

# The International Cartographic Association

Tim Trainor  
*President, ICA*



# ICA Members

## Celebrating 60 years in 2019

- National Mapping and Geospatial Agency
  - National Geographical Institute
  - Department of Surveys and Mapping
  - Geographical Military Institute
- National Cartographic Association
- National Committee for Cartography

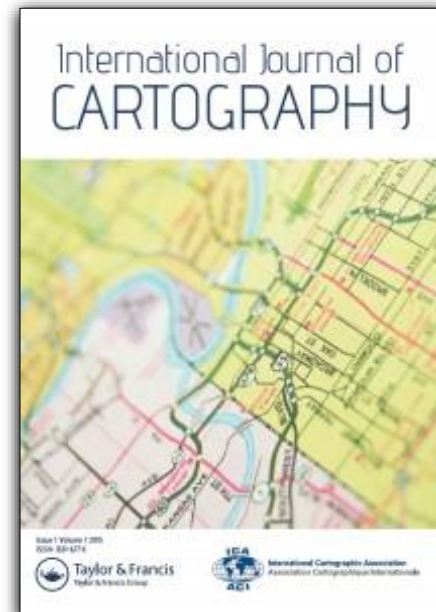
# ICA Collaborations

- One of the founding organizations of the UN-GGIM Geospatial Societies Network
- Member of the International Science Council
- MOUs with many organizations

# The Strength of the ICA

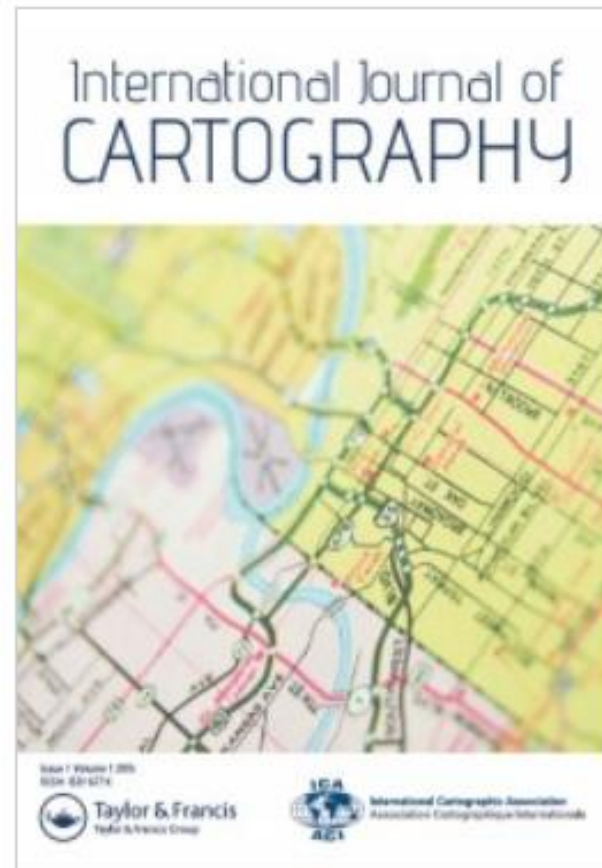
- People
  - 28 Commissions focused on specific cartographic and geospatial topics
- Conferences
  - International Cartographic Conferences (ICCs)
    - 2019 Tokyo, Japan
    - 2021 Florence, Italy
    - 2023 Cape Town, South Africa
- Publications
  - International Journal of Cartography (peer reviewed)
  - ICA News
  - eCARTO News
  - ICA website – [www.icaci.org](http://www.icaci.org)
  - ICC Proceedings

# ICA Publications



# International Journal of Cartography


International Journal of Cartograph



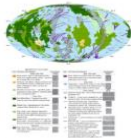
# Web page announcements...

## Communication and engagement SP9

**Updates from the commissions**




3D Printed Small Bodies on Your Desk  
A new set of small and mid sized planetary body [...]  
*Planetary Cartography*




The First Global Geologic Map of Europa  
The global geologic map of Europa will provide the first insight into [...]  
*Planetary Cartography*

Big in Japan!  
Commission Chair Kenneth Field and Vice-Chair Ian Muehlenhaus attended the [...]  
*Map Design*

New venue for pre-ICC workshop SDI-Open 2019  
We are very glad the SDI-Open 2019, which is going [...]  
*SDI and Standards*



Pre-ICC Workshop on Cartography as a Cultural Encounter: How East and West have Mapped and Influenced Each Other  
The ICA Commission on the History of Cartography and ICA Commission on Topographic [...]  
*Topographic Mapping*



Invitation: 3rd International Workshop on Spatial Data Quality  
Following previous successful workshops in 2015 and 2018, EuroGeographics and [...]  
*SDI and Standards*

# eCARTO News (Quarterly)



## eCARTO News September 2019

eCARTO News captures the latest cartographic news and developments from around the world. If you have any general cartography items of interest then please email them to David Fraser, [editor of eCARTO News](#).

