

Alternative Service Delivery Unit

Resource flow based development on an area level

GreenCape

May 2019

Where we are going with this session....

What are the goals for the session?

- A practical area level example
 - Witsand Informal Settlement Upgrading
- Avoiding predetermined outcomes
- Importance of citizen involvement / buy-in
- Wider notion of urban metabolism
 - People, skills and finance



Witsand informal settlement

Witsand (2500+ houses)

Atlantis is a town in the Western Cape province of South Africa, and a suburb of the City of Cape Town Metropolitan Municipality. Atlantis is 40 km (25 mi) north of the Cape Town Central Business District (CBD). As of 2011, it has 67,491 residents. Witsand is an informal settlement located within Atlantis.

Witsand Informal (2011 Census):

Area - 0.62 km² to 1 km²

Population - 4,689 (7,528.26 per km²)

House holds - 2,231 (3,581.90 per km²)

Dominant languages - isiXhosa, Afrikaans and English

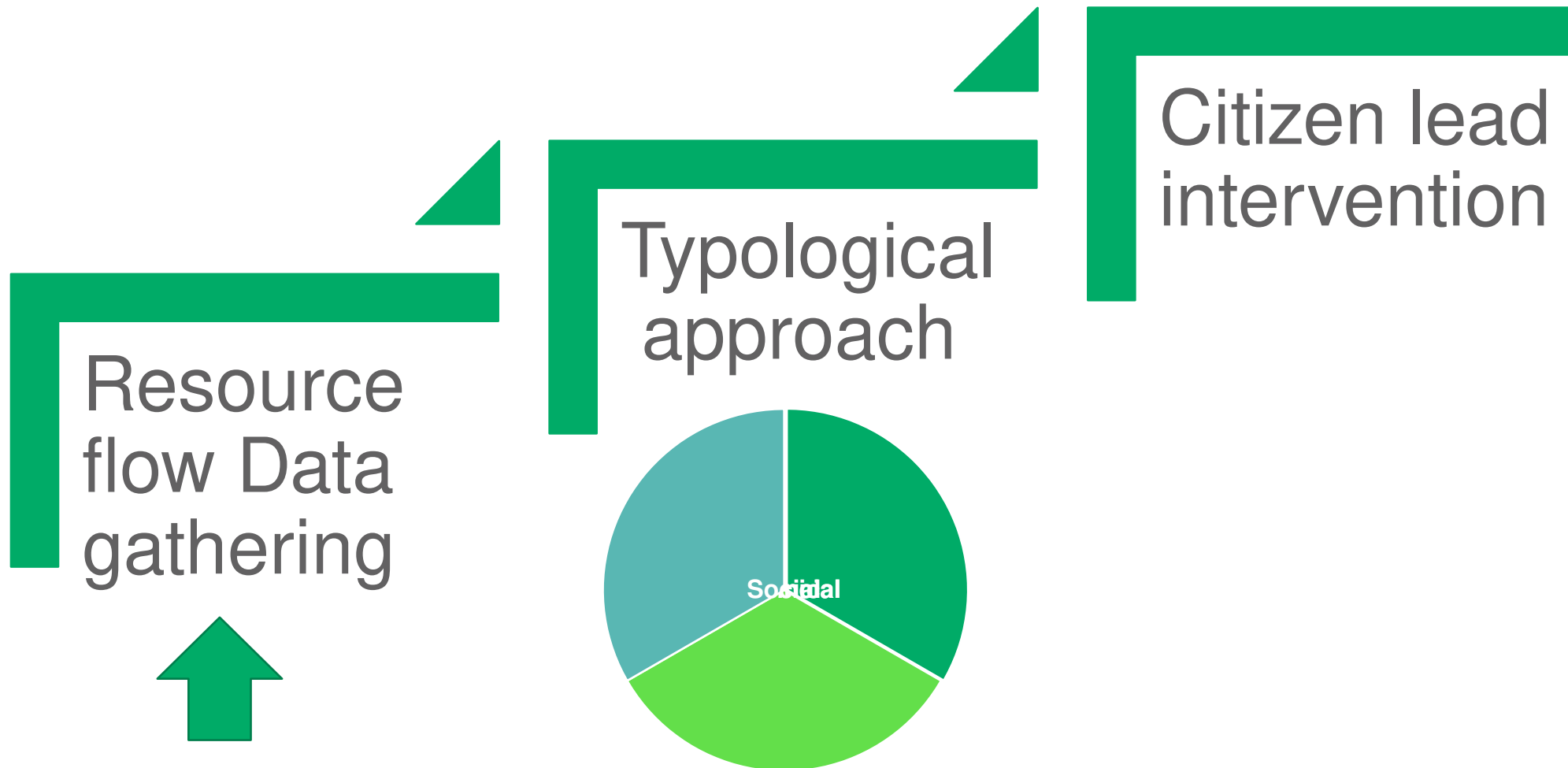


Witsand community mobilisation

Witsand is a divided and disgruntled community demanding services



What are we trying to do in Witsand?



