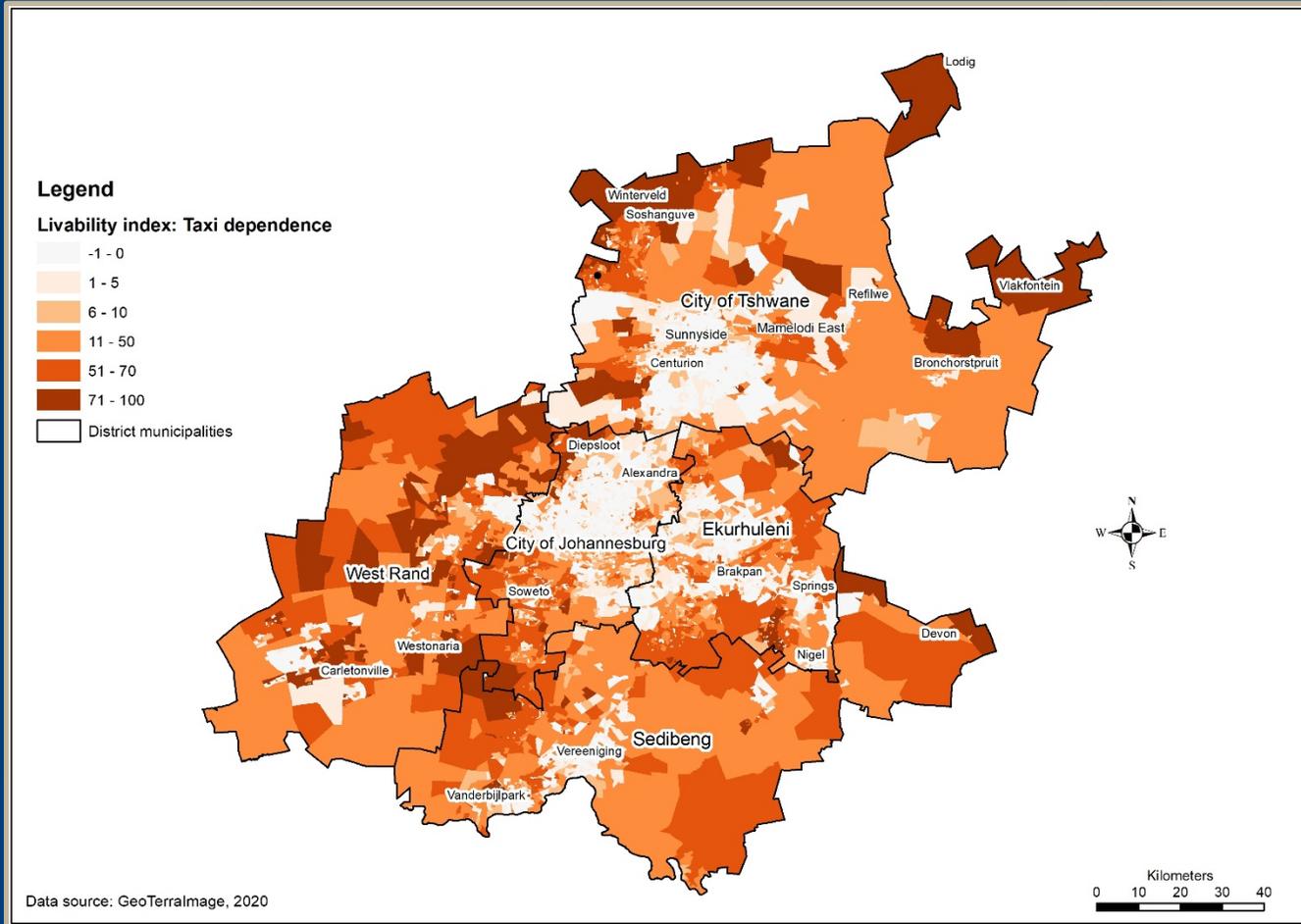


The liveability index: Dependence on taxis as a form of public transport in Gauteng

This edition of Spatial Insights assesses the Liveability Index based on taxi usage in Gauteng. A Liveability Index is used to rank cities, regions or countries based on certain economic criteria, using a combination of qualitative and quantitative techniques. Information used to compile Liveability Indices are usually based on data collected through surveys, such as quality of life, life satisfaction or happiness surveys. Others are based on public statistics, such as those derived from data on a city's, region's or country's economic climate, political stability or the level of the provision of public services. A Liveability Score is then generated as an aggregate of the data collected and analysed, usually presented for a period of 1 year ([Read more](#)).

