

## Traffic management solutions – international trends

Many parts of the world are looking at a more radical approach to reduce congestion.

### London's Congestion Charge Zone (CCZ)

was brought in against stiff opposition. Nowadays, very few Londoners oppose the system of road pricing that varies by when, how much and where drivers use the roads.

**Singapore has the world's most comprehensive road-pricing system.** It is now introducing a more precise road charging system that uses cars' GPS.

An effective integrated public transport system is central to dealing with congestion.

Other schemes are being tried out in American states such as **California and Oregon.**



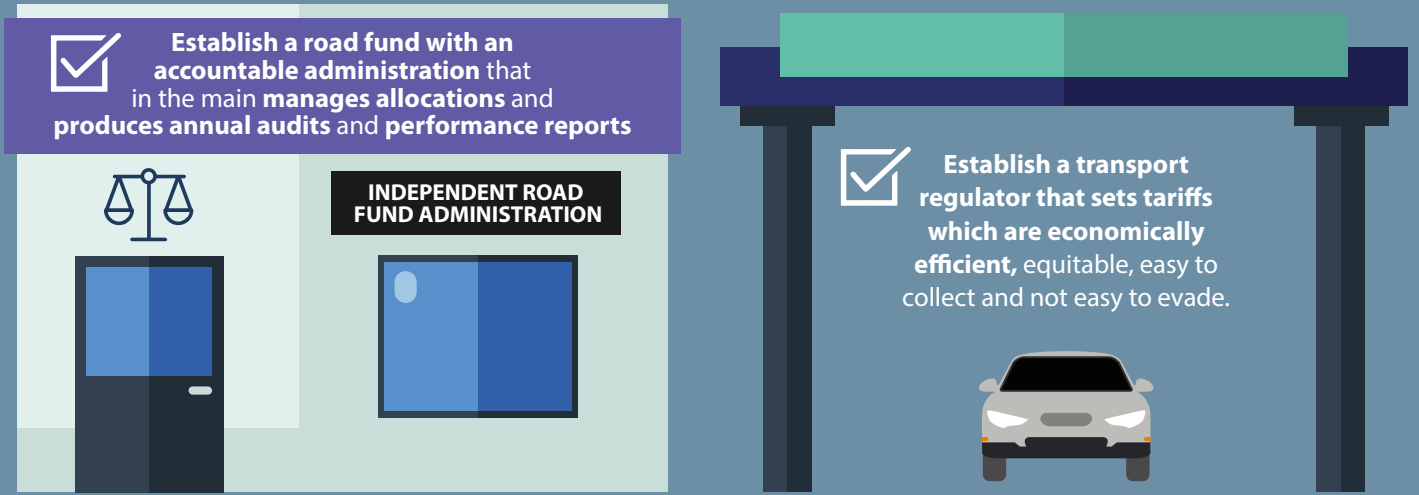
### DID YOU KNOW?

Four possible road user charge components could include:

- Value Added Tax
- Road wear/damage
- Road space
- Weight
- Distance travelled by road user

## SARF's proposed solution to SA's road funding dilemma

Establish a road fund with an accountable administration that manages allocations, audits spending and produces regular performance reports.



For queries/comments contact the South African Road Federation

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## Roads, road funding and economic prosperity in South Africa



The South African Road Federation (SARF) is a not-for-profit organisation dedicated to the promotion of safe and cost-effective transport of goods and passengers by road in SA. It achieves this through the dissemination of accurate information, the promotion of sound policies and nation-wide training association of members comprising private companies, public sector road agencies and stakeholders, parastatals and national, regional and local government players.

### Road funding

SA obtains funds for roads through **general taxation, road user levies and charges**, including the fuel levy, and other taxes. National government allocates funds to the various state-owned enterprises, local and provincial government.

SARF is working with the road sector - road users, infrastructure service providers, transport operators, and government to provide input to the development of a Road Funding Policy:



### ROAD NETWORK FAST FACTS

- 1 A public asset
- 2 One of the key pillars supporting SA's competitive economic advantage
- 3 Enables economic growth
- 4 Has a direct impact on prosperity
- 5 Can deliver a higher economic return on investment than any other single type of infrastructure
- 6 Delivers goods, services and labour to places of production
- 7 Delivers output to markets
- 8 Brings consumers and customers to marketplaces
- 9 Allows people to access essential services such as healthcare, police, schools, etc

### National Treasury Direct Allocations (R - million)

TOTAL ANNUAL ROAD BUDGET REQUIREMENT (2018) R116.1-billion

MTEF Period	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2019/21
<b>Income (fuel levy and licence fees)</b>	R50 862	R55 816	R64 492	R70 986	R79 547	R79 547	R79 547	R79 547
<b>Direct Allocations (to agencies, provinces and local government)</b>	R52 372	R56 532	R60 078	R63 942	R67 020	R67 239	R72 357	R75 834
<b>Surplus/Shortfall</b>	<b>-R1 510</b>	<b>-R716</b>	R4 414	R4 414	R7 044	R12 308	R7 190	R3 713

"There are no major surpluses in the fuel levy which can be accessed."

Source: Government's Medium Term Expenditure Framework (MTEF)

### DID YOU KNOW?

Four key consequences of insufficient road funding:

- High vehicle operating costs
- Low vehicle speeds and therefore losses of time for road users
- High prices coupled with low economic efficiency
- Negative impact on economic development
- Unsafe road environments leading to loss of life and costly damages

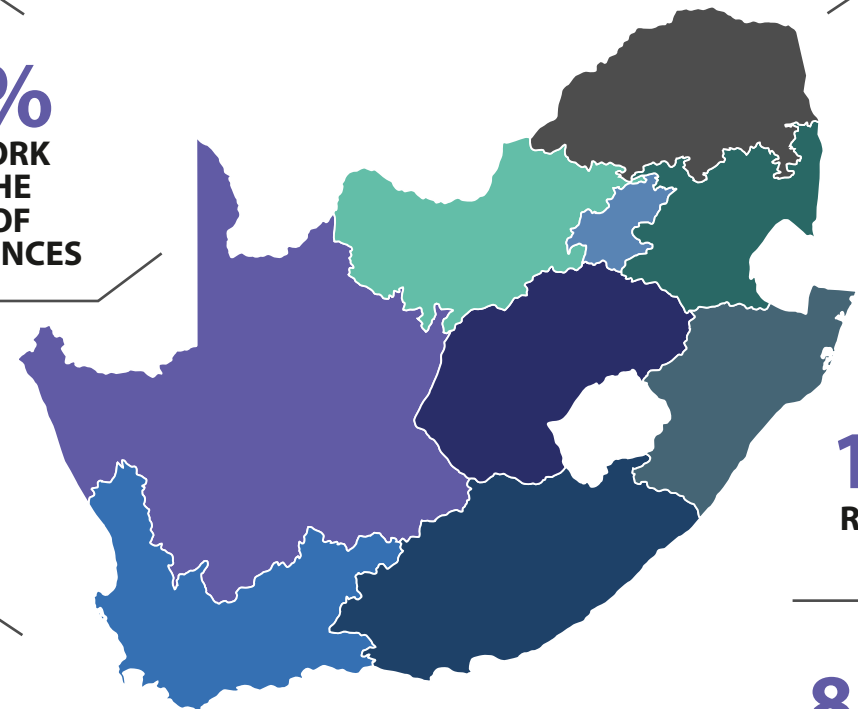
# South Africa's road network

**10TH LONGEST ROAD NETWORK INTERNATIONALLY**

**750 000KM ROAD NETWORK LENGTH (2015)**

**591 876KM GRAVEL ROADS**

**TOLL ROADS 3 120KM SOUTH AFRICA'S NATIONAL ROADS**



**36.48% OF ROAD NETWORK FALLS UNDER THE JURISDICTION OF INDIVIDUAL PROVINCES**

**18TH LONGEST PAVED ROAD NETWORK**

**R1.2 - R2 TRILLION ROAD NETWORK VALUE**

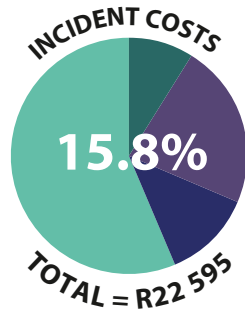
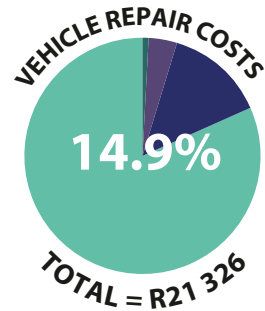
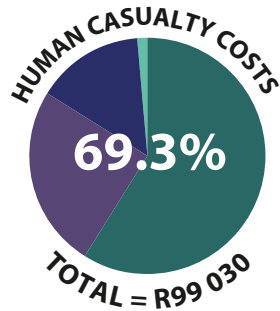
**17.59% ROADS ARE NOT PROCLAIMED**

