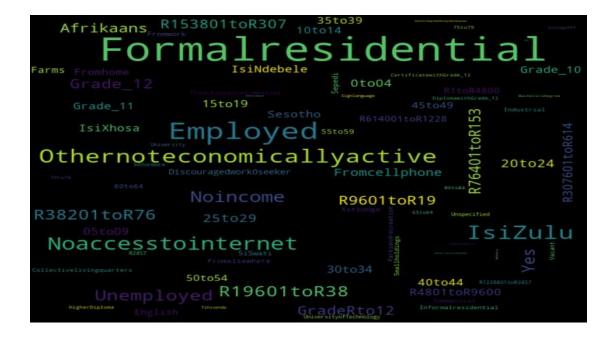


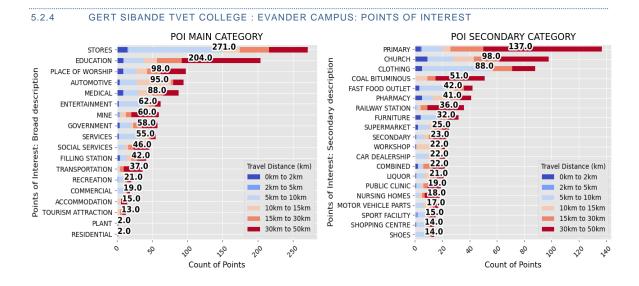




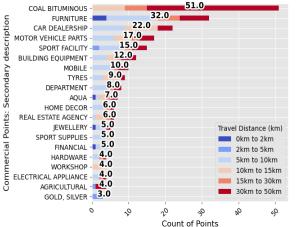








COMMERCIAL: POI SECONDARY CATEGORY COMMERCIAL: POI DETAILED CATEGORY 25.0 UNDERGROUND OPENCAST LEWIS -LEWIS -GOLF CLUB -US GOLF CLUB -ELLERINES -D GOLF COURSE -AFGRI TOWN&COUNTRY -OASIS WATER -SCORF URNITURE -CLICKS -PEP CELL -CLICKS -PEP CELL -OPENCAST 24.0 9.0 7.0 6.0 GOLF CLUB -6.0 ELLERINES -6.0 5.0 4.0 OASIS WATER - 4.0 4.0 4.0 4.0 Travel Distance (km) 3.0 PEP CELL 0km to 2km Commercial SHEET STREET - 3.0 2km to 5km RUSSELLS - 3.0 5km to 10km BUILD IT - 3.0 10km to 15km 3.0 SLEEPMASTERS -15km to 30km 3.0 SUPA QUICK -30km to 50km PERFECT WATER - 3.0 0 5 Ŷ \$ 20 \$ d's Count of Points



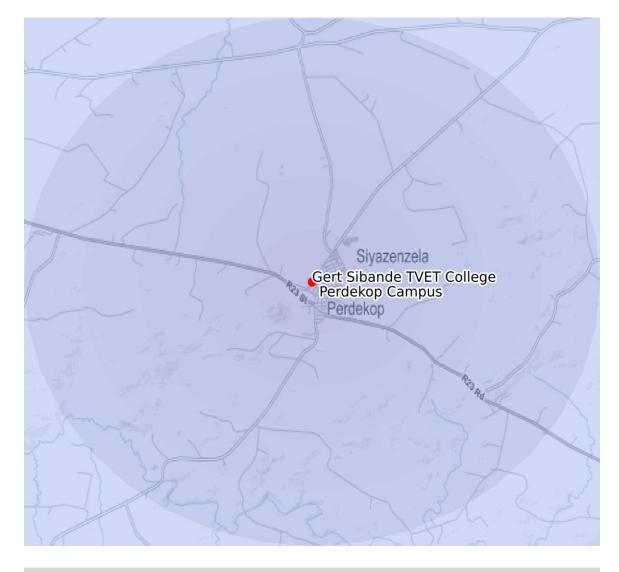
PUBLICCLINIC ENTERTAINMENT RESTAURANT RESTAURANT RECURITY MINE POSTAGE DUICKSHOP ENTERNISMATTRACTION AUTOMOTIVE JEWELLERY STATIONERY JEWELLERY STATIONERY JEWELLERY STATIONERY SPORTFACILITY GOVERNMENT FOURISMATTRACTION AUTOMOTIVE DEALTY MANDACHINERYHIRE BEAUTYPARHENT LANDSCAPING DEPARTMENTOFHOMEAFFAIRS SUPERMARKET LEARNINGBEVELOPMENT PRIVATEHOSPITAL MOBILE STATEOWNEDENTERPRISE
SPORTSUPPLIES B PLACEOFWORSHIP ACCOMMODATION TICKETSTATION
HUMANINFRASTRUCTURE
WORKSHOP TRANSPORTATION SOUTHAFRICANPOSTOFFICE CONVENIENCE CARRENTAL SOFTWARE STATEAGENCY FURNITURE PHARMACY INSTITUTION INSTALLER CARDEALERSHIP PRIMARY TOTAL EPARTMENTOFILISTICE PRIMARY TOTAL GYM
PRINTING US COMMERCIAL
TYRES DECIALITYFOOD TYRES SECONDARY HARDWARE
ENGEN PLANT CLOIHING MOTORCYCLEDEALERSHIP GREENGROCER

