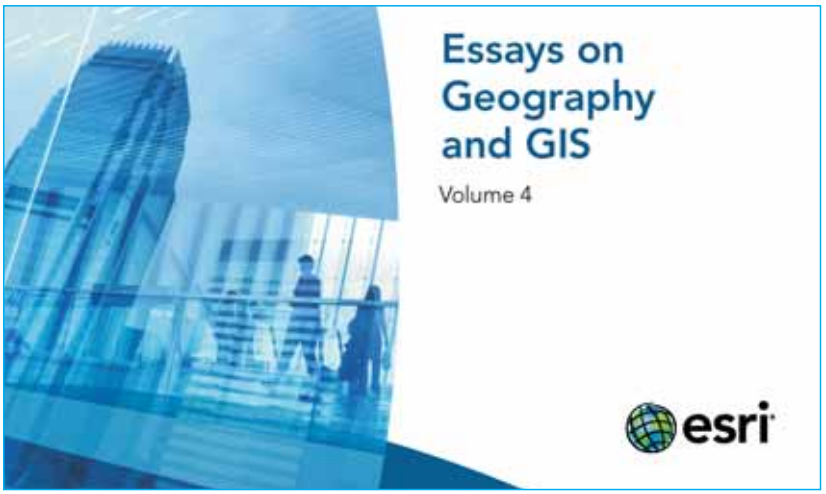
Essays on Geography and GIS, Vol. 4

The fourth volume of ESRI's free e-books titled Essays on Geography and GIS was published in May 2012. It consists of 18 short papers in 74 pages and is available free of charge at: http://www.esri.com/library/bestpractices/essays-on-geography-gis-vol4.pdf.



The volume contains the following papers:

- Through the Macroscope: Geography's View of the World (Jerome E. Dobson)
- A Role for Old-Fashioned Geographia in Education (Daniel C. Edelson)
- Zen and the Art of GIS Communication (Brandon B. Brown)
- Ecosystem Services—Learning to Leverage Natural Capital (Frederick Steiner)
- Looking Forward: Five Thoughts on the Future of GIS (Michael F. Goodchild)
- The Future Looks Bright for Spatial Thinkers (Jack Dangermond)
- Scaling Up Classroom Maps (Daniel C. Edelson)
- Managing Our Man-Made Ecosystems (Jack Dangermond)
- GIS and Geography: Interactions with the Humanities (Doug Richardson)
- The Challenge of Defining Geo-Literacy (Daniel C. Edelson)
- Let's Exchange Competition for Cooperation (Claudia Paskauskas)
- A National GIS Infrastructure for Health Research (Doug Richardson)
- The Intersection of GIS and Gaming (Matt Artz)
- Understanding Our World (***)
- From Maps to GeoDesign (Lilian Pintea)
- Making Sense of Our Sensored Planet (Matt Artz)
- Hand in Hand—Spatial Information for Latin America (Santiago Borrero)
- Delivering GIS in a Period of Unsustainable Growth (Corey Halford)

I would like to emphasize *Looking Forward: Five Thoughts on the Future of GIS* by M. F. Goodchild. According to the author, predicting the future is very risky, especially the future of GIS. However, the author considers such considerations useful and hopes his work will motivate others to consider the topic. He states that open spaces were the most important domain of GIS spaces. GPS signals are strong and reliable in open spaces. Nevertheless, an average American spends only 13% of his time in open spaces. Meanwhile, GIS provides almost no support for moving in closed spaces, such as malls, hospitals, and airports. The author indicates two main issues related to application of GIS in closed spaces. There are several billion buildings on Earth and it would take approximately three billion gigabytes to store data about them in a database, including data on their interiors. Existing technology could handle this, but it would take approximately 10% of USA's gross domestic product in the next ten years. In other words, ten percent of American workers would have to work on this project for ten years. Furthermore, the project would also require efficient methods of determining position in closed spaces. According to the author, using GIS in closed spaces and its merging with GPS in open spaces represents an enormous commercial potential.

Several articles emphasize geodesign and education. The term geodesign has become increasingly common in geoinformation science literature. According to one definition, geodesign is planning based on knowledge how the world functions, expressed in simulations based on GIS (see Geodetski list 2011, 1, 63–64).

It is also worth pointing out Erick van Rees's overview of the fourth volume of Essays on Geography and GIS (Geoinformatics 2012, 5, 51). According to him, the term geodesign is still a mystery. He wonders whether it is the same as integrating spatial planning and modelling with GIS and what makes geodesign different from spatial planners' work. The term obviously implies something new, but it is not completely clear what it is.

Nedjeljko Frančula

Essays on Geography and GIS, Vol. 4

Četvrti svezak serije besplatnih ESRI-jevih e-knjiga pod nazivom Essays on Geography and GIS objavljen je u svibnju 2012. Sastoji se od 18 kratkih priloga na 74 stranice i besplatno je dostupan na adresi: http://www.esri.com/library/bestpractices/essays-on-geography-gis-vol4.pdf.

