Special Issue on Retail Geography

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This special issue of the *International Journal* of Applied Geospatial Research (IJAGR) is devoted to the long-standing applied field of retail geography. The five papers in this special issue address three areas of retail geography: namely, the identification of retail structure, the tracking of retail change and the development of retail location decision support tools.

Storie outlines an automated approach to identifying components of retail structure. His applied study describes the development of a set of automated GIS-based routines that are used to remotely delimit clusters of retail activity. The semi-automated approach is demonstrated using an extensive data set of commercial activity in the Southern Ontario markets of Kitchener, Waterloo and Cambridge. A series of nearest commercial neighbour statistics are generated as a measure of proximity between commercial locations - which in turn are used as the basis for retail cluster identification. The paper examines a number of different ways in which nearest neighbour statistics can be applied to retail structural research. While the search for a fully automated approach remains elusive, Storie provides insights into the nuances of defining retail structure and the opportunities afforded by GIS in operationalizing what traditionally has been a highly labourious and time-consuming process.

Dwan in his paper on retail activity within market towns in the Republic of Ireland approaches structural analysis from a demand threshold perspective. Unlike Storie who focuses on identifying retail clusters, Dwan looks to applying GIS to explain the variation in different types of retail activity by market town. Using a small set of three case study market towns (Nenagh, Clonmel, and Thurles) located in County Tipperary, Southern Ireland he outlines an approach that takes conventional demand threshold analysis and extends its application through the integration of Huffderived catchment areas to more realistically capture local demand. As opposed to traditional threshold studies which conveniently rely on pre-defined administrative levels of geography Dwan demonstrates the markedly different retail metrics that are generated when efforts are made to capture the draw of a market (i.e., the catchment). His paper highlights that applied GIS approaches can effectively be used to examine retail structure and to benchmark the relative under- or over-penetration of retail activity within a given set of markets. The paper also identifies the shortfalls and limitations inherent in threshold-type analysis and stresses the need for high quality longitudinal data on retail demand and supply.

The second section provides case studies of retail structural change with two papers focusing on the retail evolution underway in Toronto, Canada's largest urban marketplace with a resident population of over 5.5 million in 2006. The first of these examines the phenomenal growth and clustering of large format retailers, and the second explores the evolution of ethnic Chinese retailing in Toronto's multicultural marketplace.

Buliuing and Hernandez report on the significant transformation in Toronto's retail landscape with the widespread development of big-box retailing. Their paper underlines the scale and extent of the structural change and functional transformation in the retail economy of North America - and in the Americanization of the Canadian retail landscape. Specifically, they explore these changes using data from a longitudinal database of commercial activity and report on the spatio-temporal patterns of retail development the Greater Toronto Area (GTA). The paper provides an overview of the evolution of retailing in Canada and spatio-temporal analysis of the developing retail structure of the GTA. The work is methodologically situated within the established branch of spatial statistics concerned with the description of spatial point processes. The paper uses bivariate kernel estimation and the G function to describe the spatial patterns of retailing over time and by different types of shopping centre (from the super-regional mall to local convenience centres). The results emphasize the wave of power centre retailing that swept across the GTA between 1996 and 2005 - and the resulting significant change in retail supply. The paper quantifies the emerging retail reality and concludes with a discussion of the urban growth pressures within the GTA and the growing gap and tensions between smart growth policy and local level planning.

Wang et al. focus on a research area that has received surprisingly minimal attention from retail and business geographers - ethnic retailing. For many years demographers have highlighted significant shifts in the Canada demographic. Major Canadian cities (especially, Toronto and

Vancouver) have become increasingly diverse due to high levels of immigration. Given the aging population dynamic in Canada, increasing emphasis has been placed on immigration as a driver of population growth. With increased immigrants flows ethnic retailing has become an important and visible component of the retail economy in major Canadian urban markets. Few studies have been undertaken on the scale, extent and impact of these changes. Wang et al. attempt to redress this gap by providing a spatial analytical study of the demand for and supply of ethnic retail in Toronto. Their findings highlight that since the late 1990s, ethnic Chinese retailing in the Toronto market has continued to expand at a rapid rate. The paper identifies three key spatial trends: a resurgence of food retailing and growth of modern largescale supermarkets; ethnic retail developments have begun to shift away from clusters of exclusive ethnic retailing towards a mix with mainstream businesses; and, the emergence of a major new corridor of ethnic Chinese retailing that is forming into the geographical center of a Chinese-dominated ethnoburb.

The final paper turns its attention to the development of retail location decision support tools. Bermingham et al. report on their design, development and testing of a GIS-based decision support tool to undertake store segmentation. The paper describes the importance of store segmentation to retail and service firms and their need to be able to divide their often large network of stores into meaningful groups (based on a combination of operational, site and trading environment factors). The paper outlines findings from their case study research that built a functional custom tool, CAN-MIRSA that integrates cluster analysis with GIS to enable decision makers to explore, construct and visualize store segments. The approach extends traditional aspatial clustering to include options that allow the user to influence cluster formation based on the distance between stores. This integrated spatial statistical approach to store segmentation is detailed and associated benefits and shortfalls discussed. The paper highlights the opportunities to further develop geospatial tools to support network planning decision making activities – and of particular note, to bridge the gap between 'analyst' and 'decision-maker'. Specifically, the authors argue that geospatial decision support tools need to be designed to accommodate the varying GIS skill-levels of potential end-users and that fundamentally more

emphasis needs to be placed on creating tools that can be integrated throughout the decision making process.

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