The Liveability Index based on taxi dependence in Gauteng



Several commuters use minibus taxis as a means of transport in Gauteng daily. The number of car owners and people who depend on taxis can be used as a measure of affluence, using the Liveability Index ([Read more](#)). In this edition, the percentage of the population that is dependent on taxis for transportation for their daily commute is illustrated.

The map to the left shows a value of -1 to 0 to indicate no liveability information could be calculated for the area. Subsequent values indicate the index per municipality. The map shows that taxi dependence is high for high-density areas such as Soweto and Diepsloot in the City of Johannesburg, and is almost evenly distributed for the West Rand, Sedibeng, and Ekurhuleni. There are pockets of high taxi usage in the outskirts of the City of Tshwane, such as in Vlakfontein, Soshanguve, Winterveld, and the border town of Lodig, which falls just outside this metro. Detailed maps are discussed overleaf.

[READ MORE](#) on taxi dependency in Gauteng.

Liveability and taxi usage in Gauteng

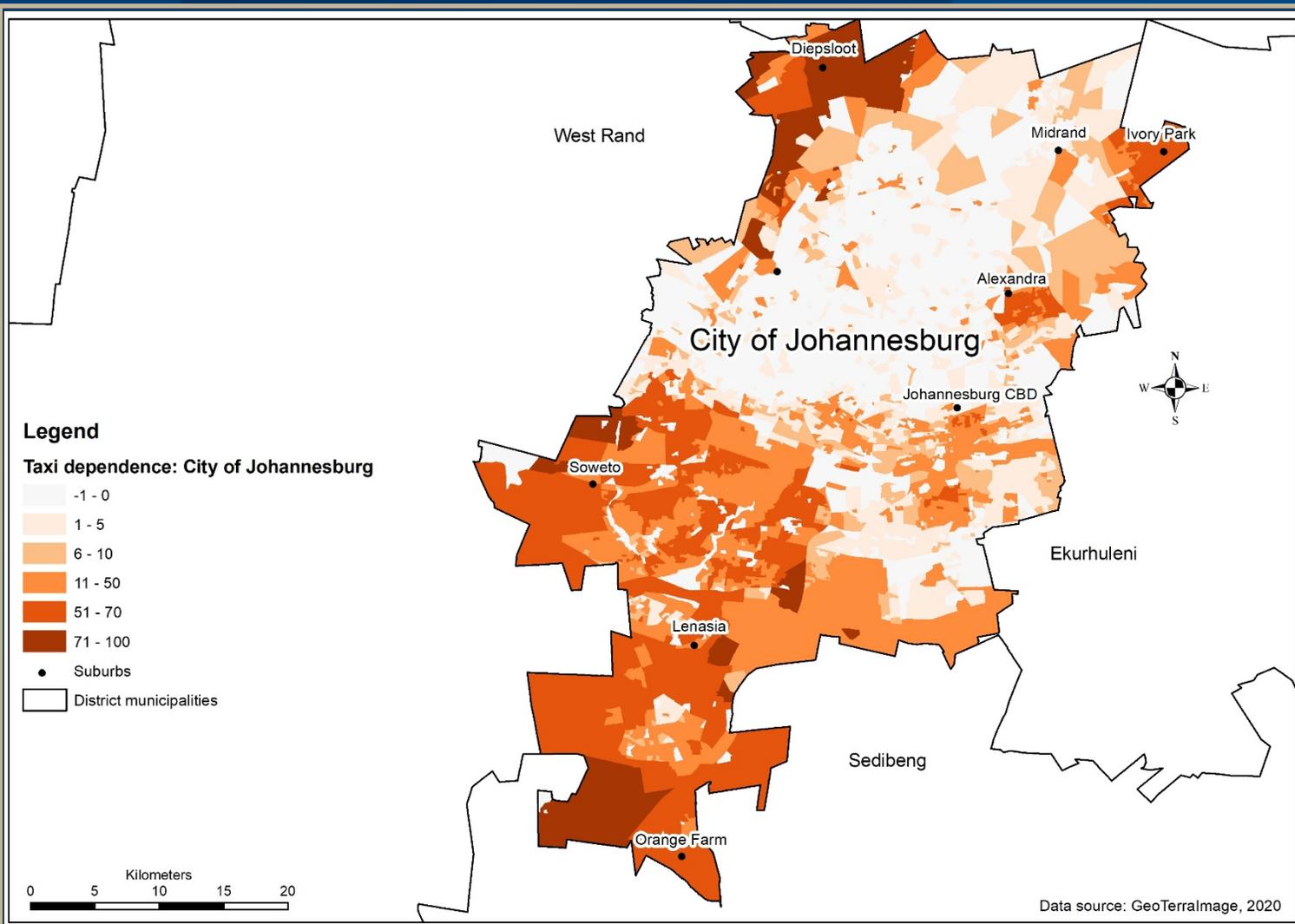
The Global Liveability Index (2021) examines 140 cities across the world based on an aggregation of lifestyle measures. While only a few cities are included, the report ranks Johannesburg as the 86th most liveable city in the world, while Pretoria is lower, in 92nd in position ([Read more](#)).

