



## **CIVITAS** indicators

Crime events per inhabitant on public transport and at stops and stations (SOC\_SC\_SC2)

### **DOMAIN**



**Transport** 



**Environment** 



Energy



Society



**Economy** 

**TOPIC** 

Security

**IMPACT** 

Transport-related security

Reducing criminal activity on public transport and at stops and stations

SOC\_SC

### **Category**

Key indicator Supplementary indicator State indicator

#### **CONTEXT AND RELEVANCE**

Ensuring security in public transport is essential for creating safe and inclusive urban environments. This involves reducing crime and threats to personal safety on board and at stops and stations. A key concern is addressing issues like sexual harassment, which remains a significant barrier to mobility and disproportionately affects women and vulnerable groups. Enhancing security in public transit not only improves passenger safety but also encourages greater use of sustainable transport options by fostering a more trustworthy and accessible system.

This indicator provides a measure of transport-related security in the pilot area. It is a relevant indicator when the policy action is aimed at increasing public transport users' security. A successful action is reflected in a <u>LOWER</u> value of the indicator.

### **DESCRIPTION**

This indicator is the number of crimes per inhabitant on board public transport and at stops and stations. Its unit of measurement is **event per person**.

### METHOD OF CALCULATION AND INPUTS

The indicator should be computed exogenously, by applying the method described and then coded in the supporting tool.

# Method Calculation of the index based on data from police Significance: 1.00

### **INPUTS**

The following information is needed to compute the indicator:

- Number of crimes committed on public transport and at stops and stations in the pilot area. This information is to be retrieved from the local police department and may include both misdemeanours (e.g., pickpocketing) and felonies (e.g., assaults). The data should cover a period of at least 10 weeks before the date of data collection and the monitored period must be of the same length before and after the implementation of the pilot measures.
- The number of inhabitants in the pilot area. This information is to be retrieved from census data.

### METHOD OF CALCULATION

The indicator should be computed **exogenously** according to the following steps:

- Retrieval of the number of crimes committed on public transport and at stops and stations in the pilot area from police department data.
- Retrieval of the number of inhabitants in the pilot area.
- **Estimation of the index** by computing the ratio between the number of crimes retrieved in the first step and the number of inhabitants obtained in the second step.

### **EQUATIONS**

The equation computing the index is the following:

$$TraSecIndex = \frac{PTCrimes}{Pop}$$

Where:

PTCrimes = Number of public transport-related crimes in the pilot area in the monitored period Pop = Population in the pilot area

### **ALTERNATIVE INDICATORS**

This indicator assesses transport-related security by assessing the number of crimes per inhabitant on board public transport and at stops and stations based on police records.

Alternative indicator **SOC\_SC\_SC1** tracks the share of residents in the pilot area who have experienced sexual harassment on board public transport or at stops and stations. This data is collected through surveys, allowing to capture unreported incidents. SOC\_SC\_SC2, relying on police reports, is fully significant and generally easier to compute, as it only requires retrieving data from local law enforcement authorities. However, SOC\_SC\_SC1 may be preferable when unreported incidents are a concern, or if the goal is to specifically assess the prevalence of sexual harassment in public transport settings.

Indicator **SOC\_SF\_PS1** measures perceived transport-related security. Since perceived security can differ from objective security, this indicator is more complementary than substitutive. Calculating it requires conducting a sample survey, but if one is already planned for other indicators, adding a question on perceived security would require minimal effort.