

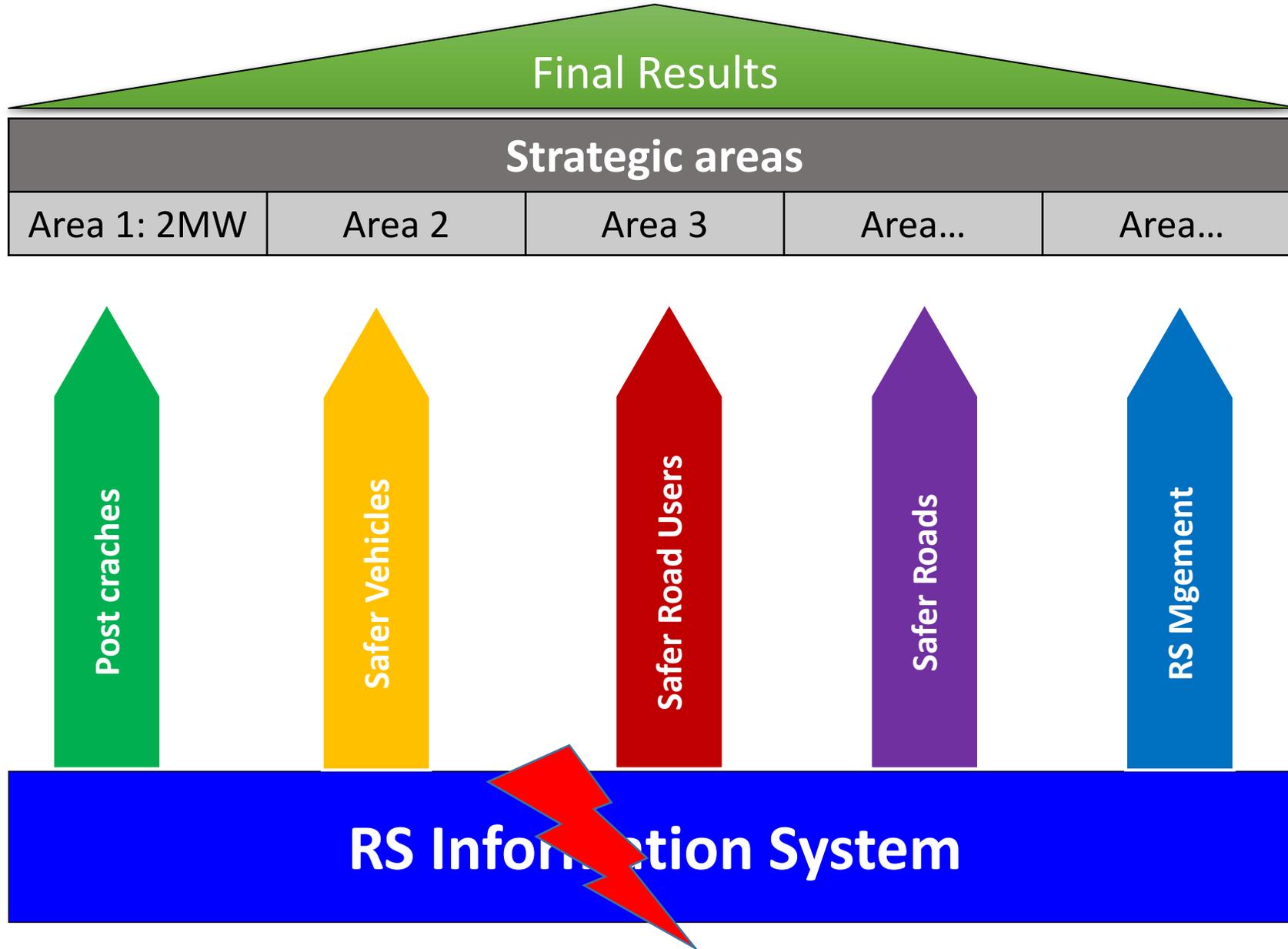
**AFRICA ROAD SAFETY OBSERVATORY (ARSO)**  
**Annual General Assembly**  
**March 22 & 23, 2022**