The Gauteng Province Household Travel Survey Report 2019/20 found a link between the use of motorized travel and affluence levels. This report uses the percentage of people reliant on transport as a general measure of affluence within the province. The report found that minibus taxis account for 23% of all peak-period trips and private cars for over 22%. Higher capacity trains and buses account for about 5% of peak-period trips. Households do not use higher capacity travel modes like trains, because these are not available, are infrequent and generally inaccessible for the trips being made ([Read more](#)).

The report further states some implications for this distribution of taxi usage in the province, in that spatial planning and settlement patterns in the province are not taking advantage of high capacity public transport modes. Also, the frequency and density of higher capacity public transport modes should be continuously reviewed to respond to changing travel patterns ([Read more](#)).

The spatial data illustrated in the maps per municipality, was recently procured for HSRC research purposes. The data is at an Enumerator Area level and besides indicating dependence on taxi transport it also contains other liveability variables like air quality, distances to the closest shop, density of residential structures, etc.

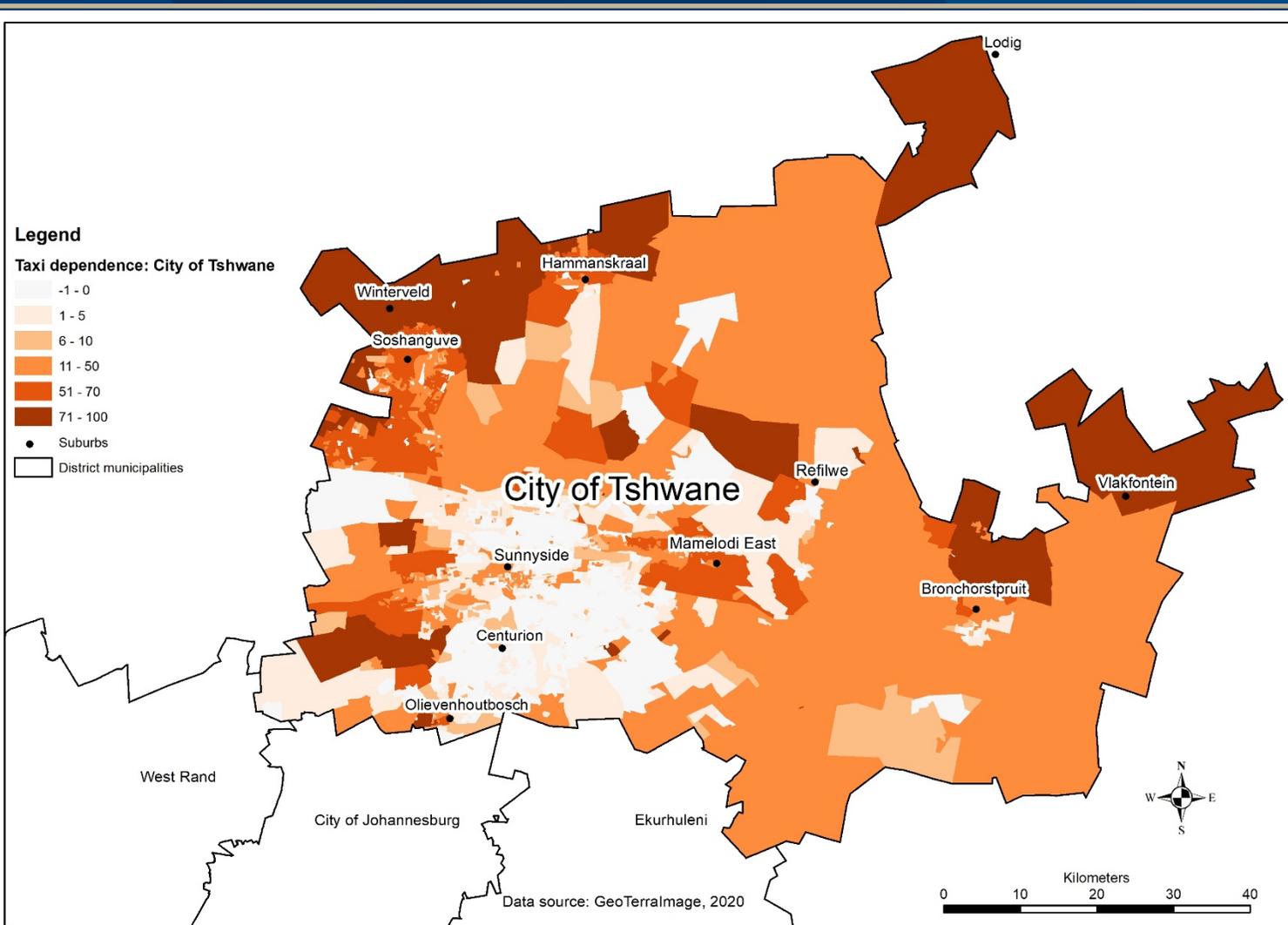
City of Johannesburg



The City of Johannesburg has the highest figure of taxi dependence in the province, with 52% of the commuters dependent on taxis. In comparison, approximately 26.5% use their own cars as a means of daily commuting to work.

