CAREC

Central Asia Regional Economic Cooperation Program

21st Transport Sector Coordinating Committee Meeting

22–23 April 2024 • Almaty, Kazakhstan

21-е заседание Координационного комитета по транспортному сектору

22–23 апреля 2024 года • Алматы, Казахстан

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Crash data review in the CAREC region

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Consultancy objectives

- Document current **crash data management practices** in CAREC
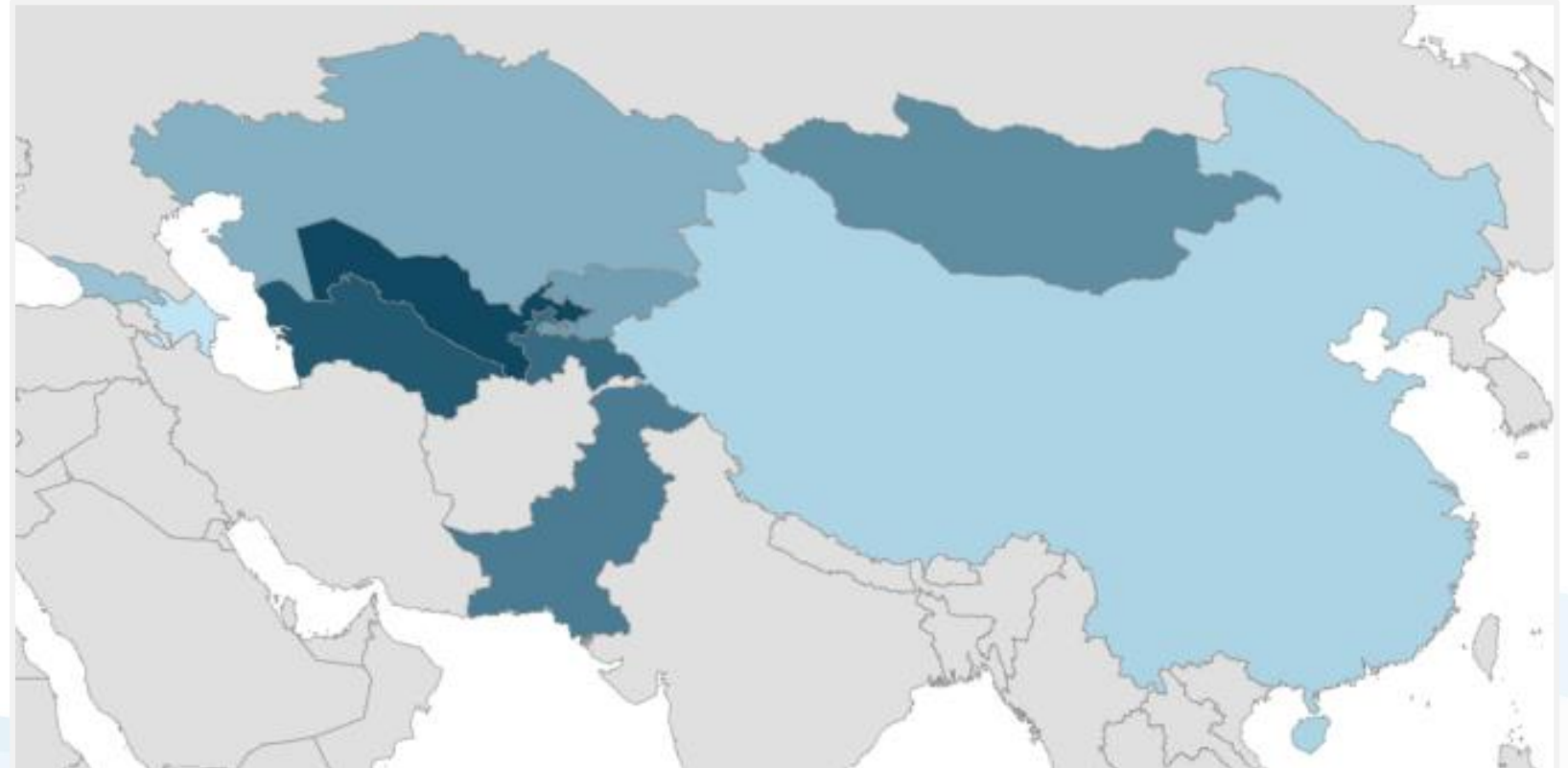- Identify **recommendations for improvements**
- Establish a **basis for a harmonized data management system**
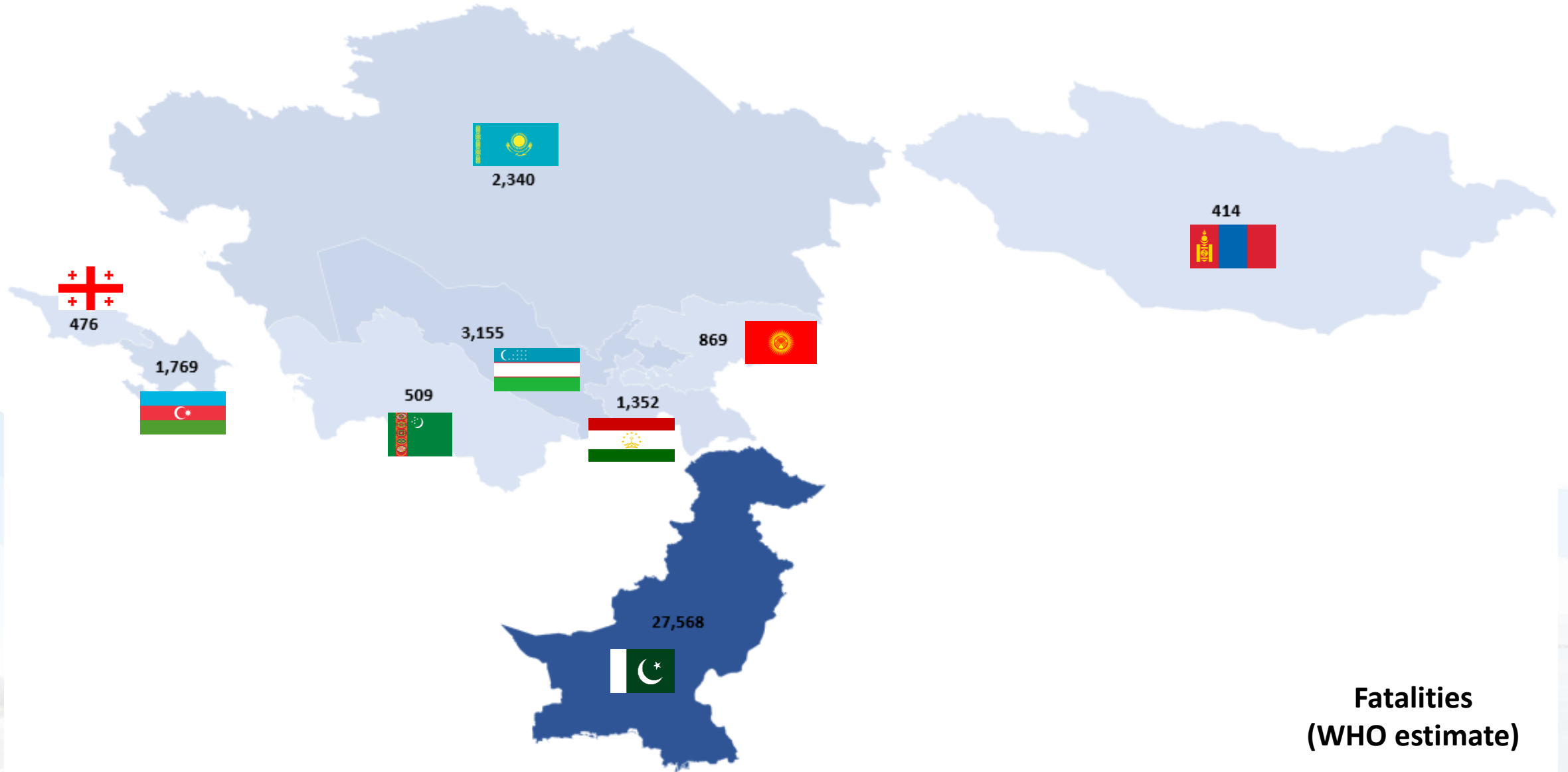- Informed, shared and coordinated approach to road safety

