References Used in CrimeStat Manual

(All Versions)

Abraham, B. & Ledolter, J. (2006). *Introduction to Regression Modeling*. Thompson Brooks/Cole: Belmont, CA.

Aizcorbe, A. & Starr-McCluer, M. (1996). Vehicle Ownership, Vehicle Acquisitions, and the Growth of Auto Leasing: Evidence from Consumer Surveys. Finance and Economic Discussion Series, Federal Reserve Board of Governors: Washington, DC. http://www.federalreserve.gov/pubs/feds/1996/199635/199635pap.pdf. Accessed April 28, 2012.

Aldenderfer, M. & Blashfield, R. (1984). Cluster Analysis. Sage: Beverly Hills, CA.

Alonso, W. (1964). Location and Land Use: Towards a General Theory of Land Rent. Harvard University Press: Cambride, MA.

Amir, Menachim (1971). *Patterns in Forcible Rape*. The University of Chicago Press: Chicago, 87-95.

AMPO (2012). *AMPO: Highlights & What's New*. Association of Metropolitan Planning Organizations: Washington, DC. http://www.ampo.org/. Accessed May 7, 2012.

Andersson, T. (1897). Den Inre Omflyttningen. Norrland: Mälmo.

Anselin, L. (2008). "Personal note on the testing of significance of the local Moran values".

Anselin, L. (2002). Under the hood: Issues in the specification ad interpretation of spatial regression models, *Agricultural Economics*, 17(3), 247-267.

Anselin, L. (1995). Local indicators of spatial association - LISA. *Geographical Analysis*. 27, No. 2 (April), 93-115.

Anselin, L.. (1992). SpaceStat: A Program for the Statistical Analysis of Spatial Data. Santa Barbara, CA: National Center for Geographic Information and Analysis, University of California.

Anselin, L. & Madden, M.s (1990). *New Directions in Regional Analysis*. Belhaven Press: New York.

Aplin, G. (1983). *Order-Neighbour Analysis*. Concepts and Techniques in Modern Geography No. 36. Institute of British Geographers, Norwich, England: Geo Books.

Bachi, R. (1957). *Statistical Analysis of Geographical Series*. Central Bureau of Statistics, Kaplan School, Hebrew University: Jerusalem.

Bailey, T. C. & Gatrell, A. C. (1995). *Interactive Spatial Data Analysis*. Longman Scientific & Technical: Burnt Mill, Essex, England.

Banez, L., Prasanna, P., Sun, L., Ali, A., Zhiqiang, Z., & Adam, B. (2003). Diagnostic potential of serum proteomic patterns in prostate cancer, *The Journal of Urology*, 170, 442–446.

Barber, C., Dobkin, D. & Huhdanpaa, H. (1997). The Quickhull algorithm for convex hulls. *ACM Trans. Mathematical Software*, 22, 469-483.

Ball, G. H. & Hall, D. J. (1970). A clustering technique for summarizing multivariate data. *Behavioral Science*, 12, 153-155.

Barnard, G. A. (1963). Comment on 'The Spectral Analysis of Point Processes' by M. S. Bartlett, *Journal of the Royal Statistical Society*, Series B, 25, 294.

Beale, E. M. L. (1969). Cluster Analysis. Scientific Control Systems: London.

Beimborn, E. A. (1995). A transportation modeling primer. In *Inside the Blackbox, Making Transportation Models Work for Livable Communities*. http://www4.uwm.edu/cuts/utp/models.pdf. Accessed April 28, 2012.

Ben-Akiva, M. E., & Bierlaire, M. (1999). Discrete Choice Methods and their Applications to Short Term Travel Decisions. In R. W. Hall (Ed.), *Handbook of Transportation Science* (pp. 5-34). Norwell, MA: Kluwer.

Ben-Akiva, M. & Lerman, S. (1985). *Discrete Choice Analysis: Theory and Application to Travel Demand*. MIT Press: Cambridge.

Berk, K. N. (1977). Tolerance and condition in regression computations, *Journal of the American Statistical Association*, 72 (360), 863-866.

Bernasco, W. (2010a). Modeling Micro-Level Crime Location Choice: Application of the Discrete Choice Framework to Crime at Places. *Journal of Quantitative Criminology*, 26(1), 113-138.

Bernasco, W. (2010b). A Sentimental Journey to Crime; Effects of Residential History on Crime Location Choice. *Criminology*, 48, 389-416.

Bernasco, W. (2007). The usefulness of measuring spatial opportunity structures for tracking down offenders: A theoretical analysis of geographic offender profiling using simulation studies. *Psychology, Crime & Law, 13*, 155-171.

Bernasco, W. (2006). Co-Offending and the Choice of Target Areas in Burglary. *Journal of Investigative Psychology and Offender Profiling*, 3, 139-155.

Bernasco, W. & Block, R. (2009). Where offenders choose to attack: A discrete choice model of robberies in Chicago. *Criminology* 47(1): 93-130.

Bernasco, W., & Kooistra, T. (2010). Effects of Residential History on Commercial Robbers' Crime Location Choices. *European Journal of Criminology*, 7(4), 251-265.

Bernasco, W. & Nieuwbeerta, P. (2005). How do residential burglars select target areas?. *British Journal of Criminology* 44: 296-315.

Bernasco, W. & Luykx, F. (2002). Using random utility models to explain location choice of offenders. Sixth Annual International Crime Mapping Research Conference, December, Denver CO.

Besag, J., 1974. Spatial interaction and the statistical analysis of lattice systems (with discussion). *J. Roy. Statist. Soc. Ser. B* 36, 192–236.

Besag, J. & Newell, J. (1991). The detection of clusters in rare diseases. Journal of the Royal Statistic Society A, 154, Part I, 143-155.

- Besag, J., Green, P., Higdon, D., & Mengersen, K. (1995). Bayesian computation and stochastic systems (with discussion), *Statistical Science*, 10, 3-66.
- Betlyon, B. & Culp, M. (2001). *Overview of Travel Demand Forecasting*. Presentation. Federal Highway Adminstration, U.S. Department of Transportation: Washington, DC. http://tmip.fhwa.dot.gov/conf courses/presentations/fmt traveldemand/traveldemand files/v3 document.htm.
- Bezdek, J. C. (1981). *Pattern Recognition with Fuzzy Objective Function Algorithms*. Plenum Press: New York.
- Bishop, Y. M. M., Feinberg, S. E. & Holland, P. W. (1975). *Discrete Multivariate Analysis: Theory and Practice*. MIT Press: Cambridge, MA.
- Block, C. R. (1994). STAC hot spot areas: a statistical tool for law enforcement decisions. In *Proceedings of the Workshop on Crime Analysis Through Computer Mapping*. Criminal Justice Information Authority: Chicago, IL.
- Block, R. & Bernasco, W. (2009). Finding a serial burglar's home using distance decay and conditional origin-destination patterns: A test of Empirical Bayes journey to crime estimation in The Hague. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 187-211.
- Block, R. & Block, C. R. (1999). Risky places: a comparison of the environs of rapid transit stations in Chicago and the Bronx. In Mollenkopf, J. (ed), *Analyzing Crime Patterns: Frontiers of Practice*, Sage Publishing: Beverly Hills, CA.
- Block, R. & Block, C. R. (1995). Space, place and crime: hot spot areas and hot places of liquor-related Crime in Eck, J. E. & Weisburd, D. (eds.), *Crime and Place*. Crime Prevention Studies, Volume 4. Criminal Justice Press: Monsey, NY. 147-185.
- Block, C. R. & Green, L. A. (1994). *The GeoArchive Handbook: A Guide for Developing a Geographic Database an Information Foundation for Community Policing*. Illinois Criminal Justice Information Authority: Chicago, IL.
- Blumin, D. (1973). *Victims: A Study of Crime in a Boston Housing Project*. City of Boston, Mayor's Safe Street Act, Advisory Committee: Boston.
- Boggs, S. L. (1965). Urban crime patterns, American Sociological Review, 30, 899-908.

Bodnar, P. M. (2007). A new approach to geographic profiling. Ninth Crime Mapping Research Conference, National Institute of Justice. Pittsburgh, PA. March.

Borland.Com (1998). dBase IV 2.0. Inprise Corporation: Scotts Valley, CA.

Bossard, E. G. (1993). RETAIL: Retail trade spatial interaction. In Richard E. Klosterman, Richard K. Brail & Earl G. Bossard, *Spreadsheet Models for Urban and Regional Analysis*. Center for Urban Policy Research, Rutgers University: New Brunswick, NJ, 419-448.

Boswell, M. T. & Patil, G. P. (1970). Chance mechanisms generating negative binomial distributions. In *Random Counts in Scientific Work*, Vol. 1, G. P. Patil, ed., Pennsylvania State University Press: University Park, PA, 3-22.

Bowers, K. & Hirschfield, A. (1999). Exploring links between crime and disadvantage in North-West England: An analysis using Geographic Information Systems. *International Journal of Geographical Information Science*, 13, 159-184.

Bowman, A. W. & Azzalini, A. (1997). *Applied Smoothing Techniques for Data Analysis: The Kernel Approach with S-Plus Illustrations*. Oxford Science Publications, Oxford University Press: Oxford, England.

Box, E.P., Jenkins, G.M., & Reinsel, G.C. (2008). *Time series analysis: forecasting and control*, Wiley: Hoboken.

Braga, A. & Weisburd, D. (2010). Policing Problem Places: Crime Hot Spots and Effective Prevention. Oxford: Oxford University Press.

Brantingham, P. & Brantingham, P. (1999). A Theoretical Model of Crime Hot Spot Generation, *Studies on Crime and Crime Prevention*, 8 (1), 7-26.