# Africa Status Report on Road Safety, 2020

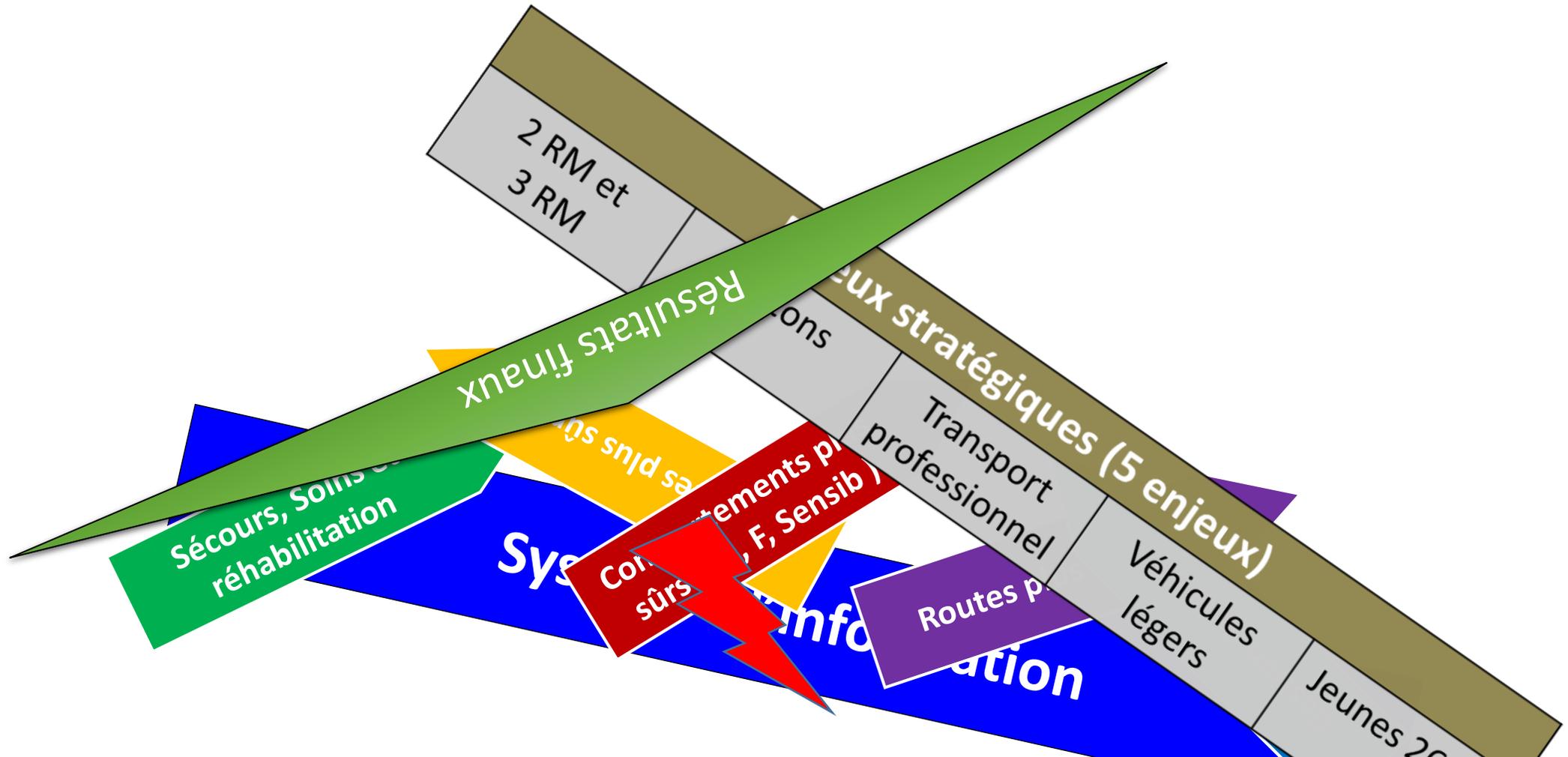


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# NRSS: RS information system



# NRSS: RS information system



# Review of Data Collection in Africa

Africa has the highest fatality rate of road Fatalities.

Need to address road safety on the continent

Africa has made strong commitments to improve the road safety

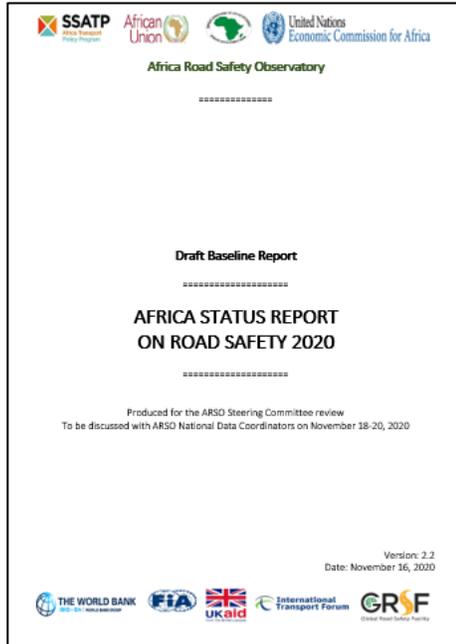


The issue of fatality characterization is challenging in Africa

Needs to understand challenges faced in Africa when it comes to road safety data.

Deeper analysis of the road safety-related environment in the region is required.

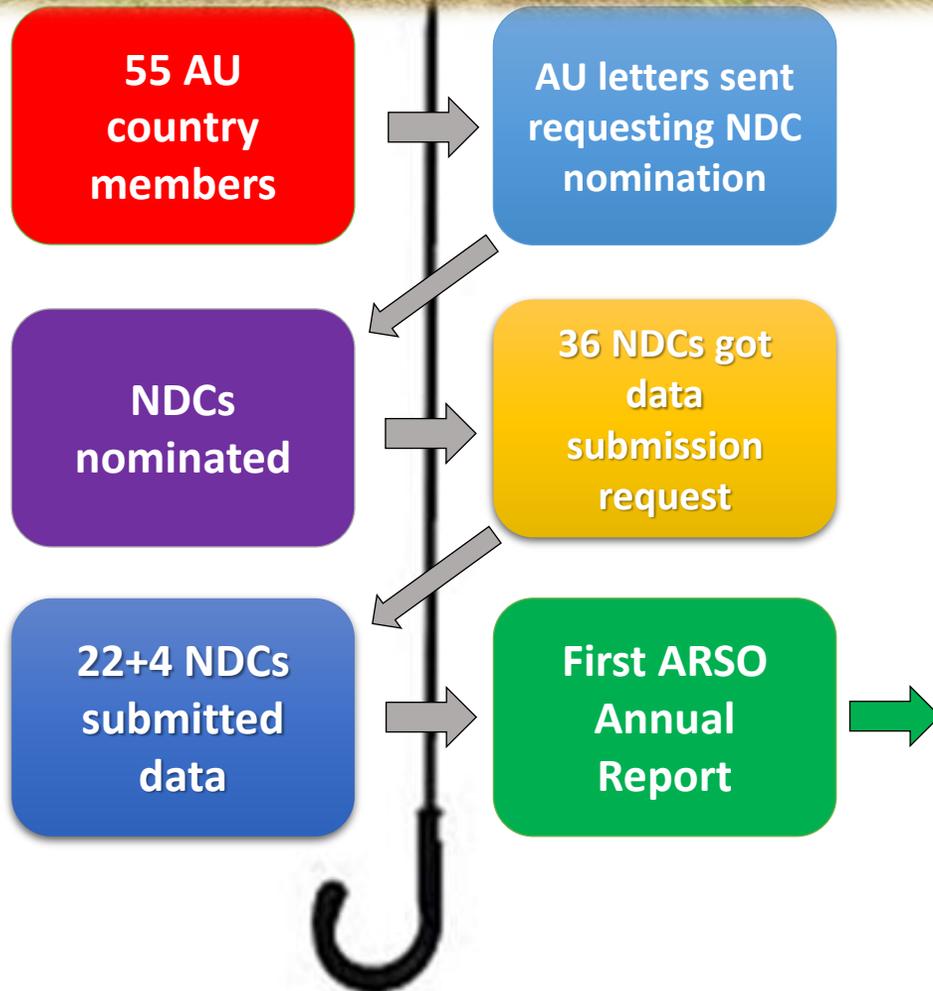
# The Goal



The goal of this report is to present structural framework for road safety data collection in African countries

## Important note:

- This is not an ordinary crash data analysis report, but an aggregate report on the current RS situation in Africa (ARSO).
- The goal of this report is to convey key messages on the different aspects of road safety in Africa.



