# **COVID-19 and Tourism Spaces of Vulnerability in South Africa**

Christian M. Rogerson \*

School of Tourism and Hospitality, College of Business and Economics, University of Johannesburg, Johannesburg, South Africa, E-mail, <u>chrismr@uj.ac.za</u>

# Jayne M. Rogerson

# School of Tourism and Hospitality, College of Business and Economics, University of Johannesburg, Johannesburg, South Africa, E-mail <u>jayner@uj.ac.za</u>

#### \*Corresponding Author

How to cite this article: Rogerson, C.M & Rogerson J.M. (2020). COVID-19 and Tourism Spaces of Vulnerability in South Africa. African Journal of Hospitality, Tourism and Leisure, 9(4):382-401. DOI: https://doi.org/10.46222/ajhtl.19770720-26

### Abstract

The COVID-19 pandemic will exert a devastating and destructive impact on the South African tourism economy with its ramifications felt countrywide. Nevertheless, the negative local impacts of the pandemic will be particularly harsh for those parts of South Africa where tourism is a critical sector in the local economy. The objective in this article is to identify the tourism spaces of vulnerability in South Africa. Use is made of the IHS Global Insight data base for 2016 to analyse at a local authority scale the most vulnerable localities to the impacts of the COVID-19 pandemic. Indicators used to isolate tourism spaces of vulnerability are total tourism spend; tourism spend as a proportion of local GDP; domestic and international tourism (trips and bednights); and, leisure, business and VFR (visiting friends and relatives) travel. The analysis discloses those local authorities that are the most vulnerable to the downturn/collapse of tourism as a whole as well as to the hollowing out of specific forms of tourism, namely domestic as opposed to international travel, leisure as opposed to business or VFR travel.

Keywords: Geographical impacts; local governments; spatial perspective; tourism-dependent localities; tourism economy

# Introduction

A decade ago Hall (2010) observed perceptively that crisis events in tourism were likely to increase in size and frequency as a result of tourism becoming hypermobile and the global economy ever more inter-connected. It is stressed that a substantial segment of the global tourism industry is exposed to natural hazards and that over recent years has been impacted by disasters and crisis situations (Aliperti, Sandholz, Hagenlocher, Rizzi, Frey & Garschagen, 2019; Visser & Ferreira, 2013). The tourism sector is highly vulnerable to disruption by natural hazard events in terms of localized phenomenon such as earthquakes, bushfires, volcanic explosions, tsunamis or floods as well as global events such as disease pandemics (Butler, 2017; Laws, Prideaux & Chon, 2007; Ma, Chiu, Tian, Zhang & Guo, 2020; Ritchie, 2004, 2009). Tourism flows can be shaped by a range of different factors and forces, some of which such as natural hazards are exogenous to the tourism sector (Rosselló, Becken & Santana-Gallego, 2020). In the context of the tourism industry therefore risk can affect destination choice and traveller behaviour (Ritchie & Jiang, 2019). Concerns over health and personal safety are among the factors considered by tourists as consumers in their choice of destinations or forms of travel. Understanding the travel risks associated with natural hazards and disasters





therefore is one critical research issue particularly for destinations in the global South (Lenggogeni, Ritchie & Slaughter, 2019). Relevant also is the emergent scholarship about disaster impacts and post-disaster tourism recovery strategies and most especially with the COVID-19 pandemic of 2019-2020 (Hall, Scott & Gössling, 2020; McCartney, 2020; Peters, Peters & Peters, 2020).

The geographer David Harvey (2020) argues that in a highly connected and globalised world which is marked by high levels of mobility the human networks for the diffusion of COVID are vast and open. The spatial spread of the coronavirus is destroying national and local economies as well as triggering the worst economic and humanitarian crisis since the Second World War. For the tourism sector the appearance of the COVID-19 pandemic represents an exceptional shock event which poses its greatest challenge since the 2008 global financial crisis (Gössling, Scott & Hall, 2020). As is demonstrated by Zhang Goh & Wen (2020) the pandemic has saturated the headlines of international media. It is not an exaggeration to argue that "we are in an era of major change of the equivalent of a world war or great depression" (Higgins-Desboilles, 2020: 620). With its reliance on human mobility the economic health of tourism is jeopardized by infectious disease (Yang, Zhang & Chen, 2020). The United Nations World Tourism Organisation (2020) affirms that the tourism sector "is one of the most hardest hit" by the COVID-19 outbreak with negative consequences both for tourism demand and supply. Within only a relatively short historical time-span the outbreak of COVID-19 has exerted a massive international impact on the tourism sector by suddenly reducing and drastically curbing global mobilities thereby creating the worst crisis in the history of tourism (Jamal & Budke, 2020). Border closures, the shutdown of the international aviation sector, cancellation of sports events as well as festivals and the almost zero occupancies for accommodation services are the most obvious manifestations of the tragedy unfolding (Cooper & Alderman, 2020; Hall et al., 2020).

Currently, the COVID-19 pandemic is wreaking a devastating and destructive impact on the South African tourism economy with its ramifications countrywide. Arguably, the local impacts of the pandemic will be hardest felt particularly in those parts of South Africa where tourism is a critical sector of the local economy. In the United Kingdom the country's tourism 'hotspots' are viewed as those localities which may suffer disproportionately the consequences of the economic impact of the pandemic (Thomas, Scott, Butcher, O'Donoghue & Thomas, 2019). It is against this backcloth that this paper has modest objectives. The aim is to apply a spatial lens and undertake a detailed sub-national analysis of the tourism space economy of South Africa for 2016. More specifically, the task is to map out the 'tourism spaces of vulnerability' in South Africa by analysing at a local authority scale the most vulnerable localities to the impacts of the COVID-19 pandemic. The study seeks to identify those local authorities in South Africa that are most vulnerable to the downturn/collapse of tourism as a whole as well as to the hollowing out of specific forms of tourism, namely for domestic as opposed to international travel, leisure as opposed to business or VFR travel. Future geographical investigations can be informed by this historical benchmark of information in order to interrogate and measure COVID-19 impacts for the post-viral tourism space economy of South Africa.

# Context, methods and sources

The research adopts an unashamedly spatial perspective. The spatial viewpoint, the determination, display and understanding of the organisation of spatial systems, is one of the core approaches in geographical scholarship (Pattison, 1964; Taaffe, 1974). The work of Pattison (1964: 211) stresses the "importance of spatial analysis" as one of the four 'traditions' or foundations of the geographical discipline which are seen "as parts of a general legacy of



Western thought". As documented by Johnston and Sidaway (2015) the spatial viewpoint has represented one of the historical bulwarks of Anglo-American human geography since 1945 including for the contributions made by geographers to tourism studies. Timothy (2018: 166) contends that geography is the very essence and "substance" of tourism. Overall, the discipline of geography with its strong spatial focus and synthesizing approach has exerted a "foundational role" in tourist studies as one of the earliest disciplines to engage with tourism research (Butler, 2004, 2015; Gill, 2018).