### People in Cartography

- Reddit's Papertowns puts cartography firmly on the map – [irishtimes.com](#) ⇨
- Persuasive Cartography: An Interview with Map Collector PJ Mode – [daily.jstor.org](#) ⇨
- Mapping My Life Through a Changing Tel Aviv – [citylab.com](#) ⇨
- The ecologist who wants to map everything – [nature.com](#) ⇨
- He's Trying To Fill In The Gaps On Google Street View — Starting With Zimbabwe – [npr.org](#) ⇨

### Manipulated maps content

- MapLab: Trump's 'Mutilated' Storm Map – [citylab.com](#) ⇨
- City of Women Map Renames NYC Subway Stations After Famous Women – [untappedcities.com](#) ⇨
- Against the 'How to Lie with Data' Classification – [gim-international.com](#) ⇨
- How Did Lake Travis' Sometimes Islands Get Their Name? – [kut.org](#) ⇨
- Start with the Map – [newyorker.com](#) ⇨
- Why Germany is a blank spot on Google's Street View – [bigthink.com](#) ⇨
- The Renaissance Map That Filled My Childhood With Monsters – [citylab.com](#) ⇨
- Drink Map of Oxford – [bodleianshop.co.uk](#) ⇨

### Special Mapping

- "Streets of Gold" map wins two British Cartographic Society Awards – [gisuser.com](#) ⇨

## David Fraser



David is the editor of eCARTO news. He is the former Chair of the ICA Commission on Education and a retired professor of RMIT University Melbourne.

## Search

## About ICA

The mission of the International Cartographic Association (ICA) is to promote the disciplines and professions of cartography and GIScience in an international context. More about ICA ...

## ICC2019



## International Journal of Cartography

International Journal of  
Cartography

International Cartographic Association  
Association Cartographique Internationale



# ICA Commissions

- Workshops
- Research
- Publications
- Websites
- International collaboration

# April 27 – 30, 2018

## ICA COMMISSIONS JOINT WORKSHOP

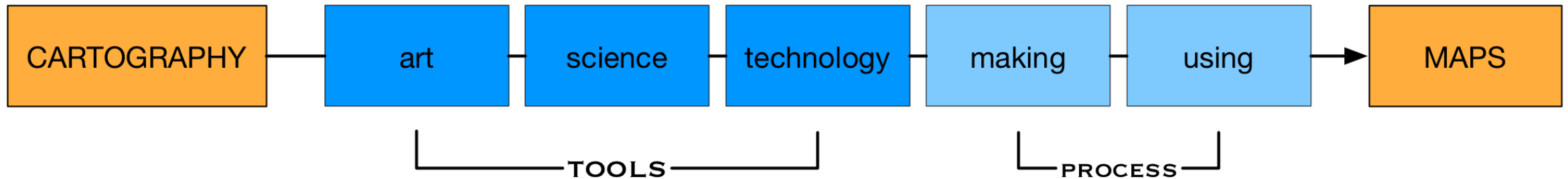
### ATLASES, COGNITION, USABILITY

ICA Commission on Atlases in co-operation with  
ICA Commission on Cognitive Issues in Geographic Information Visualization and  
ICA Commission on Use, User and Usability Issues

do cordially invite **Papers and Attendance for the Joint Workshop** in Olomouc,  
Czech Republic on April 27 – 30, 2018