Witsand community mobilisation

Witsand community has decided to undertake a mobilisation process with ASDU



What data have we gathered – the flow of people in and out

The average person has been living in Witsand for 6 years (longest, more than 30)

Household size

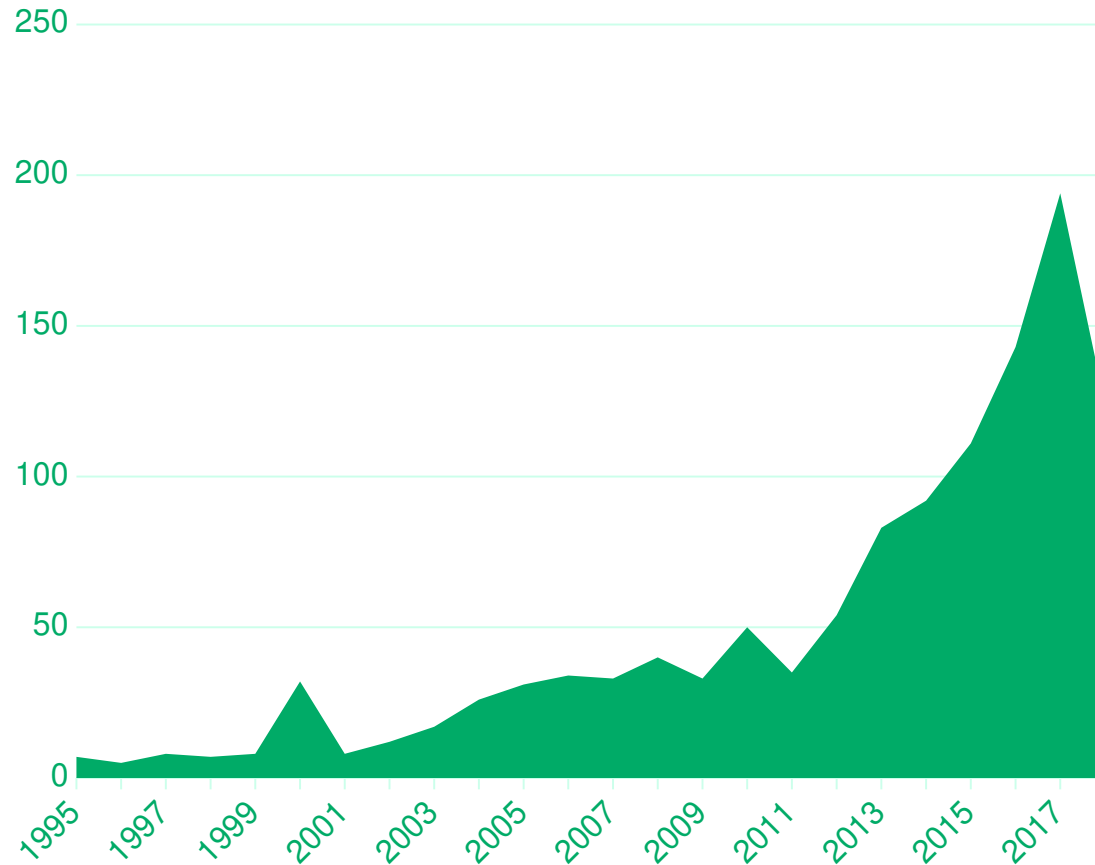
Average household size	2.4
Max number per house	9.00
Min number per house	1.00
Number of males per house	1.22

Formal housing

- 70/30 mix of informal and formal housing
- Only 31% of the households are on the formal household waiting list
- These recipients have been waiting on average 7.5 years