With their multiple interests in place, space and the environment geographers continue to make critical contributions to the multi-disciplinary domain of tourism studies (Butler, 2018; Gill, 2012; Hall, 2013; Hall & Page, 2006; Müller, 2019; Saarinen, 2014). The analytical toolkits of geographers are valued particularly for investigating regional patterns, tourism's impact on places, the industry's spatial growth, and flows of travellers from home to destinations (Timothy, 2018). The crossover between tourism and geospatial technologies is a significant interface for driving contemporary spatial enquiry (Rangel & Rivero, 2020). Hall and Page (2009: 4) in a seminal review article stress that "geographers have made a substantial contribution to the field of tourism". Key themes that tourism geographers offer critical research works include, inter alia, climate change, sustainability, entrepreneurship, conservation and biosecurity, geopolitics, innovation, mobilities, the sharing economy, inclusive development, public policy, wilderness and protected areas, the blue economy, planning local economic development, and destination management (Gillen & Mostafenezhad, 2019; Hall, 2013; Hall & Page, 2009; Hall & Williams, 2019; Rogerson & Rogerson, 2019a; Saarinen, 2014; Saarinen, Hall & Rogerson, 2017; Saarinen, Rogerson & Hall, 2019). Currently tourism geographers are engaged in vibrant debates about the impact of the COVID-19 pandemic and of the development and prospects of future pathways for the tourism sector (Brouder, 2020; Crossley, 2020; Gössling et al., 2020; Hall et al., 2020; Higgins-Desbiolles, 2020; Ioannides & Gyamóthi, 2020; Mostafanezhad, 2020; Nepal, 2020; Niewiadomski, 2020).

The evolution of tourism geographical research reveals changing foci of interest over time. During the 1970s, informed by the dominant positivist paradigm of the period, "the geography of tourism was mainly concerned with the spatial differentiation of tourism and the recognition of general regularities in its occurrence" (Pearce, 1979: 247). In the early 1990s Mitchell and Murphy (1991: 63) reiterated the spatial implications of tourism remained "very important to geography". Over the past quarter-century, however, research in tourism geography has diversified in scope and broadened from issues of spatial analysis per se and instead to tackle a range of different theoretical issues, methodological perspectives and empirical agendas (Butler, 2018; Hall, 2013; Hall & Williams, 2019; Müller, 2019; Rogerson & Visser, 2020; Saarinen, 2014; Saarinen et al., 2017). Notwithstanding these shifts, the spatial organization of tourism and understanding changing tourism spatial systems is a particular focus for geographers. The production and organization of tourism spaces as well as the shifting dynamics of the tourism space economy remain core research questions for geographers (Hall & Page, 2006; Hall, 2013). Butler (2018: 1) contends that "the spatial aspect of tourism is what makes that subject and geography inevitably and inexorably linked". The preparation of national development policies as well as the formulation of place-based economic development interventions can be informed by a strengthened understanding of the spatial distribution of tourism (Rogerson, 2014a). Recently, the argument has been advanced for geographers to'respatialize' and to pursue a renewed wave of investigations from the spatial tradition (Rogerson & Rogerson, 2019b). For Hall (2012) spatial analysis is described as a critical tool for tourism geographers. Butler (2018: 922) contends that it is "of critical importance to tourism research to keep the spatial element in tourism research strong and visible, thus reminding researchers and others of the importance of the geographical viewpoint".



After democratic transition the tourism sector moved strongly onto the radar screen of South African geographers. Geographers have been at the forefront of the burgeoning tourism literature in the country (Rogerson & Visser, 2004; Visser, 2016). Rogerson and Visser (2020) capture the most recent trends evident in South African tourism scholarship and highlight new research foci that include historical studies, innovation, niche tourism, VFR travel, and climate change. A vital research focus for local geographers has been to chart the changing dynamics around the spatial distribution of tourism as a whole as well as of specific segments of tourism (Rogerson, 2014b, 2015a, 2015b, 2015c, 2015d, 2016a, 2016b, 2017a, 2017b; Rogerson & Rogerson, 2014a, 2014b, 2017, 2019b; Visser, 2007). Much of this cluster of research investigations on the tourism space economy has been made possible by access to an unpublished data base from the private sector consultancy IHS Global Insight. For tourism researchers the local tourism data base of IHS Global Insight is highly valued as it furnishes details concerning the tourism performance of all local municipal authorities in the country, inter alia, the number of tourism trips differentiated by primary purpose of trip; bednights by origin of tourist (domestic or international); calculation of tourism spend; and, the contribution of tourism to local gross domestic product. Data is available on an annual basis from 2001. Since 2001 the administrative boundaries of local governments in South Africa have been redrawn on several occasions; the data in this study is on the basis of the 2016 boundary delimitation of municipal authorities.

By the application of a spatial lens the task in this study is to use the IHS Global Insight data base to provide a baseline analysis of geographical patterns of tourism for year 2016 which represents near the close for the pre-COVID-19 era of tourism. The research approach uses descriptive data as well as application of the tool of location quotients. For Chiang (2009: 399) the location quotient is "the most commonly applied approach to identifying specialization". The objective of the location quotient technique is to yield a coefficient or simple expression of how well represented a particular activity is within any given study region (Billings & Johnson, 2012; Isserman, 1977; Leigh, 1970). Spatial analysts view its advantages as those of including ease of calculation and interpretation (Tian, Gottlieb & Goetz, 2020). It generates an index which discloses the over-representation or under-representation of a particular activity in a study region (Andresen, 2007). The location quotient can be expressed as "a ratio of ratios" (Miller, Gottlieb & Goetz, 1991: 65). The location quotient is calculated as follows:

# $\frac{Ri/RRi}{R/RR}$

Where *Ri* equals the number of for example leisure trips in Johannesburg and *RRi* is the total number of trips (all purpose) in Johannesburg, R is the total number of leisure trips in South Africa and RR is the total number of trips (all purpose) in South Africa. Location quotients thus are calculated on a simple numerical scale with a quotient of less than one indexing that an industry or sector is underrepresented in that it has less than its share relative to the base. Correspondingly, a quotient of more than one is indicative that the region enjoys 'more than its share' or is overrepresented in a particular industry or activity. A quotient score of one indicates that the study region's share of an industry or activity is identical to the reference base and thus is referred to by some researchers as the 'self-sufficiency ratio' (Miller et al., 1991). Tourism research that applies location quotients includes works by Krakover (2004) on Israel, by Spiriajevas (2008) on the South-east Baltic region, and by Tsui, Tan, Chow, & Shi (2019) on New Zealand. Two examples of scholarship by tourism geographers which use location quotients are those by Majewska (2015) on Poland and by Rogerson & Rogerson (2017) on South Africa.



### The tourism space economy

What did the tourism economy of South Africa look like in the pre-COVID-19 era?. The snapshot below is for 2016 which was a year that for South Africa was distinguished by several notable happenings. These included an eruption of University student protest over 'fees must fall'; mounting discontent over state capture, corruption and mismanagement under President Zuma; local government elections which saw the ruling African National Congress lose control of three metropolitan councils (City of Johannesburg, City of Tshwane, and Nelson Mandela Bay); and, brighter moments such as South African glory in winning two athletics gold medals at the Olympic Games hosted by Rio de Janeiro, Brazil. For the tourism sector the historical highlights for 2016 are celebrated in the Annual Report which was produced by South African Tourism (2016). These were that the size of the tourism market had reached a record level of R102 billion; this market was comprised of R26.5 billion from domestic tourism and R75.5 billion from international tourism. In particular, the segment of international tourism arrivals was seen as buoyant in 2016 with estimates of a record 10 million tourists. This upturn in international tourist arrivals was welcome as it compensated partially for the decline which had been occurring in domestic tourism flows as a result of a national economic downturn (South African Tourism, 2016).

The following discussion seeks to delineate the major contours of the space economy of tourism in South Africa for 2016. It presents data relating initially to total trips, total bednights and total spend. The analysis then moves to scrutinise the spatial data in terms of both purpose of trip and origin of trip, whether domestic or international. The differentiation between the importance for particular localities between domestic and international is further unpacked in terms of bednight data. The vital contribution of tourism to local economies is interrogated through an analysis of data which measures the share of GDP which is contributed by tourism. This provides an important signal about those local governments which are most vulnerable to downturns in national tourism precipitated by COVID-19. In addition, the research applies the tool of location quotients in order to drill down further and identify (or at least, flag) those localities and local governments which are most vulnerable or exposed to the demise of particular types of tourism.

