Contact: paulbcote@gmail.com

Web Site: <a href="http://www.pbcGlS.com">http://www.pbcGlS.com</a>

Education:

1993 Master of City Planning, Massachusetts Institute of Technology:

Concentration: Planning Support Systems.

1984 **Bachelor of Arts, Indiana University:** Geography major, Cartography

specialization, Certificate in Urban Studies.

1982 Colorado School of Mines: Geological Field Camp.

## Professional Experience:

2007 - Present	Principal Consultant
	Paul B. Cote Geographic Information Services
2013 - 2019	Faculty of Design
	Boston Architectural College, Rhode Island School of Design
2014 – 2019	Lecturer
	Friedman School of Nutrition Science and Policy
1993 - 2013	Geographic Information Systems Specialist
	Harvard University Graduate School of Design
1996 - 2012	Lecturer, Urban Planning and Design
	Harvard University Graduate School of Design
1999 - 2010	Lecturer, Landscape Architecture
	Harvard University Graduate School of Design
1988 - 1990	Cartographic Supervisor
	H.M. Gousha Map Company, Comfort Texas
1986 - 1988	Cartographic Technician, Photo Lab Manager
	Rand McNally Map Company, Austin Texas
1984 – 1986	Cartographic Technician
	Continental Map Company, Austin Texas
1983	Survey Party Rod Man
	Accutex Survey Systems, Austin Texas

### Activities and Honors:

2006 – Present	Consulting: As founding principal, have consulted internationally on the
	development of enterprise-scale three dimensional models of cities. My

main clients are the GIS departments of the City of Cambridge and the Boston Planning and Development Agency. I am also engaged in a webbased archive of historical building information with the City of Cambridge

Historical Commission.

Teaching Awards from Tufts:

2018 **Tufts Teaching with Technology Award**: Runner Up selected from 85

nominees.

2017 Tufts Office of Institutional Research and Evaluation Senior Survey: Instructor of

an Exceptional Course.

2008-2013 Collaboration with Dumbarton Oaks Center for Landscape Studies: As a

summer project, I supervise the summer GIS interns at Dumbarton Oaks, a 15

acre garden and research center that is part of Harvard. We have developed a data model for managing information on the actual and proposed terrain and plantings over time. In the summer of 2012, I

November 19, 2019 page 1 of 5

	established web-based GIS and Image repository to support collaborative research.
2008 - Present	<b>Board of Review Member:</b> Norman B. Leventhal Map Center at the Boston Public Library.
2013 – Present	Research Affiliate: Harvard Center for Geographic Analysis.
2008 - Present	Editorial Committee Member: Journal of Map and Geography Libraries
2008 - Present	<b>Editorial Committee Member:</b> Journal of Urban and Regional Information Systems Association.
2005 - 2013	<b>Technical Steering Committee Member:</b> Harvard Center for Geographic Analysis.
2000 - 2012	Steering Committee Member: Harvard Geospatial Library.
2007 - 2009	<b>Community Advisory Committee Member:</b> Massachusetts Executive Office of Transportation Green Line Extension Impact Study
2009	Community Negotiation Team Member: Represented East Cambridge neighborhood in a 3 month negotiation process hosted by Cambridge Mayor David Maher.
2009	<b>Best Teacher:</b> Awarded by Students in the Department of Urban Planning and Design, Harvard University Graduate School of Design.
2006 - 2007	<b>Thread Architect:</b> Open Geospatial Consortium initiative to develop Open Web Services for CAD, GIS and Building Information Models.
1999 - 2001	Advisory Board Member: Boston Children and Families Database.

### Recent Publications:

2016 Handbook for Information Stewardship for Cultural Heritage Preservation;

Created as part of the University Partnership between National College of Art Rawalpindi, Pakistan, and Boston Architectural College. Funded by the U.S.

Department of State.