What data have we gathered – the flow of people in and out

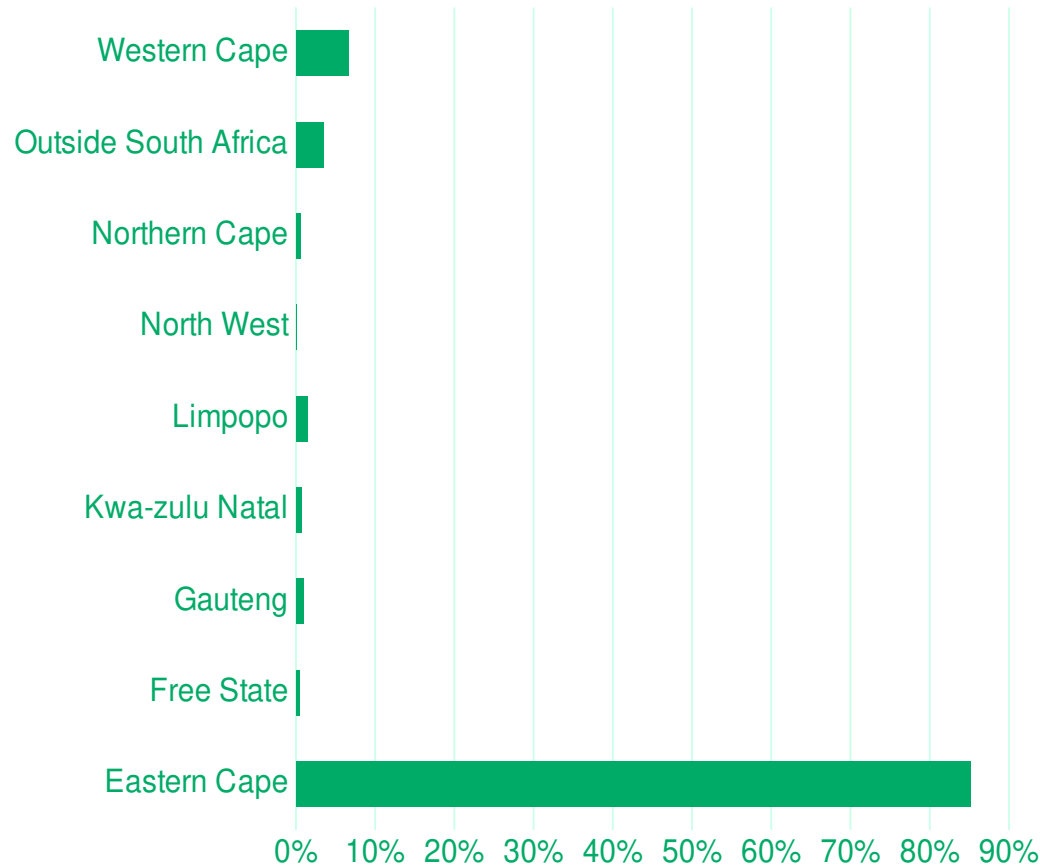
Area growth between 1995 and 2018



- People have been living in the area since early 1980's
- The settlement growth accelerated over past 10 years
- 50% of the respondents moved into the area between 2014 and 2018
 - Informal settlement growth
 - New formalised housing development

What data have we gathered – the flow of people in and out

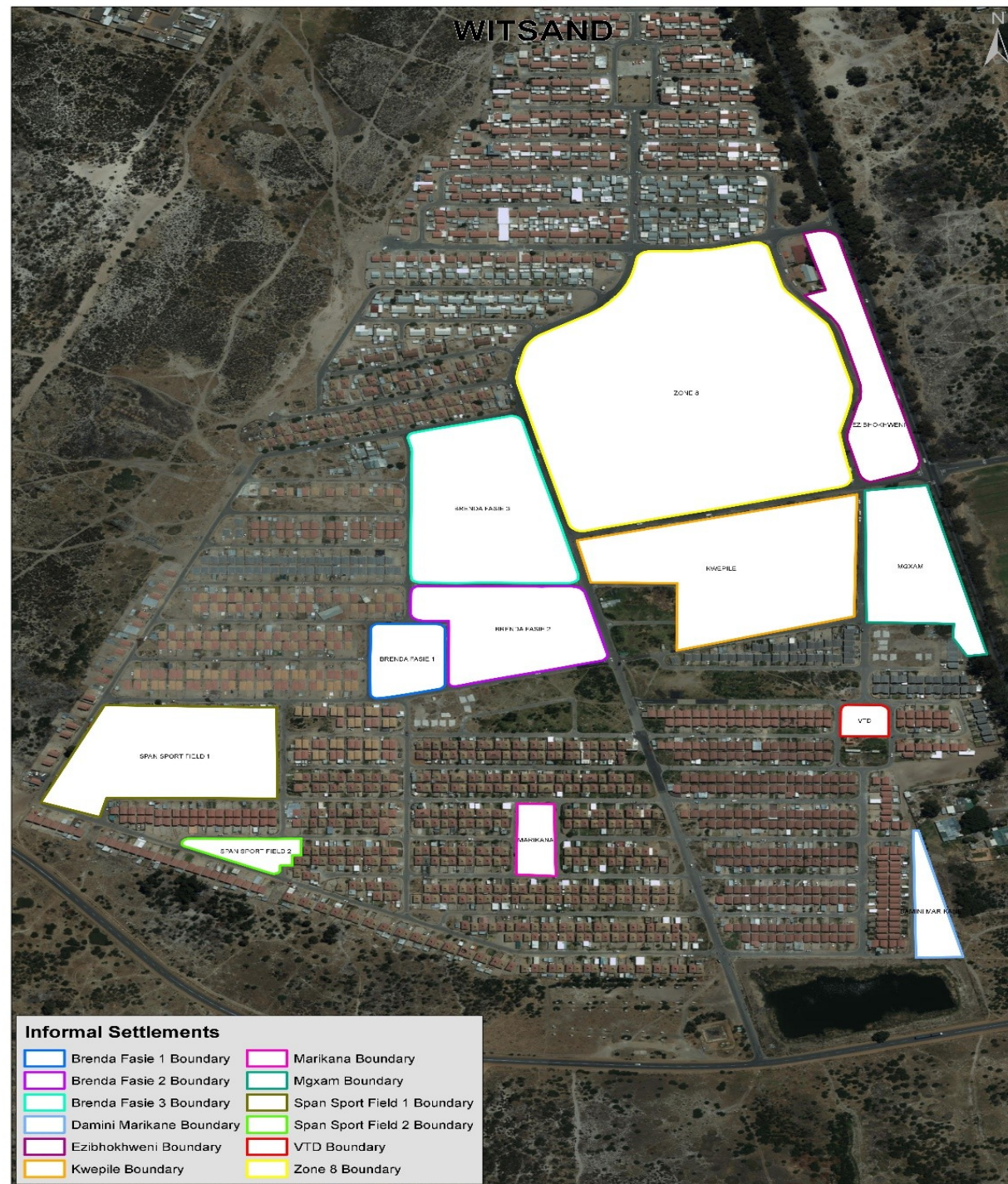
Most people who moved into Witsand in the past 5 years are from the Eastern Cape



Dominant reasons for moving:

1. Employment opportunity
2. Closer to family
3. Affordable rent

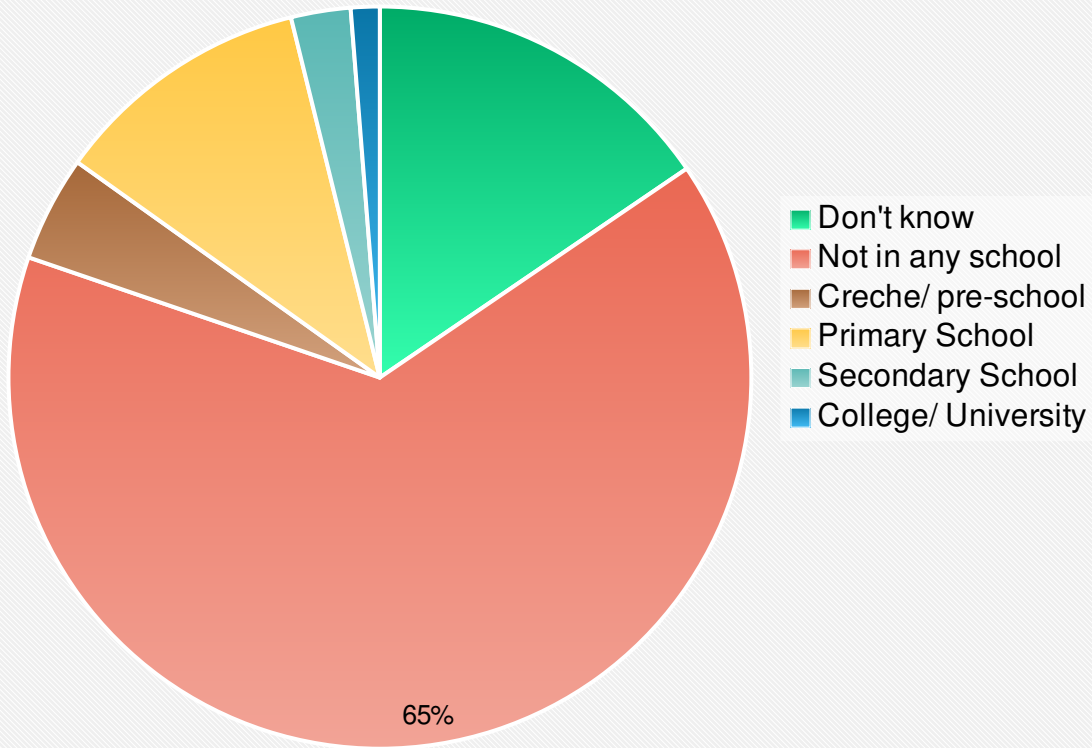
There have been limited xenophobic issues but what does this mean for re-blocking?



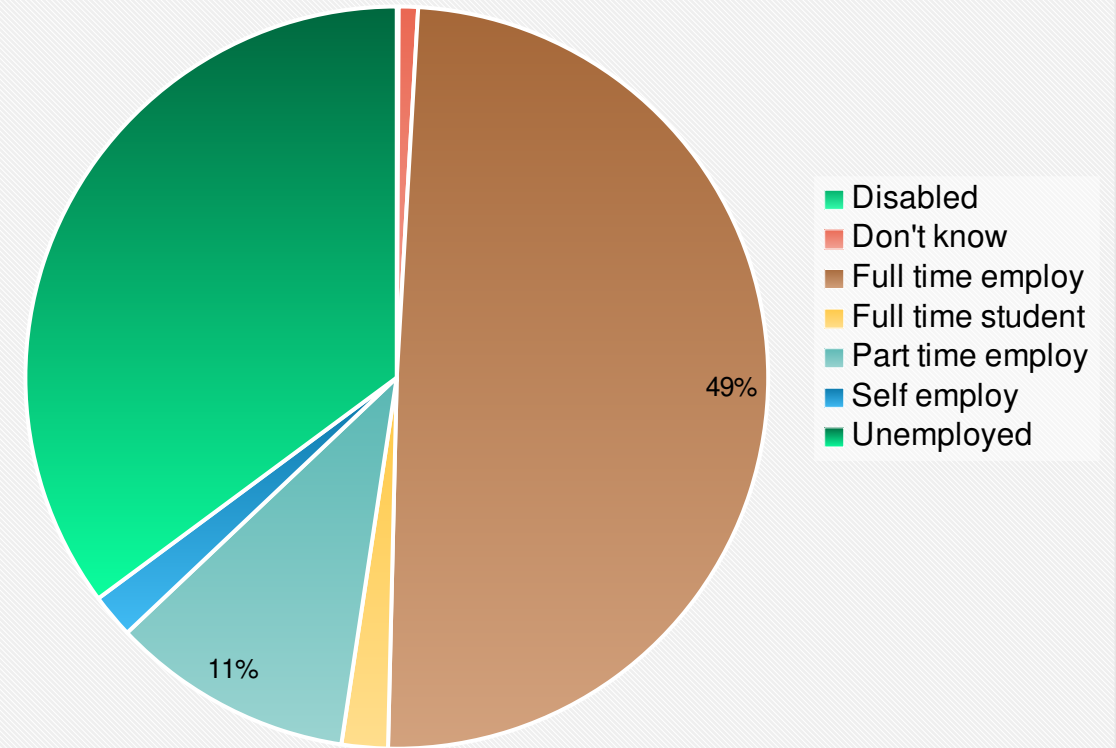
What data have we gathered – skills development

80% of school age children are not in school, while 38% of the respondents are unemployed