# Cartography

standing



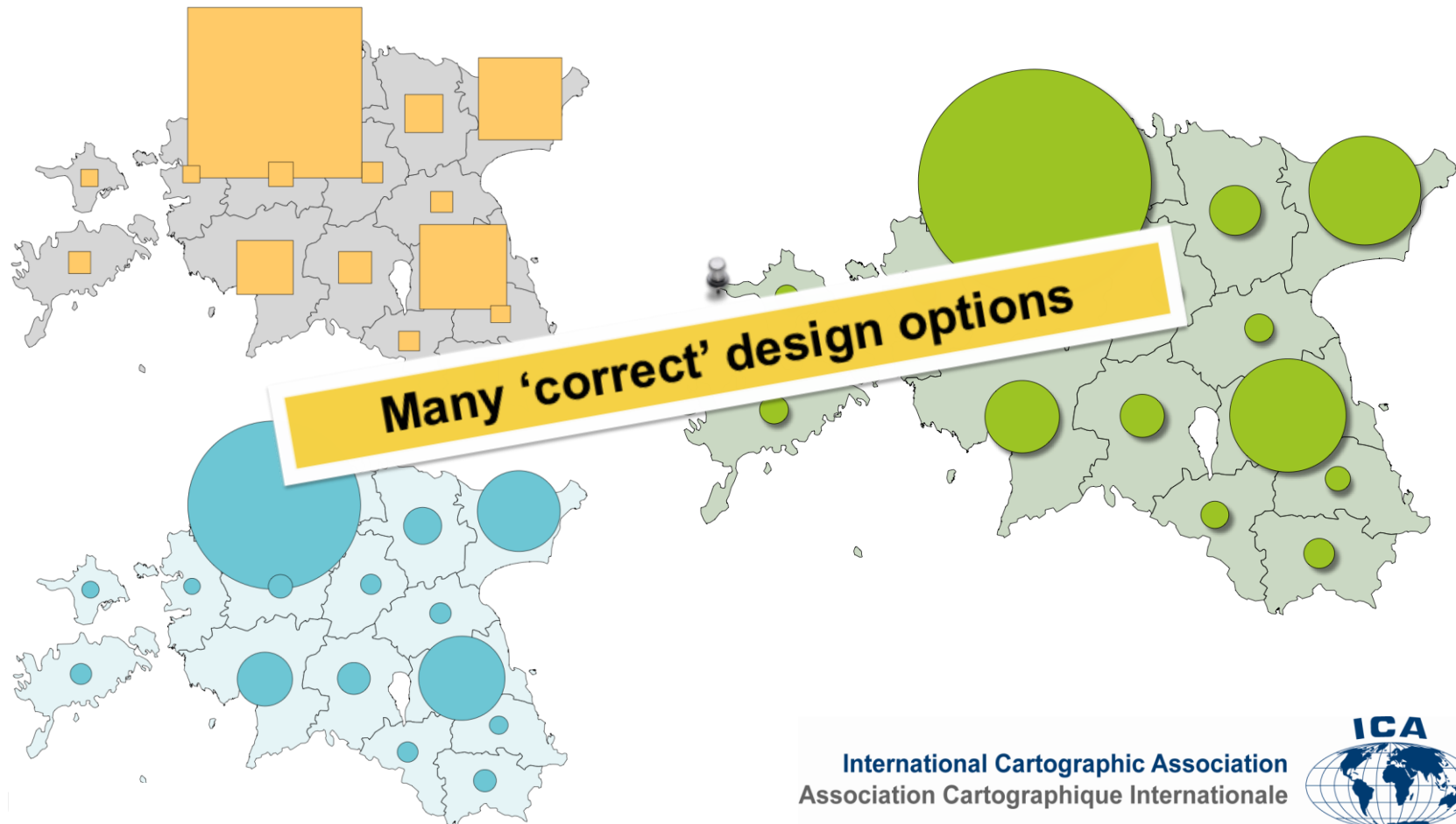
Cartography  
technology  
information

International Cartographic Association  
Association Cartographique Internationale



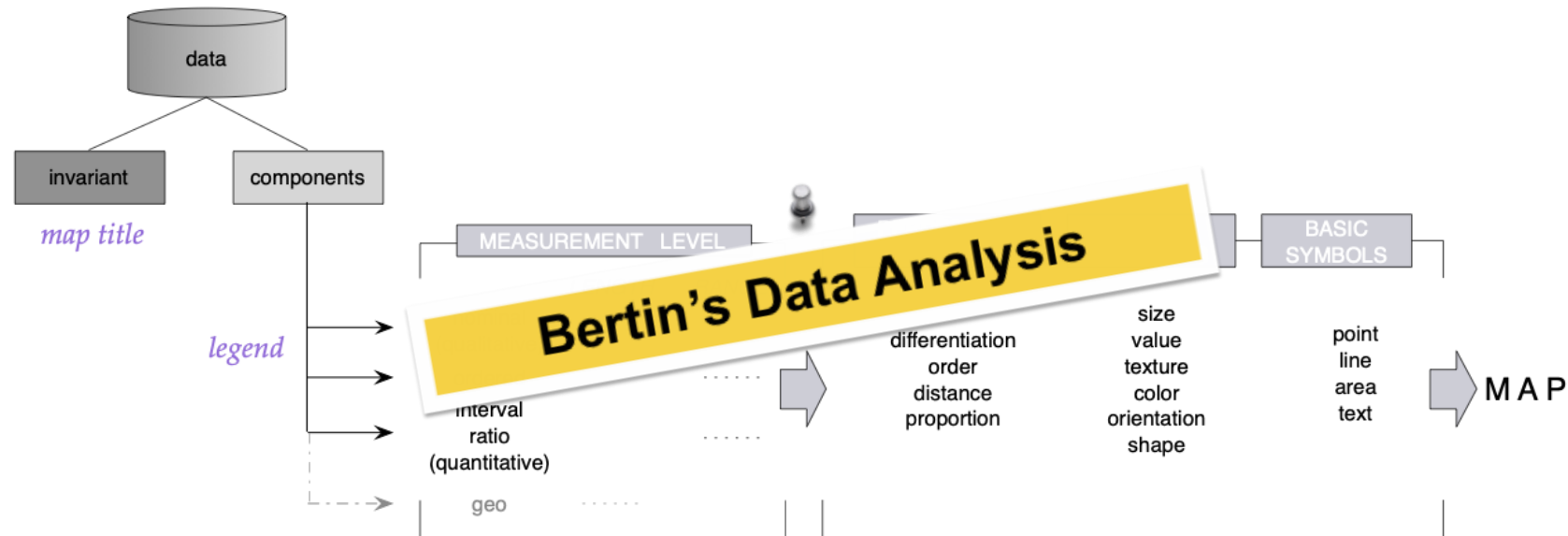
# About Cartography (tools)

- ...the **art**, science, and technology of making and using maps



# About Cartography (tools)

- ...the art, **science**, and technology of making and using maps



# About Cartography (tools)

---

- ...the art, science, and **technology** of making and using maps



# About Cartography (process)

---

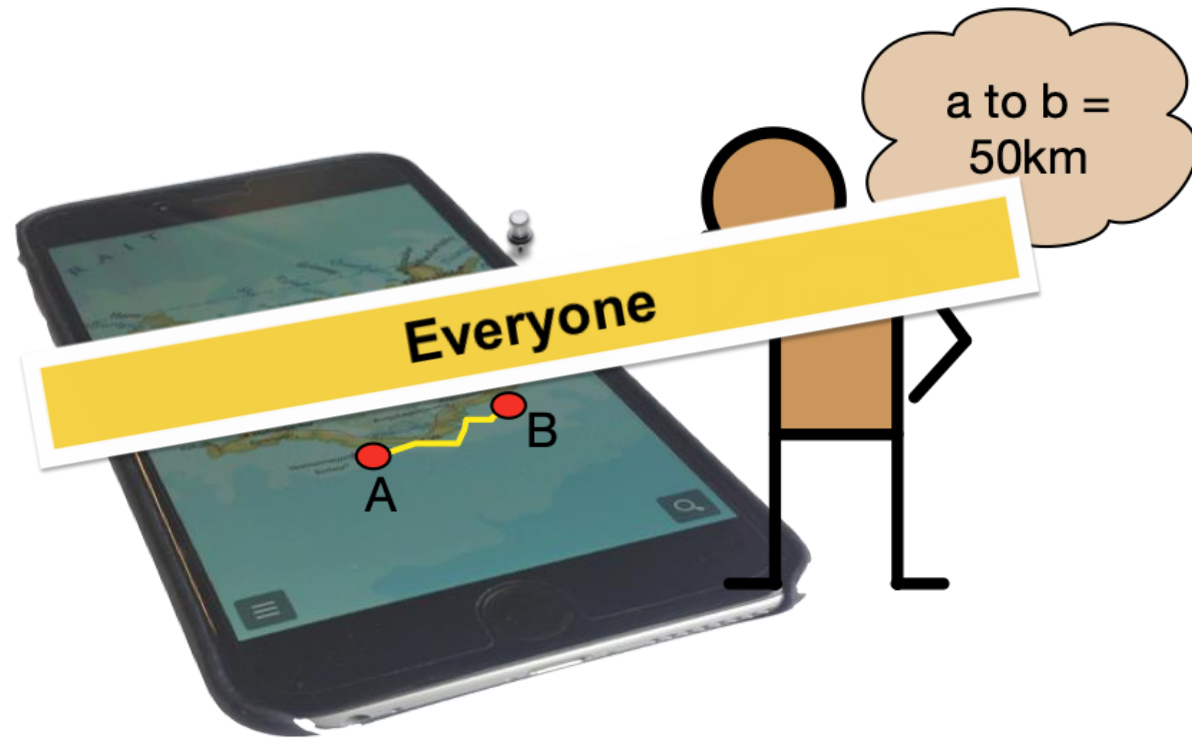
- ...the art, science, and technology of **making** and using maps



# About Cartography (process)

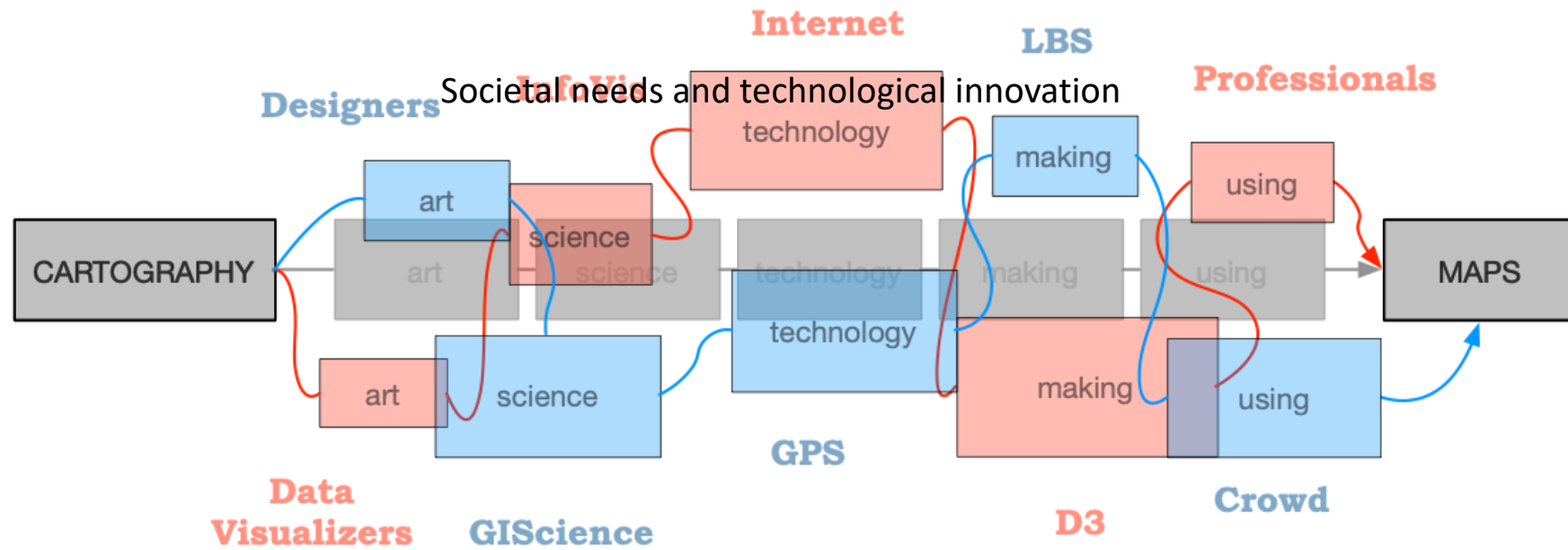
---

- ...the art, science, and technology of making and **using** maps



# Sustainability of the definition

---



# ICA Commission Alignment to Current Needs: The IGIF

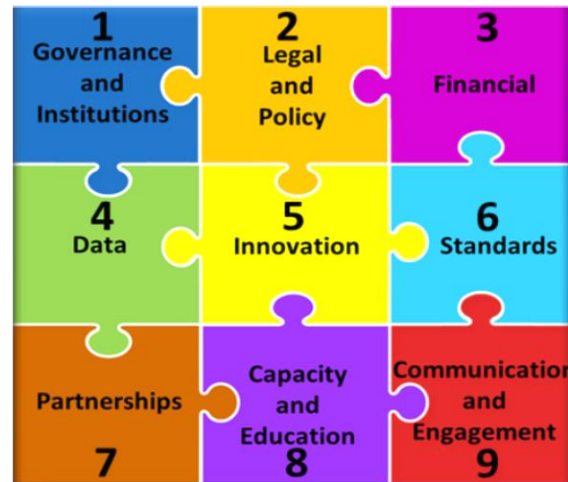
1. Cartography in Early Warning And Crisis Management

4. Topographic Mapping

4. Atlases

4. Map Production and  
Geoinformation Management

4. Marine Cartography



8. Education and Training

8. Cartography and Children

5. Geospatial Analysis and Modeling

5. Location Based Services

5. Open Source Geospatial Technologies

5. Sensor Driven Mapping

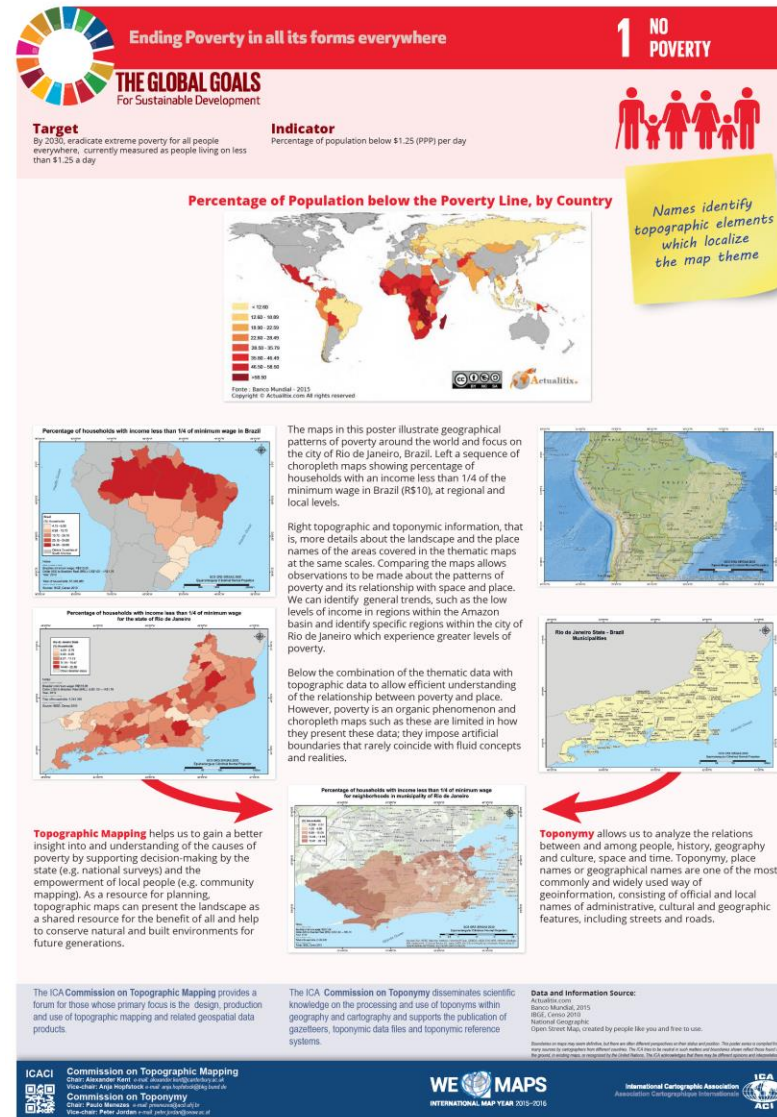
5. Ubiquitous Mapping

6. SDI and Standards


# ICA Commission Alignment to Current Needs: The SDGs



# ICA and SDG Goal 1 – No Poverty




# ICA and SDG Goal 2 – End Hunger



**End hunger, achieve food security and improve nutrition and promote sustainable agriculture**

**THE GLOBAL GOALS**  
For Sustainable Development

**2 ZERO HUNGER**



**Target**

End hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants to safe, nutritious and sufficient food all year round.  
Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production.

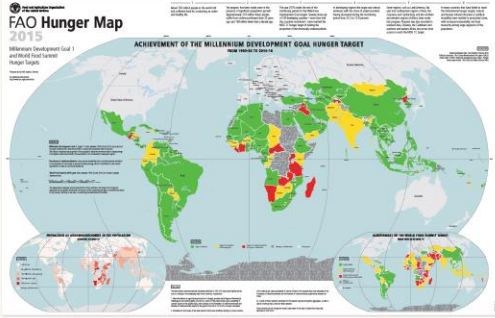
**Indicator**

Prevalence of Undernourishment (PoU)  
Prevalence of population with moderate or severe food insecurity  
Emissions of greenhouse gases in agriculture (per hectare of land and per unit of output).

*Maps communicate spatial patterns and spatio-temporal analysis results effectively*

**FAO Hunger Map 2015**

**ACHIEVEMENT OF THE MILLENNIUM DEVELOPMENT GOAL HUNGER TARGET**




**Mapping the reality of food insecurity in the World**

The prevalence of undernourishment (PoU) is analyzed for each country and visualized in the world map. Changes of PoU have been monitored and visually presented in the map. It is shown that the progress of reduction in number of undernourished has been made in all world regions, but at different rates.

Between the monitoring period of 1990-2015, more than 50% of the developing countries have at least halved the proportion of the chronically undernourished. But the map also shows that many countries still have not reached the international hunger target, with increased vulnerability and food insecurity among large segments of the population.

**Sustainable agriculture**

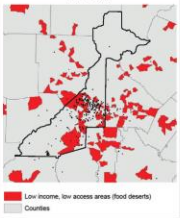
GIS and mapping have been used as enabling technology for sustainable agriculture and food production. The GIS and GPS-enabled mobile device technologies allow planners, agronomists and farmers to research and devise for resilient agricultural practices and better productivity. For example, emissions of greenhouse gases per hectare of land and per unit of output can be accurately estimated based on precise geolocation, observation, and measurement.



**Prevalence of population with moderate or severe food insecurity at fine urban and regional scales**

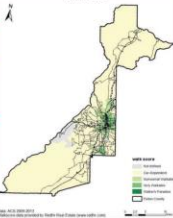
The prevalence of food insecurity also needs to be studied at the local level. This is often done with special consideration of the income level and people's spatial accessibility to healthy food. The mapping of the analysis results helps to identify areas where improvements are urgently needed. The maps below show such areas in Atlanta, USA.

**Map title**



Low income, low access areas (food deserts)

**Map title**



Food access by transit route

The ICA Commission on Geospatial Analysis and Modeling focuses on spatial analysis, modeling and data mining, often with links to the geovisualization and visual analytical approaches. The commission encourages concerted efforts on cutting edge or emerging research directions related to geospatial data and problems.

Note: Some of the maps come from publications from official sources.  
**Data and Information Source Info:**  
FAO, USDC researchers at the University of Georgia, USA

Boundaries and names are not necessarily endorsed by the ICA Commission on Geospatial Analysis and Modeling. The ICA Commission on Geospatial Analysis and Modeling is not responsible for any errors or for any consequences arising from the use of the information. The ICA Commission on Geospatial Analysis and Modeling is not responsible for any errors or for any consequences arising from the use of the information.

**ICACI**  
Commission on Geospatial Analysis and Modeling  
Chair: Saeed Anwar, Vice-Chair: Saeed Anwar  
President: Saeed Anwar, Vice-President: Saeed Anwar

**WE MAPS**  
INTERNATIONAL MAP YEAR 2015-2016

**ICA**  
International Cartographic Association  
Association Cartographique Internationale

# ICA and SDG Goal 4 – Quality Education



**Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

**4 QUALITY EDUCATION**

**THE GLOBAL GOALS**  
For Sustainable Development

**Target**  
By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes. And eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.

**Indicator**  
Completion rate primary and secondary / teachers in primary education, school life expectancy, out-of-school adolescents of primary school age and out-of-school adolescents of lower secondary school age.

*Maps help children understand our world*

Every person - child, young or adult - should be able to benefit from educational opportunities designed to meet his/her basic learning needs.

These needs comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and basic learning contents (knowledge, skills, values, and attitudes), indispensable to human beings to survive, allowing them to fully develop their capacities, living and working with dignity, improving life quality, making well-founded decisions, and continuing to learn.

Higher education institutes offering cartography courses

Cartography can play an important role in the goals proposed by the United Nations. Learning how to guide one's self into the geographic space, read maps and know how to use them as a spatial representation with a specific language is essential for the formation of autonomous citizens.

**Children who draw maps nowadays will be more conscious adults about the geographic space!**

The main goal of the ICA Commission on Cartography and Children is promote the use and enjoyment of maps by children and young people.

The Commission on Maps and Graphics for Blind and Partially Sighted People exchanges and disseminates information on the design of and production technologies for maps and graphics for blind and visually impaired people.

The Commission on Education and Training acts as a forum to maintain an overview of cartographic education worldwide.

**Commission on Cartography and Children**  
Chair: Carla Cristina Renato Simoes de Seta - e-mail: carla@carta.org  
Vice-chair: André Felipe Nogueira - e-mail: andre@carta.org

**Commission on Maps and Graphics for Blind and Partially Sighted People**  
Chair: Alexandre Cadi Estelle - e-mail: alex@carta.org  
Vice-chair: Valérie Ribaudo - e-mail: val@carta.org

**Commission on Education and Training**  
Chair: David Peters - e-mail: david@carta.org  
Vice-chair: Stefan Peters - e-mail: stefan@carta.org

**ICACI**

**WE MAPS**  
INTERNATIONAL MAP YEAR 2015-2016

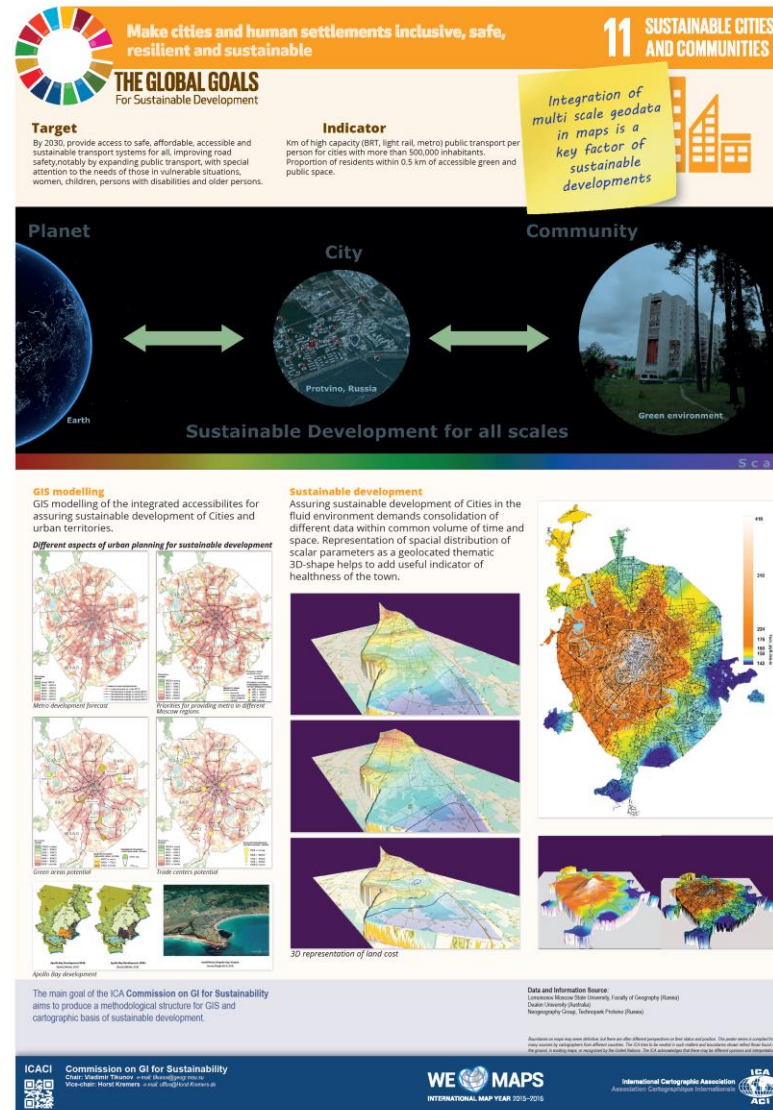
**International Cartographic Association**  
Association Cartographique Internationale

**ICA**  
**ACI**

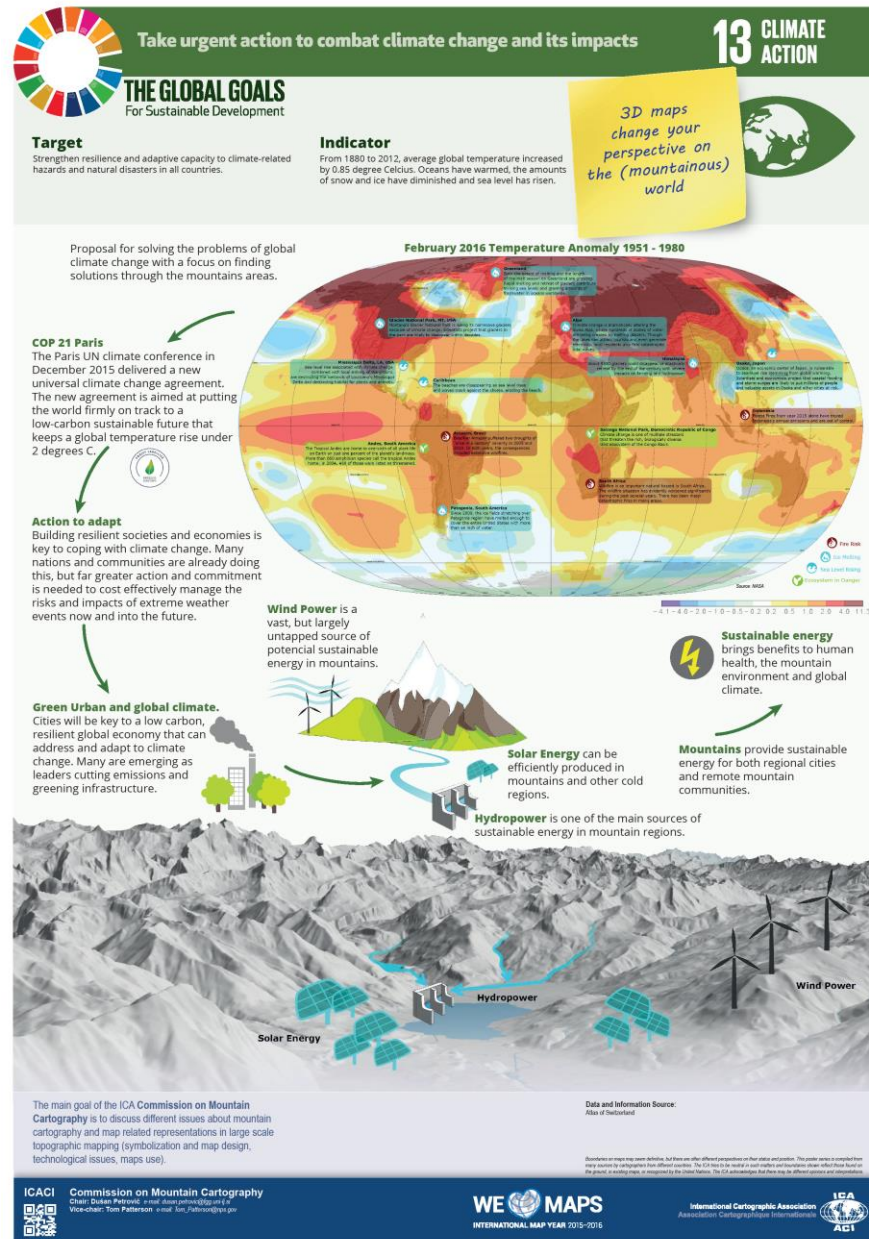
# ICA and SDG Goal 9 – Industry, Innovation, and Infrastructure



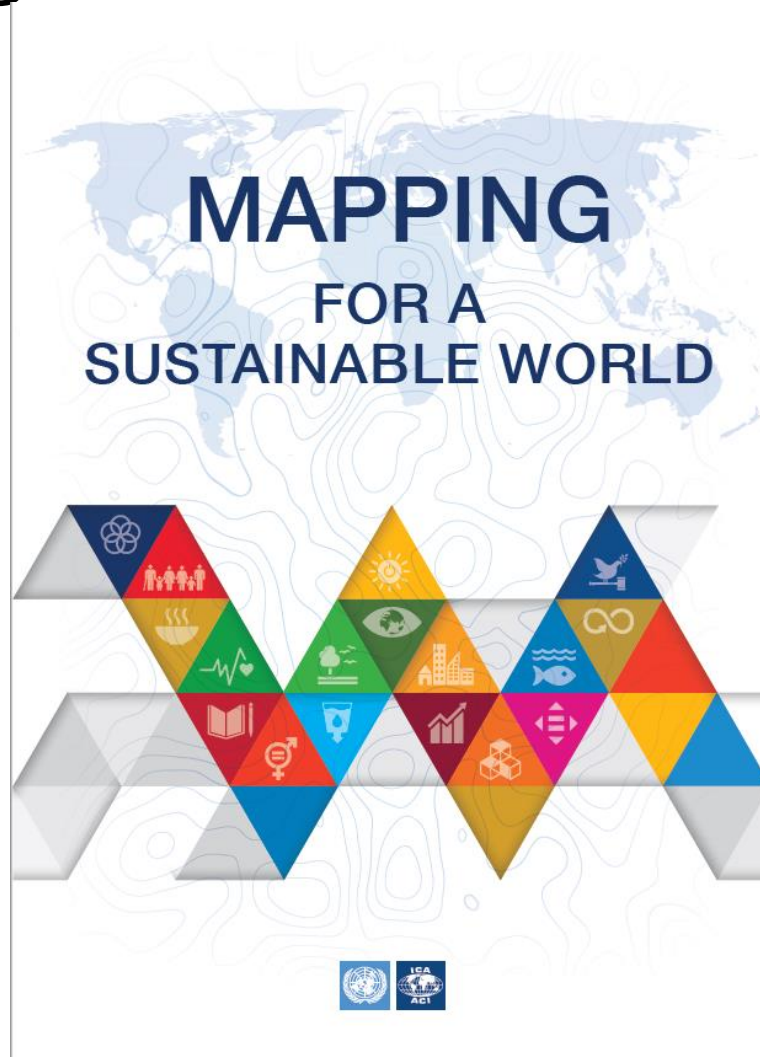
# ICA and SDG Goal 11 – Sustainable Cities and Communities



# ICA and SDG Goal 13 – Climate Action



# Forthcoming ICA Publication with the UN



International Cartographic Association  
Association Cartographique Internationale



# Regional Cartographic Conferences



International Cartographic Association  
Association Cartographique Internationale



# Future International Cartographic Conferences

2021

Sponsored by the  
Cartographic Association of Italy



# Future International Cartographic Conferences

2023

South Africa National  
Committee for the ICA

## 19th General Assembly and 31st International Cartographic Conferennce

13 – 18 August 2023



International Cartographic Association  
Association Cartographique Internationale



# Mosaic World Atlas Wiki – SP9



# What can you do?

- Check if you are one of 70 countries who are members of ICA
- Participate in the work of the ICA Commissions to learn and influence new developments in cartography and geospatial science and applications
- Sponsor young professionals to partake in ICA Commissions and International Cartographic Conferences
- Display your accomplished works at the International Map Exhibition
- Support a developing country to participate in the ICA



Let's make the world a better place with maps