IBGE
Instituto Brasileiro de Geografia e Estatística

Spatial Data

Use and Dissemination

June/2011

Definitions

Spatial data

- Spatial data are data that have a spatial component, it means that data are connected to a place in the Earth.

GIS

- A Geographic Information System integrates hardware, software, data, and people to capture, manipulate, analyse and display all forms of geographically referenced information or spatial data.

- A GIS allows see, understand, consult and interpret data to reveal relationships, patterns and trends.

GIS and Statistic Offices

Why use GIS?

- Most of the human activities are linked directly or indirectly to location.
- There is an assumption that up to 80% of all activities is linked to location.
- Statistics are related to territory and it means that they could be linked to a specific location → they are spatial data
- GIS adds value to the traditional “table based” statistics.

GIS and Statistic Offices

How to use GIS in Census?

1- Preparation

- EA maps and address list → ensures the coverage in the next phases
- gives an overview of the census planning (pilot areas, household list, EA mapping, etc.)

2- Enumeration / Data Collection

- use map applications to ensure that enumerators know their work territories
- monitoring the enumeration process (maps for supervisors)

GIS and Statistic Offices

How to use GIS in Census?

3- Data Processing

- link census results to location
- estimation of the census coverage
- definition of localities
- enable spatial queries

4- Dissemination

- thematic mapping, atlas
- map applications in the internet

GIS and Statistic Offices

Very important

- The use of GIS in Census operations is an ongoing process to support the production of spatial data → statistics linked to location
- GIS is not just to produce Enumeration Maps every 10 years.
- Spatial Data dissemination is directly dependent to the use of GIS in previous stages.

Dissemination of spatial data

Three different potential users of spatial data

1. Advanced GIS users → researchers, experts

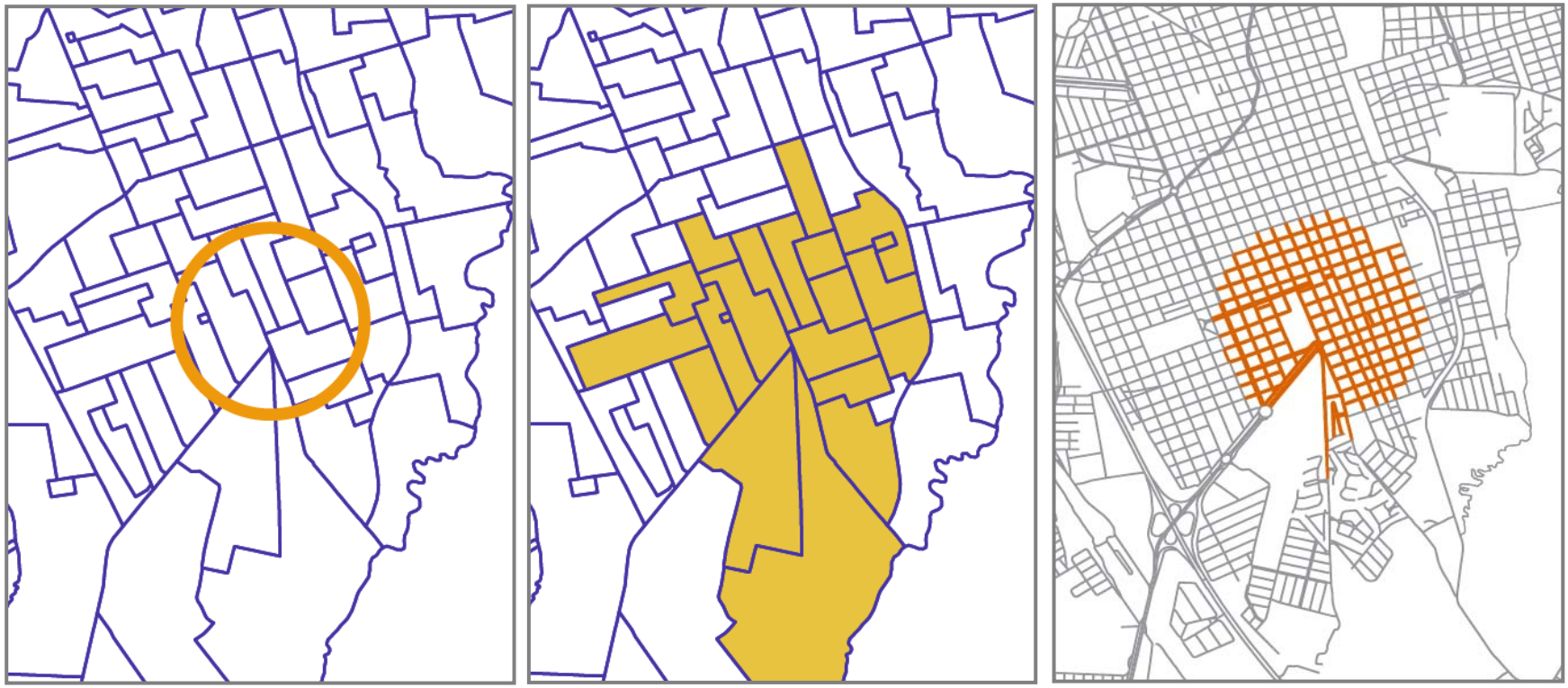
2. Statisticians, who do not use GIS tools but use statistical tools