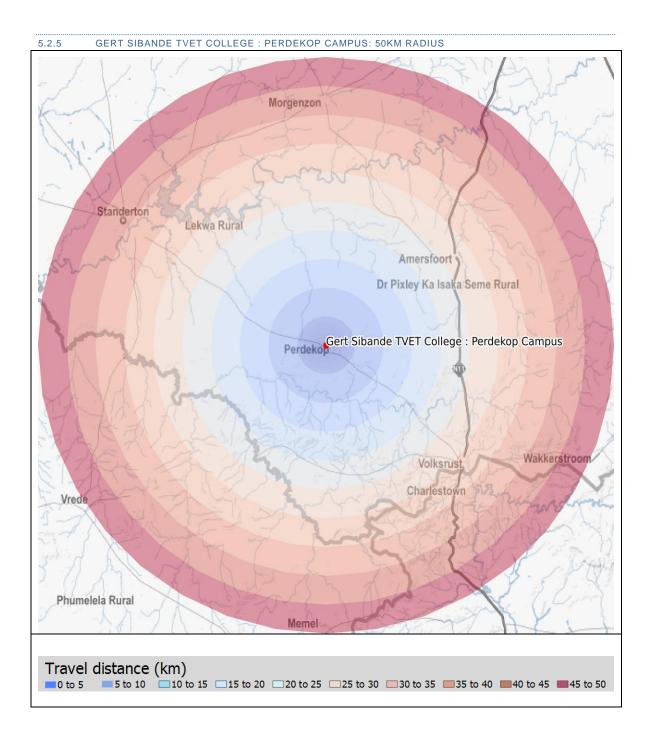
5.2.5 GERT SIBANDE TVET COLLEGE : PERDEKOP CAMPUS

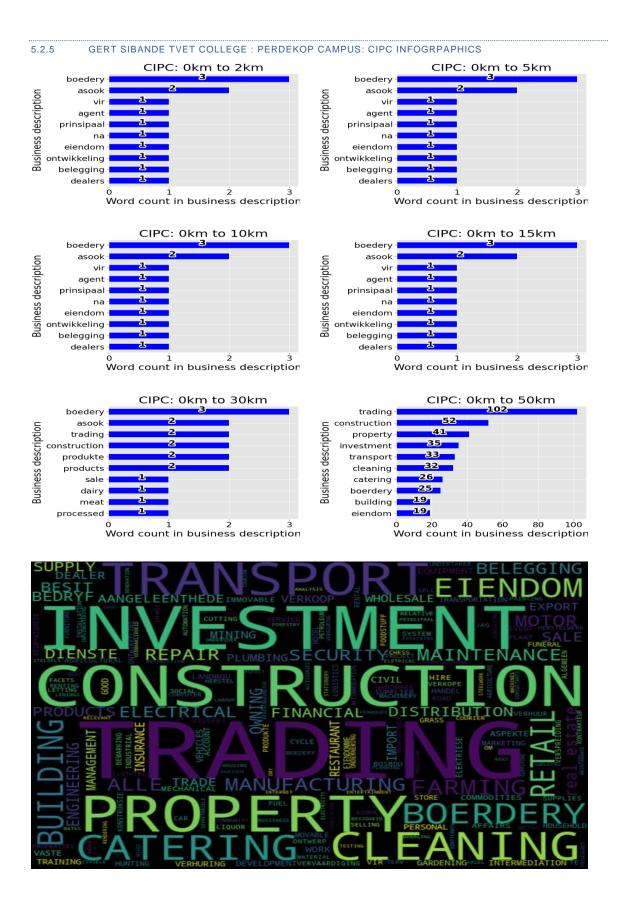


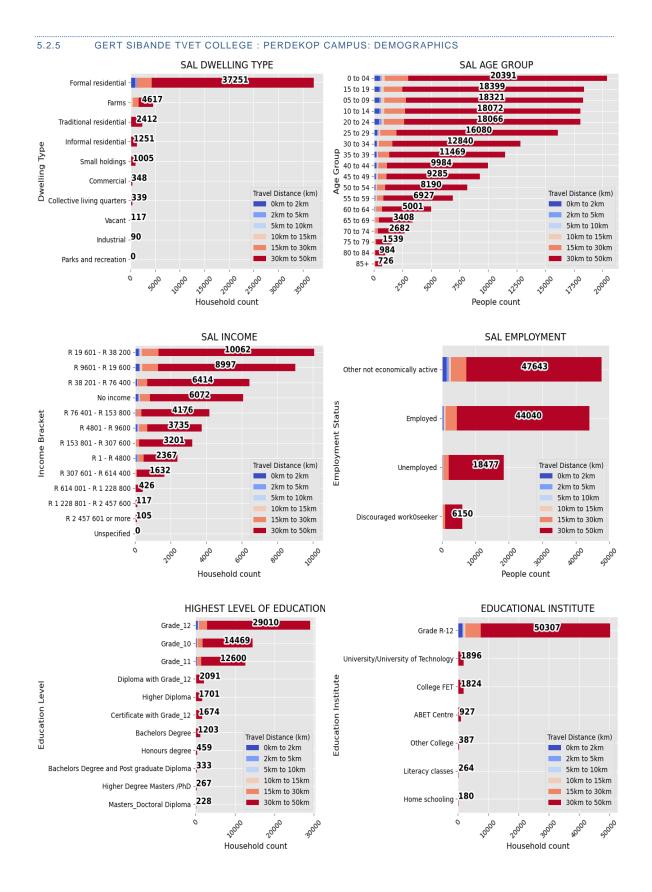
WESTERN CAPE

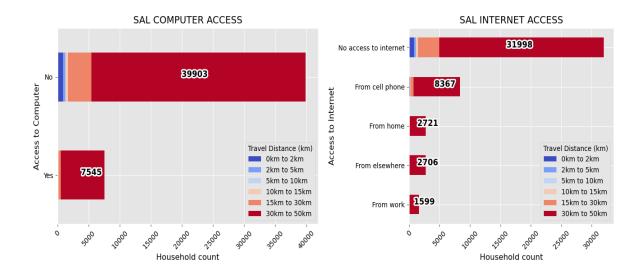
Sub-Classification: B 3 Location Confidence: 7 Province: Mpumalanga Municipality: Pixley Ka Seme Local Municipality Town: Perdekop Address: Koppie Allen Plot 40 Perdekop 2465 Head Office Travel Distance (km): 46.48 Head Office Travel Time (min): 47.7



