

European Commission

Data visualization in the service of knowledge management in transport

TRIMIS, its database and the role of data visualization

- **TRIMIS:** Transport Research and Innovation Monitoring and Information System.
- one-stop-shop for information about **transport research and innovation** activities at the EU and Member State level and European policy support tool.
- Established in **2017** by the European Commission at **Joint Research Centre** (Ispra, Italy).
- The **TRIMIS database:** open database of **transport-related research and innovation projects**. It contains essential data about research and innovation projects supplemented by original, transport specific information, e.g. transport mode and sector, developed technologies or project alignment with strategic research and innovation areas for transport sector.

Data visualization

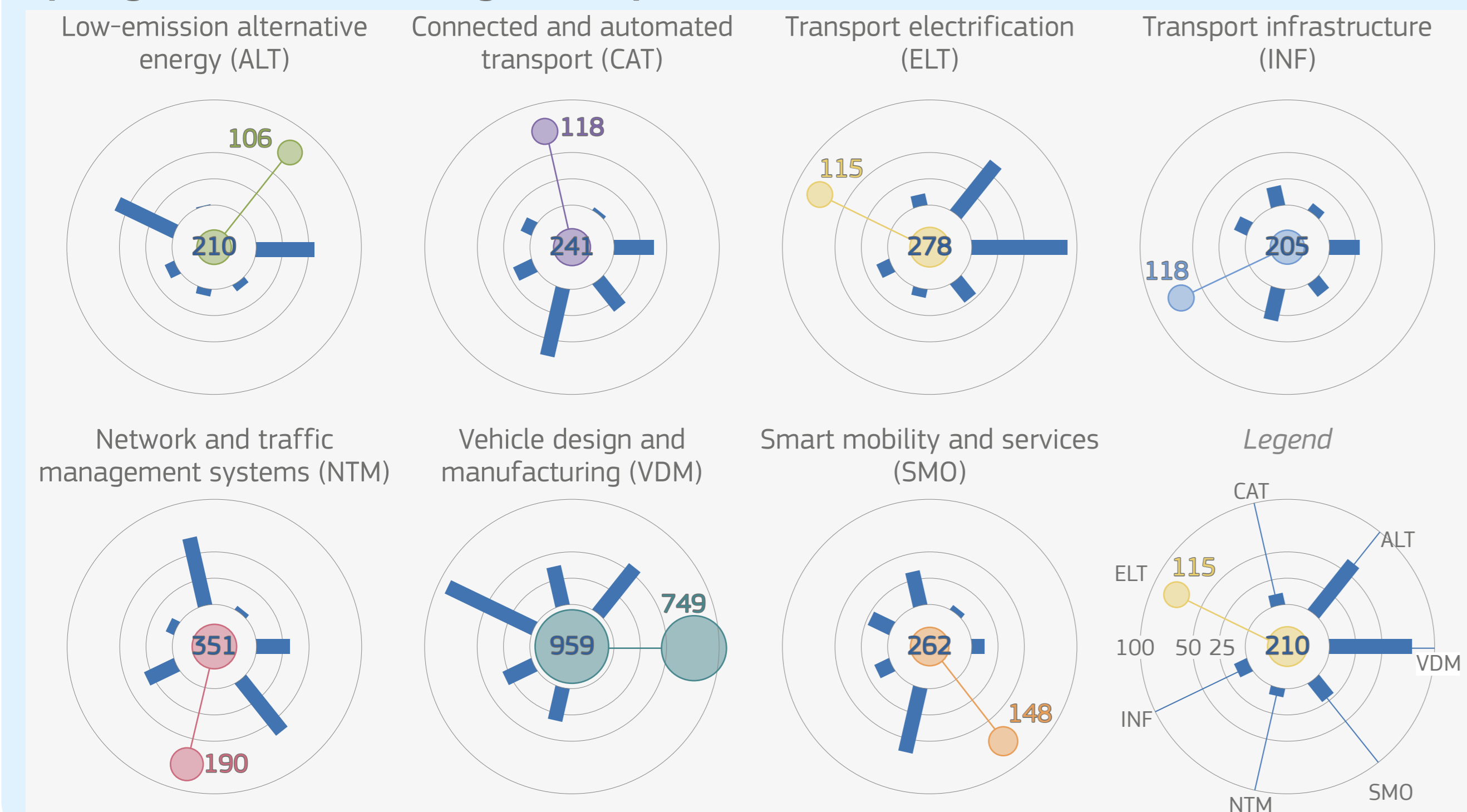
- Supports **knowledge management, communication** and **dissemination** activities, helping to get the best out of the database and showing its complexity and richness.
- Makes the complex database more **accessible** and understandable to a wider audience, enhancing **stakeholder engagement**.
- Uses various **types of data visualizations** to present complex information based on data collected in the TRIMIS database.