3. Ordinary users with no GIS experience

Dissemination of spatial data

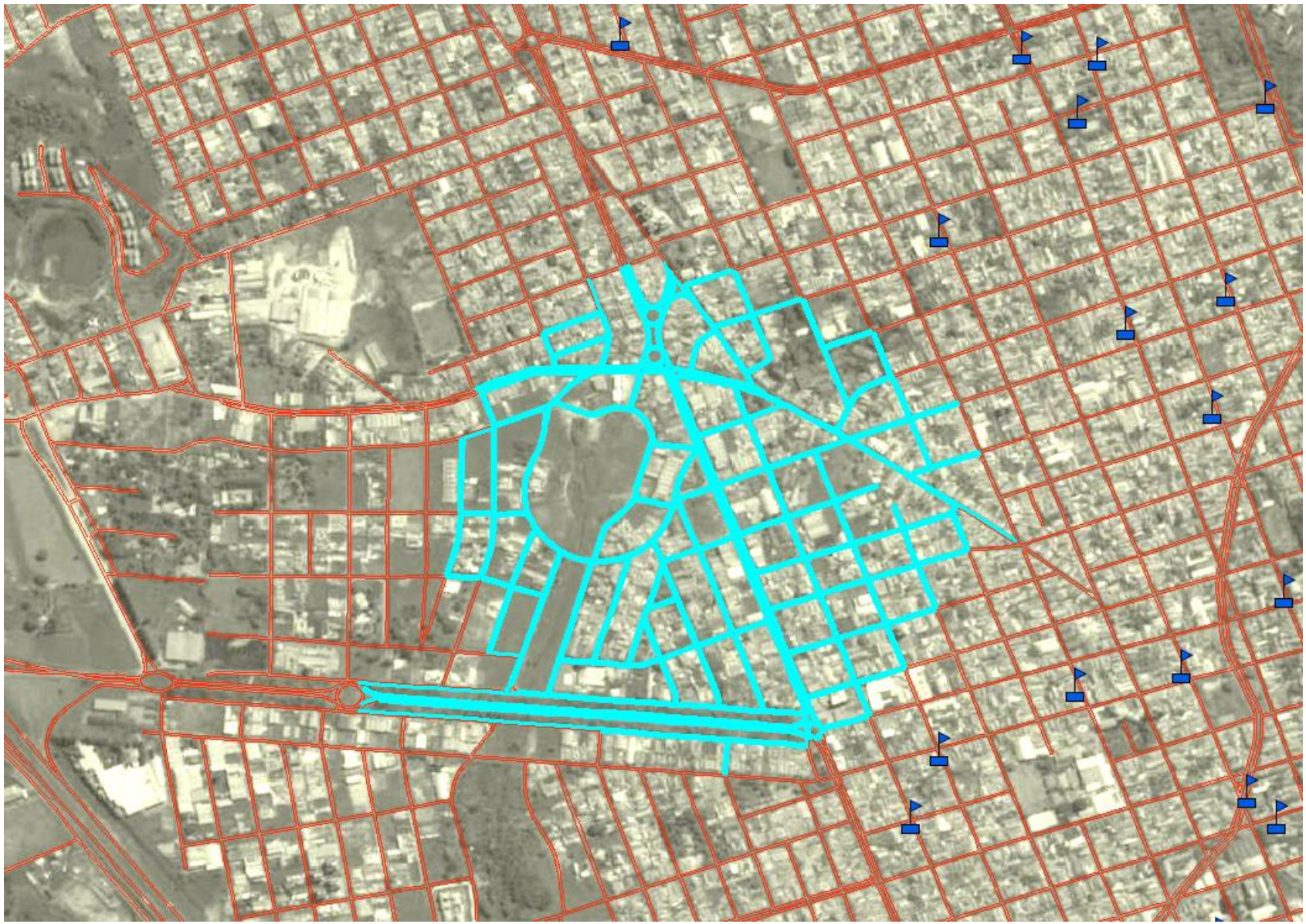
Examples of dissemination to different users