Municipality	No. of Trips	National Share (%)	Bednights	National Share (%)
City of Johannesburg	4 202 947	10.50	22 958 212	12.91
City of Tshwane	3 038 798	7.59	15 435 420	8.68
Ekurhuleni	2 167 101	5.41	11 887 675	6.68
City of Cape Town	2 060 035	5.15	14 031 365	7.89
eThekwini	1 963 520	4.91	7 673 642	4.31
Polokwane	1 674 366	4.18	3 723 542	2.09
Mbombela	940 120	2.35	3 941 835	2.22
Mangaung	775 415	1.94	4 995 940	2.81
Buffalo City	638 749	1.60	2 528 953	1.42
Rustenburg	597 425	1.49	2 149 937	1.21
Nelson Mandela Bay	575 781	1.44	2 540 918	1.43
Madibeng	408 344	1.02	1 487 853	0.84
Nkomazi	401 184	1.00	1 802 992	1.01
Mogale City	385 491	0.96	2 139 513	1.20
Bushbuckridge	355 580	0.89	1 322 462	0.74
Ray Nkonyeni	345 134	0.86	1 468 296	0.83
Overstrand	234 190	0.59	1 481 695	0.83
Moses Kotane	227 590	0.57	849 812	0.48

 Table 1: Leading South African Municipalities: Total Trips and Bednights 2016



Stellenbosch	213 731	0.53	1 443 749	0.81
Knysna	139 526	0.35	1 239 974	0.70

Table 1 provides a macro-picture of the spatial distribution of tourism in South Africa in terms of the two indicators of total number of trips and total bednights. At the outset, in reviewing this data two points of clarification are in order. First is that any single trip can vary in the number of days and so generate varying numbers of bednights. Second, is that the data on bednights includes both paid bednights in commercial accommodation (hotels, guest houses, bed and breakfasts etc.) as well as unpaid bednights which would be those accounted for by stays at the homes of friends and relatives (Rogerson, 2018). The latter – unpaid bednights - is known to be a major component of accommodation services because of the high proportion and volumes of VFR travel in South Africa (Rogerson, 2017a, 2017b). Table 1 confirms the dominance of the country's leading metropolitan areas for both indicators of total trips and total bednights. Consistently on these indicators it is confirmed that the most important tourism nodes are Johannesburg, Tshwane, Ekurhuleni, Cape Town and eThekwini. All eight metropolitan areas feature as major tourism destinations in terms of numbers of trips. Beyond the metropolitan areas the most significant secondary cities for tourism on these indicators are Polokwane, Mbombela and Rustenburg. In terms of the indicator of bednights a similar listing is generated which shows all eight metropolitan areas in the top ten destinations as ranked for bednights.

Municipality	Total Spend (R million)	National Share (%)
	Current Prices	
City of Cape Town	40 053	15.1
City of Johannesburg	38 545	14.5
City of Tshwane	17 856	6.7
eThekwini	16 313	6.1
Ekurhuleni	9 883	3.7
Mbombela	7 249	2.7
Polokwane	5 061	1.9
Mangaung	4 977	1.9
Bushbuckridge	4 122	1.6
Nelson Mandela Bay	3 682	1.4
Moses Kotane	3 320	1.2
Nkomazi	3 026	1.1
Madibeng	2 945	1.1
Ray Nkonyeni	2 905	1.1
Rustenburg	2 864	1.1
Mogale City	2 758	1.0
Overstrand	2 480	0.9
Stellenbosch	2 324	0.9
Buffalo City	2 300	0.9
Knysna	2 299	0.9

Table 2: Total Tourism Spend: Leading 20 Municipalities 2016

Source: Authors based on IHS Global Insight data

Table 2 provides a much sharper view of the value of tourism to particular localities as it provides estimates of total tourism spend per municipality. It reveals a different ranking of local authorities as compared to the macro-data on trips and bednights which is weighted by the numbers of VFR trips and bednights in non-commercial accommodation. Table 2 shows



that tourism spend is dominated by the leading metropolitan areas. The top five metropolitan areas – Johannesburg, Cape Town, eThekwini, Tshwane and Ekurhuleni – account for nearly half (46.1 %) of total tourism spend in South Africa. The fact that Cape Town is the most significant single destination for tourism spend is indicative of the fact that expenditures per trip are much higher than other metropolitan areas. In terms of Table 2 outside of the metropolitan areas one notes the high ranking of Mbombela, Bushbuckridge and Nkomazi in Mpumalanga because of spending linked to the game parks. Of note also is the ranking of Polokwane in Limpopo, local authorities close to Sun City (Moses Kotane, Madibeng and Rustenburg), and the winelands hub of Stellenbosch. Finally Table 2 (re-) affirms the importance of coastal tourism in South African tourism (Rogerson & Rogerson, 2020). It reveals the ranking within the top 20 tourism spend destinations of several coastal tourism areas including the metropolitan authorities of Nelson Mandela Bay and Buffalo City as well as the smaller coastal centres of Ray Nkonyeni (Hibiscus coast) in Kwazulu-Natal and of Overstrand and Knysna in the Western Cape. The high degree of concentration of total tourism spend is reflected in the finding that two-thirds of all national spend occurs within the leading 20 destinations as listed on Table 2. By way of contrast Table 3 provides a listing of the bottom 20 local authorities in respect of tourism spend. Of this listing it is observed that nine of these least tourism spend destinations are in sparsely populated areas of Northern Cape, six are in rural areas of KwaZulu-Natal, two are in Free State, two in Eastern Cape and one in Western Cape province.

Municipality	Province	Total Spend (R million) Current Prices
Laingsburg	Western Cape	66 675
Dikgatlong	Northern Cape	66 205
Ndwedwe	KwaZulu-Natal	65 303
Tswelopele	Free State	64 393
Intsika Yethu	Eastern Cape	62 659
Tsantsabane	Northern Cape	62 396
Mkhambathini	KwaZulu-Natal	58 252
Impendle	KwaZulu-Natal	56 767
Khai-Ma	Northern Cape	56 618
Siyathemba	Northern Cape	52 960
Dannhauser	KwaZulu-Natal	44 419
Ntabankulu	Eastern Cape	43 249
Maphumulo	KwaZulu-Natal	42 880
Kgatelopele	Northern Cape	42 096
Tokologo	Free State	38 497
eMadlangeni	KwaZulu-Natal	30 068
Thembelihle	Northern Cape	24 563
Renosterberg	Northern Cape	22 861
!Kheis	Northern Cape	22 436
Magareng	Northern Cape	20 865

 Table 3 South Africa's Lowest Tourism Spend Local Authorities, 2016

Source: Authors based on IHS Global Insight data

The index of total tourism spend is an aggregate of expenditure made by trips for different purpose and by trips of different origin. In terms of different purpose of travel a differentiation can be made between leisure (holiday), business, VFR and other travel, the latter mainly comprised of religious or health travel. In terms of origin of travel the only distinction



is that made between domestic as opposed to international travel; one limitation is that the international category contains both the (minority high spend per trip sub-group of) longhaul (Europe, Americas, Australia and Asia) visitors as well as the large numbers of (mainly lower spend) regional tourists to South Africa from countries in sub-Saharan Africa.