Which countries

- Azerbaijan
- DRC (2 regions)
- Georgia
- Kazakhstan
- Kyrgyz Republic
- Mongolia
- Pakistan
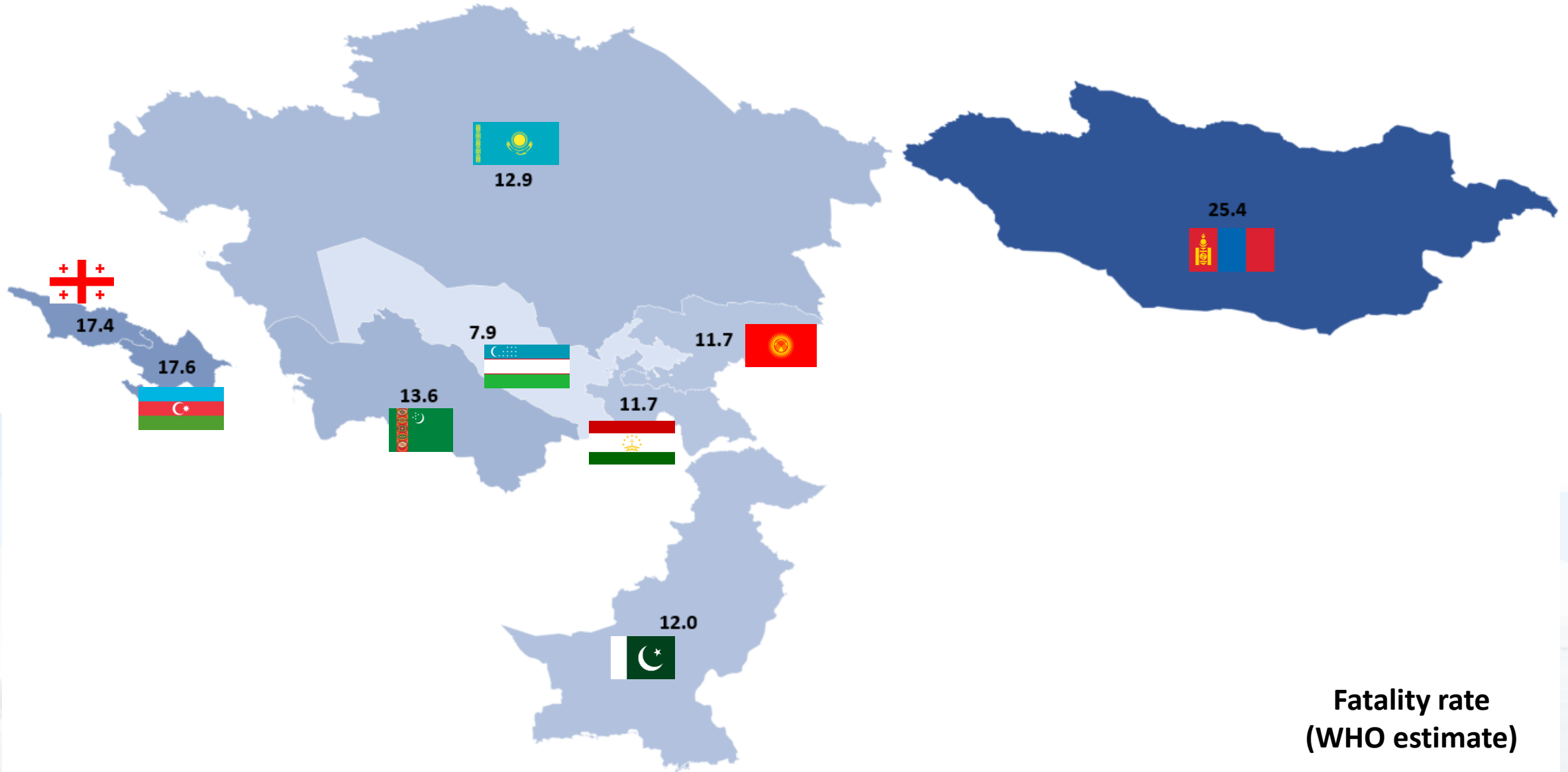- Tajikistan
- Turkmenistan
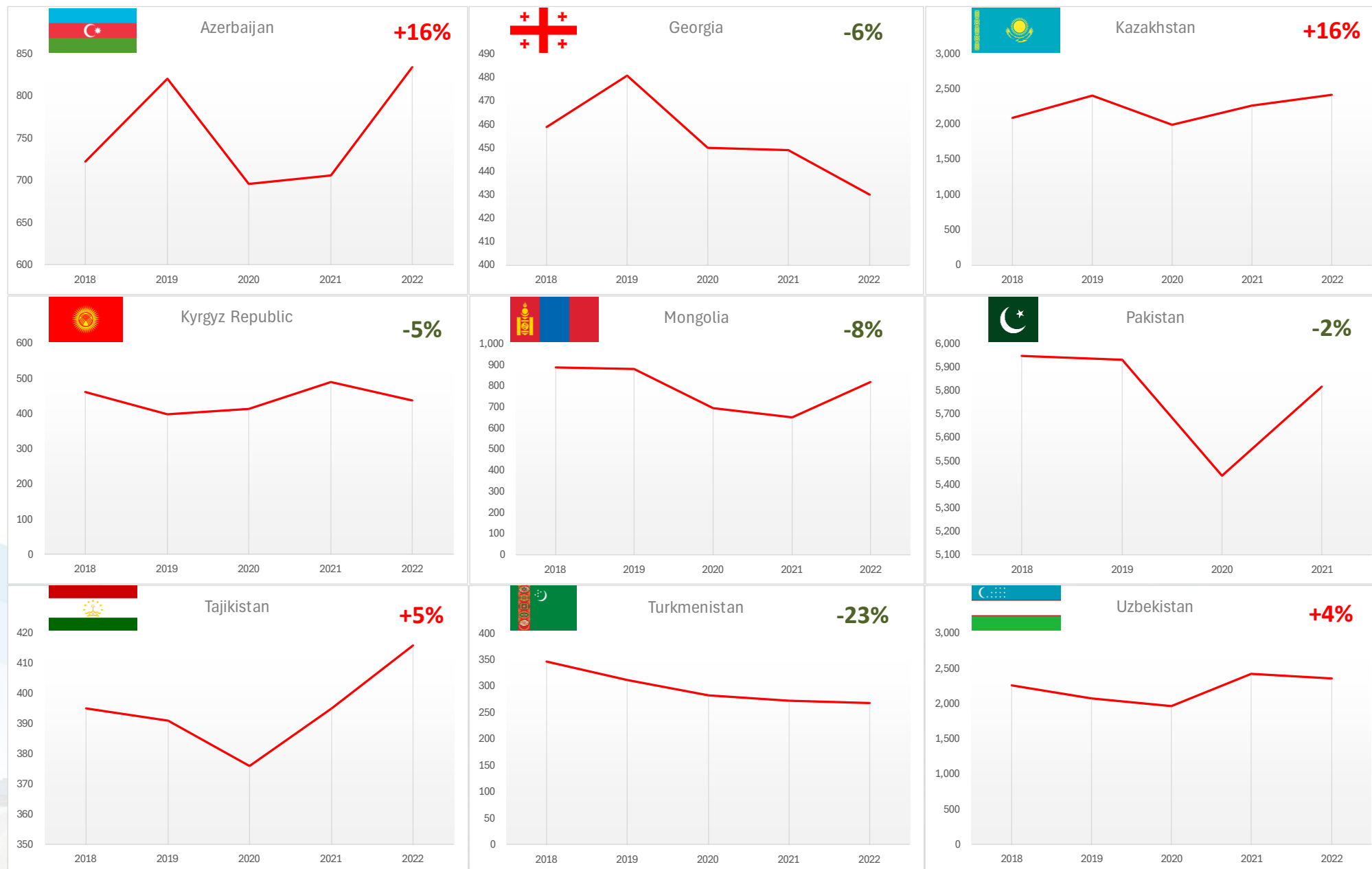- Uzbekistan