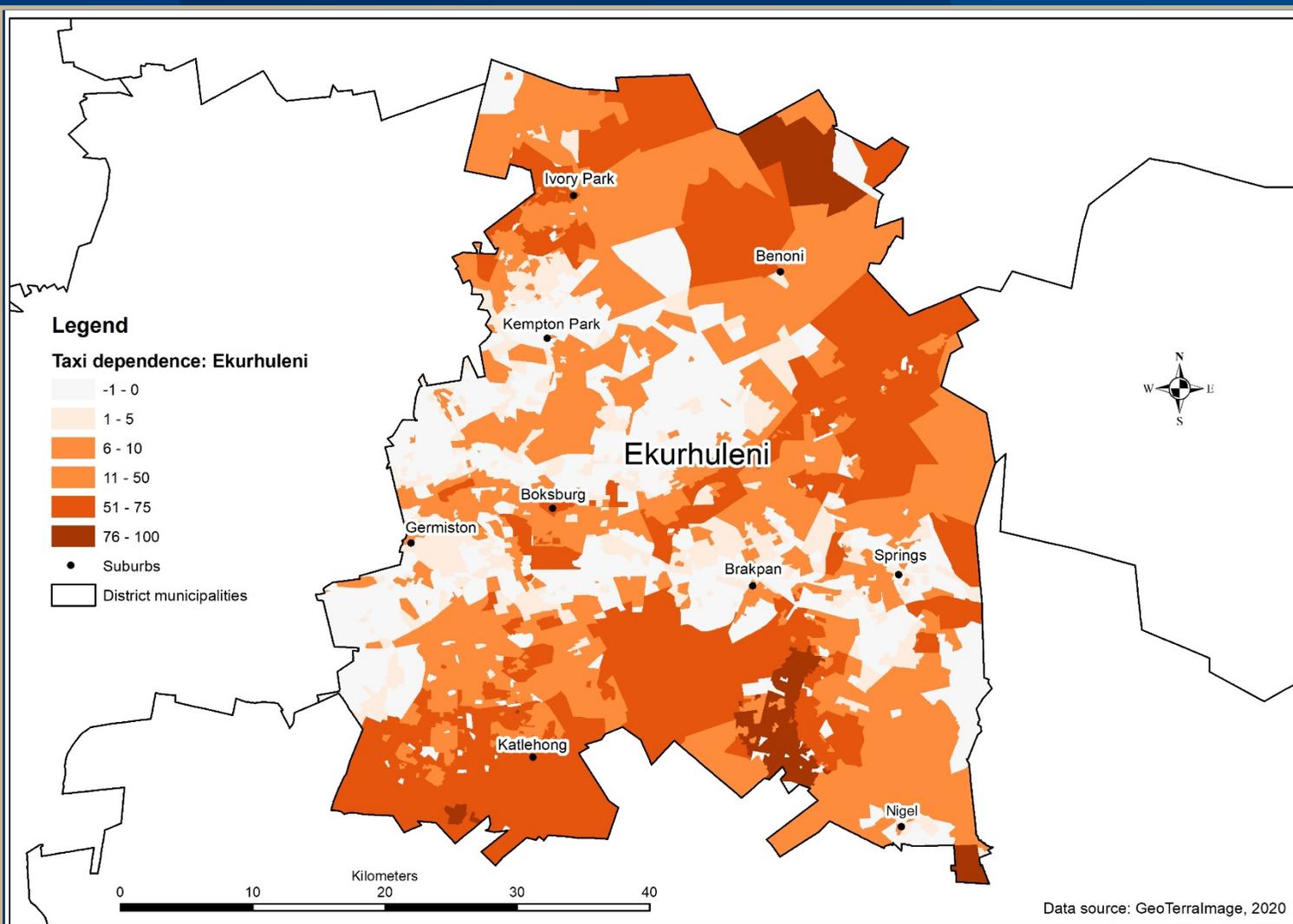
The map shows that a proportionally high number of people residing the south of Johannesburg (Orange Farm and Soweto), and those to the north of the City (Diepsloot), together with those from the eastern outskirts of the city (Alexandra) are largely dependent on taxis. These are also the most economically deprived areas of the province, comprising of high-density residential suburbs and informal settlements ([Read more](#)).

City of Tshwane



In the City of Tshwane, 44% of commuters are dependent on taxis for daily transport. The use of taxis in the City shows that the majority of taxi services represent a radial type of service which has its centre at the Pretoria CBD. Around the CBD, most taxi usage is concentrated in zones that provide economic opportunities and job potential (for example Sunnyside). Taxi usage is also concentrated in high density suburbs and townships, notably Mamelodi, Hammanskraal, Winterveld, Soshanguve and in Lodig, which borders the metro to the north ([Read more](#)).