Municipality	Leisure	Business	VFR	Other
City of Cape Town	785 918	310 396	842 496	121 225
City of Johannesburg	811 281	594 233	2 488 245	309 187
City of Tshwane	591 869	346 400	1 798 254	302 274
eThekwini	430 229	207 805	1 113 329	212 157
Ekurhuleni	258 701	178 941	1 572 762	156 697
Mbombela	236 795	147 053	482 439	73 833
Polokwane	92 014	208 327	939 108	434 916
Mangaung	152 078	140 330	407 155	75 853
Bushbuckridge	56 786	17 875	245 685	35 233
Nelson Mandela Bay	114 841	72 555	315 259	73 126
Moses Kotane	48 736	24 175	137 522	17 158
Nkomazi	85 458	32 556	252 592	30 577
Madibeng	67 659	29 114	279 596	31 975
Ray Nkonyeni	115 105	20 016	189 703	20 310
Rustenburg	77 403	36 744	446 825	36 452
Mogale City	92 144	57 505	202 392	33 450
Overstrand	132 757	16 802	79 627	5 003
Stellenbosch	96 674	26 859	81 860	8 338
Buffalo City	69 507	73 878	440 100	55 264
Knysna	80 231	21 834	32 316	5 144

Table 4 Leading 1	Destinations in	South Africa b	ov Purpose of '	Trip. 2016

Source: Authors based on IHS Global Insight data

Table 4 shows the 20 leading destinations as differentiated by purpose of travel. Several points can be observed. First, is that across three of the four categories of purpose of travel the City of Johannesburg emerges as the most significant destination in terms of numbers of trips. Second, metropolitan dominance is evident across all purposes of travel. It is strongest in the category of business travel in which eight of the top ten destinations are metropolitan areas. The high ranking of the secondary city of Polokwane in business travel is also notable. In the category of leisure trips the significance of Mbombela as well as the coastal tourism areas of the Overstrand and Ray Nkonyeni (KwaZulu-Natal South Coast) must be highlighted. In VFR travel the full list of leading trip destinations would include areas such as Giyani which incorporate large segments of former Homelands. Three, variations can be observed in the relative significance and comparative ranking of destinations across particular categories. Examples are Cape Town (second in leisure, third in business and sixth for VFR travel) and Ekurhuleni (fifth in leisure, sixth for business and third for VFR travel). The category 'other' is distinguished by the ranking of Polokwane as first because of religious travel. As a whole the data in Table 4 signify the differential importance of different purposes of travel for various local governments.

Municipality	Trips		Bednights	
	Domestic	International	Domestic	International
City of Cape Town	1 461 470	598 565	5 370 953	8 660 412
City of Johannesburg	2 812 234	1 390 713	8 804 872	14 153 340



City of Tshwane	2 185 672	853 126	6 843 141	8 592 279
eThekwini	1 726 785	236 735	5 269 819	2 403 823
Ekurhuleni	1 449 992	717 109	4 539 807	7 347 868
Mbombela	636 362	303 759	1 449 952	2 491 883
Polokwane	1 520 741	153 624	3 076 054	647 488
Mangaung	443 616	331 799	1 279 602	3 716 338
Bushbuckridge	273 418	82 162	628 482	693 979
Nelson Mandela Bay	508 374	67 407	1 747 823	793 095
Moses Kotane	161 012	66 578	399 294	450 518
Nkomazi	257 500	143 684	590 132	1 212 860
Madibeng	300 035	108 309	745 991	741 862
Ray Nkonyeni	285 572	59 561	872 346	595 951
Rustenburg	448 223	149 201	1 119 735	1 030 203
Mogale City	250 001	135 491	782 145	1 357 368
Overstrand	175 835	58 355	646 681	835 013
Stellenbosch	150 806	62 926	554 803	888 946
Buffalo City	599 540	39 209	2 067 089	461 864
Knysna	70 805	68 721	259 765	980 209

Table 5 provides the profile of leading destinations as differentiated by origin of travel. Two indicators are provided, namely for numbers of trips and bednights. Several points can be observed from this descriptive data on Table 5. First, is the phenomenon of metropolitan dominance for both domestic and international tourism, which is dominated by regional African visitors. Second, across the metropolitan areas certain variations can be observed. Table 5 discloses the leading roles of Johannesburg and Tshwane in terms of domestic and international trips. Using bednight data, however, the relatively greater weight of Cape Town in the tourism economy is evident. Three, for the categories of international trips and bednights proximity to international borders is a factor in the high relative ranking of Mangaung and Nkomazi. As shown elsewhere borderland spaces are significant areas for international travel between South Africa and especially Lesotho, eSwatini and Zimbabwe (Rogerson & Rogerson, 2019c).

Overall, from the above description it is evident that the pre-COVID-19 tourism economy of South Africa was geographically uneven and that marked variations existed between different localities in terms of the mix of tourism both in terms of different purpose of travel and different origins of trips. In order to further demonstrate the differentiation that occurs between destinations Figures 1 and 2 show for the top 20 tourism spend destinations the breakdown of their tourism economy both in terms of the relative significance of the four different categories of purpose of travel (Fig. 1) and of different origins of travel as divided between domestic and international travel (Fig. 2).



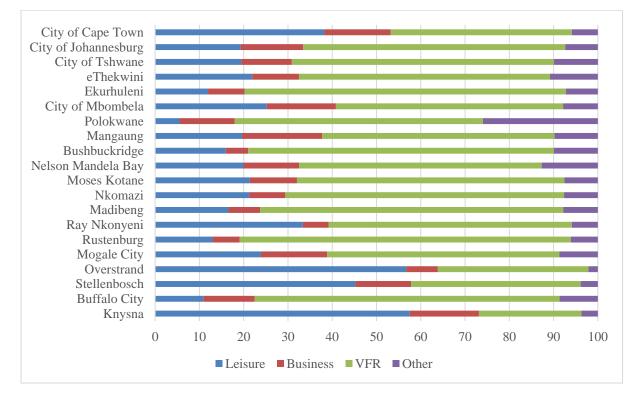


Figure 1: South Africa's Leading 20 Destinations: Purpose of Trip, 2016 (Source: Authors based on IHS Global Insight data

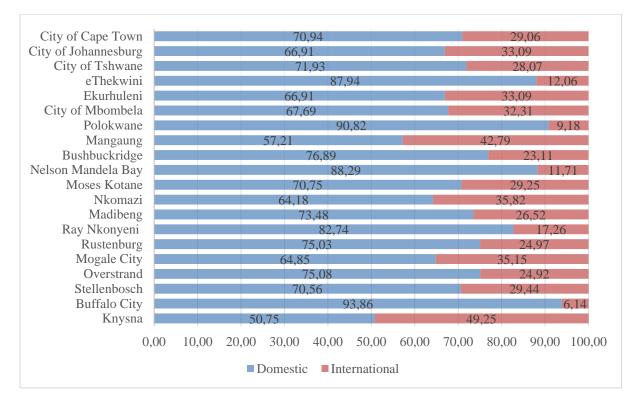


Figure 2: South Africa's Leading 20 Destinations: Origin of Trip, 2016 (Source: Authors based on IHS Global Insight data



The findings on Table 1 prompt a number of important observations across South Africa's leading tourism destinations for 2016. In terms of purpose of travel there are considerable observed differences in the relative significance of leisure, business, VFR and 'other' travel between destinations. The highest share of leisure travel occurs for the coastal destinations of Knysna, Overstrand, Cape Town and Ray Nkonyeni on the South Coast of KwaZulu-Natal. Other destinations where leisure is a notable component of local tourism are Stellenbosch in the Cape Winelands and the City of Mbombela, gateway to Kruger National Park. For business travel one observes its particular significance in the metropolitan areas of Cape Town, Johannesburg and Mangaung as well as certain secondary centres including Mogale City, Stellenbosch and more surprisingly in the small town of Knysna. The relative significance of VFR trips is evident for all the top 20 destinations with the exception of the important leisure nodes of Cape Town, Overstrand, Stellenbosch and Knysna. The highest significance of VFR within local tourism economies is shown for the metropolitan areas of Ekurhuleni, eThekwini and Buffalo City as well as for Bushbuckridge and Nkomazi in Mpumalanga, and for Rustenburg and Madibeng in North West. With the exception of Ekurhuleni it is notable that all these areas with high shares of VFR travel contain rural swathes of the former apartheid Homelands. Finally, in terms of purpose of travel, the Polokwane area is the most distinctive of all in terms of South Africa's leading tourism nodes as a result of the fact that almost 25 percent of local tourism trips were accounted for by the 'other' category of travel. This is explained by the area being the focus of substantial religious travel, particularly at Easter, to the pilgrimage site of Moria (Saayman, Saayman & Gyekye, 2014).