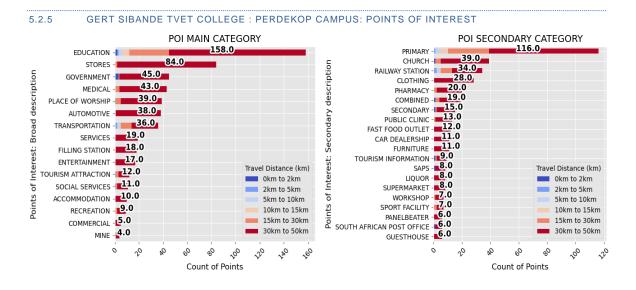












4.0 LEWIS 3.0 GOLF CLUB -MICA -OPENCAST -BRADLOWS & MORKELS -BRADLOWS & MORKELS -MIDAS GOLF CLUB 3.0 3.0 3.0 2.0 2.0 2.0 2.0

2.0

2.0

2.0

2.0

2.0

20

s. 2.0 2.5 3.0

Count of Points

1.0

1.0

CLICKS

CHATZ

BUILD IT

BESTDRIVE

SUPA OUICK -

ASSUPOL

GLASFIT -

00

THE COURIER GUY

TOTAL BONJOUR

AFGRI TOWN&COUNTRY

COMMERCIAL: POI DETAILED CATEGORY

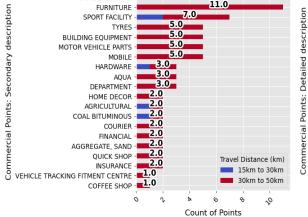
Travel Distance (km)

15km to 30km

30km to 50km

s.