MiniARSO  
WHO's other road safety performance indicators.  
The survey contained 13 sections with over 100 questions

# ARSO: the First Annual Report

Data gathering and data analysis only improve with practice.



The survey contained 13 sections with over 100 questions.

Thanks to a collaboration with WHO's pilot test of an online platform. Thanks to the other stakeholders.



The process involved personalized log in information into an internet-based questionnaire.

The survey included MiniARSO data as well as WHO's RS performance indicators



Individuals were characterized either as data coordinators or data collaborators.

# General information on the ARSO's pilot data collection



Countries that completed ARSO survey, 2020

# Years used for reporting by country

Out of the 26 countries submitting data, 12 submitted data for more than one year

| Country       | 2019 | 2018 | 2017 |
|---------------|------|------|------|
| Benin         | X    | X    |      |
| Burkina Faso  | X    | X    | X    |
| Cameroon      | X    |      |      |
| Congo         | X    |      |      |
| Côte d'Ivoire | X    |      |      |
| DRC           | X    |      |      |
| Eritrea       | X    |      |      |
| Ethiopia      | X    |      |      |
| Ghana         | X    | X    |      |
| Guinea        | X    |      |      |
| Guinea-Bissau |      | X    | X    |
| Liberia       | X    | X    |      |
| Madagascar    | X    | X    | X    |
| Malawi        |      |      | X    |
| Mali          | X    | X    |      |
| Morocco       | X    | X    | X    |
| Mozambique    |      | X    |      |
| Namibia       |      | X    |      |
| Niger         | X    | X    | X    |
| Nigeria       | X    | X    | X    |
| Senegal       | X    |      |      |
| South Africa  | X    |      |      |
| Togo          | X    | X    |      |
| Uganda        | X    |      |      |
| Zambia        | X    | X    | X    |
| Zimbabwe      | X    |      |      |

Table : Years used for reporting by country, as of November 2020

# Main content of the report

1. General information on ARSO's pilot data collection
2. Trends in road crashes and deaths in Africa 2016- 2019
3. Road crashes and deaths in Africa in natural year 2019
4. **Number of crashes and fatalities**
  - a. By population
  - b. By vehicle type
  - c. By age of vehicle
  - d. By road user type
  - e. Share by gender
  - f. By age group
  - g. By time
  - h. By vehicle function
  - i. By weather
5. **Exposure to risk of road traffic crashes**
6. **Key performance indicators**
7. **Seatbelt**
8. **Legislation on key issues**
9. **National road safety strategies**
10. **Powered vehicles**
11. **Infrastructure**



# Road crashes and deaths in 2019

Number of crashes and fatalities and time intervals used for fatality definitions:

| Country       | Injury crashes    | Type of victims  |                   |        | Time interval used for defining a road traffic death |
|---------------|-------------------|------------------|-------------------|--------|--|
|               |                   | Slightly injured | Seriously injured | deaths |  |
| Benin         | 3.172             | 2 297            | 2 029             | 810    | Died within 30 days of crash                         |
| Burkina Faso  | NA                | NA               | NA                | 978    | Died at scene of crash                               |
| Cameroon      | NA                | NA               | NA                | 1140   | Died within 30 days of crash                         |
| Congo         | Death crashes 177 | 3225             | NA                | 266    | Unlimited time following crash                       |
| Congo         | NA                | NA               | NA                | NA     | NA   |
| Côte d'Ivoire | 12862             | 10507            | 10687             | 1465   | Died within 30 days of crash                         |
| Eritrea       | NA                | NA               | NA                | NA     | NA   |
| Ethiopia      | 15529             | 7                | 7                 | 5118   | Died within 30 days of crash                         |
| Ghana         | NA                | NA               | NA                | NA     | NA   |
| Guinea        | NA                | NA               | NA                | NA     | Died at scene of crash                               |
| Liberia       | NA                | NA               | NA                | NA     | NA   |
| Madagascar    | 1694              | 2802             | 2802              | 229    | Died within 24 hours of crash                        |
| Mali          | NA                | NA               | NA                | NA     | NA   |
| Morocco       | 101644            | 139339           | 10003             | 3622   | Died within 30 days of crash                         |
| Niger         | 6583              | 11917            | 11917             | 929    | Died at scene of crash                               |
| Nigeria       | 35981             | 1265             | 6911              | 5483   | Died within 30 days of crash                         |
| Senegal       | 17213             | 17               | 27465             | 745    | Died at scene of crash                               |
| South Africa  | NA                | NA               | NA                | 12503  | Died within 30 days of crash                         |
| Togo          | NA                | NA               | NA                | NA     | NA   |
| Uganda        | 10810             | 1                | 9                 | 3880   | Died within 30 days of crash                         |
| Zambia        | 10115             | 8                | 5                 | 1746   | 365 days as defined by the primary data source       |
| Zimbabwe      | NA                | NA               | NA                | NA     | NA   |

# Road crashes and deaths in 2019

Comparison between reported data and the last WHO Global Status

|               | WHO estimated | Country reported | Country reported |
|---------------|---------------|------------------|------------------|
| Country       | 2018          | 2016             | 2019             |
| Burkina Faso  | 5686          | 878              | 978              |
| Cameroon      | 7066          | 1879             | 1140             |
| Congo         | 1405          | 308              | 266              |
| Côte d'Ivoire | 5582          | 991              | 1465             |
| Ethiopia      | 27326         | 4352             | 5118             |
| Madagascar    | 7108          | 340              | 229              |
| Niger         | 5414          | 978              | 929              |
| Nigeria       | 32076         | 5053             | 5483             |
| South Africa  | 14507         | 14071            | 12503            |
| Uganda        | 12036         | 3503             | 3880             |
| Zambia        |               | N/A              | 1746             |