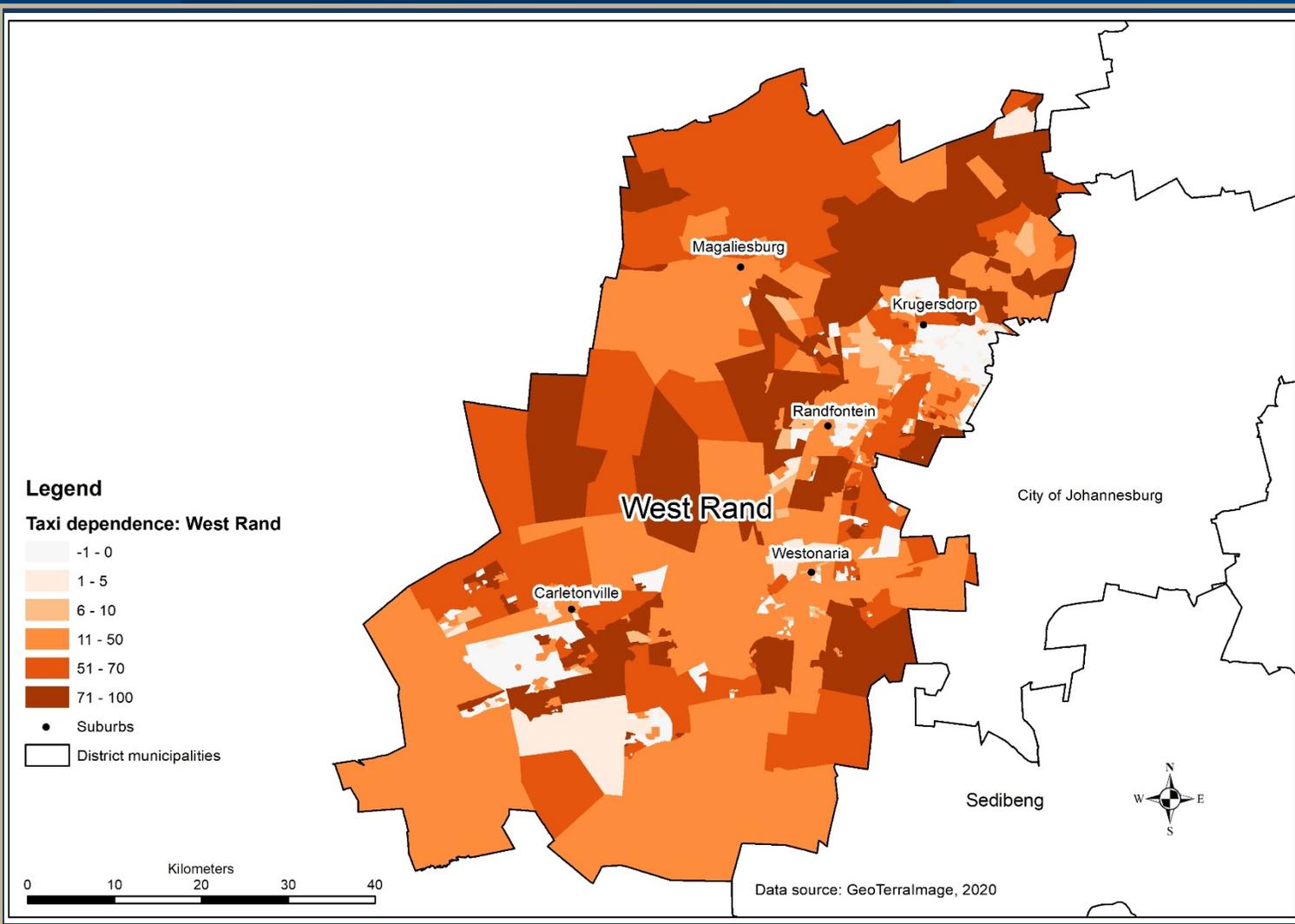
Ekurhuleni



In the City of Ekurhuleni, taxi usage accounts for 47.7% of the transport mode by residents for daily commuting. Taxi usage in the province comes third to that of the City of Johannesburg (52%), followed by the West Rand (50%) ([Read more](#)).

The map to the left shows a radial pattern of taxi usage from the centre of the city, with a high concentration of taxi usage in high density suburbs that are at the fringes of the city, namely, Katlehong, Nigel and Ivory Park, among others. Taxi usage is also high in areas that have high economic activities, like around Boksburg and Benoni ([Read more](#)).