Children Education

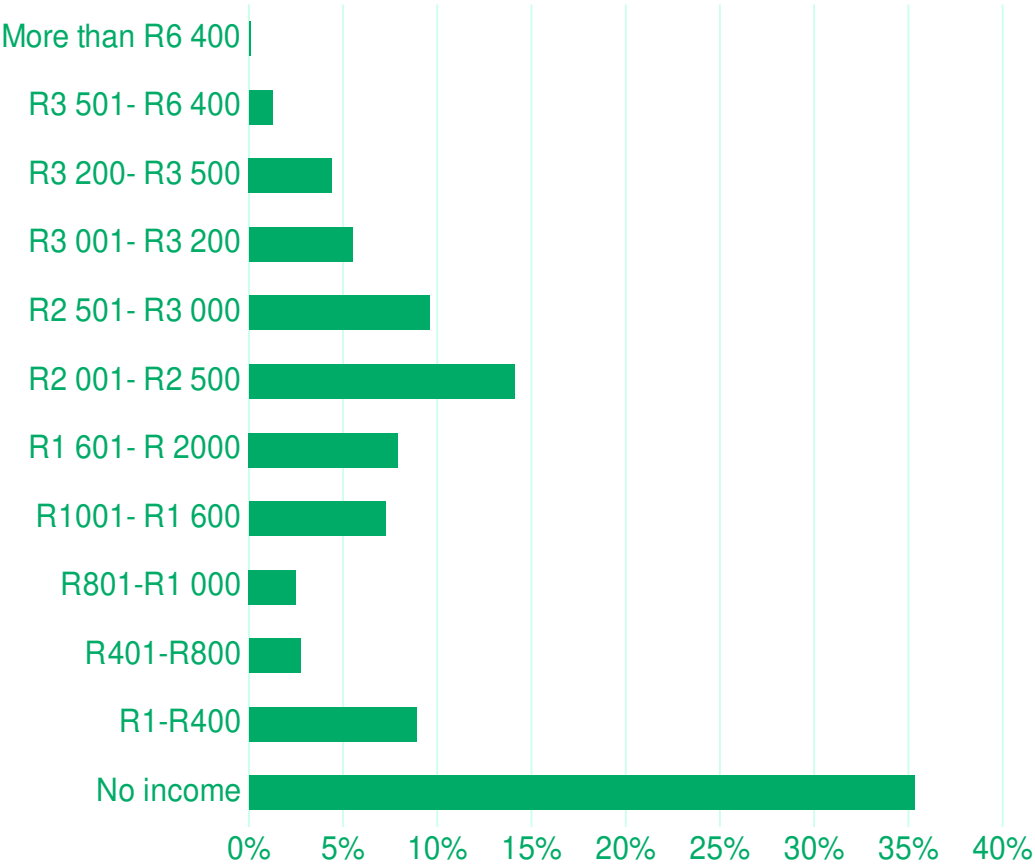


Employment



What data have we gathered – economic flows

The income in Witsand ranges from between R1100 and R2200

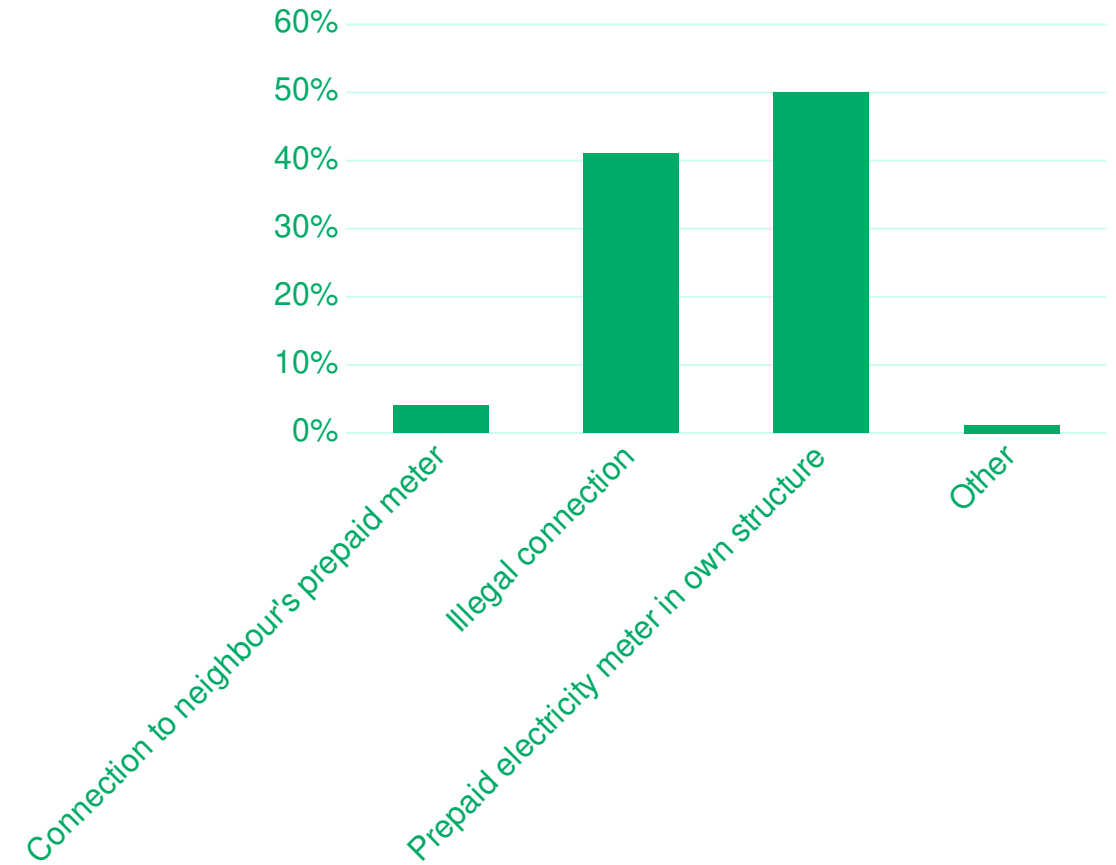


Item	Monthly cost	% of total
Food	R 707	26%
Energy	R 200	7%
Rent / Maintenance	R 372	14%
Transport	R 346	13%
Clothing	R 614	23%
Education fees	R 441	16%
Cell phone data / airtime	R 71	3%