Brantingham, P. & Brantingham, P. J. (1984). *Patterns in Crime*. Macmillan Publishing: New York.

Brantingham, P. L. & Brantingham, P. J. (1981). Notes on the geometry of crime. In Brantingham, P. J. & Brantingham, P. L. *Environmental Criminology*. Waveland Press, Inc.: Prospect Heights, IL, 27-54.

Bright, M. L. & Thomas, D. S. (1941). Interstate migration and intervening opportunities, *American Sociological Review*, 6, 773-783.

Brown, R. G. (1959). Statistical forecasting for inventory control, New York: McGraw-Hill.

BTS (2007). Table 2: A matrix of transportation expenditure by source of finance and type of expenditure, *Government Transportation Financial Statistics*, Bureau of Transportation Statistics, U.S. Department of Transportation: Washington, DC., http://www.bts.gov/publications/government transportation financial statistics/2007/html/table_02.html. Accessed April 28, 2012.

BTS (2003). U.S. Vehicle-miles (millions), Table 1-32. *National Transportation Statistics* 2004, Bureau of Transportation Statistics, U.S. Department of Transportation: Washington, DC.

http://www.bts.gov/publications/national_transportation_statistics/2004/html/table_01_32.html. Accessed April 28, 2012.

BTS (2002). *National Household Travel Survey: Daily Travel Quick Facts*. Bureau of Transportation Statistics, U.S. Department of Transportation: Washington, DC. http://nhts.ornl.gov/download.shtml#2009. Accessed June 1, 2012.

BUGS (2008). *The BUGS (Bayesian Inference Using Gibbs Sampling) Project*. MRC Biostatistics Unit, University of Cambridge: Cambridge. http://www.mrc-bsu.cam.ac.uk/bugs. Accessed March 23, 2010.

Burgess, E. W. (1925). The growth of the city: an introduction to a research project. In Park, R. E., Burgess, E. W. & Mackensie, R. D. (ed), *The City*. University of Chicago Press: Chicago, 47-62.

Bursik, R. J., Jr. & Grasmick, H. G. (1993). Economic deprivation and neighborhood crime rates, 1960-1980. *Law and Society Review*, 27, 263-268.

Burt, J. E. & Barber, G. M. (1996). *Elementary Statistics for Geographers* (second edition). The Guilford Press: New York.

Cameron, A. C. & Trivedi, P.K. (1998). *Regression Analysis of Count Data*. Cambridge University Press: Cambridge, U.K.

Cameron, A. C. & Windmeijer, F. A. G. (1996). R-squared measures for count data regression models with applications to health-care utilization. *Journal of Business & Economic Statistics*, 14(2), 209-20.

Can, A. & Megbolugbe, I. (1996). The geography of underserved mortgage markets. Paper presented at the American Real Estate and Urban Economics Association meeting. May.

Canter, D. (2009). Developments in geographical offender profiling: Commentary on Bayesian journey-to-crime modeling. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 161-166.

Canter, D. (2003). *Dragnet: A Geographical Prioritisation Package*. Center for Investigative Psychology, Department of Psychology, The University of Liverpool: Liverpool, UK. http://www.i-psy.com/publications/publications_dragnet.php.

Canter, D. (1994). *Criminal Shadows: Inside the Mind of the Serial Killer*. Harper Collins Publishers: London.

Canter, D. (1999). Modelling the home location of serial offenders. Paper presented at the 3rd Annual International Crime Mapping Research Conference, Orlando, December.

Canter, D. V. & Hammond, L. (2007). A comparison of the efficacy of different decay functions in geographical profiling for a sample of US serial killers. In press *Journal of Investigative Psychology and Offender Profiling*. 3.

Canter, D.V, Coffey, T., Huntley, M., & Missen, C. (2000). Predicting serial killers' home base using a decision support system. Journal of Quantitative Criminology, 16, 457-478.

Canter, D. & Larkin, P. (1993). The environmental range of serial rapists, *Journal of Environmental Psychology*, 13, 63-69.

Canter, D. & Tagg, S. (1975). Distance estimation in cities, *Environment and Behaviour*, 7, 59-80.

Canter, D. & Gregory, A. (1994). Identifying the residential location of rapists, *Journal of the Forensic Science Society*, 34 (3), 169-175.

Canter, D. V., & Snook, B. (1999). *Modelling the home location of serial offenders*. Paper presented at the meeting of the Crime Mapping Research Center, Orlando, FL. December.

Capone, D. L. & Nichols Jr, W. W. (1975). Crime and distance: an analysis of offender behaviour in space, *Proceedings, Association of American Geographers*, 7, 45-49.

Carlin, B. P. & Louis, T. A. (2000). *Bayes and Empirical Bayes Methods for Data Analysis*. Chapman & Hall/CRC: Boca Raton Fl.

Carmichael, J. W., George, L.A. & Julius, R.S. (1968). Finding natural clusters. *Systematic Zoology*, 17, 144-150.

Carnegie-Mellon University (1975). *Security of Patrons on Urban Public Transportation Systems*. Transportation Research Institute, Carnegie-Mellon University: Pittsburgh, PA.

Cattell, R. B. & Coulter, M.A. (1966). Principles of behavioural taxonomy and the mathematical basis of the taxonome computer program. *British Journal of Mathematical and Statistical Psychology*, 19, 237-269.

Chainey, S. & Ratcliffe, J. (2005). *GIS and Crime Mapping*, John Wiley & Sons, Inc.:Chichester, Sussex, England.

Chainey, S., Thompson, L. & Uhlig, S. (2008). The utility of hotspot mapping for predicting spatial patterns of crime. *Security Journal*, **21**, 4-28.

Chaitin, G. (1990). *Information, Randomness and Incompleteness* (second edition). World Scientific: Singapore.

Chand, D & Kapur, S. (1970). An algorithm for convex polytopes. J. ACM, 17, 78-86.

Chen, A. & Renshaw, E. (1994) The general correlated random walk. *Journal of Applied Probability*, 31, 869-884.

Chen, A. & Renshaw, E. (1992). The Gillis-Domb-Fisher correlated random walk. *Journal of Applied Probability*, 29, 792-813.

Chiricos, T. (1987). Rates of Crime and Unemployment Social Problems, 34, 187-211

Chrisman, N. (1997) *Exploring Geographic Information Systems*. John Wiley & Sons, Inc.: New York.

Citro, C. F. & Michael, R. T. (eds) (1995). *Measuring Poverty : A New Approach*. Panel on Poverty and Family Assistance, Committee on National Statistics, Commission on Behavioral and Social Sciences and Education, National Research Council: Washington, DC.http://www.census.gov/hhes/www/img/povmeas/ack.pdf. Accessed May 7, 2012.

Clare, J., Fernandez, J., & Morgan, F. (2009). Formal Evaluation of the Impact of Barriers and Connectors on Residential Burglars' Macro-Level Offending Location Choices. *Australian and New Zealand Journal of Criminology*, 42, 139-158.

Clark, P. J. & Evans, F. C. (1954). Distance to nearest neighbor as a measure of spatial relationships in populations. *Ecology*, 35, 445-453.

Clayton, D. & Kaldor, J. (1987). Empirical Bayes estimates of age-standardized relative risks for use in disease mapping. *Biometrics*, 43, 671-681.

Cleveland, W. S., Grosse, E. & Shyu, W. M. (1993). Local regression models. In John M. Chambers & Trevor J. Hastie, *Statistical Models in S.* Chapman & Hall: London.

Cliff, A. D. & Haggett, P. (1988). Atlas of Disease Distributions. Blackwell Reference: Oxford.

Cliff, A. & Ord, J. (1973). Spatial Autocorrelation. Pion: London.

Cohen, J., Garman, S. & Gorr, W. L. (2009). Empirical calibration of time series monitoring methods using receiver operating characteristic curves, *International Journal of Forecasting*, 2009, 25(3), 484–497.

Cohen, L.E. & Felson, M. (1979) Social change and crime rate trends: a routine activity approach, *American Sociological Review*, 44: 588-608.

Cohen, L. E. 1981 Modeling crime trends: a criminal opportunity perspective, *Journal of Research in Crime and Delinquency*, 18:138-163.

Cole, A. J. & Wishart, D. (1970). An improved algorithm for the Jardine-Sibson method of generating overlapping clusters. *Comparative Journal*, 13, 156-163.

Committee on Map Projections (1986). Which Map is Best, American Congress on Surveying and Mapping, Falls Church, VA., 1986.

Conway, R. W & Maxwell, W. L. (1962), A queuing model with state dependent service rates. *Journal of Industrial Engineering* **12**: 132–136.

Cormen, T. H., Leiserson, C. E., Rivest, R. L. & Stein, C. (2009). Ch. 16: Greedy algorithms, *Introduction to Algorithms*, MIT Press: Cambridge, MA.

Cornish, D. & Clarke, R. (1986). The Reasoning Criminal. Springer-Verlag: New York.

Cressie, N. (1991). Statistics for Spatial Data. New York: J. Wiley & Sons, Inc.

Cromley, R. G. (1992). Digital Cartography. Prentice Hall: Englewood Cliffs, NJ.

Culp, M. & Lee, E. J. (2005). Improving travel models through peer review. *Public Roads*, 68 (6), FHWA-HRT-05-005. Federal Highway Administration, U.S. Department of Transportation: Washington, DC.

http://www.fhwa.dot.gov/publications/publicroads/05may/07.cfm. Accessed April 28, 2012.

Curtis, L. A. (1974). Criminal Violence. Lexington Books: Lexington, MA.

D'andrade, R. (1978). U-Statistic Hierarchical Clustering *Psychometrika*, 4,58-67.

de Berg, M., van Kreveld, M., Overmans, M. & Schwarzkopf, O. (2000). Convex hulls: mixing things. In *Computational Geometry: Algorithms and Applications*, 2nd rev. ed. Springer-Verlag: Berlin, 235-250.