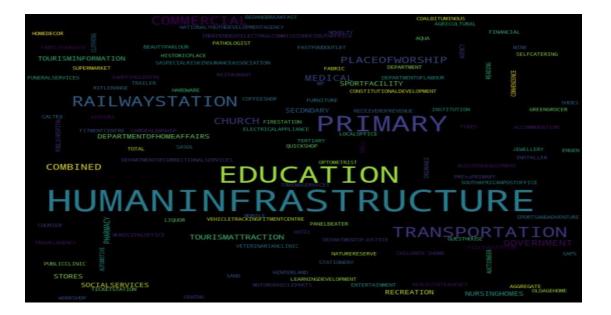
A.0



CAR DEALERSHIP

COMMERCIAL: POI SECONDARY CATEGO

11.0

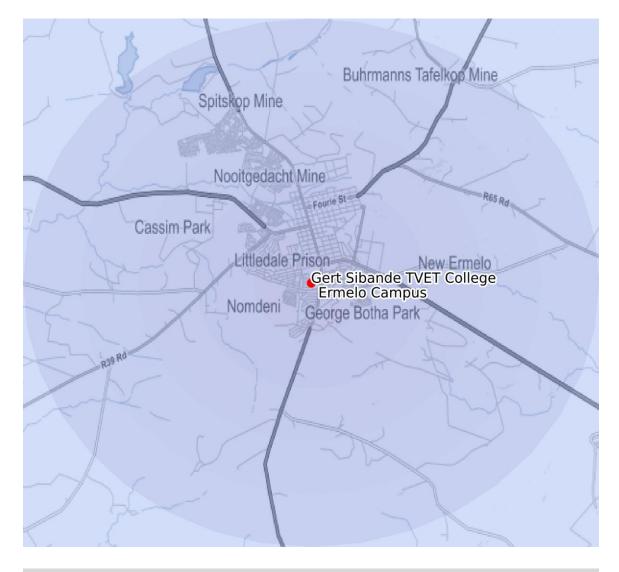


5.2.6 GERT SIBANDE TVET COLLEGE : ERMELO CAMPUS



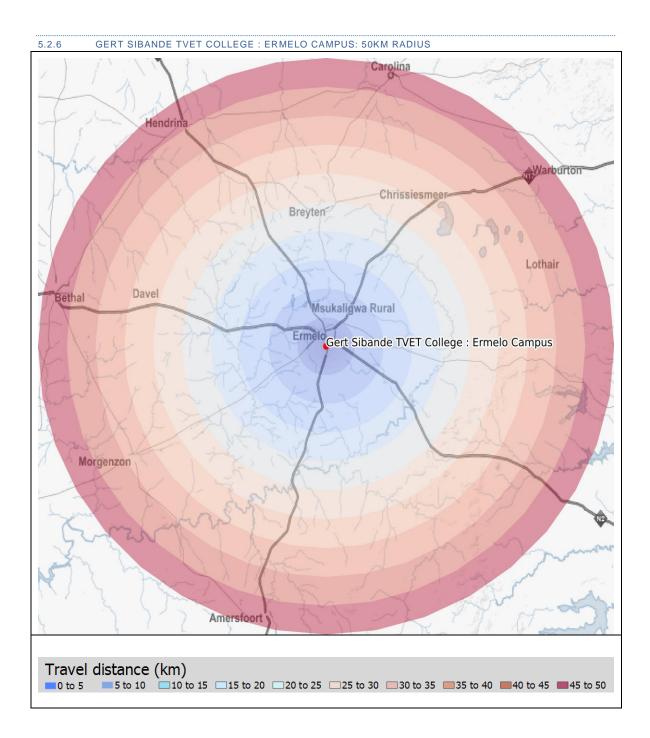
WESTERN CAPE

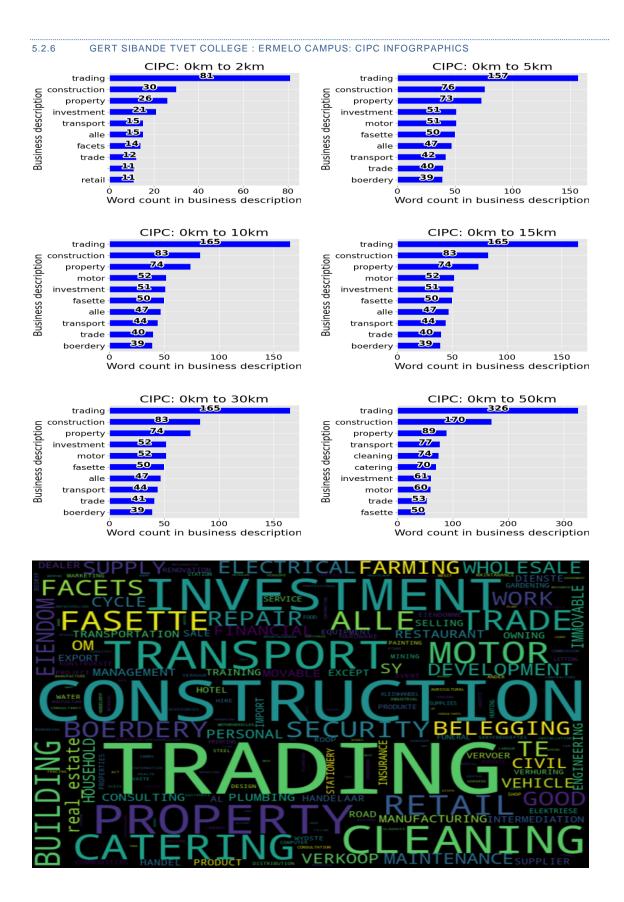