Basic Services – Energy

This is an Eskom provision area and some zones have been electrified

- Pre-paid electricity in formalised area and a small section of the following informal zones:
 - Marikana, VTD and Span sport field 1 & 2
- Homes with electricity only use the free basic subsidy (+-10 days) and then no more electricity for the rest of the month.
- More than 500+ informal connections counted
- 50%+ of homes un-electrified



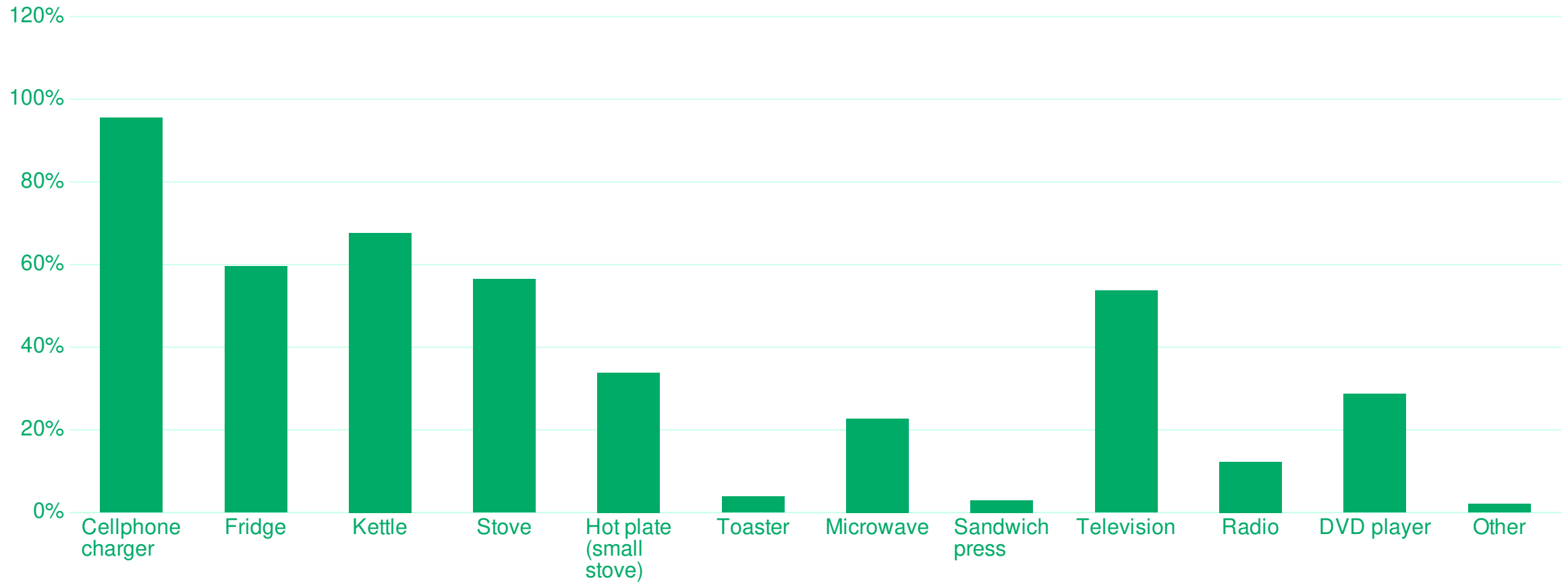
Basic Services - Energy

There is a need for a basket of services to address the needs of a diverse area

- Electricity, gas and paraffin are the main sources of energy for cooking, lighting and heating.
- Gas and paraffin use increases once electricity subsidy ends (FBE).
- Eskom has undertaken sporadic electrification of households.
- Very limited area lighting (high crime rate) – this represents a significant need in the area.
- Connectivity (TV, Radios and internet) highlighted as key services (R80 – R100 per month).
- Willingness to pay for electricity up to R150.