The poster illustrates how **data visualization** strengthens **innovative approaches to knowledge management** in the transport sector and supports research and policy-making in the field.

Strategic transport research and innovation areas

Each project is tagged with one or more strategic research and innovation areas, based on the scope of the project.

Synergies between strategic transport research and innovation areas



Small multiples of radial charts are combined with **bubble charts** in the centre. Each **multiple** shows potential synergies between a particular strategic area and the remaining ones. The **length of each bar** indicates synergies showing how many projects cover both the main and the selected areas. The bars follow the same order as shown in the legend. The **size of the bubble** in the centre reflects the total number of projects with the strategic area in the scope, while the size of the orbiting bubble represents projects focusing exclusively on the main strategic area. The sizes of bubbles enable comparisons and the values are displayed for clarity.

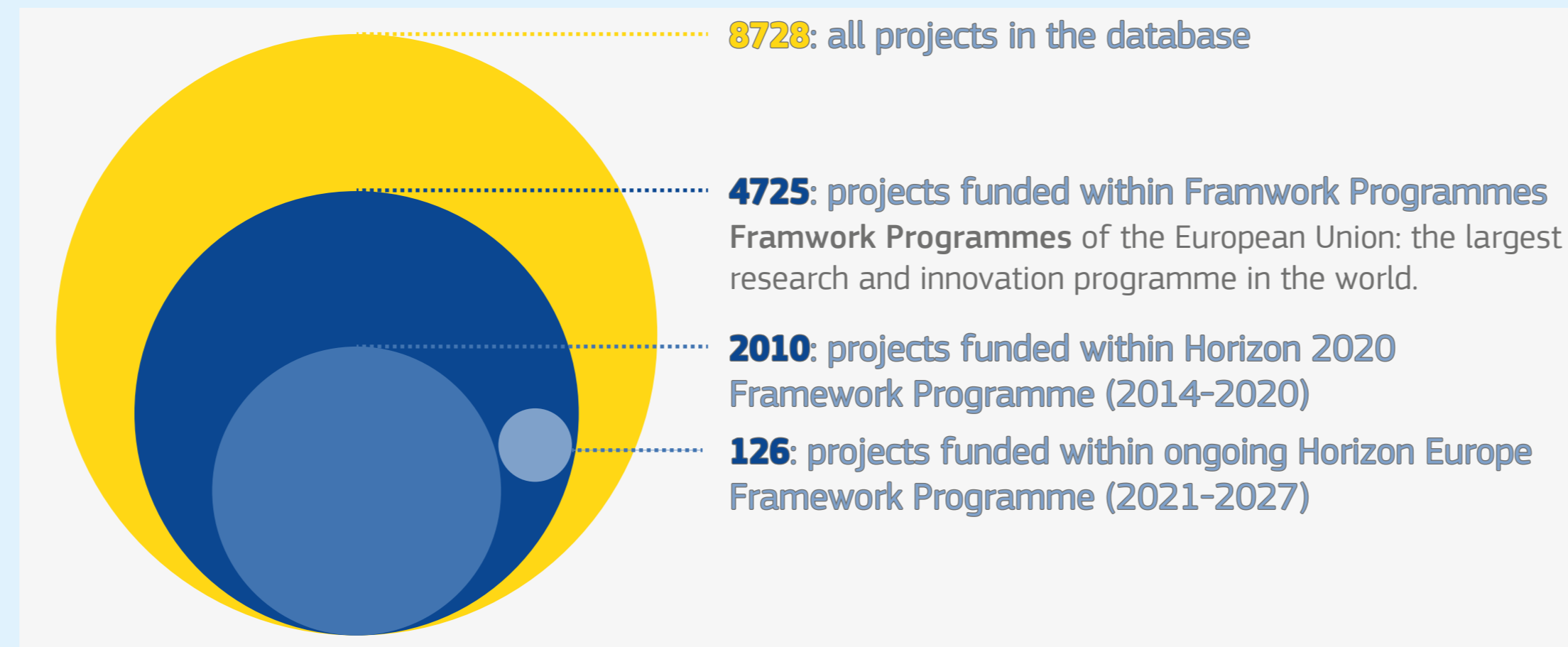
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Composition of the TRIMIS database