# Road crashes and deaths in 2019

## Number of fatal crashes by type of vehicle involved

| Number of fatal crashes where... |                       |                               |                                     |                                     |                       |  |                          |                               |  |       |  |  |  |  |
|----------------------------------|-----------------------|-------------------------------|-------------------------------------|-------------------------------------|-----------------------|--|--------------------------|-------------------------------|--|-------|--|--|--|--|
| Country                          | a bicycle is involved | other motor vehicles involved | non-2/3 motor vehicles Are involved | wheeled passenger cars are involved | bus /trolley involved | light goods vehicle (less than 3.5 t) or heavy goods (more than 3.5 t) is involved | another vehicle involved | unknown type vehicle involved | vehicle of operated by animals is involved | Total |  |  |  |  |
| Ethiopia                         |                       |                               |                                     | 1                                   | 1                     | 1  | 148                      | 142                           | 35   | 328   |  |  |  |  |
| Ivory Coast                      | 5                     |                               | 144                                 | 193                                 | 127                   |  |                          |                               |  | 469   |  |  |  |  |
| South Africa                     | 112                   | 5                             | 256                                 | 4469                                | 201                   | 1081   | 2322                     | 1033                          | 3  | 9482  |  |  |  |  |

**Nine countries** declared that **they collect data about Number of fatal crashes by type of vehicle involved**. However, **they did not fill in this data**.

# Road crashes and deaths in 2019

More details are given in the report describing road crashes and deaths by :

- ❑ Road user type
- ❑ Gender
- ❑ Age group
- ❑ Time
- ❑ Main activities of drivers
- ❑ Vehicle function
- ❑ Weather

## Seatbelt

# Key performance indicators

| Country       | National Safety-belt Law | Safety-belt wearing rate          | Remark   |
|---------------|--------------------------|-----------------------------------|--|
| Benin         | No                       | -                                 |  |
| Burkina Faso  | Yes                      | -                                 | Applies to front and rear seat occupants with moderate enforcement |
| Cameroon      | Yes                      |                                   | Moderate usage   |
| Congo         | Yes                      | 4% front seats, 4% Rear seats     | Low/limited enforcement  |
| Congo - DRC   | Yes                      |                                   | Limited/little enforcement   |
| Côte d'Ivoire | Yes                      |                                   | "  |
| Eritrea       | Yes                      | 80% for both seats                | High enforcement   |
| Ethiopia      | Yes                      | <1% all occupants                 | Moderate usage/enforcement   |
| Ghana         | Yes                      | 18% Front seats and 4% Rear seats | Limited/little enforcement   |
| Guinea        | Yes                      |                                   |  |
| Liberia       | No                       |                                   |  |
| Madagascar    | Yes                      |                                   | Moderate usage/enforcement   |
| Mali          | Yes                      | 20% Drivers                       | Limited enforcement  |
| Morocco       | Yes                      | 63% Front and 22% Rear seats      | High enforcement   |
| Niger         | No                       |                                   | -  |
| Nigeria       | Yes                      |                                   | High enforcement   |
| Senegal       | Yes                      | -                                 | Moderate usage/enforcement   |
| South Africa  | Yes                      | 33% Drivers and, 31% Front seats  | "  |
| Togo          | Yes                      |                                   | "  |
| Uganda        | Yes                      |                                   | Limited/little enforcement   |
| Zambia        |                          |                                   |  |
| Zimbabwe      | Yes                      |                                   | High enforcement   |

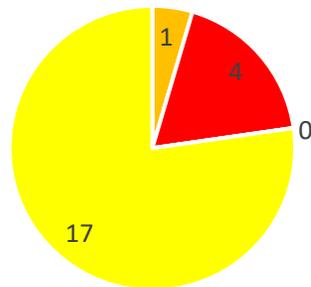
# Key performance indicators

For the other questions, the countries did not answer any of them including the question “how effective is the enforcement of child restraint laws in your country?”.



## Child restraints

National data available on the percentage/rates of child restraint use

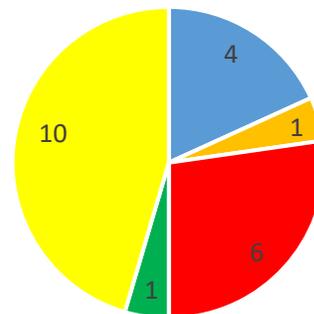


Don't know No Yes without answer



## Mobile phone use while driving

Data collected on mobile phone use while driving

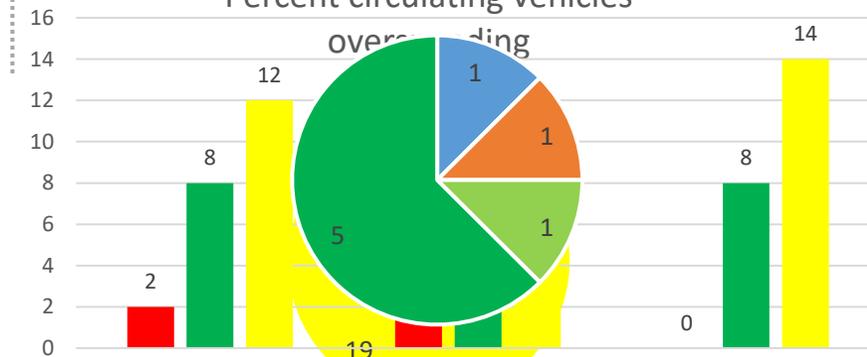


Data collected as part of regular police crash reports  
Don't know  
No



## Speed

Manual speed enforcement  
Automated speed enforcement  
Percent circulating vehicles