Key data comparison

2,340

414

476

3,155

869

1,769

509

1,352

27,568

**Fatalities
(WHO estimate)**

Key data comparison

12.9 (Kazakhstan)

25.4 (Mongolia)

17.4 (Georgia)

17.6 (Azerbaijan)

7.9 (Uzbekistan)

11.7 (Kyrgyzstan)

13.6 (Turkmenistan)

11.7 (Tajikistan)

12.0 (Pakistan)

**Fatality rate
(WHO estimate)**

Recent trend of fatalities

RTC involving pedestrians

Azerbaijan — **41%**
- Crash without pedestrian 59%
- Crash with pedestrian 41%

Georgia — **24%**
- Crash with pedestrian 24%
- Crash without pedestrian 76%

Kazakhstan — **17%**
- Crash with pedestrian 17%
- Crash without pedestrian 83%

Kyrgyz Republic — **16%**
- Crash with pedestrian 16%
- Crash without pedestrian 84%

Mongolia (only children) — **64%**
- Crash without pedestrian 36%
- Crash with pedestrian 64%

Pakistan — **4%**
- Crash with pedestrian 4%
- Crash without pedestrian 96%

Tajikistan — **44%**
- Crash without pedestrian 56%
- Crash with pedestrian 44%

Turkmenistan — **45%**
- Crash without pedestrian 55%
- Crash with pedestrian 45%

Uzbekistan — **36%**
- Crash without pedestrian 64%
- Crash with pedestrian 36%

Standards for a reliable RTC data system

- **Good quality data**

  – To understand problems, to communicate about them and to assess successes / failures

  – No data ➜ No evidence-based policies

  – Without good, comprehensive, well-analyzed data you never know ....

Topic	Reference standard
Road crash data collection	Common / unique crash notification system
	RTC definitions compliant with international standards
	All road crash scenes with victims attended
	Unique road crash registration system
	Collected variables allows for data analysis
	Precise location of road crashes on map
Storage, processing, use of road crash data	Data recorded by all actors in a single information system
	Data transferred to a national road crash database
	Data accessible by all stakeholders
	RTC data management system available
Other road safety data	Risk exposure data included in data collection and storage
	SPIs included in data collection and storage
Data analysis	Comprehensive analysis of RTC and road safety data

Road crash data collection: key aspects

Country	RTC definition	Crash scene attendance	Crash registration system	Precise crash location
Azerbaijan	Fatal crash within 7 days	All crashes	Paper-based / Not coordinated	No GPS
Georgia	Fatal crash no limit	All crashes	Paper-based / Not coordinated	No GPS
Kazakhstan	Fatal crash no limit	All crashes	Paper-based / Not coordinated	No GPS
Kyrgyz Republic	Fatal crash no limit	All crashes	Paper-based / Not coordinated	No GPS
Mongolia	Unknnow definitions	All crashes	Paper-based / Not coordinated	No GPS
Pakistan	Several definitions	Lack in Provinces	Paper-based / Not coordinated	No GPS
Tajikistan	Fatal crash within 7 days	All crashes	Paper-based / Not coordinated	No GPS
Turkmenistan	Fatal crash no limit	All crashes	Paper-based / Not coordinated	No GPS
Uzbekistan	Fatal crash within 30 days	All crashes	Use of tablets to collect data	No GPS