Sub-Classification: B 2 Location Confidence: 5 Province: Mpumalanga Municipality: Msukaligwa Local Municipality Town: Ermelo Address: Mel Mentz Street Ermelo 2350 Head Office Travel Distance (km): 92.27 Head Office Travel Time (min): 91.99

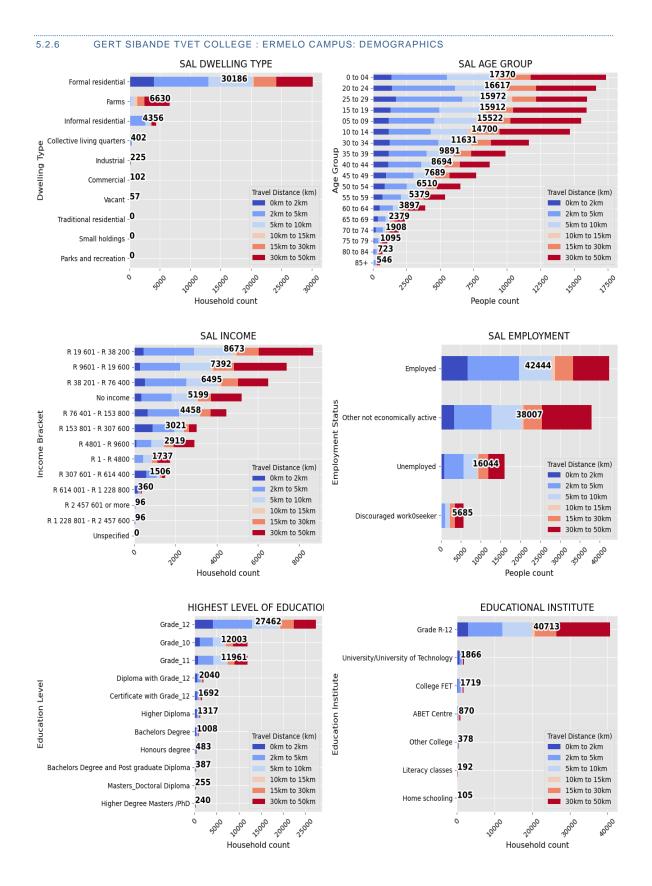


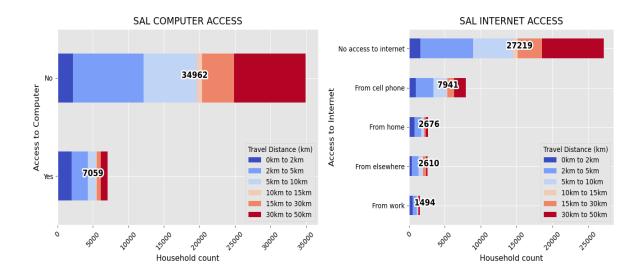
 Travel distance (km)

