Contact: paulbcote@gmail.com
Web Site: http://www.pbcGIS.com

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	**Instructor** Boston Architectural College
2014 – 2019	**Lecturer** Tufts Friedman School of Nutrition Science and Policy
2006 – 2007	**Interoperability Testbed Architect** Open Geospatial Consortium Web Services Testbed for CAD, GIS and BIM
1993 - 2013	**Geographic Information Systems Specialist; Lecturer** Harvard University Graduate School of Design
1989 - 1991	**Cartographic Supervisor** H.M. Gousha Map Company, Comfort Texas
1987 - 1989	**Cartographic Technician, Photo Lab Manager** Rand McNally Map Company, Austin Texas
1985 – 1987	**Cartographic Technician** Continental Map Company, Austin Texas
1984 - 1985	**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 web-based 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 established web-based GIS and Image repository to support collaborative research.

2008 - Present	**Board of Review Member:** 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	**Editorial Committee Member:** Journal of Urban and Regional Information Systems Association.
2005 - 2013	**Technical Steering Committee Member:** Harvard Center for Geographic Analysis.
2000 - 2012	**Steering Committee Member:** Harvard Geospatial Library.
2007 - 2009	**Community Advisory Committee Member:** 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	**Best Teacher:** Awarded by Students in the Department of Urban Planning and Design, Harvard University Graduate School of Design.
2006 - 2007	**Thread Architect:** 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. Link

Book Chapters, Magazine Articles, Peer Reviewed Publications:

2008	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
2009	Paul Cote, "Where Are Samson and Goliath? 3D 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	The GIS Manual: Cultivating Spatial Intelligence 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. Link
2012	**Information Ecology in Place-Based Studies**, McKinsey & Company North American Knowledge Center.
2011	**Promoting a Culture of Information Stewardship at the Graduate School of Design,** First Harvard Information Technology Summit.
2010	**Introducing CityGML: Interoperability for GeoDesign**

First Conference on GeoDesign, Redlands California.

2010 **New Media for Public Participation in Urban Design and Planning**
National Organization of Minority Architects, Boston, Massachusetts

2010 **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 **New Media and Community Planning**, 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.

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 **Fighting Urban Traffic Congestion with Exploratory Data Analysis**, 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 **Tools for Discovering the Topology of Segregation**, 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 **Planning and Design of Landscapes**. 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 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.