Storage, processing, use of data: key aspects

Country	Common information system	Data transfer to national database	Crash data management system
Azerbaijan	Accessible only by MoIA	Police data only	Missing
Georgia	Accessible only by Police	Police data only	Development planned
Kazakhstan	Partially accessible	Police data only	Dashboard existing
Kyrgyz Republic	Accessible only by Police	Police / Health data separate	Missing
Mongolia	Accessible only by Police	Missing	Missing
Pakistan	Missing	Partial (NHMP)	Partial (NHMP)
Tajikistan	Missing	Missing	Missing
Turkmenistan	Missing	Missing	Missing
Uzbekistan	Development planned	Police data only	Development planned

Other RS data and analysis: key aspects

Country	Risk exposure data	Safety performance indicators	Systematic data analysis
Azerbaijan	Missing	Missing	Analysis of high-risk sites
Georgia	Missing	Missing	Analysis of all crash by Police
Kazakhstan	Some data existing	Developments planned	Analysis of problems / solutions
Kyrgyz Republic	Missing	Missing	Partial analysis of high-risk sites
Mongolia	Missing	Missing	Summary analysis
Pakistan	Missing	Missing	Partial analysis by various agencies
Tajikistan	Missing	Missing	Partial analysis
Turkmenistan	Some data existing	Missing	Partial analysis
Uzbekistan	Partial	Partial	Analysis by a committee

Key recommendations

Road crash data collection

- Revised RTC definitions
- Revised data collection forms (Police, health)
- Electronic means to collect data (with GPS)

Storage, processing, use of road crash data

- National (unique) RTC database
- Web-based RTC data management system
- Data system accessible to all stakeholders

Other road safety data & analysis

- Merging of crash and road safety data
- Set-up a National Road Safety Observatory
- Links with APRSO