Figures 1 and 2 also show the relative share of domestic versus international trips across the top 20 destinations. It shows once again spatial patterns of differentiation in terms of the origin of trips. Of note is that the highest share of international trips are recorded either in areas which adjoin international borders such as Mangaung (close to Lesotho), Nkomazi (close to eSwatini and Mozambique), the popular leisure node of Knysna on the Garden Route a focal point for long haul international travellers, and to the major cities of Johannesburg and Ekurhuleni which are known to be major destinations for regional African cross-border shoppers (Rogerson, 2018). Correspondingly, the highest shares of domestic trips are recorded respectively for Buffalo City, Nelson Mandela Bay, Polokwane, and eThekwini.

### Vulnerable tourism spaces

In terms of identifying South Africa's most vulnerable tourism destinations to COVID-19 impacts it is essential to move beyond descriptive data. Instead, there is a need to examine in detail the *relative* share of tourism in each local economy as determined by proportionate contribution to local Gross Domestic Product; for South Africa as a whole in the historical base year of 2016 it was estimated tourism contributed 6.1 percent of GDP. In addition to GDP data further analysis is undertaken of the relative significance of different purposes of travel for particular destinations. Location quotients are applied to identify 'over-representation' or specialization. The material in this section facilitates identification of South Africa's most tourism-dependent local areas or vulnerable spaces to COVID-19 impacts on the basis of local government areas.

Share	Local Governments	
Between 40 an	d Western Cape:	Bitou, Knysna
49.9% (n=3)	Limpopo:	Bela-Bela
Between 30 an	d Western Cape:	Overstrand
39.9% (n=2)	KwaZulu-Natal:	Okhahlamba
Between 20 an	d Free State:	Kopanong
29.9% (n=7)	North West:	Moses Kotane

 Table 6. Tourism-Dependent Local Areas in South Africa (LQ > 1)



	Mpumalanga:	Bushbuckridge, Nkomazi, Emakhazeni
	Limpopo:	Maruleng, Modimolle
Between 16 and	Western Cape:	Cederberg; Saldanha Bay, Oudtshoorn, Prince Albert, Beaufort
19.9% (n=11)	-	West
	Northern Cape:	Umsobomvu
	Eastern Cape:	Sundays River Valley
	KwaZulu-Natal:	KwaDukuza, Umdoni
	Mpumalanga:	Thaba Chweu
	North West:	Ramotshere Moiloa
Between 10 and	Western Cape:	Stellenbosch, Cape Agulhas, Swellendam, Hessequa, Mossel Bay,
15.9% (n=32)	-	George, Laingsburg
	Northern Cape:	Kamiesberg, Kareeberg, Joe Morolong
	Eastern Cape:	Ndlambe, Kou-Kamma, Port St Johns, Umzimvubu
	_	Mohokare, Dihlabeng, Mantsopa
	Free State:	Umdoni, Ray Nkonyeni, uPhongolo, Nongoma, Jozini, Mtubatuba,
	KwaZulu-Natal:	Big Five Hlabisa, Nkosazana Dlamini-Zuma, Nongoma,
	Limpopo:	Musina, Ephraim Mogale, Lephalale, Mogalakwena
	Gauteng:	Mogale City
	Mpumalanga:	Chief Albert Luthuli
Between 6.2 and 9.9%	Western Cape:	City of Cape Town, Bergrivier, Swartland, Kannaland, Langeberg,
(n=45)	Western Cape.	Theewaterskloof
(11-43)	Northern Cape:	Nama Khoi, Hantam, Karoo Hoogland, Ubuntu, Emthanjeni,
		Kai!Garib
	Eastern Cape:	Dr Beyers Naude, Makana, Kouga, Great Kei, Engcobo, Nyandeni,
	·····	Matatiele
	Free State:	Letsemeng, Setsoto. Ngwathe
	KwaZulu-Natal:	uMngeni, Mpofana, Impendle, Nqutu, Msinga, uMhlabuyalingana,
		Nkandla, Umuziwabantu, Mpofana, Greater Kokstad
		Ba-Phalaborwa, Elias Motsoaledi, Greater Giyani, Thulamela,
	Limpopo:	Polokwane, Makhuduthamaga, Greater Tzaneen, Thabazimbi,
		Blouberg, Collins Chabane
	Mpumalanga:	City of Mbombela, Dipaleseng, Dr Pixley Ka Isaka Keme

Table 6 shows the list of local governments organised by province which have a proportionate contribution of tourism to the local economy which exceeds 6.1 percent or in other words those where tourism is over-represented to a lesser or greater extent and thus the location quotient exceeds unity. In total 100 local governments recorded a share of over 6.1 percent and thus would be at some degree of risk from the COVID-19 tourism meltdown. With the single exception of the City of Cape Town, all these local authorities are outside South Africa's metropolitan areas. Secondary centres and small towns therefore will bear the heaviest relative burden of the decline in South Africa's tourism economy associated with COVID-19. The local governments that are most at risk are those where tourism contributes at least 10 percent of local GDP with the most tourism-dependent localities the leading group of 12 in which tourism contributes upwards of 20 percent of local GDP. The list of these tourism-dependent localities is headed by the three Western Cape coastal areas of Bitou (Plettenberg Bay), Knysna and Overstrand (Hermanus), the leisure node of Bela-Bela (Warmbaths) in Limpopo and Okhahlamba in KwaZulu-Natal which is the resort area for the Drakensberg mountains. Of the group of 100 most tourism-dependent localities the largest number are comprised of local governments in KwaZulu-Natal (23), Western Cape (21), Limpopo (17) and Eastern Cape (12) provinces; North West and Gauteng have the lowest number of local governments that would be viewed as most at risk from a COVID-19 tourism collapse.



Municipality	Province	%GDP	
Emalahleni	Mpumalanga	2.2	
Umzumbe	Kwa-Zulu Natal	2.2	
Dr JS Moroka	Mpumalanga	2.2	
Intsika Yethu	Eastern Cape	2.2	
Tswelopele	Free State	2.2	
Phokwane	Northern Cape	2.2	
King Sabata Dalindyebo	Eastern Cape	2.1	
Metsimaholo	Free State	2.1	
Ndwedwe	KwaZulu-Natal	2.0	
eMadlangeni	KwaZulu-Natal	2.0	
Rand West City (Randfontein/Westonaria)	Gauteng	1.9	
Merafong City	Gauteng	1.9	
Magareng	Northern Cape	1.8	
Greater Taung	North West	1.8	
Msunduzi	KwaZulu-Natal	1.8	
Thembelihle	Northern Cape	1.7	
Kgatelopele	Northern Cape	1.6	
Dannhauser	KwaZulu-Natal	1.6	
Tsantsabane	Northern Cape	1.4	
uMfolozi	KwaZulu-Natal	1.0	

Table 7: Least Tourism Dependent Local Areas in South Africa, 2016

As compared to tourism-dependent localities a tourism economic downturn or COVID-19 meltdown would exert the lowest impact on areas where tourism's contribution to the local economy is minimal. This low share of tourism variously can be the result of a combination of factors including limited tourism assets, remoteness, or the local significance of other economic activities such as government services, industry, mining or agriculture. Table 7 provides a listing of those local governments where tourism's contribution to local GDP is far below that of the national average of 6.1 percent. Among the 20 bottom ranked local governments in terms of contribution of tourism to local GDP there are five each in Northern Cape and KwaZulu-Natal and two each in Eastern Cape, Free State, Gauteng, Mpumalanga and North West provinces. The only provinces with no local authorities in this bottom ranked list of the 20 least dependent on tourism are Limpopo and Western Cape.

Number of Trips 2016	Leisure (n=55)	Business (n=39)	VFR (n=116)
>500,000	City of Johannesburg, City of Cape Town, City of Tshwane	City of Johannesburg	Ekurhuleni
250-500,000	eThekwini	City of Cape Town, City of Tshwane	Buffalo City, Govan Mbeki, Steve Tshwete, Nkomazi, Greater Giyani, Greater Tzaneen, Thulamela, Mogalakwena, Madibeng, Rustenburg

Table 8: Vulnerable Tourism Municipalities by Form of Tourism 2016 (LQ > 1)



101-250,000	Nelson Mandela Bay,	aThalauini	Matjhabeng,
101-250,000		eThekwini,	Maluti-a-Phofung, Msunduzi,
	Mangaung, Overstrend	Mangaung, City of Mbombela,	Alfred Duma,
	Overstrand,	-	
	Ray Nkonyeni,	Polokwane	Newcastle,
	City of Mbombela		KwaDukuza,
			Chief Albert Luthuli, Thembisile
			Hani, Bushbuckridge,
			Greater Letaba,
			Ba-Phalaborwa,
			Musina,
			Makhado,
			Collins Chabane, Thabazimbi,
			Lephalale,
			Mahikeng,
			City of Matlosana,
			JB Marks,
			Umzimvubu,
			Ephraim Mogale,
			Elias Motsoaledi,
			Makhuduthamaga, Merafong City
51-100,000	Saldanha Bay, Stellenbosch,	Nelson Mandela Bay, Buffalo	Engcobo,
	Mossel Bay,	City,	King Sabata Dalindyebo,
	Bitou,	Mogale City	Setsoto,
	Knysna,		Metsimaholo,
	George,		uMngeni,
	Thana Chweu, Nkomazi,		AbaQulusi,
	Ba-Phalaborwa,		Nongoma,
	Bela-Bela,		Mtubatuba,
	Mogale City		uMlalazi,
	0		Mkhondo,
			Lekwa,
			Dipaleseng,
			Emalahleni,
			Dr J.S Moroka, Moretele,
			Ditsobotla,
			Ramotshere Moiloa, Naledi,
			Greater Taung, Kagisano/Malopo,
			Nkosazana Dlamini-Zuma,
			Matatiele,
			Ga-Seganyana,
			Rand West City
26-50,000	Cederberg,	Stellenbosch, Dihlabeng,	Khai!Garib,
_0 00,000	Drakenstein, Langeberg,	City of uMhlathuze,	Mbhashe,
	Theewaterskloof,	Emalahleni,	Emalahleni, Sakhisizwe,
	Cape	Thaba Chweu,	Elundini,
	Agulhas,	Emfuleni	Senqu,
	Swellendam, Oudtshoorn,	Linucin	Port St Johns, Nyandeni,
	Kouga,		Mhlontlo,
	Kouga, Kopanong,		Masilonyana,
	Dihlabeng, Okhahlamba,		Nala,
	Emakhazeni,		Phumelela,
	Maruleng,		Umzumbe,
	Lephalale,		uMashwati,
	Moses Kotane		Inkosi Langalibalele, Endumeni,
	WIUSES KUIAIIE		Msinga,
			Umvoti,
			uPhongolo,
			Ulundi, uMhlabuyalingana, Jozini,
			Big Five Hlabisa, Mandeni,
			Ratlou,
			Tswaing,
			Mamusa Lekwa-Teemane,
			Greater Kokstad, uMzimkhulu,
			Mbizama, Joe Morolong



10-25,000	Matzikama,	George,	Richtersveld,
	Bergrivier,	Oudtshoorn,	Hantam,
	Swartland, Witzenberg,	Bitou,	Karoo Hoogland,
	Breede Valley,	Knysna,	Khai-Ma,
	Hessequa,	Umsobomvu,	Tsantsabane,
	Beaufort West,	Inxuba Yethemba,	Dawid Kruiper, Dikgatlong,
	Nama Khoi, Umsobomvu,	Enoch Mgijima,	Phokwane,
	Dr Beyers Naude, Makana,	Moqhaka, Metsimaholo,	Amahlathi,
	Ndlambe,	Okhahlamba, Msukaligwa,	Ngqushwa,
	Sundays River Valley, Kou-	Emakhazeni, Maruleng,	Intsika Yethu,
	Kamma, Moqhaka,	Bela-Bela,	Walter Sisulu,
	Ngwathe,	Modimolle,	Letsemeng,
	Mdoni,	Moses Kotane,	Tswelopele,
	Kgetlengrivier, Midvaal,	Mahikeng,	Nketoana,
	Lesedi	Ditsobotla, Ramotshere	Mafube,
		Moiloa, Gamagara,	Umuziwabantu, Richmond,
		JB Marks,	Nqutu,
		Matatiele,	Dannhauser,
		Ntabankulu	Mthonjaneni,
			Ndwedwe,
			Maphumulo,
			Maquassi Hills, Ubuhlebezwe

Source: Authors based on IHS Global Insight data. Note: Numbers of trips refers to each category of purpose of travel.

Finally, location quotients were calculated for all local governments in South Africa in respect of the three main purpose of travel. This analysis was undertaken to identify which local governments would be most impacted by the decline of *particular forms of tourism*, namely leisure, business and VFR tourism. Table 8 shows the list of all local governments with a location quotient above unity in respect of either leisure, business or VFR travel. The table does not rank municipalities on the basis of LQ score. For these three forms of travel it offers a frame to show which municipalities are at potential risk from declines relating to specific forms of tourism. Table 8 shows the dependent on either leisure, business or VFR travel and the respective number of trips for each locality per category of trip.

Overall, the key headline finding is that whereas only 39 South African municipalities would be hard hit by a decline in business tourism, 55 would feel a strong impact of a downturn in leisure tourism and a total of 116 municipalities would be negatively affected by a demise of travel for purposes of visiting friends and relatives. The group of most vulnerable local governments to a downturn in business tourism are observed as mainly metropolitan areas and certain larger secondary centres. For leisure tourism the list contains a mix of metropolitan authorities and small town areas many of which are situated in Western Cape, Mpumalanga and KwaZulu-Natal provinces. Lastly, in relation to VFR travel, the extent of vulnerability is geographically widespread. Over half of all South African local governments would be classed as VFR dependent; the vast majority of these are found in small town and rural areas mostly in the former Homelands. This highly significant finding from this investigation should be read in light of the argument of Backer and Ritchie (2017) that VFR travel is a useful market segment for targeting by those localities that are seeking to recover from situations of tourism disaster and crisis.