The TRIMIS project collects and disseminate data from scattered and sometimes hardly available sources.

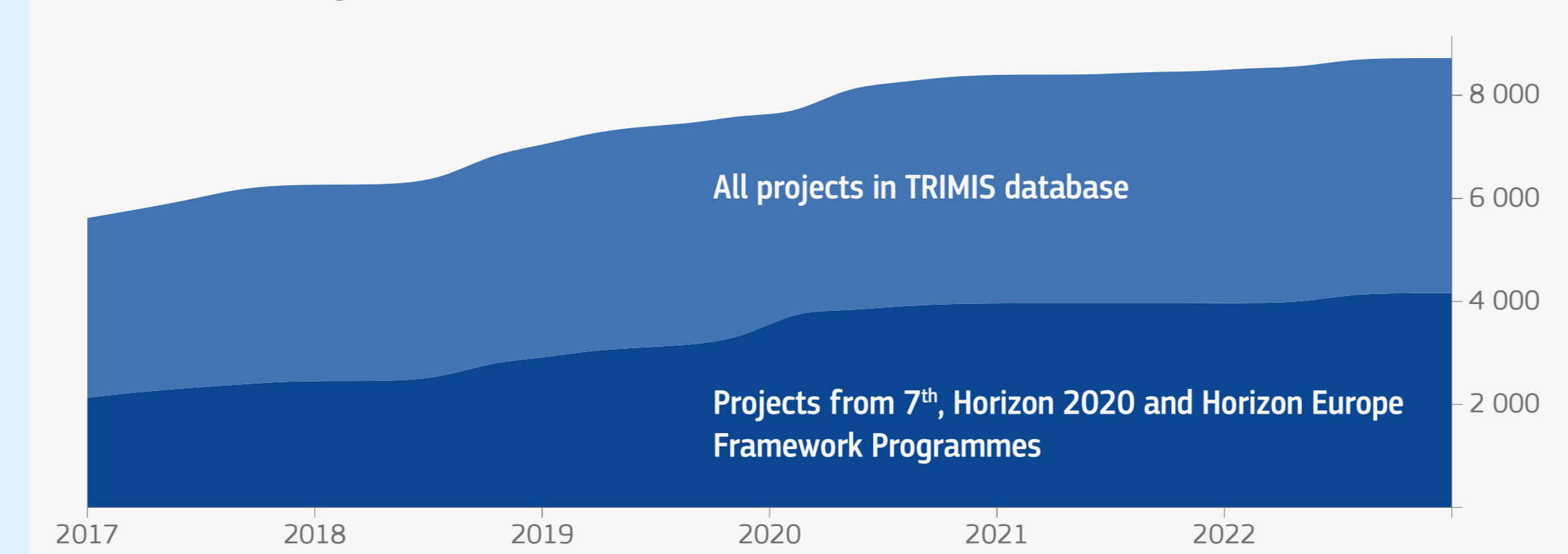


Nestled bubble chart presents shares of the main categories in the TRIMIS database.

Growing database

Newly identified, transport-related research and innovation projects are regularly added to the database.

