



## CIVITAS indicators

Shared mobility usage index – Version 1 (TRA\_SH\_US1)

### DOMAIN

 <p><b>Transport</b></p>	 <p>Environment</p>	 <p>Energy</p>	 <p>Society</p>	 <p>Economy</p>
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### TOPIC

**Shared mobility**

### IMPACT

**Use of shared mobility**

*Increasing user registrations to shared mobility services*

**TRA\_SH**

### Category

<b>Key indicator</b>	Supplementary indicator	State indicator
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## CONTEXT AND RELEVANCE

Shared mobility services, including bike-sharing, e-scooter sharing, car-sharing, and ride-hailing, play an important role in sustainable urban transportation. They provide flexible alternatives to car ownership, encouraging a shift toward more sustainable travel modes. Shared bikes and e-scooters provide low- or zero-emission transport options, while car-sharing optimizes vehicle usage and reduces parking demand, freeing up valuable urban space for other purposes. Additionally, shared mobility services improve accessibility by bridging first- and last-mile gaps in public transport. Once implemented, ensuring adoption is essential to fully realize the environmental and social benefits of these schemes.


This indicator provides a measure of the usage of shared mobility vehicles. **It is a relevant indicator when the policy action is aimed at increasing the number of trips made by shared mobility modes in the city. A successful action is reflected in a HIGHER value of the indicator.**

## DESCRIPTION

This indicator is an index obtained as ratio between the **number of user registrations to shared mobility services in the city** and the population in the city. The unit of measurement of the indicator is **shared mobility registrations per inhabitant**.

## 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 shared mobility service providers and census data	Significance: <b>0.75</b>	
<h3>INPUTS</h3> <p><b>The following information is needed</b> to compute the indicator:</p> <ol style="list-style-type: none"><li>The number of user registrations to shared mobility services per service provider in the city</li><li>The population in the city according to census data</li></ol> <p>The experiment would add sharing schemes in the city or change their characteristics (e.g., lower price), resulting in a higher number of user registrations.</p>		
<h3>METHOD OF CALCULATION</h3> <p><b>The indicator should be computed exogenously</b> according to the following steps:</p> <ul style="list-style-type: none"><li><b>Retrieval of the number of user registrations to shared mobility services per provider in the city.</b> This information can be obtained from the providers themselves.</li></ul>		

If in the 'before' scenario there are no sharing schemes in operation in the city, this value equals zero.

- **Retrieval of the number of inhabitants in the city.** This information can be obtained from census data.
- **Estimation of the index** by computing the ratio between the number of registrations calculated in the first step and the number of inhabitants obtained in the second step.

## EQUATIONS

The equation computing the index (last step of the method of calculation) is the following:

$$ShUseIndex = \frac{\sum_p UserReg_p}{Pop}$$

Where:

$UserReg_p$  = Number of user registrations to shared mobility provider  $p$  in the city

$Pop$  = Population in the city

## ALTERNATIVE INDICATORS

This indicator measures the number of user registrations to sharing schemes per inhabitant. An alternative indicator, **TRA\_SH\_US2**, instead tracks the number of weekly trips per inhabitant using shared vehicles. Since subscriptions are only an indirect measure of actual usage, TRA\_SH\_US2 is generally to be preferred, unless the objective is specifically to track user registrations. Both indicators rely on data from service providers and are simple to compute once the necessary data has been collected.

Should the focus be on the **availability** of shared vehicles, **TRA\_SH\_AV1** quantifies the number of shared vehicles present in the city per inhabitant.