Common investigation manual
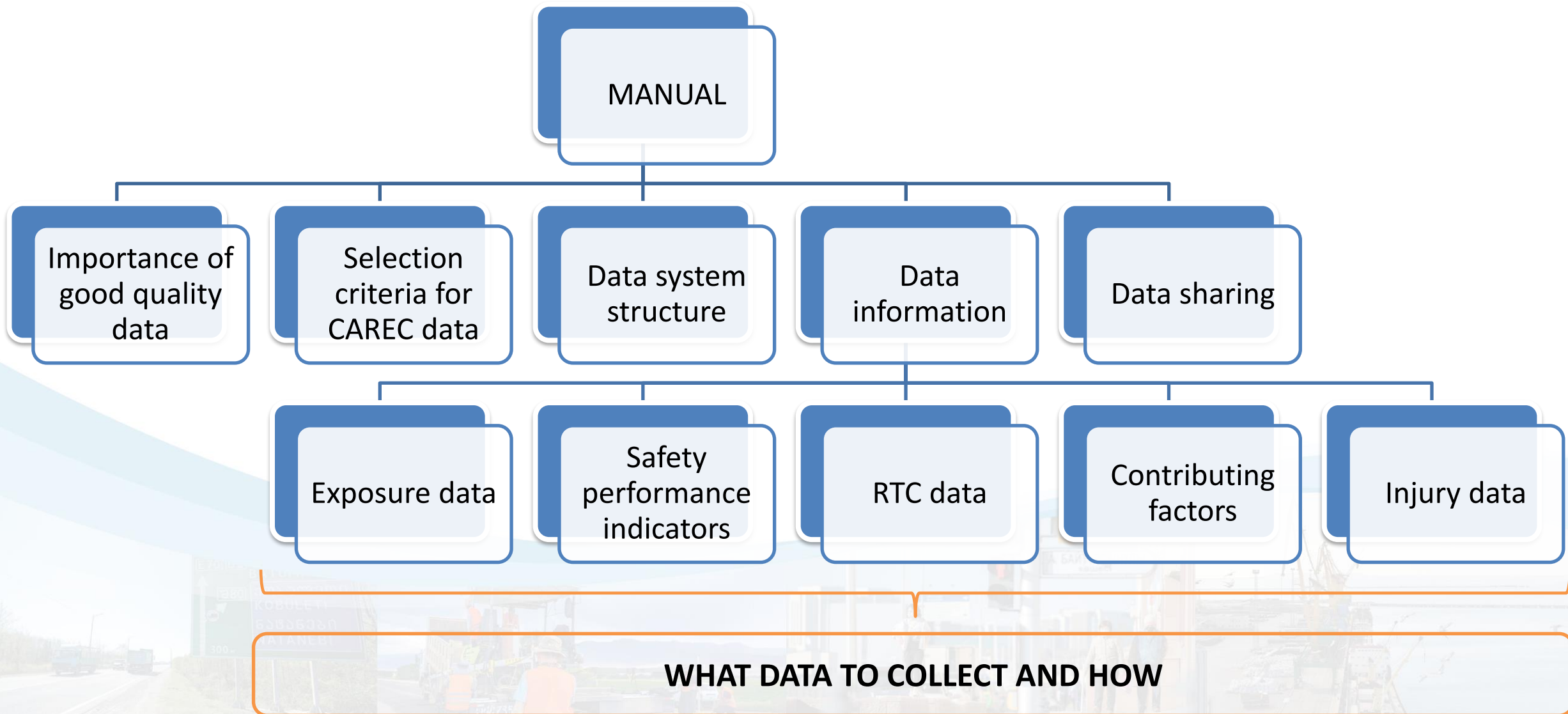
Data visualization: Kazakhstan good practice