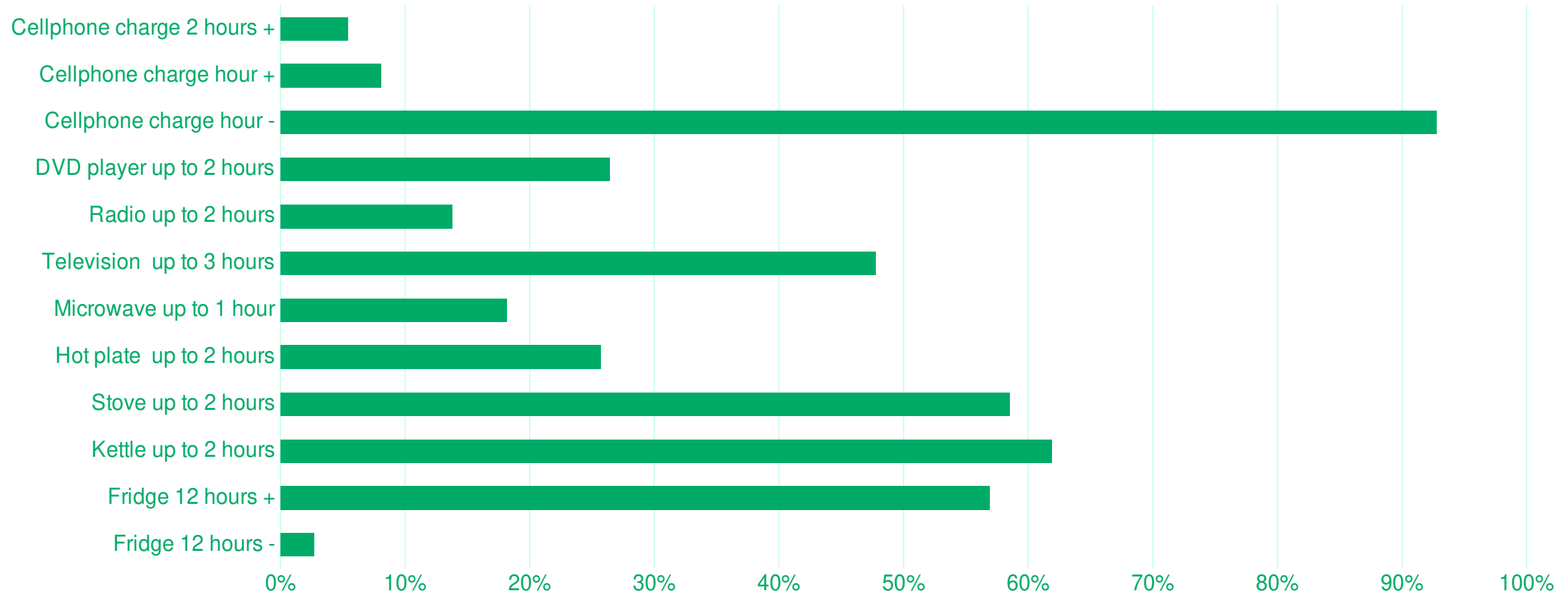
Basic services – Energy

There is a wide range of appliance use in Witsand from fridges to TVs and stoves



Basic services – Energy

Appliances used at different times - peak consumption 20h00 and 21h00



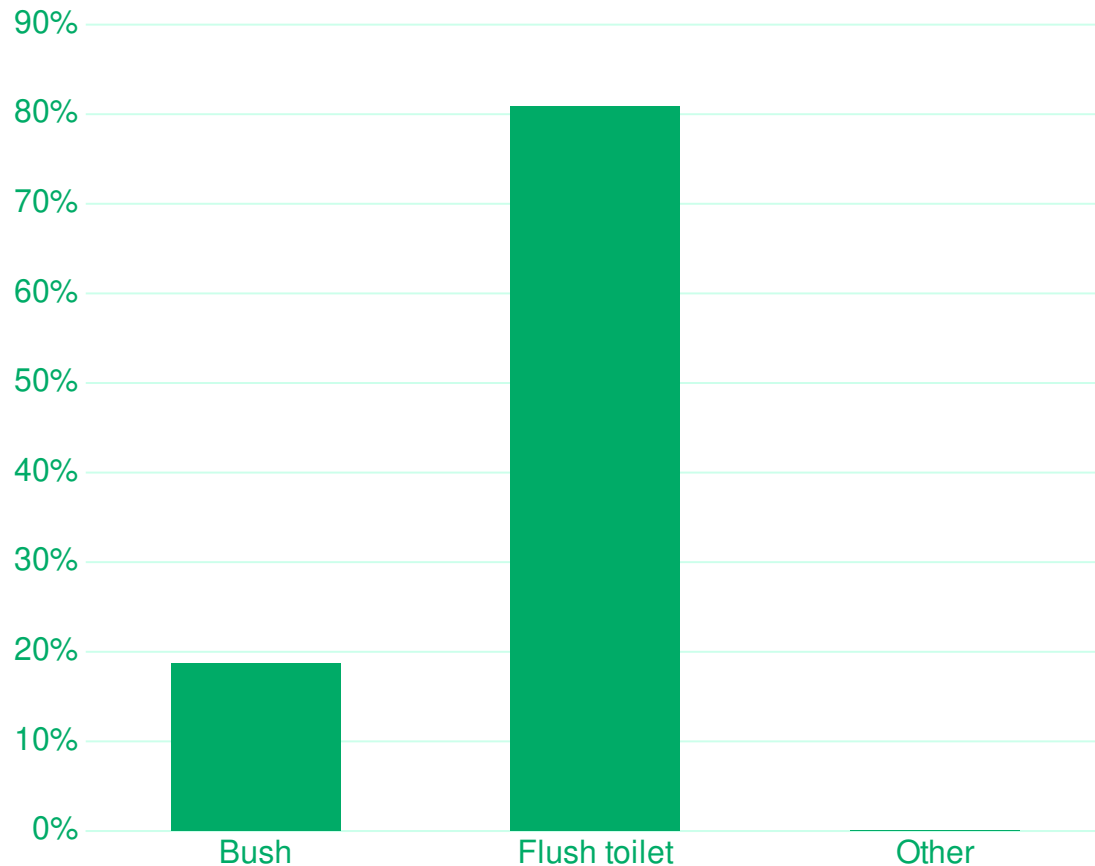
Basic Services - Water services

There is no willingness to pay for alternative water services

Service	Level of service
Can only access communal tap	90% of respondents
Distance to supply	Between 200m and 500m (5-10 min)
Interruption in water supply (12 month)	Yes 34% No 66%
Length of average interruption	1 day
Considered safe to drink	Yes 77% No 23%
Willingness to pay	Yes 2% No 98%