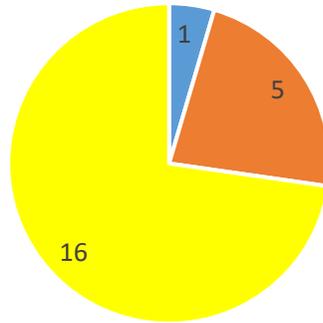


Other- Both roadside radar and in-vehicle devices  
Other- Through Patrol Enforcement  
Not determined  
Sealing of vehicle speedometers, installation of speed reducers, vertical traffic signs  
No  
Roadside using radar or laser devices by an enforcement officer  
not known  
without answer

# Key performance indicators

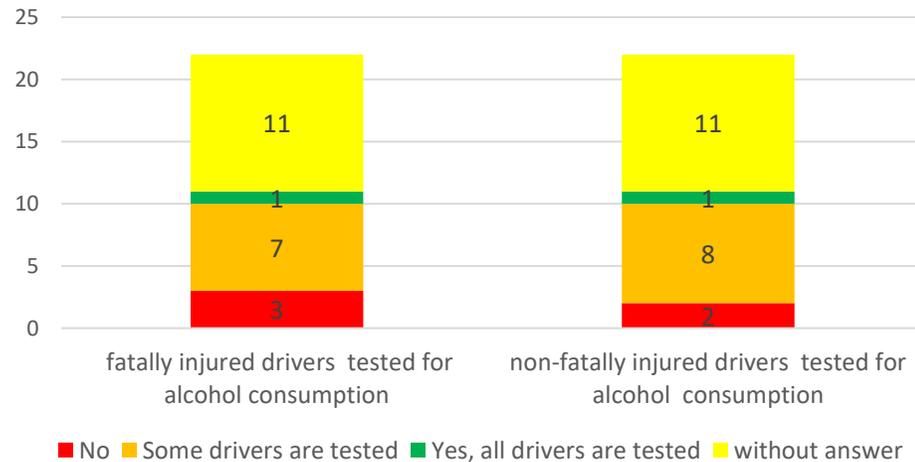
## Alcohol consumption

mechanisms used to enforce drink-driving laws



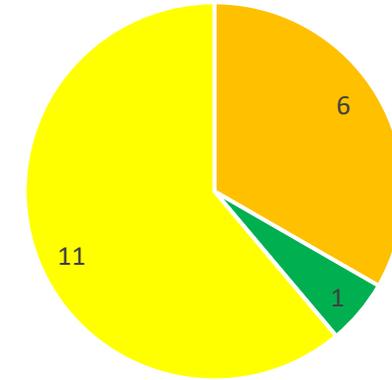
- All random breath tests (population) throughout the year
- Use of breath testing at specific locations or times
- without answer

## Alcohol consumption test



## Drug consumption

Drugs consumption test



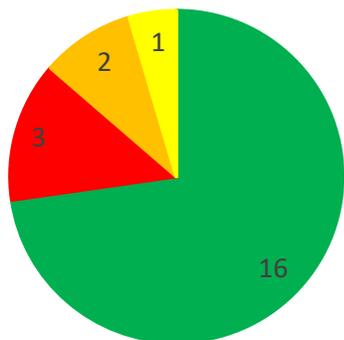
- Some drivers are tested
- Yes, all drivers are tested
- without answer

# Legislation on key issues

| Country         | Legislation that specifies national speed limits | Is alcohol consumption (by adults) legally prohibited | National drink-driving law | Is there a national law that restricts the use of drugs while driving | National legislation requiring helmet | National legislation requiring seatbelt | National legislation regulating the use of mobile phones | Vital registration /death certification system | Trauma registry           | National legislation requiring the use of child restraints |
|-----------------|--|---|----------------------------|---|---------------------------------------|---|--|--|---------------------------|--|
| Benin           | Yes  | Yes   | Yes                        | Yes   | Yes                                   | No                                      | Yes  | Yes  | National registry         | No   |
| Burkina Faso    |  | Yes   |                            |   |                                       |   |  |  |                           |  |
| Cameroon        | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  |                           | No   |
| Congo           |  |   |                            |   |                                       |   |  |  |                           |  |
| Côte d'Ivoire   | Yes  | Yes   | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Do not know                                    | Do not know               | Do not know  |
| DRC             |  |   |                            |   |                                       |   |  |  |                           |  |
| Eritrea         |  |   |                            |   |                                       |   |  |  |                           |  |
| Ethiopia        | Yes  | Yes   | Yes                        | Yes   |                                       | Yes                                     | Yes  | Yes  |                           | Yes  |
| Ghana           |  |   |                            |   |                                       |   |  |  |                           |  |
| Guinea          | Yes  | Yes   | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | No   |                           | No   |
| Liberia         |  |   |                            |   |                                       |   |  |  |                           |  |
| Madagascar      | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | No   | National registry         | No   |
| Mali            |  |   |                            |   |                                       |   |  |  |                           |  |
| Morocco         | Yes  | Yes   | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | Yes                       | No   |
| Niger           | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | National registry         | Yes  |
| Nigeria         | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Do not know                                    | Do not know               | Yes  |
| Senegal         | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | National registry         |  |
| South Africa    | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | National registry         | Yes  |
| Togo            |  |   |                            |   |                                       |   |  |  |                           |  |
| Uganda          | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | Some scattered facilities | No   |
| Zambia          | Yes  | No  | Yes                        | Yes   | Yes                                   | Yes                                     | Yes  | Yes  | None                      | Yes  |
| Zimbabwe        |  |   |                            |   |                                       |   |  |  |                           |  |
| Total_Unknown   | 0  | 0   | 0                          | 0   | 0                                     | 0                                       | 0  | 2  | 2                         | 1  |
| Total_No        | 0  | 8   | 0                          | 0   | 0                                     | 1                                       | 0  | 2  | 1                         | 6  |
| Total_No answer | 9  | 8   | 9                          | 9   | 10                                    | 9                                       | 9  | 9  | 12                        | 10   |
| Total Yes       | 13   | 6   | 13                         | 13  | 12                                    | 12                                      | 13   | 9  | 7                         | 5  |