RTC dashboards: Azerbaijan
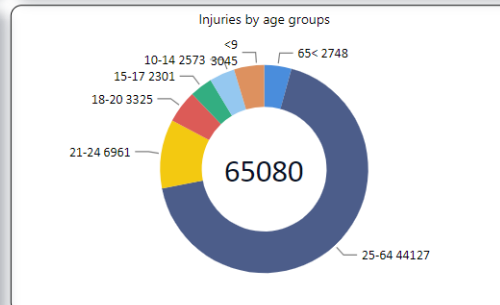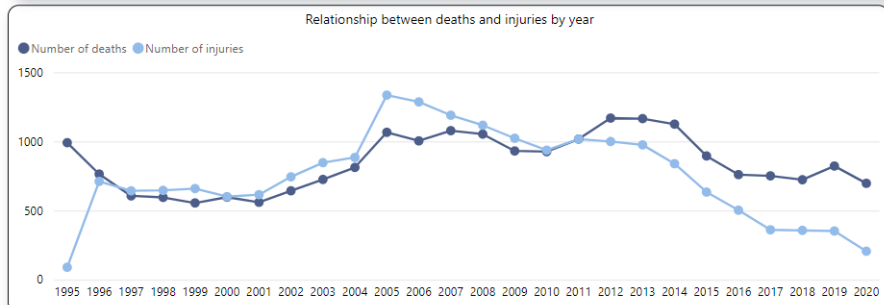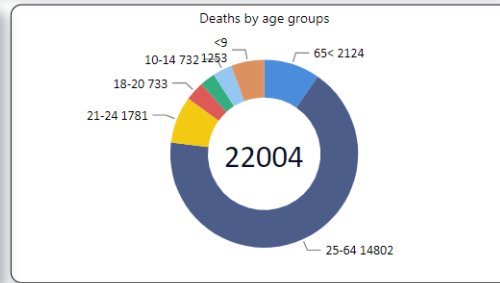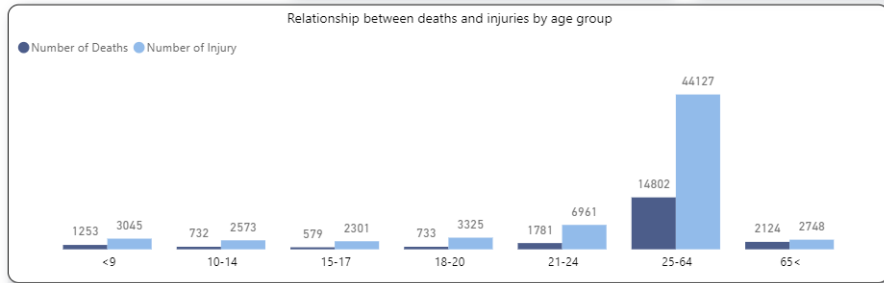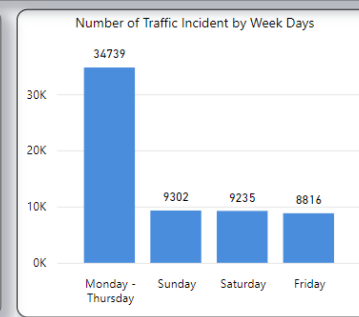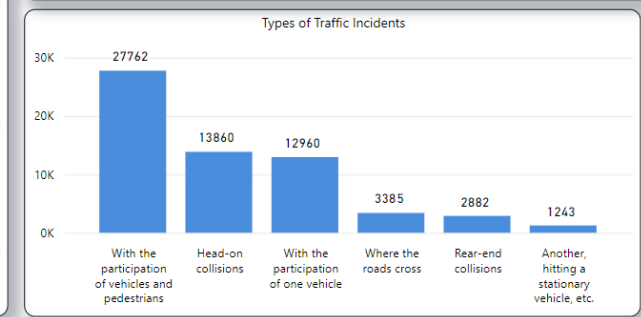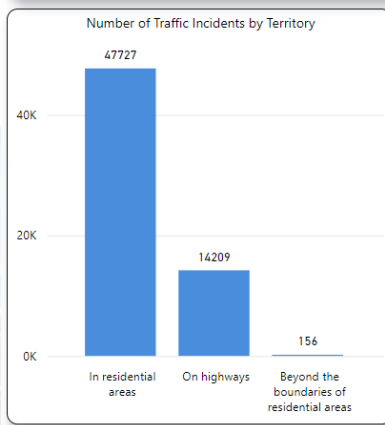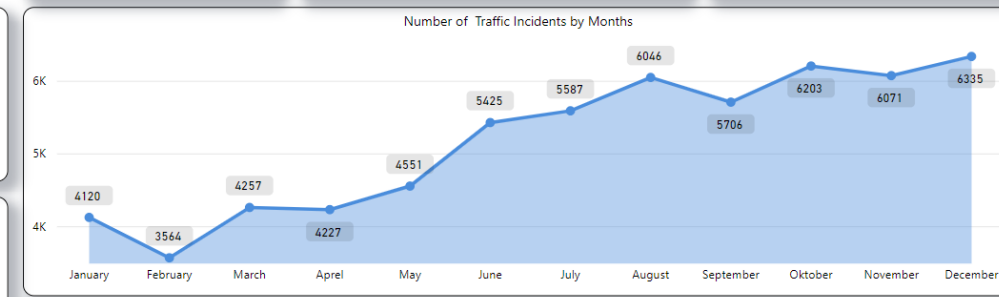
RTC dashboards: Mongolia

THANK YOU FOR THE ATTENTION

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