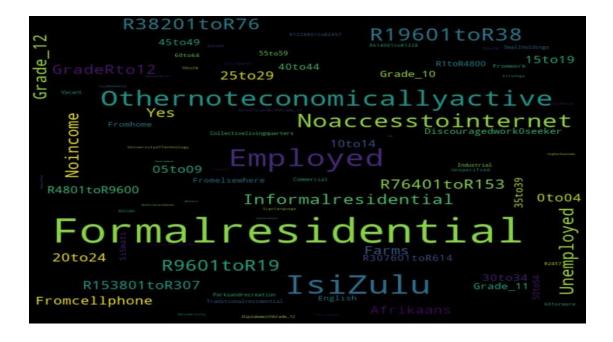
 0 to 5
 5 to 10
 10 to 15
 15 to 20
 20 to 25
 25 to 30
 30 to 35
 35 to 40
 40 to 45
 45 to 50

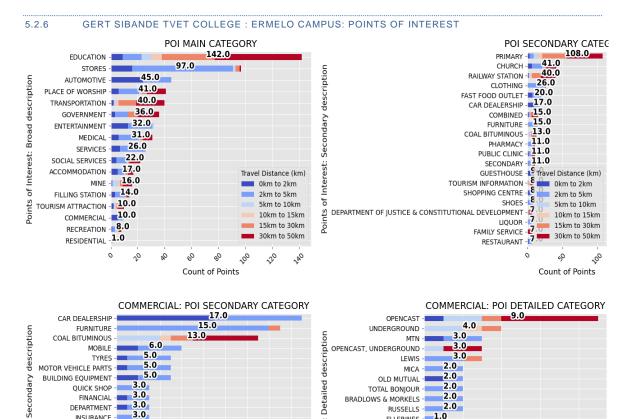












Points:

Commercial

Travel Distance (km)

2km to 5km

5km to 10km

10km to 15km

15km to 30km

30km to 50km

0km to 2km

ELLERINES - 1.0

DSTV - 1.0

DODGE - 1.0

ERA - 1.0

0

r

Þ.

Count of Points

DIY DEPOT - 1.0

Travel Distance (km)

2km to 5km

5km to 10km

15km to 30km

30km to 50km

ዓ

6

10km to 15km

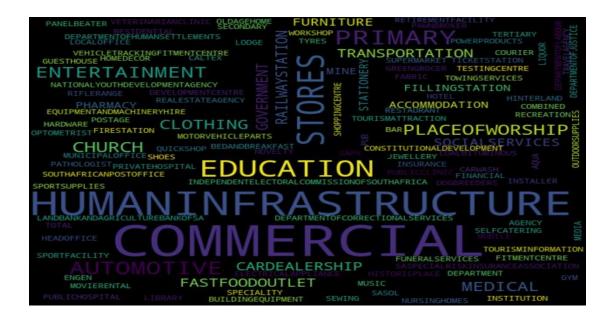
0km to 2km

ELECTRIC EXPRESS - 1.0

DHL SERVICE POINT - 1.0

EXCITEMENT STORES

WOOLWORTHS - 1.0



3.0

3.0

2.0

2.0

r 0

5

Ֆ ~0 v ~~ ~~

Count of Points

INSURANCE -

HOME DECOR - 2.0

SPORT FACILITY -

AQUA - 2.0 STATIONERY & POSTAGE - 2.0

ELECTRICAL APPLIANCE - 2.0 NOVELTY - 2.0

JEWELLERY -

NOVELTY -

HARDWARE - 2.0

REAL ESTATE AGENCY -

Points:

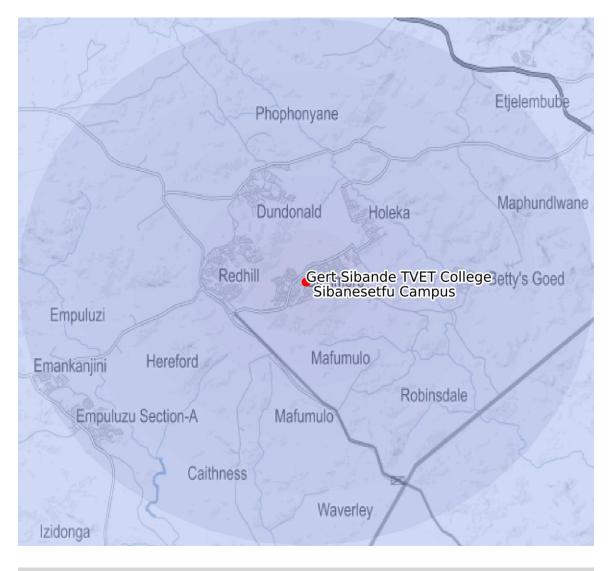
Commercial

5.2.7 GERT SIBANDE TVET COLLEGE : SIBANESETFU CAMPUS

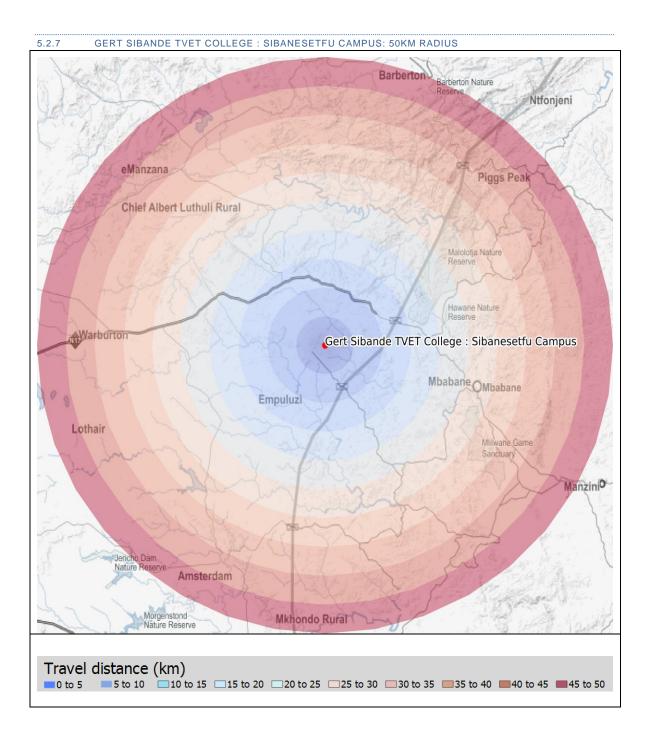


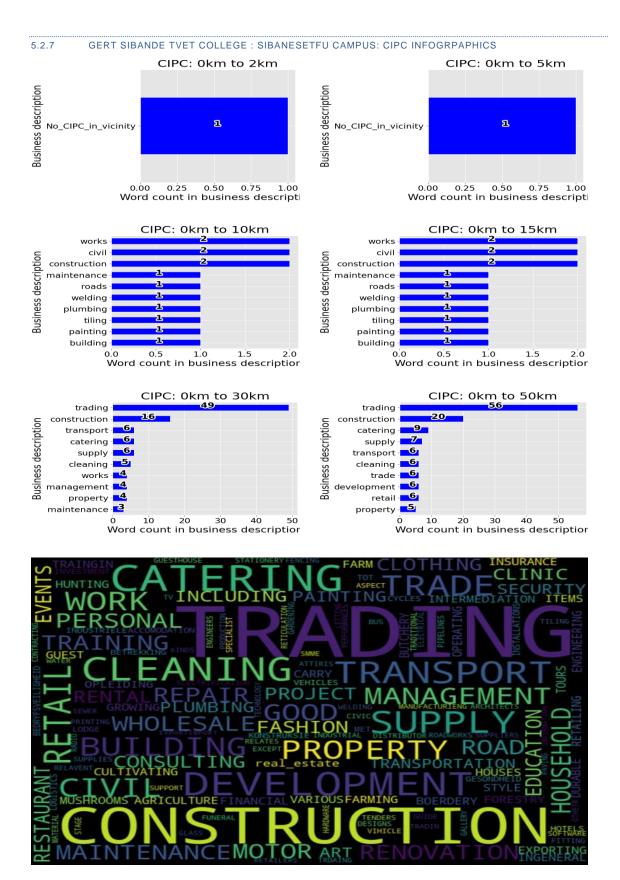
WESTERN CAPE

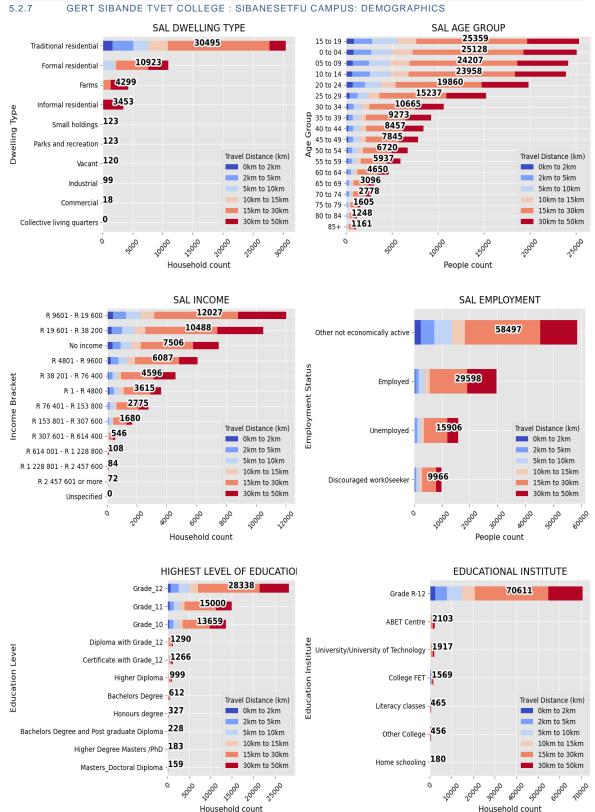
Sub-Classification: B 4 Location Confidence: 7 Province: Mpumalanga Municipality: Albert Luthuli Local Municipality Town: Chief Albert Luthuli Rural Address: Community Road Stand E1368 Glenmore