**34.26% OF ROADS FALL UNDER MUNICIPALITIES**

**158 124KM PAVED ROADS**

**8.82% OF ROADS FALL UNDER METROPOLITAN CITIES**

## Total social cost of Road Traffic Crashes - RTCs - (R million)



Fatal Major Minor Damage only

Source: 2017 Road Traffic Management Corporation Report (RTMC) report

Cost Category	Fatal	Major	Minor	Damage only	Total
Total Cost	R60 569	R30 716	R20 189	R31 477	R142 951

## DID YOU KNOW?

Four key costs of vehicle use to society:



"In some form or another, road users pay for the use of a road. If it's not in money, it might be in time in the case of congestion or in vehicle operating cost where the road is not in ideal condition."

## ROAD USERS

Generally pay more tax than what their fair share of road use demands

Pay in personal time due to congestion

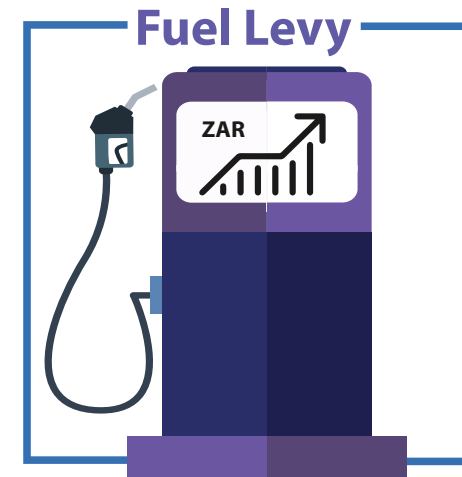
Pay for increased vehicle operating costs

Poorer people pay the same tax rate as wealthier people

High levels of personal income are spent on fuel

Affluent people who can afford newer fuel-efficient cars pay less to use the road

Movement of freight by truck is subsidised by light motor vehicles - comparison between the cost of freight via road or rail therefore skewed



## CURRENT FUEL LEVY IMPACT

Who pays what (2019)

	Old car	New car	Hybrid	Electric
l/100km	11	6	2	0
R/100km	40.26	21.96	7.32	0

"South Africa urgently needs a tariff setting mechanism that deals with congestion for which the fuel levy is not suitable."

## THE FUEL LEVY

Cannot be used as a tool to manage congestion in peak periods

Does not fairly compensate for the road damage caused by heavy vehicles

Trip costs cannot be easily calculated

Income collected by provinces through the levy is not ring fenced for roads only

Is not sustainable as fuel efficient and electric vehicles are entering the road network

## Urbanisation & congestion

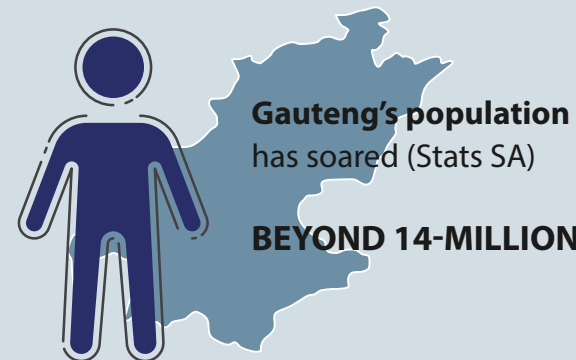
Around two-thirds of SA's population live in urban areas



People living in urban areas increased



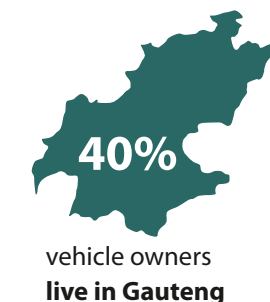
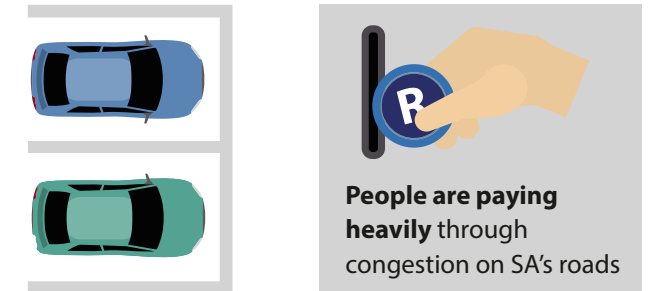
Source: Statista 2019



This places a huge demand on urban infrastructure requirements

Road users are 'paying' by queuing

Vehicle ownership in SA has doubled since 1994



In Johannesburg road users spend over