Demographia (1999). U.S. Central Cities and Suburban Crime Rates Ranked: 1999. Wendell Cox Consultancy: Belleville, IL. http://www.demographia.com/db-crime99r.htm.

Demographia (1998). *U. S. Metropolitan Areas: 1998 Central City and Suburban Population.* Wendell Cox Consultancy: Belleville, IL. http://www.demographia.com/db-usmsacc98.htm.

Denison, D.G.T., Holmes, C.C., Mallick, B. K., & Smith, A. F. M. (2002). *Bayesian Methods for Nonlinear Classification and Regression*. John Wiley & Sons, Ltd: Chichester, Sussex.

De Smith, M., Goodchild, M. F., & Longley, P. A. (2007). *Geospatial Analysis* (second edition). Matador: Leicester, U.K.

Diggle, P. J. (2003). Statistical Analysis of Spatial Point Patterns. Arnold: London.

Dijkstra, E. W. (1959). A note on two problems in connection with graphs, *Numerische Mathematik*, 1, 269-271.

Domencich, T. & McFadden, D. (1975). *Urban Travel Demand: A Behavioral Analysis*. North Holland Publishing Company: Amsterdam & Oxford (republished in 1996). Also found at http://emlab.berkeley.edu/users/mcfadden/travel.html. Accessed April 28, 2012.

Draper, N. & Smith, H. (1981). *Applied Regression Analysis, Second Edition*. John Wiley & Sons: New York.

Durkheim, E. (1895). The Rules of Sociological Method. Free Press: New York. 1964.

Dwass, M (1957). Modified randomization tests for nonparametric hypotheses. *Annals of Mathematical Statistics*, 28, 181-187.

Ebdon, D. (1988). Statistics in Geography (second edition with corrections). Blackwell: Oxford.

Ehrlich, I. (1975). On the relation between education and crime. In Juster, F. T. (ed), *Education, Youth and Human Behavior*. McGraw-Hill: New York, 313-337.

El-Basyouny K. & Sayed, T. (2009). Collision prediction models using multivariate Poisson-lognormal regression. *Accident Analysis & Prevention*, 41(4), 820-828.

Eldridge, J. D. & Jones, J. P. (1991). Warped space: a geography of distance decay, *Professional Geographer*, 43 (4), 500-511.

Elmore, J. G., Miglioretti, D. M., Reisch, L. M., Barton, M. B., Kreuter, W., & Christiansen, C. L., (2002). Screening mammograms by community radiologists: Variability in false positive rates. Journal of the National Cancer Institute, 94, 1373–1380.

Engelen, R. E. (1986). Transportation planning. In So, F. S. *The Practice of State and Regional Planning*. American Planning Association: Chicago, Ch. 17, 431-453.

ESRI (2012). *ArcGIS 10.0*. Environmental Systems Research Institute: Redlands, CA. http://www.esri.com/software/arcgis/index.html.

ESRI (1998a). ArcView GIS 3.1. Environmental Systems Research Institute: Redlands, CA.

ESRI (1998b). ArcInfo 7.2.1. Environmental Systems Research Institute: Redlands, CA.

ESRI (1998c). Atlas*GIS 4.0. Environmental Systems Research Institute: Redlands, CA.

ESRI (1997). *ArcView Spatial Analyst*. Environmental Systems Research Institute: Redlands, CA.

Everitt, B. S. (2011). *Cluster Analysis* (5th edition). J. Wiley: London.

Everitt, B. S., Landau, S. & Leese, M. (2001). *Cluster Analysis*. 4th Edition. Oxford University Press: New York.

Farewell, D. (1999). Specifying the bandwidth function for the kernel density estimator. http://www.iph.cam.ac.uk/bugs/documentation/coda03/node44.html.

Fazel, S. 2006. The population impact of severe mental illness on violent crime. *American Journal of Psychiatry*, 163, 1397-1403.

Felson, M. (2002). Crime & Everyday Life (3rd Ed). Sage: Thousand Oaks, CA.

FHWA (2006). *Highway Statistics: 2005*. Federal Highway Administration, U.S. Department of Transportation: Washington, DC.

http://www.fhwa.dot.gov/policy/ohim/hs05/national household info.htm.

FHWA (2009). Integrated Urban Systems Modeling, *The Exploratory Advanced ResearchProgram Fact Sheet*, FHWA-HRT-09-042. Federal Highway Administration, U.S. Department of Transportation: Washington, DC.

http://www.fhwa.dot.gov/advancedresearch/pubs/interurbsys.pdf. Accessed April 28, 2012.

FHWA (1997). *Model Validation and Reasonableness Checking Manual*. Prepared by Barton-Aschman Associates, Inc and Cambridge Systematics, Inc for the Travel Model Improvement Program, Federal Highway Administration, U.S. Department of Transportation: Washington, DC. http://ops.fhwa.dot.gov/freight/publications/qrfm2/sect08.htm. Accessed May 31, 2012.

FHWA (1996). Latest VMT growth estimates, *Highway Information Update*, 1(1), Federal Highway Administration, U.S. Department of Transportation: Washington, DC., http://www.fhwa.dot.gov//ohim/vol1no1.html. Accessed April 28, 2012.

Field, B. & MacGregor, B. (1987). *Forecasting Techniques for Urban and Regional Planning*. UCL Press, Ltd: London.

Findley, D. F. (1993). *The Overfitting Principles Supporting AIC*. Statistical Research Division Report Series, SRD Research Report no. CENSUS/SRD/ RR-93/04, U.S. Bureau of the Census: Washington, DC. http://www.census.gov/srd/papers/pdf/rr93-04.pdf.

Fisher, W. (1958). On grouping for maximum homogeneity. *Journal of the American Statistical Association*. **53**, 789-798.

Foot, D. (1981). Operational Urban Models. Methuen: London.

Fotheringham, A. S., Brunsdon, C. & Charlton, M. (2002). *Geographically Weighted Regression: The Analysis of Spatially Varying Relationships*. John Wiley & Sons: New York.

Fotheringham, A. S. & O'Kelly, M. E. (1989). *Spatial Interaction Models: Formulations and Applications*. Kluwer Academic Publishers: Boston.

Fowles, R. & Merva, M. (1996). Wage Inequality and Criminal Activity, *Criminology*, 34, 163-82.

Frank, L., Kerr, J. Chapman, J. & Sallis, J. (2007). Urban Form Relationships With Walk Trip Frequency and Distance Among Youth. *American Journal of Health Promotion*. March/April 2007, V21, I4 Supplement, 305.

Freedman, D. A. (1999). Ecological inference and ecological fallacy. *International Encyclopedia of the Social and Behavioral Sciences*, Technical Report No. 549, October. http://www.stanford.edu/class/ed260/freedman549.pdf. Accessed March 26, 2012.

Friedman, H. P. & Rubin, J. (1967). On some invariant criteria for grouping data, *Journal of the American Statistical Association*, **62**, 1159-1178.

Fritzon, K. (2001). An Examination of the Relationship between Distance Travelled and Motivational Aspects of Firesetting Behaviour. *Journal of Environmental Psychology*, 21, 45-60.

Furfey, P. H. (1927). A note on Lefever's 'Standard deviational ellipse'. *American Journal of Sociology*. XXIII, 94-98.

Gaile, G. L. & Burt, J. E. (1980). *Directional Statistics*. Concepts and Techniques in Modern Geography No. 25. Institute of British Geographers, Norwich, England: Geo Books.

Geary, R. (1954). The contiguity ratio and statistical mapping. *The Incorporated Statistician*, 5, 115-145.

Gelman, A. (1996). Inference and monitoring convergence. In Gilks, W. R., Richardson, S. & Spiegelhalter, D. J. (eds), *Markov Chain Monte Carlo in Pratice*, Chapman & Hall: London.

Gelman, A., Carlin, J. B., Stern, H. S., & Rubin, D. B. (2004). *Bayesian Data Analysis* (second edition). Chapman & Hall/CRC: Boca Raton, FL.

Gelman, A. & Rubin, D. B. (1992). Inference from iterative simulation using multiple sequences (with discussion), *Statistical Science*, 7, 457-511.

Gersho, A. & Gray, R. (1992). *Vector Quantization and Signal Compression*. Kluwer Academic Publishers: Dordrecht, Netherlands.

Getis, A. (1991). Spatial interaction and spatial auto-correlation: a cross-product approach. *Environment and Planning A*, 23, 1269-1277.

Getis, A. & Ord, J. K. (1996). Local spatial statistics: an overview. In Longley, P. & Batty, M. (eds), *Spatial Analysis: Modelling in a GIS Environment*. GeoInformation International: Cambridge, England, 261-277.

Getis, A. & Ord, J. K. (1992). The analysis of spatial association by use of distance statistics, *Geographical Analysis*, 24, 189-206.

Getis, A. & Boots, B. (1978). *Models of Spatial Processes: An Approach to the Study of Point, Line and Area Patterns*. London: Cambridge University Press.

Gitman, I. & Levine, M. D. (1970). An algorithm for detecting uniomodal fuzzy sets and its application as a clustering technique. *IEE Transactions on Computers*, 19, 583-593.

Golden Software. 2008. Surfer® for Windows (Ver. 10). Golden Software, Inc.: Golden, CO.

Goldfield, S. M., Quandt, R. E., & Trotter, H. F. (1966). Maximization by quadratic hill-climbing, *Econometrica*, 34 (3), 541-551.

Gorr, W. L. (2009). Forecast accuracy measures for exception reporting using receiver operating characteristic curves, *International Journal of Forecasting*, 2009, Vol. 25(1), 48–61.

Gorr, W. L. & Kurland, K. S. (2012). GIS Tutorial for Crime Analysis, Esri Press, Redlands.

Gorr, W.L. & Lee, Y. J. (2013). Early warning system for crime hot spots, Heinz College, Carnegie Mellon University Working Paper Series (http://www.heinz.cmu.edu/faculty-and-research/research-details/index.aspx?rid=482).

Gorr, W. L., Olligschlaeger, O. M. & Thompson, Y. (2003). Short-term forecasting of crime, *International Journal of Forecasting, Special Section on Crime Forecasting*, 19(4), 579–594.

Gowers, J. C. (1967). A comparison of some methods of cluster analysis. *Biometrics*, 23, 623-628.

Graham, R (1972). An efficient algorithm for determining the convex hull of a finite planar point set. *Info. Proc. Letters*, 1, 132-133.

Greenfeld, L. A. (1998). *Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime*. NCJ 168632, Bureau of Justice Statistics, U.S. Department of Justice: Washington, DC. http://www.ojp.usdoj.gov/bjs/pub/pdf/ac.pdf.

Greenhood, D. (1964). Mapping. The University of Chicago Press: Chicago.

Greenwood, M. & Yule, G. U. (1920). An inquiry into the nature of frequency distributions of multiple happenings, with particular reference to the occurrence of multiple attacks of disease or repeated accidents. *Journal of the Royal Statistical Society*, 83, 255-279.

Griffith, D. A. (1987). *Spatial Autocorrelation: A Primer*. Resource Publications in Geography, The Association of American Geographers: Washington, DC.

Groff, E. R. (2002). Modeling the spatial dynamics of homicide. Paper presented at Mapping and Analysis for Public Safety annual conference. Denver, CO., December. http://www.ojp.usdoj.gov/nij/maps/Conferences/02conf/Groff.ppt.

Groff, E. R. & McEwen, J. T (2005). Disaggregating the Journey to Homicide. In Wang, F. (ed.), *Geographic Information Systems and Crime Analysis*. Idea Group Publishing: Hershey, PA.

Grubesic, T. H. & Murray, A. T. (2001). Detecting hot spots using cluster analysis and GIS. Paper presented at Annual Conference of the Crime Mapping Research Center, Dallas, TX. http://www.ojp.usdoj.gov/cmrc.

Guikema, S.D. & Coffelt, J. P. (2008). A flexible count data regression model for risk analysis, *Risk Analysis*, 28 (1), 213–223.

Guo, F., Wang, X. & Abdel-Aty, M. A. (2009). Modeling signalized intersection safety with corridor-level spatial correlations, *Accident Analysis and Prevention*, In press.

Hagan, J. & Peterson, R. (1994). *Inequality and Crime*. Stanford University Press: Palo Alto, CA.

Hägerstrand, T. (1957). Migration and area: survey of a sample of Swedish migration fields and hypothetical considerations on their genesis. *Lund Studies in Geography, Series B, Human Geography*, 4, 3-19.

Haggett, P. & Arnold, E. (1965). *Locational Analysis in Human Geography* (1st edition). Edward Arnold: London.

Haggett, P., Cliff, A. D. & Frey, A. (1977). *Locational Analysis in Human Geography* (2nd edition). Edward Arnold: London.

Hall, D. B. (2000). Zero-inflated Poisson and binomial regression with random effects: a case study. *Biometrics*, 56, 1030-1039.

Hammond, R. & McCullagh, P. (1978). *Quantitative Techniques in Geography: An Introduction*. Second Edition. Clarendon Press: Oxford, England.

Hansen, K. (1991). Head-banging: robust smoothing in the plane. *IEEE Transactions on Geoscience and Remote Sensing*, 29 (3), 369-378.

Härdle, W. (1991). Smoothing Techniques with Implementation in S. Springer-Verlag: New York.

Harlow, C. W. 1999. Prior abuse reported by inmates and probationers, *Bureau of Justice Statistics Selected Findings*. NCJ 172879, Bureau of Justice Statistics, U.S. Department of Justice: Washington, DC. http://www.oip.usdoj.gov/bjs/pub/pdf/parip.pdf.

Harries, K. (1999). *Mapping Crime: Principle and Practice*. NCJ 178919, National Institute of Justice, U. S. Department of Justice: Washington, DC., http://www.ncjrs.org/html/nij/mapping/pdf.html.

Harries, K. (1980). Crime and the Environment. Charles C. Thomas Press: Springfield.

Harries, K. & Canter, P. (1998). The use of GPS in geocoding crime incidents. Personal Communication.

Hartigan, J. A. (1975). Clustering Algorithms. John Wiley & Sons, Inc.: New York.

Hastings, W. K. (1970). Monte Carlo sampling methods using Markov Chains and their applications, *Biometrika*, 57, 97-109.

Hauer, E. (2002). Observational Before-After Studies in Road Safety. Pergamon: Oxford.

Henderson, R. (1981). *The Structural Root Systems of Sitka Spruce and Related Stochastic Processes*. PhD Thesis, University of Edinburgh: Edinburgh.

Henderson, R, Renshaw, E. & Ford, D. (1984). A correlated random walk model for two-dimensional diffusion. Journal of Applied Probability, 21, 233-246.

Henderson, R., Renshaw, E & Ford, D. (1983). A note on the recurrence of a correlated random walk. Journal of Applied Probability, 20, 696-699.

Henderson, R., Ford, D., Renshaw, E. & Deans, J. D. (1983). Morphology of the structural root system of Sitka Spruce 1. Analysis and Quantitative Description. *Forestry*, 56 (2), 121-135.

Hensher, D. A. & Button, K. J. (2002). *Handbook of Transport Modeling*. Elsevier Science: Cambridge, UK.

Heskin, A., Levine, N. & Garrett, M. (2000). "Rent control and vacancy control: a spatial analysis of four California cities". *Journal of the American Planning Association*. 66 (2), 162-176.

H-GAC (2010). Transportation and air quality program, *Houston-Galveston Area Council*. http://www.h-gac.com/taq/.

Hibon M. & Makridakis S. (2000). The M3 Competition: results, conclusions and implications, *International Journal of Forecasting*, 16, 451-476.

Hilbe, J. M. (2011). *Negative Binomial Regression, Second Edition*. Cambridge University Press: Cambridge.

Hipp, J. R. (2007). Block, Tract, and Levels of Aggregation: Neighborhood Structure and Crime and Disorder as a Case in Point. *American Sociological Review* 72:659-680.

Hodge, S. & Canter, D. (1998) Victims and Perpetrators of Male Sexual Assault. *Journal of Interpersonal Violence*, 1 (April), 222-239.

Horowitz, J. L., Koppelman, F. S. & Lerman, S. R. (1986). *A Self-instructing Course in Disaggregate Mode Choice Modeling*. Federal Transit Administration, U.S. Department of Transportation: Washington, DC. http://ntl.bts.gov/DOCS/381SIC.html. Accessed April 28, 2012.

Huff, D. L. (1963). A probabilistic analysis of shopping center trade areas. *Land Economics*, 39, 81-90.

Hultquist, J., Brown, L. & Holmes, J. (1971). Centro: a program for centrographic measures. Discussion paper no. 21, Department of Geography, Ohio State University: Columbus, OH.

Husmeier, D. & McGuire, G. (2002). Detecting recombination in DNA sequence alignments: A comparison between maximum likelihood and Markov Chain Monte Carlo. Biomathematics and Statistics Scotland, SCRI: Dundee.

http://www.bioss.ac.uk/~dirk/software/BARCEtdh/Manual/em/em.html.

Huxhold, W. E. (1991). *An Introduction to Geographic Information Systems*. Oxford University Press: Oxford, New York, 147-184.

Hyndman, R. J. & Athanasopoulos, G. (2012). *Forecasting: principles and practice: An online textbook*, http://otexts.com/fpp/.

IIHS (2012). *Q&A: Red Light Cameras*. Insurance Institute for Highway Safety: Arlington, VA. http://www.iihs.org/research/qanda/rlr.html. Accessed June 5, 2012.

Insightful Corporation (2001). *S-PLUS 6.0 Professional for Windows*. Insightful Corporation: Seattle, WA.

Isard, W. (1979). Location and Space-Economy: A General Theory Relating to Industrial Location, Market Areas, Land Use, Trade, and Urban Structure (originally published 1956). Program in Urban and Regional Studies, Cornell University: Ithaca, NY.

Isard, W. (1960). Methods in Regional Analysis. John Wiley & Sons: New York.

Isbel, E. C. (1944). Internal migration in Sweden and intervening opportunities, *American Sociological Review*, 9, 627-639.

\ITE (2003). *Trip Generation* (7th edition). Institute of Transportation Engineers: Washington, DC.

ITE (2010). *Highway Capacity Manual* (5th edition) Institute of Transportation Engineers: Washington, DC. http://www.ite.org/emodules/scriptcontent/orders/ProductDetail.cfm?pc=LP-674. Accessed June 5, 2012.

Jardine, N. & Sibson, R. (1968). The construction of hierarchic and non-hierarchic classifications. *Comparative Journal*, 11, 117-184.

Jefferis, E. (1998). A multi-method exploration of crime hot spots. Crime Mapping Research Center, National Institute of Justice: Washington, DC.

Jepsen, L., & Jepsen, C. (2002). An empirical analysis of the matching patterns of same-sex and opposite-sex couples. *Demography*, 39(3), 435-453.

Jessen, R. J. (1979). Statistical Survey Techniques. John Wiley & Sons: New York.

Johnson, M.A. (1978). Attribute importance in multiattribute transportation decisions, *Transportation Research Record*, 673, 15-21.

Johnson, S.C. (1967), Hierarchical Clustering Schemes *Psychometrika*, 2,241-254

Jones, K. S. & Jackson, D. M. (1967). Current approaches to classification and clump finding at the Cambridge Language Research Unit. *Comparative Journal*, 10, 29-37.

Kafadar, K. (1996). Smoothing geographical data, particularly rates of disease. *Statistics in Medicine* 15(23), 2539-2560.

Kallay, M. (1984). The complexity of incremental convex hull algorithms in Rd, *Info. Proc. Letters* 19, 197.

Kaluzny, S. P., Vega, S. C., Cardoso, T. P., & Shelly, A. A. (1998). *S+ Spatial Stats: User Manual for Windows and Unix*. Springer: New York.

Kanji, G. K. (1993). 100 Statistical Tests. Sage Publications: Thousand Oaks, CA.

Kelsall, J. E. & Diggle, P.J. (1995a). Kernel estimation of relative risk, *Bernoulli*, 1, 3-16.

Kelsall, J. E. & Diggle, P.J. (1995b). Non-parametric estimation of spatial variation in relative risk. *Statistical Medicine*, 14, 2335-2342.

Kent, J., Leitner, M., & Curtis, A. (2006). Evaluating the usefulness of functional distance measures when calibrating journey-to-crime distance decay algorithms. *Computers*, *Environment and Urban Systems*, *30* (2), 181-200.

Khan, G., Qin, X., & Noyce, D. A. (2006). Spatial analysis of weather crash patterns in Wisconsin. 85th Annual meeting of the Transportation Research Board: Washington, DC.

Kim, K. E. & Parke, M. (1996). The use of GPS and GIS in traffic safety. Report to Motor Vehicle Safety Office, State of Hawaii Department of Transportation: Honolulu.

Kind, S. S. (1987). Navigational ideas and the Yorkshire Ripper investigation. *Journal of Navigation*, 40 (3), 385-393.

King, B. F. (1967). Step wise clustering procedures. *Journal of the American Statistical Association*. 62, 86-101.

Kitamura, R., Yoshii, T., & Yamamoto, T. (2009). The Expanding Sphere of Travel Behaviour Research: Selected Papers from the 11th International Conference on Travel Behaviour Research. Emerald Group Publishing, Ltd: Bingley, U.K.

http://books.google.com/books?id=fFqEnNOWKw8C&pg=PA375&lpg=PA375&dq=microsim_ulation+of+travel+behavior&source=bl&ots=ArxmN7EIZl&sig=rIUukRBjCApH22qDQ0UXp_5dUOGs&hl=en&sa=X&ei=jRmkT_3aFIOi8ATImsS5CQ&ved=0CGQQ6AEwCA#v=onepage &q=microsimulation%20of%20travel%20behavior&f=false. Accessed May 4, 2012.

Kneebone, E. & Raphael, S. (2011). *City and Suburban Crime Trends in Metropolitan America*. Metropolitan Opportunity Series, Metropolitan Policy Program, Brookings Institution: Washington, DC.

http://www.brookings.edu/papers/2011/0526_metropolitan_crime_kneebone_raphael.aspx. Accessed April 28, 2012.

Kohfeld, C. W. & Sprague, J. (1988). Urban unemployment drives crime. *Urban Affairs Quarterly*, 24, 215-241.

Knox, E. G. (1988). Detection of clusters. In Elliott, P. (ed), *Methodology of Enquiries into Disease Clustering*, London School of Hygiene and Tropical Medicine: London. Knox, E. G. (1964). The detection of space-time interactions. *Applied Statistics*, 13, 25-29.

Knox, E. G. (1963). Detection of low intensity epidemicity: Application in cleft lip and palate. *British Journal of Preventive and Social Medicine*, 18, 17-24.

Krebs, J. R., & Davies, N. B. (1993). *An Introduction to Behavioural Ecology* (3th ed.). Oxford: Blackwell.

Krueckeberg, D. A. & Silvers, A. L. (1974). *Urban Planning Analysis: Methods and Models*. John Wiley & Sons: New York.

Kuhn, H.W. & Kuenne, R. E. (1962). An efficient algorithm for the numerical solution of the generalized Weber problem in spatial economics, *Journal of Regional Science* 4, 21-33.

Kulldorff, M. (1997). A spatial scan statistic, *Communications in Statistics - Theory and Methods*, 26, 1481-1496.

Kulldorff, M. & Williams, G. (1997). *SaTScan v 1.0: Software for the Space and Space-Time Scan Statistics*, Bethesda, MD: National Cancer Institute.

Kulldorff, M. & Nagarwalla, N. (1995). Spatial disease clusters: Detection and inference, *Statistics in Medicine*, 14, 799-810.

Lam, N. S. & De Cola, L. (1993). Fractals in Geography. The Blackburn Press: Caldwell, NJ.

Lander, B. (1954). *Toward an Understanding of Juvenile Delinquency*. Columbia University Press: New York.

Langbein, L. I. & Lichtman, A. J. (1978). *Ecological Inference*. Sage University Paper series on Quantitative Applications in the Social Sciences, series no. 07-010. Beverly Hills and London: Sage Publications.

Langworthy, R. H. & Jefferis, E. (1998). The utility of standard deviational ellipses for project evaluation. Discussion paper, National Institute of Justice: Washington, DC.

Laukkanen, M., P. Santtila, P. Jern, & K. Sandnabba, K. 2008. Predicting offender home location in urban burglary series. *Forensic Science International*, 176, 224-235.

LaVigne, N. & Wartell, J. (2000). *Crime Mapping Case Studies: Success in the Field (volume 2)*. Police Executive Research Forum and National Institute of Justice, U. S. Department of Justice: Washington, DC., http://www.mn-8.com/Merchant2/merchant.myc?Screen=PROD&Product Code=841&Category Code=CAR.

LaVigne, N. & Wartell, J. (1998). *Crime Mapping Case Studies: Success in the Field (volume 1)*. Police Executive Research Forum and National Institute of Justice, U. S. Department of Justice: Washington, DC.

LeBeau, J. L. (1997). *Demonstrating the Analytical Utility of GIS for Police Operations: A final report*, NCJ 187104, National Institute of Justice, U. S. Department of Justice: Washington, DC., http://www.ncjrs.org/pdffiles1/nij/187104.pdf.

LeBeau, J. L. (1992). Four case studies illustrating the spatial-temporal analysis of serial rapists. *Police Studies*, 15(3), 124-145.

LeBeau, J. L. (1987a). The journey to rape: geographic distance and the rapist's method of approaching the victim, *Journal of Police Science and Administration*, 15 (2), 129-136.

LeBeau, J. L. (1987b). The methods and measures of centrography and the spatial dynamics of rape, *Journal of Quantitative Criminology*, 3 (2), 125-141.

Lee, Jay & Wong, D. W. S. (2001). *Statistical Analysis with ArcView GIS*. J. Wiley & Sons, Inc.: New York.

Lee, P. M. (2004). *Bayesian Statistics: An Introduction* (third edition). Hodder Arnold: New York.

Lees, B. (2006). "The spatial analysis of spectral data: Extracting the neglected data", *Applied GIS*, 2 (2), 14.1-14.13.

Lefever, D. (1926). Measuring geographic concentration by means of the standard deviational ellipse. *American Journal of Sociology*, 32(1): 88-94.

Leitner, M. (2007). Assessment and evaluation of individually calibrated journey to crime geographic profiling models. Ninth Crime Mapping Research Conference, National Institute of Justice. Pittsburgh, PA. March.

Leitner, M. & Kent, J. (2009). Bayesian journey to crime modeling of single- and multiple crime type series in Baltimore County, MD. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 213-236.

Leonard, T. & Hsu, J. S. J. (1999). *Bayesian Methods: An Analysis for Statisticians and Interdisciplinary Researchers*. Cambridge University Press: Cambridge.

Levine, N. (2011a). Spatial variation in motor vehicle crashes by gender in the Houston Metropolitan Area. *Proceedings of the 4th International Conference on Women's Issues in Transportation. Volume II: Technical Papers*, Transportation Research Board: Washington, DC. 12-25. http://onlinepubs.trb.org/onlinepubs/conf/cp46v2.pdf. Accessed May 7, 2012.

Levine, N. (2011b). "Spatial variation in motor vehicle crashes by gender in the Houston Metropolitan Area". *Proceedings of the 4th International Conference on Women's Issues in Transportation. Volume II: Technical Papers*, Transportation Research Board: Washington, DC. 12-25. http://onlinepubs.trb.org/onlinepubs/conf/cp46v2.pdf.

Levine, N. (2009a). "A motor vehicle safety planning support system: The Houston experience". In S. Geertman and J. Stillwell, *Planning Support Systems: Best Practice and New Methods*. Springer. 93-111.

Levine, Ned (2009b). Introduction to the special issue on Bayesian Journey-to-crime modeling. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 167-185.

Levine, N. (2008). "The 'hottest' part of a crime hotspot: Comments on "The utility of hotspot mapping for predicting spatial patterns of crime" by Spencer Chainey, Lisa Tompson, and Sebastian Uhlig". *Security Journal*, 21, 295-302.

Levine, N. (2007a). *CrimeStat: A Spatial Statistics Program for the Analysis of Crime Incident Locations* (version 3.1). Ned Levine & Associates, Houston, TX, National Institute of Justice, Washington, DC.

Levine, N. (2007b). Crime travel demand and bank robberies: Using CrimeStat III to model bank robbery trips. *Social Science Computer Review*, 25(2), 239-258.