Dundonald 2336 Head Office Travel Distance (km): 193.19 Head Office Travel Time (min): 219.16



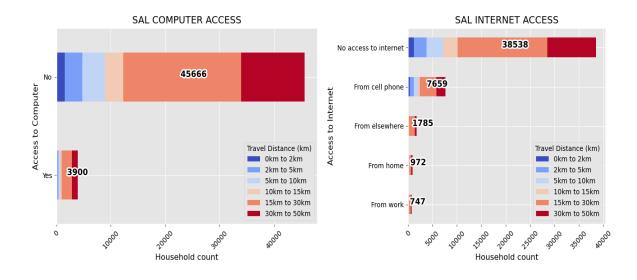
Travel distance (km)								
0 to 5	= 5 to 10	□ 10 to 15 □ 15 to 20	20 to 25	25 to 30	🔲 30 to 35	35 to 40	= 40 to 45	45 to 50

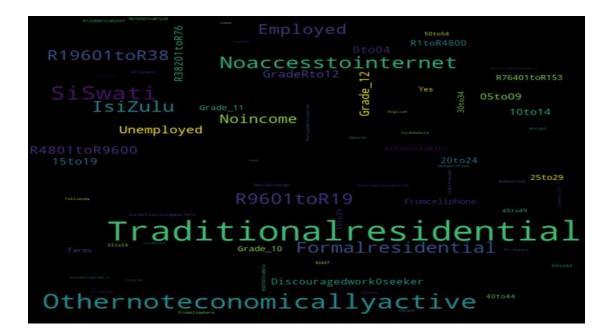


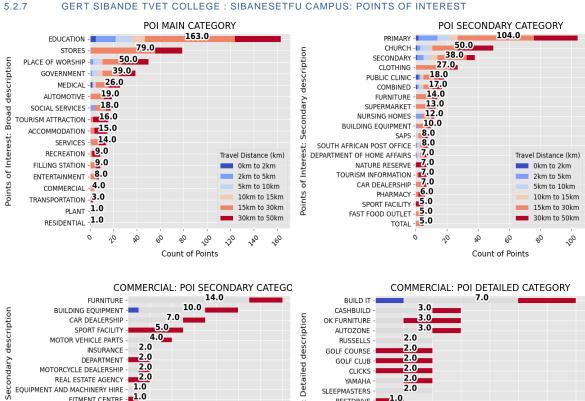


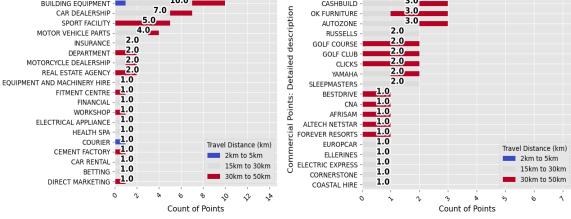


Household count









Commercial Points:

