Modern Cartography
Role and Contributions

Georg Gartner, New York 2013
How to enable the society spatially?

If SDIs are in place, what's next?

If more and more sensors are producing more and more data, what to do with Big Data?
efficient communication of spatial information to
answer space-related questions
support spatial behaviour
enable spatial problem solving
support spatial awareness
by
creation and use of maps anytime, anywhere
Modern Cartography?

Three Assumptions:
1. Cartography is relevant
2. Cartography is attractive
3. Cartography is modern
General Trends

Cartography is relevant

United Nations
Global Geospatial Information Management (UN-GGIM)
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

Promote Geospatial Advocacy and Awareness from data-centric ‘provider’ focus to a spatially enabled ‘user’ focus by government and civil society
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

Embracing trends in Information Technology
  open source, crowd sourcing, SOA, cloud, data as a service
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

Promoting data sharing, accessibility and dissemination

base set of reference and thematic data, harmonized and free of charge
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

**Assuring the quality of geospatial information**

articulate specific role Governments have in providing quality, current and authoritative national geospatial information
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

Assuring the quality of geospatial information

Recognize the value and the limitations, of the recent emergence of crowd sourcing, open street map, and volunteer geographic information
General Trends

Cartography is relevant

UN-GGIM Inventory of Issues

Assuring the quality of geospatial information

Consider the emerging use of modern mobile applications and visualization techniques to communicate issues and solutions
Cartography is attractive

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<tr>
<th>API</th>
<th>Popularity</th>
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Cartography is attractive
Interactive maps
Collaborative maps
Collaborative Mapping

User-defined base maps


Nachteil: Gestaltung lesbarer und für den Anwendungszweck sinnvoller Grundlagenkarten ist eine komplexe Aufgabe
Real-Time Cartography (Live Trains)

Live train map for Birmingham New Street

What is this?
This map shows all trains currently on approach to a particular station. The yellow pins are stations (click for a local map of that station), the red pins trains. The trains move in approximately real time, or rather quicker if you check the speed-up box.

How does it work?
Live departure data is fetched from the National Rail website, much like my [trainstuff site], and then it does a bit of maths and magic.

Who did this?
Matthew Somerville. Formerly a civil servant, I'm now normally to be found working for [my] [lozenge], helping create and update various popular democracy and civic websites, like [TheyWorkForYou] and [Birmingham].
But I'm always open to offers for other fun stuff :) I can be emailed at [matthew@lozenge.co.uk].
LBS and Ubiquitous Cartography
3D and 4D Cartography
Geo Media Techniques (AR, VR, CrossMedia, Social Media)
International Cartographic Association

mission

the **world authoritative body** for cartography and geoinformation science
International Cartographic Association
Instruments: Research Agenda

Geographic Information
Metadata and SDI
Geospatial Analysis and Modelling
Usability
Geovisualisation
Map Production
Cartographic Theory
History of Cartography and GI Science
Education
Society
International Cartographic Association
Instruments: Commissions

2002 ICA Mountain Cartography Workshop • Mt. Hood, Oregon
International Cartographic Association

Instruments: Outreach Programmes

Outreach and Capacity Building Programmes

Commission of Education
Commission of Maps and the Internet
Commission on Map Production
Working Group on Outreach Programmes
International Cartographic Association
Instruments: Open Source

Network on Open Source Geospatial Information Nodes
International Cartographic Association
UN endorsed International Year of the Map 2015

ICA endorsed by UN-RCC
Global Activities
International Cartographic Association

Instruments: Conferences

International Cartographic Conference
August 2013, Dresden, Germany

www.icc2013.org
International Cartographic Association
Instruments: Conferences

International Cartographic Conference
August 2015 Rio de Janeiro, Brasil