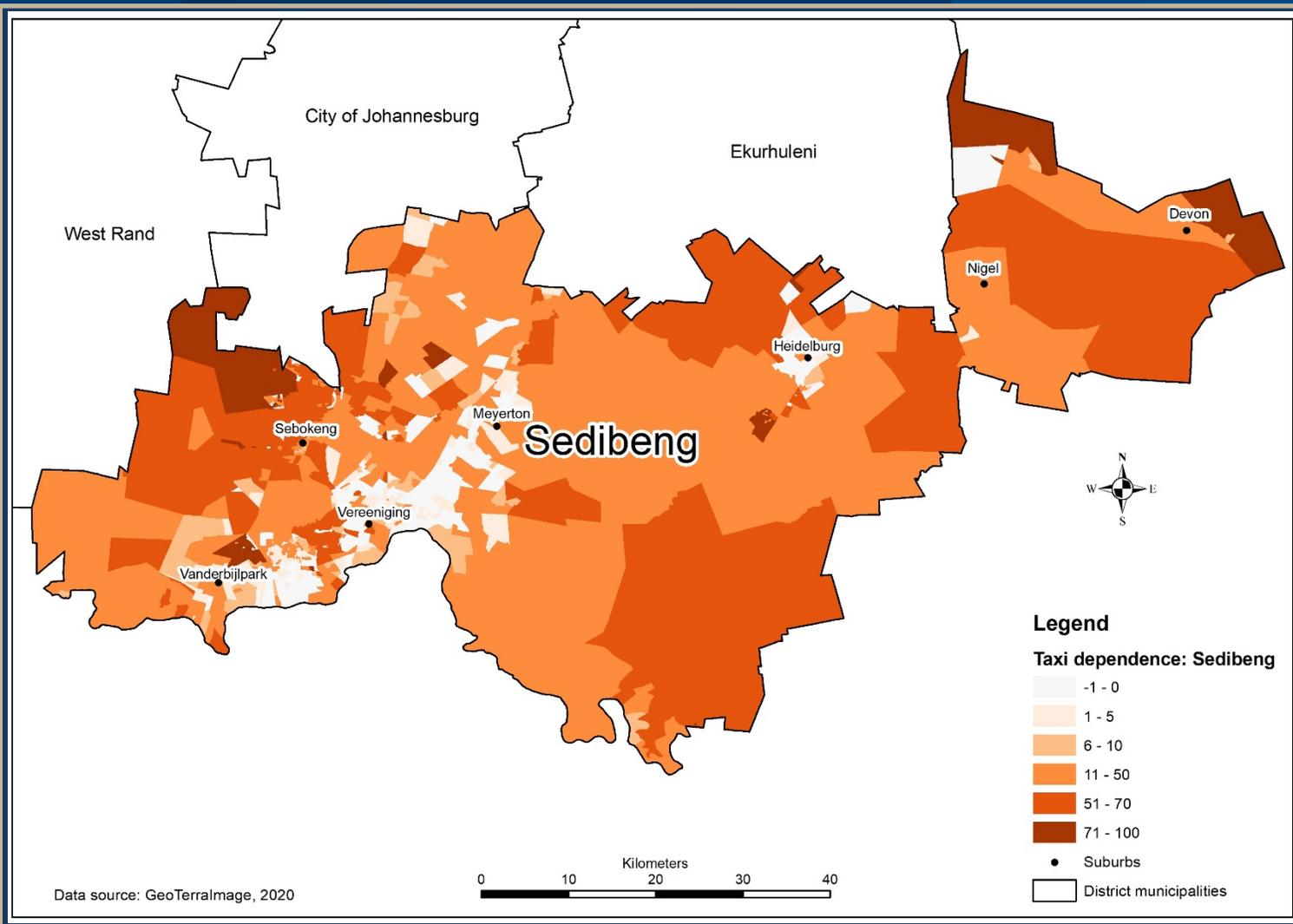
West Rand



The map to the left shows that spatially, the West Rand has a relatively higher number of commuters dependent on taxis than either the City of Tshwane and Ekurhuleni. At 50% taxi usage, the district has the second highest number of commuters dependent on taxi transport in the province, after the City of Johannesburg.

Except for a few pockets where data is not available, almost all the areas to the north (Magaliesburg), east (around Randfontein) and to the south (Carletonville) have a high dependency on taxis as a mode of commuting [Read more.](#)

Sedibeng



Approximately 19% of the commuters use taxis as a mode of transportation in this district municipality ([Read more](#)).

The map to the left shows high taxi usage for areas such as Devon, Vanderbijlpark, and the areas around Sebokeng. These areas mainly comprise of high-density residential suburbs and informal settlements ([Read more](#)).

The data used in the geographical displays here, originates from GeoTerra Image and it considers the diverse aspects of a society, often termed as the quality of life, by incorporating various different types of variables such as the accessibility to services, housing type and density, Neighbourhood Living Index, environmental factors, etc. that contributes to the overall well-being of a community.

For more information and access to the data, contact:

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The HSRC must be acknowledged for all published and unpublished works, including the maps used in this series.
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