# Conclusion

The COVID-19 pandemic will have a widespread impact on the global economy for several years with the tourism and hospitality sector in the frontline to bear the brunt of its ramifications. The outbreak of this virus has had a greater impact on travel and tourism than any other disease in living memory. Tourism is about movements of people between and within countries. The global mobility associated with various forms of tourism undoubtedly has been



one contributory factor for the rapid diffusion of the virus (Gössling et al., 2020). The structural architecture of the tourism system means that along all parts of the tourism value chain the tourism sector has contributed to the spread of the disease as well as experiencing the consequences of the virus geographical spread. Arguably, in the pre- as well as post-COVID-19 world of tourism, an understanding of geography is vital. COVID-19 is set to fundamentally recast the geographies of travel and tourism from 2020 and beyond (Jamal & Budke, 2020). As elsewhere in the world the impact of COVID-19 for South Africa's country's tourism industry was immediate and devastating. Its ramifications obviously are felt in every part of the country as the extent of tourism spend dissipates. In terms of absolute impact the effects of declining tourism and spend will be experienced in the country's leading metropolitan centres. The results of this study suggest, however, that it is in the group of South Africa's most tourismdependent localities that the impacts of COVID-19 will be most harshly felt. The analysis presented here suggests that in relative terms those geographical areas that will be most strongly impacted by the destruction of local tourism economies include several small towns reliant on leisure tourism. The broadest impacts of decline potentially are to be experienced by COVID-19 impacts on the reduced flows of VFR travel across many South African small town and rural municipalities. The results of this investigation on vulnerable tourism spaces offer a set of baseline data to inform tourism recovery planning in South Africa.

# Acknowledgements

Thanks are due to Arabella Rogerson for the data analysis, preparation of Figures 1 and 2 and major editorial assistance. The helpful inputs of Teddy, Dawn and Skye Norfolk also must be recognised.

# References

- Aliperti, G., Sandholz, S., Hagenlocher, M., Rizzi, F., Frey, M. & Garschagen, M. (2019).Tourism, crisis, disaster: An interdisciplinary approach. *Annals of Tourism Research*, 79, 102808
- Andresen, M.E. (2007). Location quotients, ambient populations and the spatial analysis of crime in Vancouver, Canada. *Environment and Planning A*, 39, 2423-2444.
- Backer, E. & Ritchie, B.W. (2017). VFR travel: A viable market for tourism crisis and disaster recovery. *International Journal of Tourism Research*, 19, 400-411.
- Billings, S.B. & Johnson, E.B. (2012). The location quotient as an estimator of industrial concentration. *Regional Science and Urban Economics*, 42 (4), 642-647.
- Brouder, P. (2020). Reset redux: Possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Tourism Geographies*, 22 (3), 484-490.
- Butler, R. (2004). Geographical research on tourism, recreation and leisure: Origins, eras, and directions. *Tourism Geographies*, 6 (2), 143-162.
- Butler, R. (2015). The evolution of tourism and tourism research. *Tourism Recreation Research*, 40 (1), 16-27.
- Butler, R. (Ed.) (2017). Tourism and Resilience. Wallingford: CABI.
- Butler, R. (2018). Thoughts of a lapsed (?) geographer. *Tourism Geographies*, 20 (5), 921-922.
- Chiang, S-H. (2009) Location quotient and trade. *The Annals of Regional Science*, 43, 399-414.
- Cooper, J.A. & Alderman, D.H. (2020). Cancelling March madness exposes opportunities for a more sustainable sports tourism economy. *Tourism Geographies*, 22 (3), 525-535.
- Crossley, E. (2020). Ecological grief generates desire for environmental healing in tourism after COVID-19. *Tourism Geographies*, 22 (3), 536-546.



- Gill, A. (2012). Travelling down the road to postdisciplinarity?: Reflections of a tourism geographer. *Canadian Geographer*, 56, 3-17.
- Gill, A. (2018). Reflections on institutional and paradigmatic changes in tourism geography: A Canadian perspective. *Tourism Geographies*, 20 (1), 185-186.
- Gillen, J. & Mostafenezhad, M. (2019). Geopolitical encounters of tourism: A conceptual approach. *Annals of Tourism Research*, 75, 70-78.
- Gössling, S., Scott, D., & Hall, C.M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*. https://doi.org/10.1080/09669582.2020.1758708
- Hall, C.M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, 13 (5), 401-417.
- Hall, C.M. (2012). Spatial analysis: A critical tool for tourism geographers. In J. Wilson (Ed.) *The Routledge Handbook of Tourism Geographies*, (pp. 163-173). Abingdon: Routledge
- Hall, C.M. (2013). Framing tourism geography: Notes from the underground. *Annals of Tourism Research*, 43, 601-623.
- Hall, C.M. & Page, S.J. (2006). *The Geography of Tourism and Recreation: Environment, Place and Space.* London: Routledge.
- Hall, C.M. & Page, S.J. (2009). Progress in tourism management: From the geography of tourism to geographies of tourism a review. *Tourism Management*, 30, 3-16.
- Hall, C.M. & Williams, A.M. (Eds.) (2019). Tourism and Innovation. London: Routledge.
- Hall, C.M., Scott, D. & Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. *Tourism Geographies*, 22 (3), 577-598.
- Harvey, D. (2020). Anti-capitalist politics in the time of COVID-19. Jacobin, (20 March).
- Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies*, 22 (3), 610-620.
- Ioannides, D. & Gyamóthi, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, 22 (3), 624-632.
- Isserman, A.M. (1977). The location quotient approach to estimating regional economic impacts. *Journal of the American Institute of Planners*, 43, 33-41.
- Jamal, T. & Budke, C. (2020). Tourism in a world of pandemics: Local-global responsibility and action. *Journal of Tourism Futures*, 6 (2), 181-188.
- Johnston, R.J. & Sidaway, J.D. (2015). *Geography and Geographers: Anglo-American Human Geography Since 1945.* London: Routledge.
- Krakover, S. (2004). Tourism development centres versus peripheries: The Israeli experience during the 1990s. *International Journal of Tourism Research*, 6 (2), 97-111.
- Laws, E., Prideaux, B. & Chon, K.S. (Eds.) (2007). *Crisis Management in Tourism*. Wallingford: CABI.
- Leigh, R. (1970). The use of location quotients in urban economic base studies. *Land Economics*, 46 (2), 202-205.
- Lenggogeni, S., Ritchie, B.W. & Slaughter, L. (2019). Understanding travel risks in a developing country: A bottom-up approach. *Journal of Travel & Tourism Marketing*, 36 (8), 941-955.
- Ma, H., Chiu, Y., Tian, X., Zhang, J. & Guo, Q. (2020). Safety or travel: Which is more important?: The impact of disaster events on tourism. *Sustainability*, 12 (7), 3038.
- Majewska, J. (2015). Inter-regional agglomeration effects in tourism in Poland. *Tourism Geographies*, 17 (3), 408-436.