Book Chapters, Magazine Articles, Peer Reviewed Publications:

Lapierre, A. and P. Cote, "Using Open Web Services for urban data management: A testbed resulting from an OGC initiative for offering standard CAD/GIS/BIM services" in Geospatial information technology for emergency response (ISPRS book series). Taylor & Francis Group, London, UK Paul Cote, "Where Are Samson and Goliath? 3D Experiments with the

Pullant Clark Con Ward Advanced to Advanced to Experiments with the

Belfast Skyline" Geo World Magazine May, 2009.

2007 Paul Cote, editor "Web Services Architecture for CAD GIS and BIM." Open

Geospatial Consortium Interoperability Program Report, Official OGC

Discussion Paper 07\_r23\_02.

1996 Alternative Futures for Camp Pendleton, California, with Carl Steinitz and

others, Published by Harvard GSD Press.

Selected Research, Conference Papers and Invited Lectures:

Ongoing <u>The GIS Manual: Cultivating Spatial Intelligence</u>

Web-Based Curriculum in GIS and Three-Dimensional Site Modeling. This site

is currently being moved to gismanual.com

2016 Handbook for Information Stewardship for Cultural Heritage Preservation;

Created as part of the University Partnership between National College of Art Rawalpindi, Pakistan, and Boston Architectural College. Funded by the

U.S. Department of State.

2012 Information Ecology in Place-Based Studies, McKinsey & Company North

American Knowledge Center.

November 19, 2019 page 2 of 5

2011	Promoting a Culture of Information Stewardship at the Graduate School of Design, First Harvard Information Technology Summit.
2010	Introducing CityGML: Interoperability for GeoDesign
0010	First Conference on GeoDesign, Redlands California.
2010	New Media for Public Participation in Urban Design and Planning
2010	National Organization of Minority Architects, Boston, Massachusetts  City of BIM, Lecture presented to Michel Schroeder's course on Building
	Information Models.
2009	Interoperability in City Models and Urban Studies, Invited Speaker, European Cooperation in Science and Technology, Liege, Belgium.
2009	City Models of the Future and the Past, Geoweb Conference, Vancouver, British Columbia.
2009	Working toward the Future of Integrated City Models: Toward Administrative Modularization, 3D Summit, Open Geospatial Consortium Technical Committee Meeting, Cambridge, Massachusetts.
2009	<b>New Media and Community Planning</b> , Harvard University Symposium on New Media and Community Planning.
2008	An Urban Design Laboratory for Belfast, Northern Ireland, University of Ulster Department School of Architecture and Design. With Richard Sommer.
2008	Promoting a Culture of Information Stewardship at the Harvard Design School, 2nd Annual Symposium on Spatial Analysis, Harvard Center for Geographic Analysis.
2008	A Data Model for Representing Cities in Three Dimensions, ESRI User Conference, San Diego, California.
2008	Integrating Building Information Models with Geospatial Information Infrastructure, Joint Services Environmental Management Conference, Columbus, Ohio.
2007	The Road Ahead for Metropolitan-Scale Three Dimensional Models, Presented at the National Conference of the Urban and Regional Information Systems Association.
2007	Geographic Information Systems and BIM: Interoperability for Modeling Cities, Presented at the National Conference of the Association of American Architects.
2006	Two Perspectives on Evolution of 3d City Models: Pragmatic and Principled, Invited lecture Bonn University Department of Geodessy and Geoinformatics.
2006	Understanding Threatened Urban View Corridors with LIDAR Data,
	Presented at the 2006 ESRI International User Conference.
2005	Rendering Multiple Urban Design Scenarios from a Single Database of 3D Features, Proceedings of the Ninth International Conference on Computers in Urban Planning.
2004	Three-Tiered Approach to Supporting Geographic Information Systems at the Harvard Design School, Proceedings of the 24th Annual Conference of the Environmental Systems Research Institute.
2003	Data Models for Three-Dimensional Cities, Presented to the Massachusetts Geographic Information Council.
2002	Real Infrastructure for Virtual Cities, Proceedings of the 22nd Annual Conference of the Environmental Systems Research Institute.
1999	MCP: A Metadata Collection Parser for Geospatial Metadata, Delivered at the 19th Annual Conference of the Environmental Systems Research Institute.