Number of projects in the database (2017-2023)

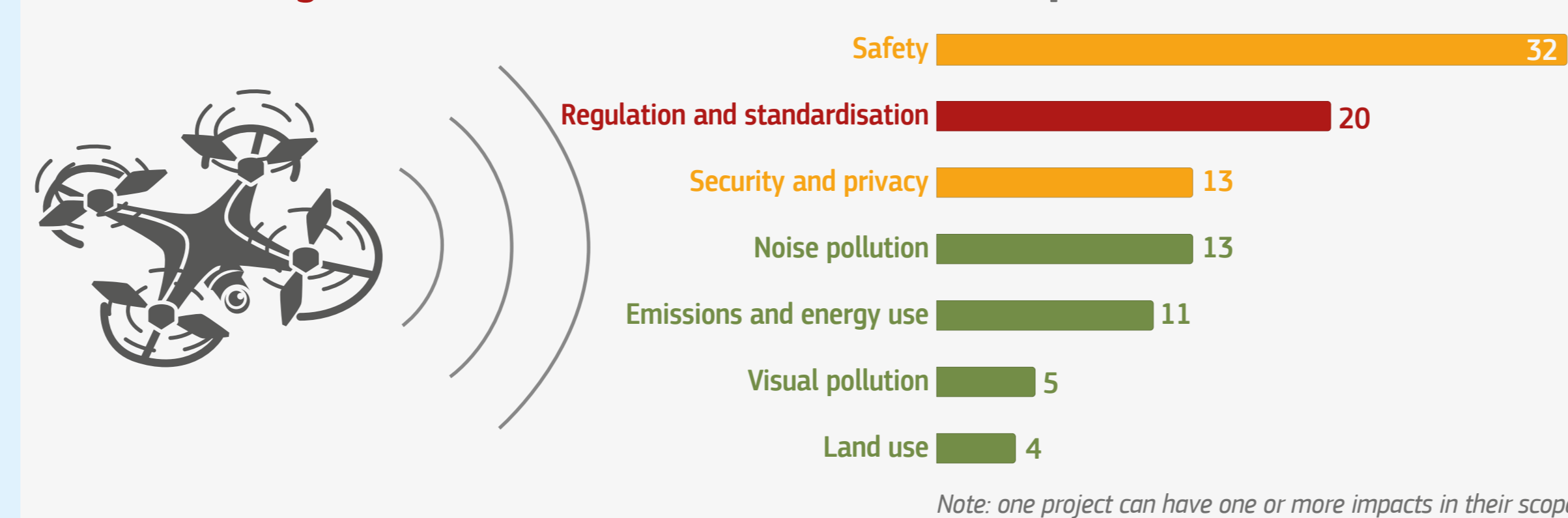


Area chart shows an increase in the number of projects in the database. **Colors** enable comparisons between categories.

Additional information specific to particular analytical works

Analytical work provides supplementary information for the selected subset of records.

Number of projects with environmental and socio-economic impact of drones or works on regulations and standardisation in their scope



Note: one project can have one or more impacts in their scope

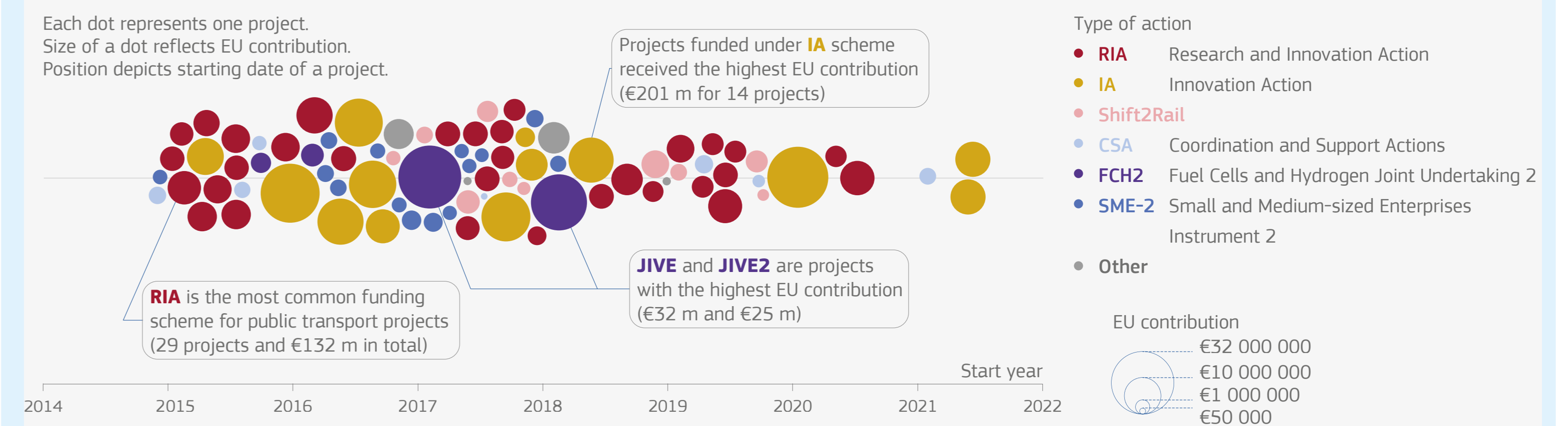
Bar chart compares categories. The **icon** enhances the chart's attractiveness. **Colors** are used in the title to help in the identification of macrocategories, replacing legend.