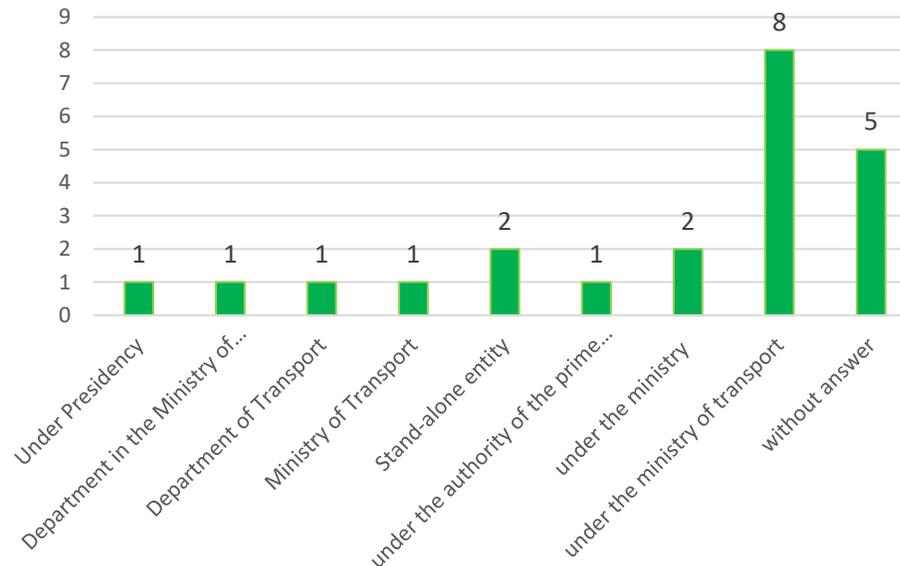
# National road safety strategies

LEAD AGENCY



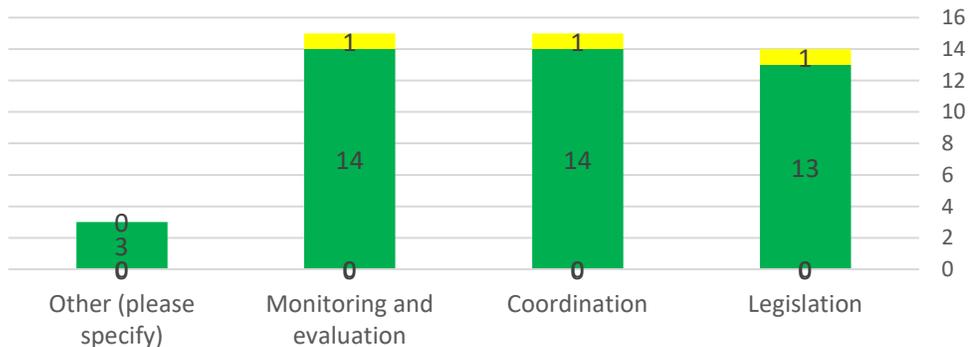
■ Yes ■ No ■ Don't know ■ without answer

Agency situation



Strategy

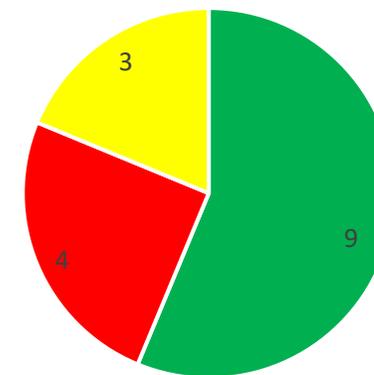
Functions is the lead agency responsible for



■ Don't know (2) ■ No (3) ■ Yes (16) ■ without answer (1)

answers about existing agency

funding allocated in the Government's budget for the lead agency



■ Yes ■ No ■ without answer

# National road safety strategies

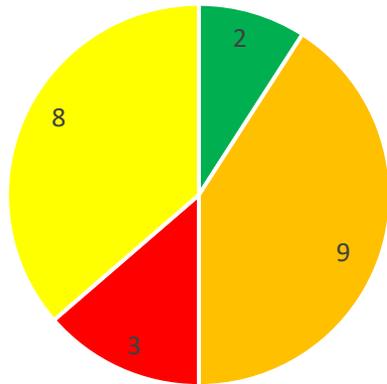
| Country                          | National strategy | National local or | Period    | Does this strategy set target for killed | Target for killed                                 | Does this strategy set target for seriously injured | Target for seriously injured    |
|----------------------------------|-------------------|-------------------|-----------|--|---|---|---------------------------------|
| Benin                            |                   |                   |           |  |   |   |                                 |
| Burkina Faso                     |                   |                   |           |  |   |   |                                 |
| Cameroon                         |                   |                   | 2019-2023 | Yes                                      |   | Yes   |                                 |
| Congo                            |                   |                   |           |  |   |   |                                 |
| Côte d'ivoire                    |                   |                   | 2020-2025 | Yes                                      | 25% reduction of fatalities                       | Yes   | 25% reduction of fatalities     |
| Democratic republic of the congo |                   |                   |           | Yes                                      | Do not know                                       | Yes   |                                 |
| Eritrea                          |                   |                   |           |  |   |   |                                 |
| Ethiopia                         |                   | National          | 2011-2020 | Yes                                      | 27 fatalities per 10,000 vehicles                 | No  |                                 |
| Ghana                            |                   |                   |           |  |   |   |                                 |
| Guinea                           |                   |                   |           | No                                       | Do not know                                       | No  |                                 |
| Liberia                          |                   |                   |           |  |   |   |                                 |
| Madagascar                       |                   | National          | 2012-2020 | Yes                                      | 5% reduction of fatalities                        | Yes   | 5% reduction                    |
| Mali                             |                   |                   |           |  |   |   |                                 |
| Morocco                          |                   | National          |           | Yes                                      | 50% reduction in fatalities between 2017 and 2026 | No  |                                 |
| Niger                            |                   | National          |           | No                                       |   | No  |                                 |
| Nigeria                          |                   | National          | 2021-3030 | Yes                                      |   | Yes   |                                 |
| Senegal                          |                   |                   | 2011-2020 | Yes                                      |   | Yes   |                                 |
| South Africa                     |                   | National          | 2010-2030 | Yes                                      | 50% reduction of fatalities                       | No  |                                 |
| Togo                             |                   |                   |           |  |   |   |                                 |
| Uganda                           |                   | National          |           |  |   |   |                                 |
| Zambia                           |                   | National          | By 2020   | Yes                                      | 50% reduction of fatalities                       | Yes   | Reduce serious injuries by 2020 |
| Zimbabwe                         |                   |                   |           |  |   |   |                                 |

# Key performance indicators

1



Funds to implement part or all of this strategy

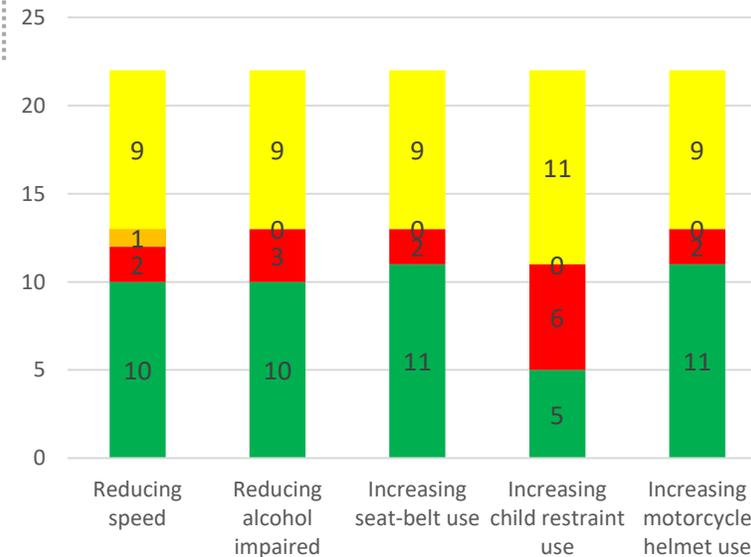


■ fully funded    ■ Partially funded  
■ Not funded    ■ without answer

2



The national strategy include targets for

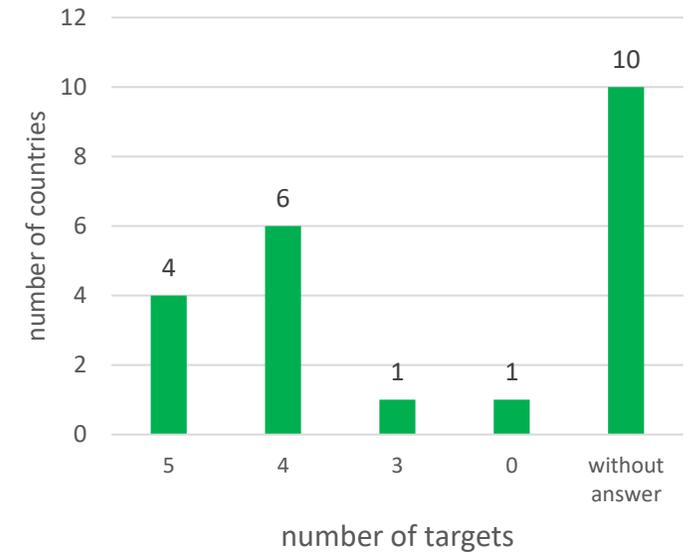


■ Yes    ■ No    ■ Don't know    ■ without answer

3



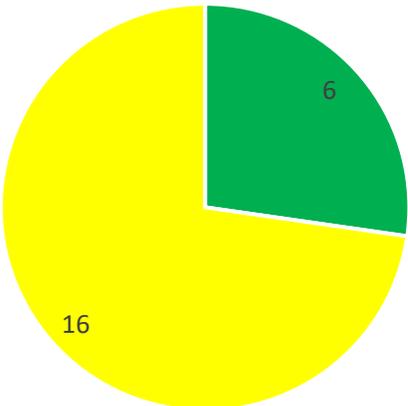
Number of targets included in strategy



number of targets

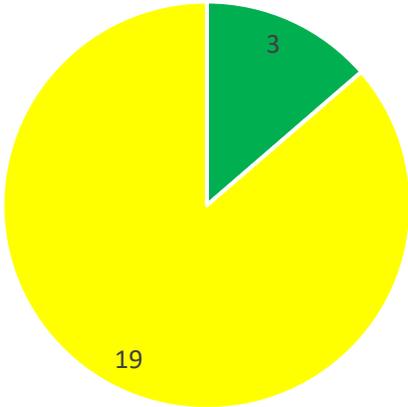
# Powered vehicles

Number of motorized two-wheeled or three-wheeled vehicles



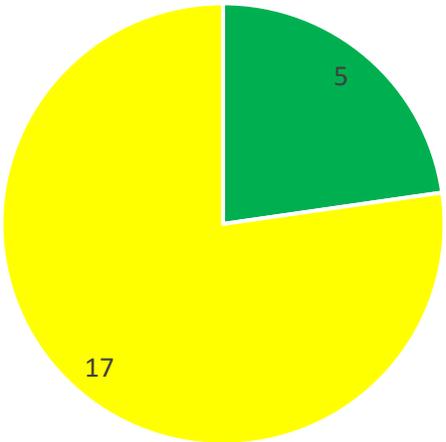
■ Answer ■ without answer

Number of heavy trucks



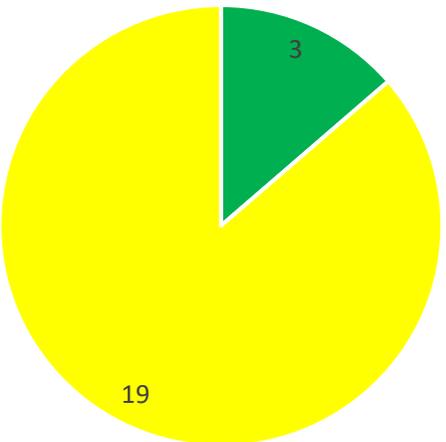
■ Answer ■ without answer

Number of 4 wheeled powered vehicles



■ answer ■ without absver

Number of buses

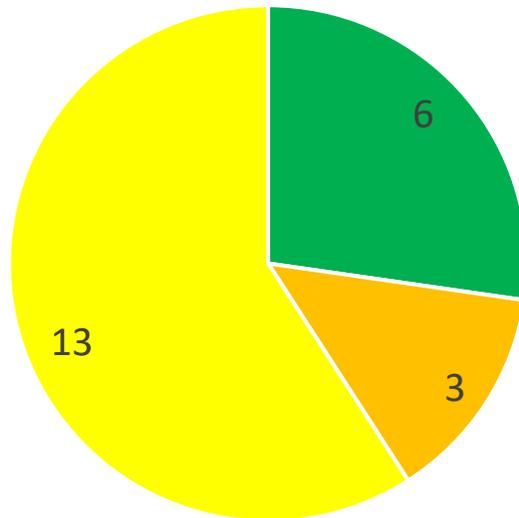


■ Answer ■ without answer



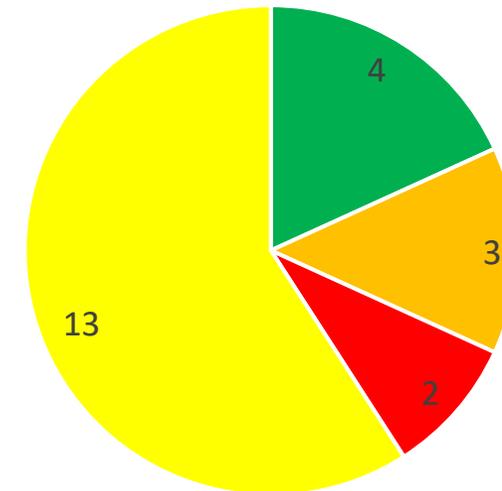
# Safety audit and standards

formal road safety audit and/or star/ safety rating assessment prior to construction



■ yes ■ Yes, but for some parts of the road network only ■ without answer

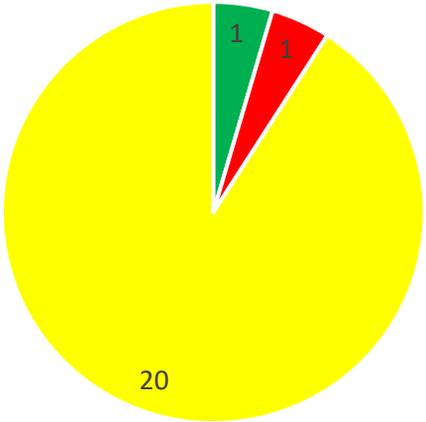
Design standards provide for roads where pedestrians and cyclists are present



■ Managing speed to safe system outcomes (e.g. 20 mph or 30 km/h)  
■ Safe crossings for pedestrians and cyclists  
■ Separation of pedestrians and cyclists from vehicular traffic  