Levine, N. (2005). "The evaluation of geographic profiling software: Response to Kim Rossmo's critique of the NIJ methodology". http://www.nedlevine.com/Response to Kim Rossmo Critique of the GP Evaluation Methodology.May 8 2005.doc

Levine, N. (2004). *CrimeStat: A Spatial Statistics Program for the Analysis of Crime Incident Locations* (version 3.0). Ned Levine & Associates, Houston, TX, National Institute of Justice, Washington, DC.

Levine, N. (2002). CrimeStat: A Spatial Statistics Program for the Analysis of Crime Incident Locations (version 2.0). Ned Levine & Associates, Houston, TX, National Institute of Justice, Washington, DC.

Levine, N. (2000). *CrimeStat: A Spatial Statistics Program for the Analysis of Crime Incident Locations* (version 1.1). Ned Levine & Associates, Annandale, VA., National Institute of Justice, Washington, DC.

Levine, N. (1999a) *CrimeStat: A Spatial Statistics Program for the Analysis of Crime Incident Locations* (version 1.0). Ned Levine & Associates, Annandale, VA., National Institute of Justice, Washington, DC.

Levine, N. (1999b). The effects of local growth management on regional housing production and population redistribution in California, *Urban Studies*. 1999. <u>36</u> 12, 2047-2068.

Levine, N. (1996). Spatial statistics and GIS: software tools to quantify spatial patterns. *Journal of the American Planning Association*. 62 (3), 381-392.

Levine, N. & Block, R. (2010). Bayesian Journey-to-Crime Estimation: An Improvement in Geographic Profiling Methodology. *The Professional Geographer*. 63(2), 213-229.

Levine, N. & Canter, P. (2011). Linking origins with destinations for DWI motor vehicle crashes: An application of crime travel demand modeling. *Crime Mapping*, 3, 7-41.

Levine, N. & Kim, K. E. (1999). The spatial location of motor vehicle accidents: A methodology for geocoding intersections. *Computers, Environment, and Urban Systems*. 22 (6), 557-576.

Levine, N., Kim, K. E.. & Nitz, L. H. (1995a). Spatial analysis of Honolulu motor vehicle crashes: I. Spatial patterns. *Accident Analysis & Prevention*, 27(5), 663-674.

Levine, N., Kim, K. E.. Nitz, L. H. (1995b). Spatial analysis of Honolulu motor vehicle crashes: II. Generators of crashes. *Accident Analysis & Prevention*, 27(5), 675-685.

Levine, N. & Lee, P. (2013). Crime travel of offenders by gender and age in Manchester, England. Leitner, M. (ed), *Crime Modeling and Mapping Using Geospatial Technologies*, Springer. 145-178.

Levine, N. & Lee, P. (2009). Bayesian journey to crime modeling of juvenile and adult offenders by gender in Manchester. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 237-251.

Levine, N. & Wachs, M. (1986a). Bus Crime in Los Angeles: I - Measuring The Incidence. *Transportation Research*. 20 (4), 273-284.

Levine, N. & Wachs, M. (1986b). Bus Crime in Los Angeles: II - Victims and Public Impact. *Transportation Research*. 20 (4), 285-293.

Levine, N. Wachs, M. & Shirazi, E. (1986). Crime at Bus Stops: A Study of Environmental Factors. *Journal of Architectural and Planning Research*. 3 (4), 339-361.

Levinson, D. & Kumar, A. (2007). Density and journey to work. Manuscript, University of Minnesota. http://ideas.repec.org/p/nex/wpaper/density.html

Lind, A. W. (1930). Some ecological patterns of community disorganization in Honolulu. *American Journal of Sociology*, 36 (2). 206-220.

Lord, D., Geedipally, S. R., & Guikema, S. D. (2010). Extension of the application of Conway-Maxwell-Poisson Models: Analyzing traffic crash data exhibiting under-dispersion, *Risk Analysis*, 30 (8), 1268-1276.

- Lord, D., Guikema, S. D., & Geedipally, S. R. (2008). Application of the Conway–Maxwell–Poisson Generalized Linear Model for analyzing motor vehicle crashes, *Accident Analysis & Prevention*, 40 (3), 1123–1134.
- Lord, D. & Miranda-Moreno, L. F. (2008). Effects of low sample mean values and small sample size on the estimation of the fixed dispersion parameter of Poisson-gamma models for modeling motor vehicle crashes: A Bayesian Perspective. *Safety Science*, 46 (5), 751-770.
- Lord, D. (2008) Methodology for estimating the variance and confidence intervals of the estimate of the product of baseline models and AMFs. *Accident Analysis & Prevention*, 40 (3), 1013-1017.
- Lord, D. (2006). Modeling motor vehicle crashes using Poisson-gamma models: Examining the effects of low sample mean values and small sample size on the estimation of the fixed dispersion parameter. *Accident Analysis and Prevention*, 38, 751-766.

Los Angeles Times (1998). Eye on the Sky. Business section, July 20.

Lottier, S. (1938). Distribution of criminal offences in metropolitan regions, *Journal of Criminal Law, Criminology, and Police Science*, 29, 37-50.

Lundrigan, S., & Canter, D., (2001) A multivariate analysis of serial murderers' disposal site location choice in Journal of Environmental Psychology, 21, 423-432.

Lynch, S. M. (2007). *Introduction to Applied Bayesian Statistics and Estimation for Social Scientists*. Springer: New York.

Ma, J., Kockelman, K. M., & Damien, P. (2008). A multivariate Poisson-lognormal regression model for prediction of crash counts by severity, using Bayesian methods. *Accident Analysis & Prevention*, 40 (3), 964-975.

MacQueen, J. (1967). Some methods for classification and analysis of multivariate observations. 5th Berkeley Symposium on Mathematics, Statistics and Probability. Vol 1, 281-298.

McBratney, A. B. & deBruijter, J. J. (1992). A continuum approach to soil classification by modified fuzzy k-means with extragrades, *Journal of Soil Science*, 43, 159-175.

McCullagh, P. & Nelder, J. A. (1989). *Generalized Linear Models* (2nd edition). Chapman & Hall/CRC: Boca Raton, FL.

McCormick Rankin (2011). *Transportation Demand Management Plan: Final Report*. Ottawa. http://ottawa.ca/cs/groups/content/@webottawa/documents/pdf/mdaw/mdc3/~edisp/cap078202. pdf. Accessed June 1, 2012.

McClain, J. O. (1988). Dominant time series monitoring methods, *International Journal of Forecasting*, 4, 563–572.

McDonnell, P. W. Jr. (1979). Introduction to Map Projections. New York: Marcel Dekker, Inc.

McCullagh, P. & Nelder, J. A. (1989). *Generalized Linear Models* (2nd edition). Chapman & Hall/CRC: Boca Raton, FL.

McFadden, D. L. (2002). The path to discrete-choice models. *Access*, No. 20, Spring. 20-25. http://www.uctc.net/access/access/20.shtml. Accessed April 28, 2012.

McFadden, D. (1980). Econometric Models for Probabilistic Choice Among Products. *The Journal of Business*, 53(3), S13-S29.

McFadden, D. (1973). Conditional Logit Analysis of Qualitative Choice Behavior, in Zarembka, P. (ed.), *Frontiers in Econometrics*, New York, Academic.

McFadden, D. L. & Train, K. (2000). Mixed MNL model for discrete response, *Journal of Applied Econometrics*, 15 (5), 447-470.

McFadden, D. L. & Train, K. (1986). *Qualitative Choice Analysis: Theory, Econometrics, and an Application to Automobile Demand*, MIT Press: Cambridge.

McGuckin, N. A. & Srinivasan, N. (2003). *Journey to Work in the United States and its Major Metropolitan Areas*. FHWA-EP-03-058, Office of Planning, Federal Highway Administration: Washington, DC.

McQuitty, L. L. (1960). Hierarchical syndrome analysis. *Educational and Psychological Measurement*, 20, 293-304.

Makridakis, S., Andersen, A., Carbone, R., Fildes, R., Hibon, M., Lewandowski, R., Newton, J., Parzen, E. & Winkler, R. (1982), The accuracy of extrapolation (time series) methods: Results of a forecasting competition, *Journal of Forecasting*, 1, 111-153.

Maling, D. H. (1973). *Coordinate Systems and Map Projections* (1973). George Philip & Sons, London.

Malkiel, B. G. (1999). *A Random Walk Down Wall Street* (revised edition). W. W. Norton & Company: New York.

Maltz, M. D., Gordon, A. C., & Friedman, W. (1990). *Mapping Crime in Its Community Setting: Event Geography Analysis*. Springer-Verlag: New York.

Mantel, N. (1967). The detection of disease clustering and a generalized regression approach. *Cancer Research*, 27, 209-220.

Mantel, N. & Bailar, J. C. (1970). A class of permutational and multinomial test arising in epidemiological research, *Biometrics*, 26, 687-700.

MapInfo (1998). MapInfo Professional 5.0.1. MapInfo Corporation: Troy, NY.

Marcon, E. & Puech, F. (2003). Evaluating the geographic concentration of industries using distance-based methods. *Journal of Economic Geography*, 3, 409-428.

Mardia, K.V. (1972). Statistics of Directional Data. Academic Press: New York.

Massey, F. J., Jr (1951). The distribution of the maximum deviation between two sample cumulative step functions. *Annuals of Mathematical Statistics*, 22, 125-128.

Mather, A. S. (1986). Land Use. John Wiley & Sons: New York.

Messner, S. (1986). Economic inequality and levels of urban homicide, *Criminology*, 23, 297-317.

Messner, S. & Tardiff, K. (1986). The social ecology of urban homicide: an application of the 'Routine Activities approach'. *Criminology*, 22, 241-267.

Metropolis, N., A. W. Rosenbluth, M. N. Rosenbluth, A. H. Teller, & E. Teller (1953). Equations of state calculations by fast computing machines, *Journal of Chemical Physics*, 21, 1087-91.