Basic Services - Sanitation services

Sanitation remains an issue with the rise of sanitation linked illness



- 97% of respondents indicated they do not feel safe using the toilets in their area
- Average distance to flush toilet – 200m
- Average distance to bush toilet – 500m
- Despite these statistics 100% of respondents were not willing to pay for an alternative service

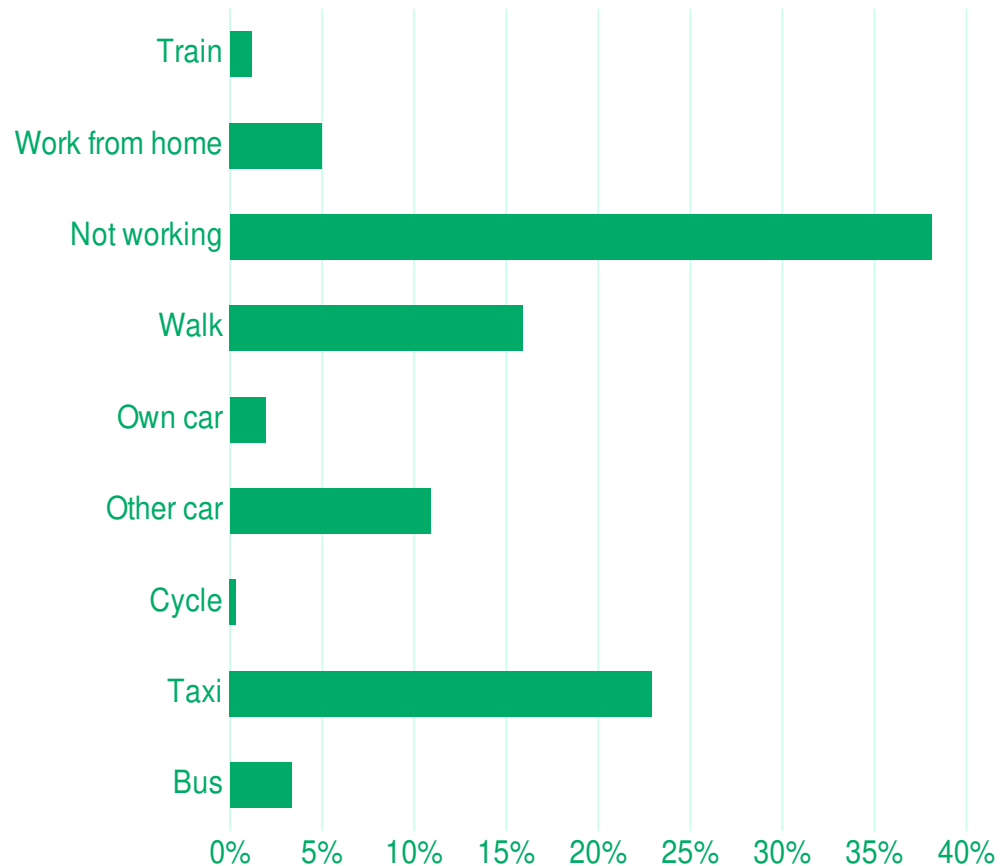
Basic Services - Waste service

The majority of the waste is mixed organic waste

- Centralised waste collection points used – maintained by the Expanded Public Works Programme (EPWP) program workers.
 - A lot of respondents depend on the EPWP program, so they indicated that they are less willing to participate in alternative waste management programs that may limit the EPWP opportunities.
- Waste collected once a week by the municipality.
- A combined waste / sanitation bio-gas project could provide a solution to the connected issues.

Basic Services – Transport

Public transport is key with Atlantis being situated 40min outside the CBD



- There is very limited rail access.
- Taxi is dominant mode of travel (R350 per month). Private car use indicative of lack of affordable private transport.
- Most people are traveling for less than 1 hour (local economic value being captured?)
 - 16% of people walking to work indicate a resurgence of the local economy in Witsand surrounds.
- The “not working numbers” corroborate the unemployment estimates on slide 22.

A typological approach can increase potential impact

Example of an interim energy intervention

Item	Home solar system	Micro-grid	Small Scale Biogas	LPG Gas cage
Density	1000+	150+	2000	2500+
Income	R2000+	R1000 – R1500	R1000	R2000+
Willingness to pay	R150	R100	R150	R15/kg
Build structure	Zinc	NA	NA	Na
Appliance use	Lights, fridge and TV	Lights, fridge and TV	Cooking, water and space heating	Cooking, water and space heating



Selected base intervention selected by community

Solar streetlights to reduce crime at night (rape, robbery etc.)



What have we learnt so far?

- Avoiding predetermined interventions improves impact and buy-in
- Citizen involvement:
 - Improved validity of the results
 - Built a social foundation for further intervention
- Not just resources, but people, information, money, which flow through and make the city



Thank You

Alternative Service Delivery Unit

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