Funding source and allocated EU contribution

The TRIMIS database includes funding source, total budget and allocated EU contribution for all European projects.

Most public transport projects are funded under RIA scheme while IA scheme contributes the most

European projects and allocated EU contribution by type of action and start date



Beeswarm chart shows individual projects. **Color and size** indicate funding source and scale of EU contribution. **Explanatory title and annotations** help with interpretation.

Transport modes

Projects in the TRIMIS database are tagged by one of transport modes.

Number of projects in the TRIMIS database by transport mode

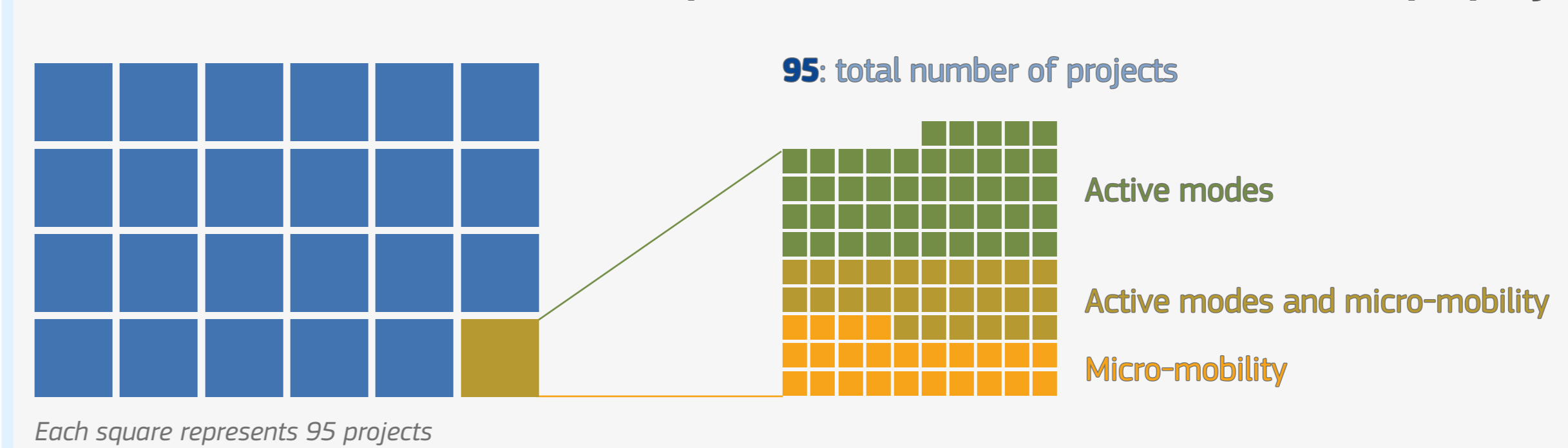


Gauge chart indicates the share of projects with a particular transport mode in the total number projects in the database. **Icons** relate to the transport mode.

Active modes and micro-mobility

The TRIMIS database contains specific tags which enable to identify projects with active modes and micro-mobility in their scope.

Active modes and micro-mobility in Horizon 2020 and Horizon Europe projects



Waffle chart shows part-to-whole relationship with a zoom-in to the **unit chart** to provide more detailed information. In the unit chart, each square represents one project.

Joint Research Centre

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