Miaou, S. P. (2006). Coding instructions for the spatial regression models in CrimeStat. Unpublished manuscript. College Station, TX.

Miaou, S. P., Song, J. J., & Mallick, B. K. (2003). Roadway traffic crash mapping: a space-time modeling approach, *Journal of Transportation and Statistics*, 6 (1), 33-57.

Miaou, S. P. (1996). *Measuring the Goodness-of-Fit of Accident Prediction Models*. FHWA-RD-96-040. Federal Highway Administration, U.S. Department of Transportation: Washington, DC.

Microsoft (2012). ExcelTM. Microsoft Corporation: Redmond, WA.

Microsoft (1999). Welcome to the ODBC Section of the Microsoft Universal Data Access Web Site. Microsoft: Redmond, WA. http://www.microsoft.com/data/obdc.

Microsoft (2007). Windows Vista. Microsoft: Redmond, WA.

Microsoft (2002). Windows XP. Microsoft: Redmond, WA.

Microsoft (2012). SKEW - skewness function, *Microsoft Office Excel 2010, Microsoft:* Redmond, WA. http://office.microsoft.com/en-us/excel-help/skew-HP005209261.aspx.Accessed May 21, 2012.

Microsoft (1998a). Windows NT Workstation 4.0. Microsoft: Redmond, WA.

Microsoft (1998b). Windows NT Server 4.0. Microsoft: Redmond, WA.

Microsoft (1998c). Windows 98. Microsoft: Redmond, WA.

Microsoft (1995). Windows 95. Microsoft: Redmond, WA.

Miller, E. J. & Salvini, P. A. (1999). Activity-based travel behavior modeling in a microsimulation framework. Paper presented at IATBR Conference, Austin, TX. December. http://www.civ.utoronto.ca/sect/traeng/ilute/downloads/conference_papers/miller-salvini_iatbr-97.pdf. Accessed May 4, 2012.

Mitra, S. & Washington, S. (2007). On the nature of over-dispersion in motor vehicle crash prediction models, *Accident Analysis and Prevention*, 39, 459-468.

Moran, P. A. P. (1950). Notes on continuous stochastic phenomena. *Biometrika*, <u>37</u>, 17-23.

Moran, P. A. P. (1948). The interpretation of statistical maps. *Journal of the Royal Statistical Society B*, 10, 243-251.

Mungiole, M., Pickle, L. W., & Simonson, K. H. (2002). Application of a weighted Head-Banging algorithm to Mortality data maps, *Statistics in Medicine*, 18, 3201-3209.

Mungiole, M. & Pickle, L. W. (1999). Determining the optimal degree of smoothing using the weighted head-banging algorithm on mapped mortality data. In ASC '99 - Leading Survey & Statistical Computing into the New Millennium, Proceedings of the ASC International Conference, September. Available at http://srab.cancer.gov/headbang.

Murray, A.T. & Grubesic, T. H. 2002. Identifying Non-hierarchical Clusters. *International Journal of Industrial Engineering*, 9, 86-95.

Myers, R. H. (1990) Classical and Modern Regression with Applications, 2nd edition, Duxbury Press, Belmont, CA.

Nannen, V. (2003). *The Paradox of Overfitting*. Artificial Intelligence, Rijksuniversitat: Groningen, Netherlands. http://volker.nannen.com/pdf/the_paradox of overfitting.pdf. Accessed March 11, 2010.

NARC (2012). *Welcome to NARC*. National Association of Regional Councils: Washington, DC. http://www.narc.org/. Accessed May 7, 2012.

NCHRP (1998). *Integration of Land Use Planning with Multimodal Transportation Planning*. Project 8-32(3). Prepared by Parsons Brinkerhoff Quade & Douglas, Inc. for the National Cooperative Highway Research Program, Transportation Research Board, National Research Council: Washington DC. October.

NCHRP (1995). *Travel Estimation Techniques for Urban Planning*. Project 8-29(2). National Cooperative Highway Research Program, Transportation Research Board: Washington, DC. http://www.trb.org/main/blurbs/160284.aspx. Accessed May 29, 2012.

Needham, R. M. (1967). Automatic classification in linguistics. *The Statistician*, 17, 45-54.

Neft, D. S. (1962). *Statistical Analysis for Areal Distributions*. Ph.D. dissertation, Columbia University: New York.

Neill, D. B. (2009). Expectation-based scan statistics for monitoring spatial time series data. *International Journal of Forecasting* 25: 498–517.

Newell, A., Shaw, J. C. & Simon, H. A. (1957). Empirical Explorations of the Logic Theory Machine, Proceedings of the Western Joint Computer Conference, pp. 218-239.

Newman, O. (1972). *Defensible Space: Crime Prevention Through Urban Design*. Macmillan: New York.

Nilsson, N. J. (1980). *Principles of Artificial Intelligence*. Morgan Kaufmann Publishers, Inc.: Los Altos, CA.

NIST (2004). Gallery of distributions. *Engineering Statistics Handbook*. National Institute of Standards and Technology: Washington, DC. http://www.itl.nist.gov/div898/handbook/eda/section3/eda366.htm.

Normandeau, A. (1967). *Trends and Patterns in Robbery: Philadelphia, PA, 1960-66.* Ph.D. Dissertation, University of Pennsylvania: Philadelphia.

Ntzourfras, I. (2009). *Bayesian Modeling using WinBugs*. Wiley Series in Computation Statistics, Wiley: New York.

Oh, J., Lyon, C., Washington, S., Persaud, B., & Bared, J. (2003). Validation of FHWA crash models for rural intersections: lessons learned. Transportation Research Record 1840, 41-49.

Oppenheim, N. (1980). *Applied Models in Urban and Regional Analysis*. Prentice-Hall, Inc.: Englewood Cliffs, NJ.

O'Leary, M. (2009). The mathematics of geographical profiling. *Journal of Investigative Psychology & Offender Profiling*. 6(3), 253-265.

Openshaw, S. (1984). *The Modifiable Areal Unit Problem.* Norwich: Geo Books. <u>ISBN 0-86094-134-5</u>.

Openshaw, S. A., Craft, A. W., Charlton, M., & Birch, J. M. (1988). Invetigation of leukemia clusters by use of a geographical analysis machine, *Lancet*, 1, 272-273.

Openshaw, S. A., Charlton, M., Wymer, C. & Craft, A. W. (1987). A mark 1 analysis machine for the automated analysis of point data sets, *International Journal of Geographical Information Systems*, 1, 335-358.

Ord, J.K. & Getis, A. (1995). Local spatial autocorrelation statistics:Distributional Issues and an Application. *Geographical Analysis*, Vol. 27, 1995, 286-306.

Ortuzar, J. D. & Willumsen, L. G. (2001). *Modeling Transport* (3rd edition). J. Wiley & Sons: New York.

Ottawa (2008). *Transportation Master Plan*. Regional Municipality of Ottawa-Carleton. http://ottawa.ca/en/city_hall/planningprojectsreports/master_plans/tmp/. Accessed June 1, 2012.

Palfrey, T. R., & Poole, K. T. (1987). The Relationship between Information, Ideology, and Voting Behavior. *American Journal of Political Science*, 31(3), 511-530.

Papachristos, A. (2003). The social structure of gang homicides in Chicago. Annual conference of the American Society of Criminologists, Denver.

Park, B. J. (2009). Note on the Bayesian analysis of count data. From Park, Byung-Jung PhD thesis, Texas A & M University: College Station, TX.

Park, B. J. & Lord, D. (2008). Adjustment for the maximum likelihood estimate of the negative binomial dispersion parameter. *Transportation Research Record*, 2061, 9-19.

Park, B. J. & Lord, D. (2008). Adjustment for the maximum likelihood estimate of the negative binomial dispersion parameter. *Transportation Research Record*, 2061, 9-19.

Park, E.S., & Lord, D. (2007). Multivariate Poisson-Lognormal Models for Jointly ModelingCrash Frequency by Severity. In Transportation Research Record 2019: Journal of theTransportation Research Board, TRB, National Research Council, Washington, D.C., 1-6.

Park, R. & Burgess, E. (1924). *Introduction to the Science of Sociology*. Chicago University Press: Chicago.

Parzen, E. (1962). On the estimation of a probability density and mode. *Annuals of Mathematical Statistics*, 33, 1065-1076.

Paulsen, D. (2007). Improving geographic profiling through commuter/marauder prediction.. *Police Practice and Research* 8: 347-357

Paulsen, D. (2006a). Connecting the dots: assessing the accuracy of geographic profiling software. *Policing: An International Journal of Police Strategies and Management*. 20 (2), 306-334.

Paulsen, D. (2006b). Human versus machine: A comparison of the accuracy of geographic profiling methods. *Journal of Investigative Psychology and Offender Profiling* 3: 77-89.

Pettiway, L. E. (1995). Copping crack: The travel behaviour of crack users. *Justice Quarterly*, 12(3), 499-524.

Phillips, P.D. (1980) Characteristics and typology of the journey to crime. In Georges-Abeyie, D. E. & Harries, K. D. (eds), *Crime: A Spatial Perspective*, Columbia Univ. Press: New York, 156-166.

Phillips, S. (2003). The Social Structure of Vengeance: A Test of Black's Model. *Criminology*, 41(3), 673-708.

Pickle, L. W. & Su, Y. (2002). Within-State geographic patterns of health insurance coverage and health risk factors in the United States, *American Journal of Preventive Medicine*, 22 (2), 75-83.

Pickle, L. W., Mungiole, M., Jones, G. K., & White, Andrew A. (1996). *Atlas of United States Mortality*. National Center for Health Statistics: Hyattsville, MD.