■ without answer

# Infrastructure

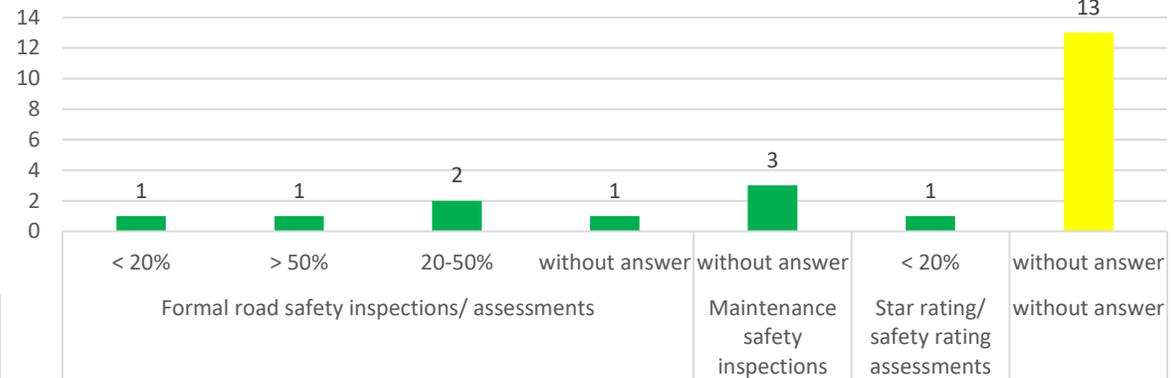
Public road network that meets safety standards for 2-3 wheel powered vehicles



■ YES ■ Not determined ■ without answer

Niger affirmed that **40%** of public road network meets safety standards for 2-3 wheel-powered vehicles.

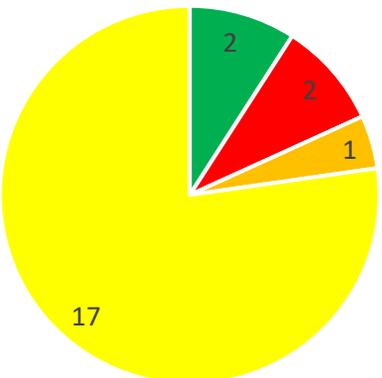
Proportion of national road networks underwent star rating/ safety rating assessments during 2019



Five countries use formal road safety inspections/ assessments, three countries use maintenance safety inspections and only one country uses start rating/ safety rating assessments.



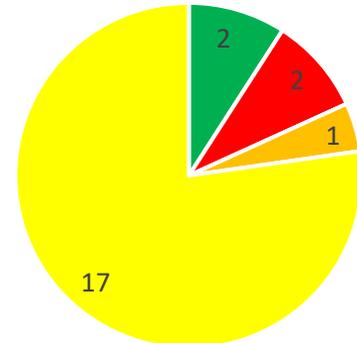
existing public road network that meets safety standards for 4 wheeled powered vehicles



■ YES ■ Not determined ■ Not known ■ without answer

Niger affirmed that **80%** of existing public road network meets safety standards for 4 wheeled powered vehicles, followed by Nigeria by **59%** of existing public road.

existing public road network that meets safety standards for pedestrians



■ YES ■ Not determined ■ Not known ■ without answer

Niger claimed that **40%** of e existing public road network that meets safety standards for pedestrians, followed by Nigeria by **20%** of existing public road

# Conclusions



# Thank you!

## AFRICA STATUS REPORT ON ROAD SAFETY, 2020

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