Svezak sadrži ove priloge:

- Jerome E. Dobson: Kroz makroskop: geografijin pogled na svijet (Through the Macroscope: Geography's View of the World)
- Daniel C. Edelson: Uloga staromodne geografije u obrazovanju (A Role for Old-Fashioned Geographia in Education)
- Brandon B. Brown: Zen i vještina komuniciranja GIS-om (Zen and the Art of GIS Communication)
- Frederick Steiner: Usluge ekosustava – Učenje iskorištvanja prirodnog kapitala (Ecosystem Services – Learning to Leverage Natural Capital)
- Michael F. Goodchild: Pogled unaprijed: pet razmišljanja o budućnosti GIS-a (Looking Forward: Five Thoughts on the Future of GIS)
- Jack Dangermond: Budućnost je svijetla za prostorne mislioce (The Future Looks Bright for Spatial Thinkers)
- Daniel C. Edelson: Povećavanje učioničkih karata (Scaling Up Classroom Maps)
- Jack Dangermond: Upravljanje ekosustavima koji su čovjekovo djelo (Managing Our Man-Made Ecosystems)
- Doug Richardson: GIS i geografija: međudjelovanje s društvenim znanostima (GIS and Geography: Interactions with the Humanities)
- Daniel C. Edelson: Izazov definiranja geopismenosti (The Challenge of Defining Geo-Literacy)
- Claudia Paskauskas: Zamijenimo natjecanje suradnjom (Let's Exchange Competition for Cooperation)
- Doug Richardson: Nacionalna infrastruktura GIS-a za zdravstvena istraživanja (A National GIS Infrastructure for Health Research)
- Matt Artz: Presjek GIS-a i igranja (The Intersection of GIS and Gaming)
- ***: Razumijevanje našega svijeta (Understanding Our World)
- Lilian Pintea: Od karata do geodizajna (From Maps to GeoDesign)
- Matt Artz: Učinimo smislenim naš istraženi planet (Making Sense of Our Sensored Planet)
- Santiago Borrero: Rukom pod ruku – prostorne informacije za Latinsku Ameriku (Hand in Hand—Spatial Information for Latin America)
- Corey Halford: Isporuka GIS-a u razdoblju neodrživog razvoja (Delivering GIS in a Period of Unsustainable Growth)

Skrećem pozornost na prilog *Looking Forward: Five Thoughts on the Future of GIS* M. F. Goodchilda. On ističe da je predviđanje budućnosti, posebno na području GIS-a, vrlo riskantno, ali smatra da su takva razmišljanja korisna i nada se da će njegov kratki prikaz potaknuti i druge na slična razmišljanja. Ističe da su do sada otvoreni prostori, gdje su signali GPS-a jaki i pouzdani, bili najvažnija domena GIS-a. Međutim, prosječni Amerikanac provodi samo 13% svog vremena na otvorenim prostorima, a za kretanje u zatvorenim prostorima, npr. trgovačkim centrima, bolnicama, zračnim lukama, GIS ne pruža gotovo nikakvu potporu. Autor navodi dva glavna problema koji stoje na putu veće primjene GIS-a u zatvorenim prostorima. Na Zemlji postoji nekoliko milijardi zgrada i spremanje podataka o njima u bazu podataka uključujući i unutrašnjost, zauzimala bi oko tri milijarde gigabajta. To je savladivo s današnjom tehnologijom, ali bi potrebna sredstva iznosila oko 10%

BDP-a SAD-a u sljedećih deset godina. Drugim riječima trebalo bi u tom razdoblju zaposliti na tim poslovima deset posto američkih radnika. Nadalje, potrebne su efikasne metode određivanja položaja u zatvorenim prostorima. Autor ističe da prodor GIS-a u zatvorene prostore i njegovo spajanje s GIS-om na otvorenim prostorima sadrži golem tržišni potencijal.

U nekoliko priloga naglasak je na geodizajnu i obrazovanju. U posljednje vrijeme termin geodizajn (GeoDesign) sve se češće susreće u literaturi iz područja geoinformacijske znanosti. Prema jednoj od definicija geodizajn je planiranje zasnovano na znanju o tome kako svijet funkcionira izraženo u simulacijama zasnovanim na GIS-u (vidi Geodetski list 2011, 1, 63–64).

Vrijedi ovdje skrenuti pozornost i na osvrt Ericka van Reesa na četvrti svezak Essays on Geography and GIS (Geoinformatics 2012, 5, 51). On ističe da mu je termin geodizajn još uvijek zagonetka. Pita se, ako taj termin znači integraciju prostornog planiranja i modeliranja s GIS-om, zašto to tako i ne nazvati. Te po čemu se geodizajn razlikuje od onoga što odavno rade prostorni planeri. Termin očito implicira nešto novo, ali nije potpuno jasno što.

Nedjeljko Frančula