November 19, 2019 page 3 of 5

1996	Strategy for Managing Geographic Analysis and Cartography In a Major Ecological Research Project, Delivered at the 16th Annual Conference of the Environmental Systems Research Institute.
1995	Improved Method for Selection of Shade symbols for use with Synthetic Relief, poster presentation, 15th Annual Conference of the Environmental Systems Research Institute, July.
1992	<b>Fighting Urban Traffic Congestion with Exploratory Data Analysis</b> , Published in ArcInfo Map Book Volume 5, ESRI Press.

# Grants and Funded Research:

2011	Archiving Spatial Data Resources for the Comparative Analysis of Cities Real Estate Academic Initiative
2008 - 2011	Data Model for a Managed Landscape
	Dumbarton Oaks, Washington D.C.
2006	Three-Dimensional Modeling Infrastructure for Town of Brookline Massachusetts. Funded by Town of Brookline GIS Department
2004	Cross-Curricular Modules for Teaching Site Representation at the Harvard Design School, Funded by Harvard University Provost's Office.
2003	<b>Tools for Discovering the Topology of Segregation</b> , with Guy Stuart of the Kennedy School of Government.
2002	Feasibility Study for a Commonwealth-wide Inventory of Underutilized or Contaminated Sites, Funded by Massachusetts Governor's Office for Brownfield Revitalization.
2000	Investigation of Technologies for Maintaining Large Three Dimensional Models of Cities, Funded by the Boston Redevelopment Authority, 2000.

Courses Taught at the Harvard Graduate School of Design	
1996 - 2012	Theory and Applications of Geographic Information Systems. A full-semester course provides students with the technical skills to conceive and carry out analytical studies of places and to compile and share spatial data in a scholarly manner.
2003 - 2011	Geographic Information Systems and Representation. Under different names over the years, this course presents techniques for research and two and three-dimensional representation for the candidates for Harvard's Master's Degree in Urban Planning. This course is now a required component of the MUP Core.
2005 - 2011	Three Dimensional City Modeling. Considers new ways of understanding urban form through metropolitan-scale databases of urban models made possible by new combinations of technologies such as LIDAR, encapsulated three-dimensional models in enterprise-scale relational databases. Variations on this research seminar have been offered at the GSD four times since 2005.
2008 - 2009	<b>Planning and Design of Landscapes</b> . Co-instructor in third semester core landscape studio coordinated by Scheri Fultineer. Coordinated by Pierre Belanger in 2009.
2000 – 2008	Site Systems Representation. A course in cartographic modeling required for candidates for the Master's degree in Landscape Architecture. This course is integrated with two other courses taken concurrently: the third-semester core landscape planning studio and Theory and Methods of Landscape Planning, taught by Professor Carl Steinitz. Taught in

November 19, 2019 page 4 of 5

collaboration with Hope Hasbrouck 2000 – 2002.

## Technical Proficiencies:

**Geographic Information Systems:** ArcGIS, QGIS, Extensive experience creating reusable models with Model Builder and Python.

**Research and Analytics:** Extensive understanding of geospatial and architectural data sources and analytic techniques and cartography for a variety of demographic, infrastructural and ecological applications.

**Teaching:** 19 years of experience developing and delivering courses at the Harvard University Graduate School of Design.

**Three Dimensional Modeling:** Expert in Sketchup and Terrain modeling with Rhinoceros 3D. Develop plugins with Sketchup Ruby.

**Field work and Data Collection:** Experienced with Plane Surveying, and GPS data collection techniques.

**Graphical Presentation:** 30 years experience as a professional cartographer; video editing; Adobe Creative Suite

Enterprise Spatial Data Infrastructure: Oracle, MSQL, Omeka

**Web Based Services and Applications:** Apache, GeoServer, HTML Javascript, OpenLayers, XML, Omeka Neatline.

System Administration: Linux, cloud-based system administration.

**Remote Sensing:** Experience with processing and classifying multispectral imagery with MultiSpec and Erdas Imagine.

November 19, 2019 page 5 of 5