- McCartney, G. (2020). The impact of the coronavirus on Macao: From tourism lockdown to tourism recovery. *Current Issues in Tourism*, <u>https://doi.org/10.1080/13683500.2020.1762549</u>
- Miller, M.M., Gibson, L.J. & Wright, N.G. (1991). Location quotient: A basic tool for economic development analysis. *Economic Development Review*, 9 (2), 65-68.
- Mitchell, L.S. & Murphy, P.E. (1991). Geography and tourism. *Annals of Tourism Research*, 18, 57-70.
- Mostafanezhad, M. (2020). Covid-19 is an unnatural disaster: Hope in revelatory moments of crisis. *Tourism Geographies*, 22 (3), 639-645.
- Müller, D. (Ed.) (2019). A Research Agenda for Tourism Geographies. Cheltenham: Edward Elgar.
- Nepal, S. (2020). Travel and tourism after COVID-19: Business as usual or opportunity to reset?. *Tourism Geographies*, 22 (3), 646-650.
- Niewiadomski, P. (2020). COVID-19: From temporary de-globalisation to a rediscovery of tourism? *Tourism Geographies*, 22 (3), 651-656.
- Pattison, W.D. (1964). The four traditions of geography. *Journal of Geography*, 63 (5), 211-216.
- Pearce, D.G. (1979). Towards a geography of tourism. *Annals of Tourism Research*, 6, 245-272.
- Peters, K., Peters, J. & Peters, N. (2020). *Visit People: Tourism Recovery After Disaster*. Adelaide: KPPM Strategy.
- Rangel, M.C.R. & Rivero, M.S. (2020).Spatial imbalance between tourism demand and supply: The identification of spatial clusters in Extremedura, Spain. *Sustainability* 12 (4), 1651.
- Ritchie, B. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. *Tourism Management*, 25 (6), 669-683.
- Ritchie, B. (2009). Crisis and Disaster Management for Tourism. Clevedon: Channel View.
- Ritchie, B. & Jiang, Y. (2019). A review of research on tourism risk, crisis and disaster management: Launching the annals of tourism research curated collection on tourism risk, crisis and disaster management. *Annals of Tourism Research*, 79, 102812.
- Rogerson, C.M. (2014a). Reframing place-based economic development in South Africa: The example of local economic development. *Bulletin of Geography: Socio-Economic Series*, 24, 203-218.
- Rogerson, C.M. (2014b). The uneven geography of tourism in South Africa. *African Journal* of Hospitality, Tourism and Leisure, 3 (1), 1-15.
- Rogerson, C.M. (2015a). Tourism and regional development: The case of South Africa's 'distressed areas'. *Development Southern Africa*, 32, 277-291.
- Rogerson, C.M. (2015b). Revisiting VFR tourism in South Africa. *South African Geographical Journal*, 97 (2), 139-157.
- Rogerson, C.M. (2015c). Restructuring the geography of domestic tourism in South Africa. *Bulletin of Geography: Socio-Economic Series*, 29, 119-135.
- Rogerson, C.M. (2015d). The uneven geography of business tourism in South Africa. South African Geographical Journal, 97 (2), 183-202.
- Rogerson, C.M. (2016a). Outside the cities: Tourism pathways in South Africa's small towns and rural areas. *African Journal of Hospitality, Tourism and Leisure*, 5 (3), 1-16.
- Rogerson, C.M. (2016b). Secondary cities and tourism: The South African record. *African Journal of Hospitality, Tourism and Leisure*, 5 (2), 1-12.



- Rogerson, C.M. (2017a). Unpacking directions and spatial patterns of VFR travel mobilities in the global South: Insights from South Africa. *International Journal of Tourism Research*, 19, 466-475.
- Rogerson, C.M. (2017b). Less visited tourism spaces in South Africa. *African Journal of Hospitality, Tourism and Leisure*, 6 (3), 1-17.
- Rogerson, C.M. & Rogerson, J.M. (2014a). Agritourism and local economic development in South Africa. *Bulletin of Geography: Socio-Economic Series*, 26, 93-106.
- Rogerson, C.M. & Rogerson, J.M. (2014b). Urban tourism destinations in South Africa: Divergent trajectories 2001-2012. *Urbani izziv*, 25 (Supplement), S189-S203.
- Rogerson, C.M. & Rogerson, J.M. (2017). City tourism in South Africa: Diversity and change. *Tourism Review International*, 21 (2), 193-211.
- Rogerson, C.M. & Rogerson, J.M. (2019a). Emergent planning for South Africa's blue economy: Evidence from coastal and marine tourism. Urbani izziv, 30 (Supplement), 24-36.
- Rogerson, C.M. & Rogerson, J.M. (2019b). Tourism and accommodation services in South Africa: A spatial perspective. In J. Knight & C.M. Rogerson (Eds.), *The Geography of South Africa: Contemporary Changes and New Directions*, (pp. 213-220). Cham, Switzerland: Springer International.
- Rogerson, C.M. & Rogerson, J.M. (2019c). Tourism in South Africa's borderland regions: A spatial view. *GeoJournal of Tourism and Geosites*, 24 (1), 175-188.
- Rogerson, C.M. & Rogerson, J.M. (2020). Coastal tourism in South Africa: A geographical perspective. In J.M. Rogerson & G. Visser (Eds.), *New Directions in South African Tourism Geographies*, (pp. 227-247). Cham, Switzerland: Springer International.
- Rogerson, C.M. & Visser, G. (Eds.) (2004). *Tourism and development issues in contemporary South Africa*. Pretoria: Africa Institute of South Africa.
- Rogerson, J.M. (2018). The geography of tourist bednights in South Africa. *GeoJournal of Tourism and Geosites*, 23 (3), 835-847.
- Rogerson, J.M. & Visser, G. (2020). Recent trends in South African tourism geographies. In J.M. Rogerson & G. Visser (Eds.), *New Directions in South African Tourism Geographies*, (pp. 1-14). Cham, Switzerland: Springer International.
- Rosselló, J., Becken, S. & Santana-Gallego, M. (2020). The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, 79, 104080.
- Saarinen, J. (2014). Tourism geographies: Connections with human geography and emerging responsible geographies. *Geographia Polonica*, 87, 343-352.
- Saarinen, J., Hall, C.M. & Rogerson, C.M. (2017). Geographies of tourism development and planning. *Tourism Geographies*, 19 (3), 307-317.
- Saarinen, J., Rogerson, C.M. & Hall, C.M. (Eds.) (2019). *Tourism, Planning and Development: Contemporary Cases and Emerging Issues*. London: Routledge.
- Saayman, A., Saayman, M. & Gyekye, A. (2014). Perspectives on the regional economic value of a pilgrimage. *International Journal of Tourism Research*, 16 (4), 407-414.
- South African Tourism (2016). *Annual Report: Tourism Performance Highlights, 2016.* Johannesburg: South African Tourism.
- Spiriajevas, E. (2008). The impact of tourism factor for the development of the development of the south-east Baltic coastal regions. *GeoJournal of Tourism and Geosites*, 2 (2), 118-128.
- Taaffe, E.J. (1974). The spatial view in context. Annals of the Association of American Geographers, 64 (1), 1-16.
- Thomas, K., Scott, J., Butcher, J., O'Donoghue, D. & Thomas, L. (2019). A Perfect Storm?: The Impact of the End of Free Movement on the UK Tourism Workforce. Report



prepared by the Tourism Event Hub, Canterbury Christ Church University, Canterbury, United Kingdom.

- Tian, Z., Gottlieb, P.B. & Goetz, S.J. (2020). Measuring industry co-location across county borders. *Spatial Economic Analysis*, 15 (1), 92-113.
- Timothy, D. (2018). Geography: The substance of tourism. *Tourism Geographies*, 20 (1), 166-169.
- Tsui, K.W.H., Tan, D., Chow, C.K.W. & Shi, S. (2019). Regional airline capacity, tourism demand and housing prices: A case study of New Zealand. *Transport Policy*, 77, 8-22.
- United Nations World Tourism Organisation (2020). Impact assessment of the COVID-19 outbreak on international tourism. <u>https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism</u>, [accessed 13.4.2020].
- Visser, G. (2007). Geography of tourism. In R. George (Ed.). *Managing Tourism in South Africa*, (pp. 34-52). Cape Town: Oxford University Press.
- Visser, G. (2016). South African tourism geographies: Progress and prospects. *South African Geographical Journal*, 98 (3), 428-438.
- Visser, G. & Ferreira, S. (Eds.) (2013). *Tourism and Crisis*. London: Routledge.
- Yang, Y., Zhang, H. & Chen, X. (2020). Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modelling of infectious disease outbreak. *Annals of Tourism Research*, 102913.
- Zhang, Y., Goh, E. & Wen, J. (2020). The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: A perspective article. *Anatolia*, 31 (2), 337-340.