1. Advanced GIS users



Area of Study

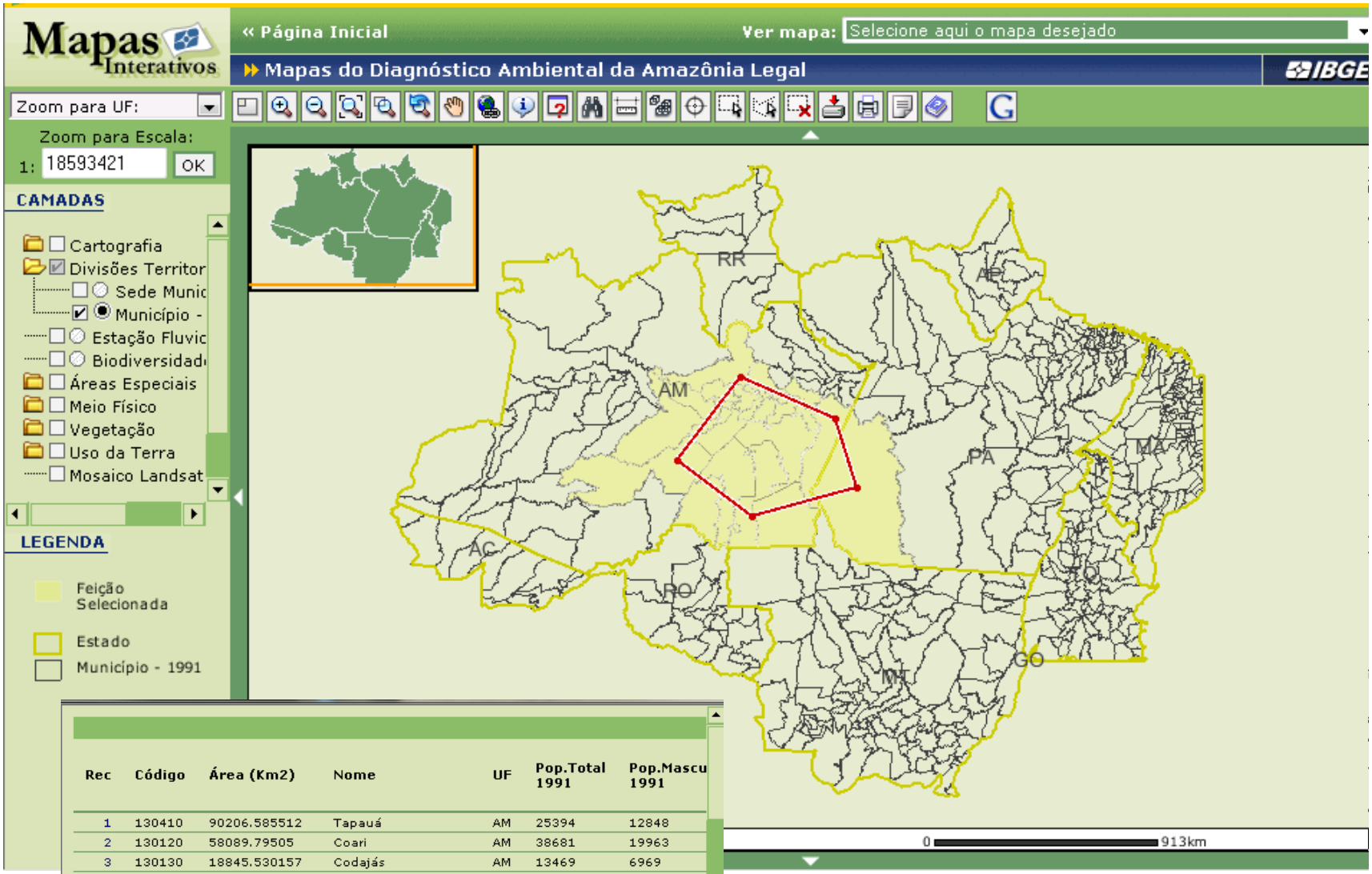
Spatial Query result



Dissemination of spatial data

Examples of dissemination to different users

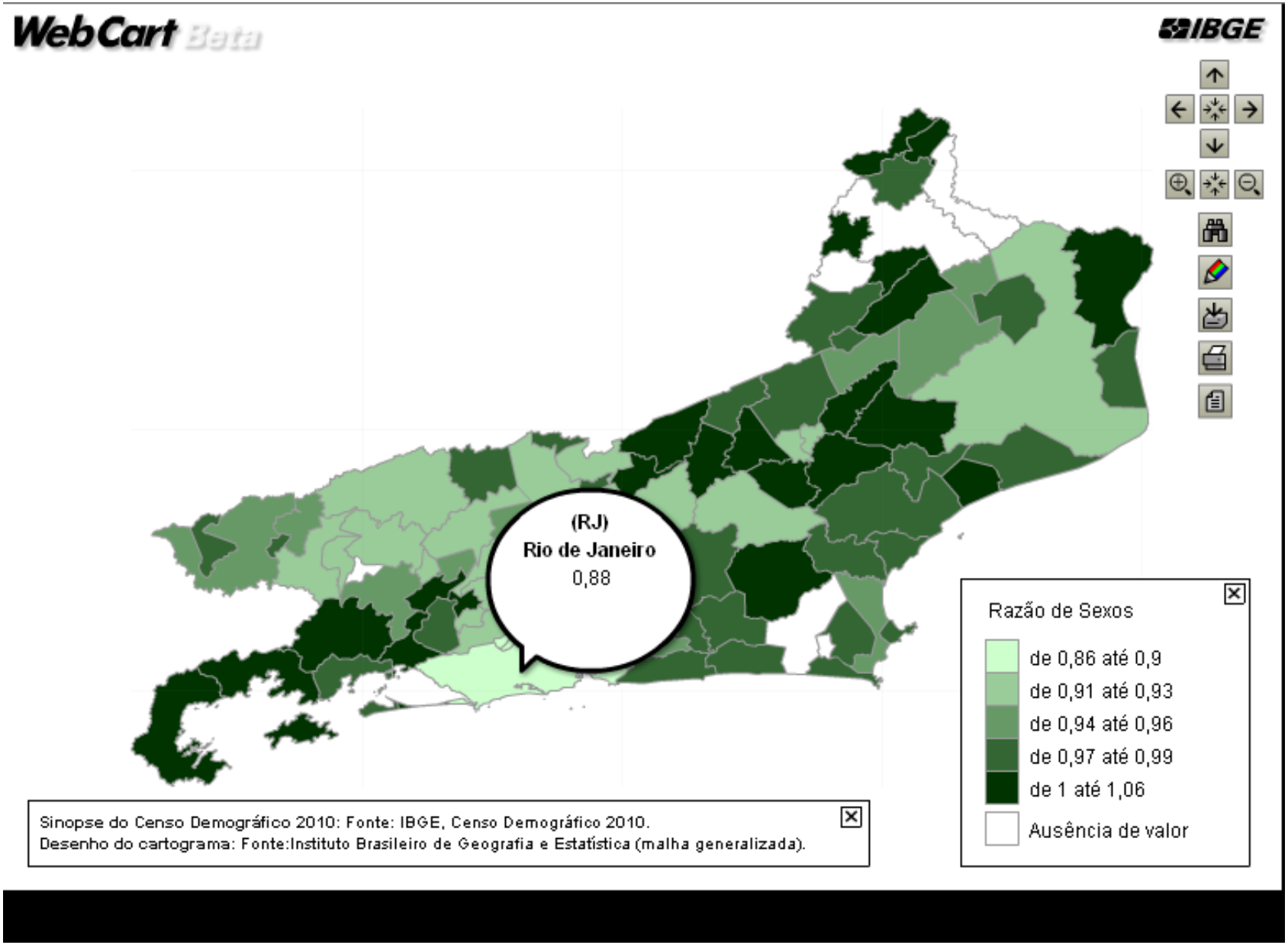
2. Statisticians, who do not use GIS tools


Mapas Interativos
« Página Inicial
Ver mapa:
Selecione aqui o mapa desejado
Mapas do Diagnóstico Ambiental da Amazônia Legal
Zoom para UF:
Zoom para Escala:
1: 18593421
OK
CAMADAS
Cartografia
Divisões Territor
Sede Munic
Município -
Estação Fluvic
Biodiversidad
Áreas Especiais
Meio Físico
Vegetação
Uso da Terra
Mosaico Landsat
LEGENDA
Feição Selecionada
Estado
Município - 1991
RR
AP
AM
PA
MA
AC
RO
TO
GO
MT
0
913km
Rec
Código
Área (Km2)
Nome
UF
Pop.Total 1991
Pop.Mascu 1991
1 130410 90206.585512 Tapauá AM 25394 12848
2 130120 58089.79505 Coari AM 38681 19963
3 130130 18845.530157 Codajás AM 13469 6969
4 130320 38470.56796 Novo Airão AM 14029 7348
5 130170 33874.740547 Humaitá AM 38735 20309
6 130010 6537.542616 Anori AM 8975 4648
7 130063 17571.727268 Beruri AM 7445 3936

Dissemination of spatial data

Examples of dissemination to different users

3. Ordinary users with no GIS experience


WebCart Beta
IBGE
(RJ)
Rio de Janeiro
0,88
Razão de Sexos
de 0,86 até 0,9
de 0,91 até 0,93
de 0,94 até 0,96
de 0,97 até 0,99
de 1 até 1,06
Ausência de valor
Sinopse do Censo Demográfico 2010: Fonte: IBGE, Censo Demográfico 2010.
Desenho do cartograma: Fonte:Instituto Brasileiro de Geografia e Estatística (malha generalizada).

IBGE

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