Porojan, A. (2000). Trade flows and spatial effects: the Gravity Model revisited. Conference on Managing Economic Transition in Eastern Europe: Emerging Research Issues. The Manchester Metropolitan University: Manchester, England, January. http://www.business.mmu.ac.uk/research/met/papers/aporojan.pdf.

Portland (1998). *Bicycle Master Plan*. Resolution 35515, Office of Transportation, City of Portland; Portland, OR.

http://www.portlandonline.com/transportation/index.cfm?a=369990&c=49304. Accessed June 1, 2012.

Porter, C., Suhrbier, J. & Schwartz, W. L. (1999). Forecasting bicycle and pedestrian travel: State of the practice and research needs. *Transportation Research Record*, 1674, 94-101.

Preparata, F. & Hong, S. J. (1977). Convex hulls of finite sets of points in two and three dimensions, *Comm. ACM*, 20, 87-93.

Pyle, G. F. (1974). *The Spatial Dynamics of Crime*. Department of Geography Research Paper No. 159, University of Chicago: Chicago.

Pyle, G. F., Hanten. E. W., Williams, P. G., Pearson, II, A. L. Doyle, J. G. & Kwofie, K. (1974). *The Spatial Dynamics of Crime*. Department of Geography, University of Chicago: Chicago.

Rabin, S. (2000a). A* aesthetic optimizations. In DeLoura, M.. *Game Programming Gems*. Charles River Media, Inc.: Rockland, MA., 264-271.

Rabin, S. (2000b). A* speed optimizations. In DeLoura, M., *Game Programming Gems*. Charles River Media, Inc.: Rockland, MA., 272-287.

Radford, N. (2006). The problem of overfitting with maximum likliehood . CSC 411: Machine Learning and Data Mining, University of Toronto: Toronto, CA. http://www.cs.utoronto.ca/~radford/csc411.F06/10-nn-early-nup.pdf Accessed March 11, 2010.

Radford, N. (2003). Slice sampling, Annals of Statistics, 31(3), 705-767.

Rand, A. (1986). Mobility triangles. In Figlio, R. M., Hakim, S. & Rengert, G. (ed), *Metropolitan Crime Patterns*. Criminal Justice Press: Monsey, NY, 117-126.

Ratcliffe, J.H. (2008). The magnitude of the crime challenge (Chapter 3). *Intelligence-Led Policing*, Willan Publishing: Cullompton.

Ravenstein, E. G. (1885). The laws of migration. Journal of the Royal Statistical Society. 48.

Recker, W. (2000). A bridge between travel demand modeling and activity-based travel analysis. *Center for Activity Systems Analysis*. Paper UCI-ITS-AS-WP-00-11. http://repositories.cdlib.org/itsirvine/casa/UCI-ITS-AS-WP-00-11/. Accessed May 23, 2012.

Reilly, W. J. (1929). Methods for the study of retail relationships. *University of Texas Bulletin*, 2944.

Rengert, G., Piquero, A. R., & Jones, P. R. (1999). Distance decay re-examined, *Criminology*, 37 (2), 427-445.

Rengert, G. F. (1995). Comparing cognitive hot spots to crime hot spots. In Block, C. R., Dabdoub, M. & Fregly, S., *Crime Analysis Through Computer Mapping*. Police Executive Research Forum: Washington, DC., 33-47.

Rengert, G. F. (1981). Burglary in Philadelphia: a critique of the opportunity structure model. In Brantingham, P. J. & Brantingham, P. L., *Environmental Criminology*. Waveland Press, Inc.: Prospect Heights, IL, 189-202.

Rengert, G. F. (1975). Some effects of being female on criminal spatial behavior. *The Pennsylvania Geographer*, 13 (2), 10-18.

Renshaw, E. (1985). Computer simulation of sitka spruce: spatial branching models for canopy growth and root structure. *Journal of Mathematics Applied in Medicine and Biology*, 2, 183-200.

Repetto, T. A. (1974). Residential Crime. Ballinger: Cambridge, MA.

Rhodes, W. M. & Conly, C. (1981). Crime and mobility: an empirical study. In Brantingham, P. J. & Brantingham, P. L., *Environmental Criminology*. Waveland Press, Inc.: Prospect Heights, IL, 167-188.

Rich, T. (2001). Crime mapping and analysis by community organizations in Hartford, Connecticut, *Research in Brief*. National Institute of Justice, U. S. Department of Justice: Washington, DC., http://www.ncjrs.org/pdffiles1/nij/185333.pdf.

Rich, T., & Shively, M. (2004). *A Methodology for Evaluating Geographic Profiling Software*. Final Report for the National Institute of Justice, Abt Associates: Cambridge, MA. http://www.ojp.usdoj.gov/nij/maps/gp.pdf

Ripley, B. D (1981). Spatial Statistics. John Wiley & Sons: New York.

Ripley, B. D. (1976). The second-order analysis of stationary point processes. *Journal of Applied Probability* 13: 255-66.

Robinson, A. H., Sale, R. D., Morrison, J. L. & Muehrcke, P. C. (1984). *Elements of Cartography* (5th edition). J. Wiley & Sons: New York.

Roemer, F. & Sinha, K. (1974). Personal security in buses and its effects on ridership in Milwaukee, *Transportation Research Record*, 487, 13-25.

Rosenblatt, M. (1956). Remarks on some non-parametric estimates of a density function. *Annuals of Mathematical Statistics*, 27, 832-837.

Rossmo, D. K. (2005a). Geographic heuristics or shortcuts to failure?: Response to Snook et al. *Applied Cognitive Psychology* 19: 651-654.

Rossmo, D. K. (2005b). Response to NIJ's methodology for evaluating geographic profiling software. http://www.ojp.usdoj.gov/nij/maps/gp.htm.

Rossmo, D. K. & Filer, S. (2005). Analysis versus guesswork. *Blue Line Magazine*, August / September, 24:26.

Rossmo, D. K. (2000). Geographic Profiling. CRC Press: Boca Raton Fl.

Rossmo, D. K. (1997). Geographic profiling. In Jackson, J. L. & Bekerian, D. A. *Offender Profiling: Theory, Research and Practice*. John Wiley & Sons: Chicester, 159-175.

Rossmo, D. K. (1995). Overview: multivariate spatial profiles as a tool in crime investigation. In Block, C. R., Dabdoub, M. & Fregly, S., *Crime Analysis Through Computer Mapping*. Police Executive Research Forum: Washington, DC., 65-97.

Rossmo, D. K. (1993a). Multivariate spatial profiles as a tool in crime investigation. In Block, C. R. & Dabdoub, M. (eds), *Workshop on Crime Analysis Through Computer Mapping:*Proceedings. Illinois Criminal Justice Information Authority and Loyola University Sociology Department: Chicago. (Library of Congress HV7936.C88 W67 1993).

Rossmo, D. K. (1993b). Target patterns of serial murderers: a methodological model. *American Journal of Criminal Justice*, 17, 1-21.

Rushton, G. (1979). *Optimal Location of Facilities*. COMPress: Wentworth, NH. SPSS, Inc. (1999). *SPSS 9.0 for Windows*. SPSS, Inc.: Chicago.

SAS Institute Inc. (1998). Statistical Analysis System, Version 7. Cary, NC.

Schachter, J. (2001). Geographical mobility: March 1999 to March 2000. *Current Population Reports*, P20-538, March. U.S. Census Bureau: Hyattsville, MD.

Schnell, J. B., Smith, A. J., Dimsdale, K. R. & Thrasher, L. J. (1973). *Vandalism and Passenger Security: A Study of Crime and Vandalism on Urban Mass Transit Systems in the United States and Canada*. Prepared by the American Transit Association for the Urban Mass Transportation Administration (now Federal Transit Administration), U. S. Department of Transportation. National Technical Information Service: Springfield, VA. PB 236-854.

Schwartz, W.L., Porter, C. D., Payne, G. C., Suhrbier, J. H., Moe, P. C. & Wilkinson III, W. L. (1999). *Guidebook on Methods to Estimate Non-Motorized Travel: Overview of Methods*. Turner-Fairbanks Highway Research Center, Federal Highway Administration: McLean, VA. July. http://www.fhwa.dot.gov/publications/research/safety/pedbike/98165/index.cfm. Accessed June 1, 2012.

Scott, D. W. (1992). *Multivariate Density Estimation: Theory, Practice, and Visualization*. John Wiley & Sons: New York.

Sedgewick, R. (2002). *Algorithms in C++: Part 5 Graph Algorithms* (3rd edition). Addison-Wesley: Boston.

Sellers, K. S. & Shmueli, G. (2010), A flexible regression model for count data, *Annals of Applied Statistics*, 4 (2), 943-961.

Shaw, C. R. (1929). Delinquency Areas. University of Chicago Press: Chicago.

Shaw, C. R. & McKay, H. D. (1942). *Juvenile Delinquency in Urban Areas*. Chicago: University of Chicago Press.

Shaw, C. & McKay, H.D. (1972). *Juvenile Delinquency and Urban Areas* (revised edition). University of Chicago Press: Chicago.

Shekhar, S. & Chawla, S. (2003). *Spatial Databases: A Tour*. Prentice-Hall: Upper Saddle River, NJ.

Sherman, L.W. & Weisburd, D. (1995). General deterrent effects of police patrol in crime hot spots: a randomized controlled trial. *Justice Quarterly*. 12, 625-648.

Sherman, L. W., Gartin, P. R. & Buerger, M. E. (1989). Hot spots of predatory crime: routine activities and the criminology of place. *Criminology*, 27(1), 27-56.

Shifton, Y., Ben-Akiva, M., Proussaloglu, K., de Jong, G., Popuri, Y., Kasturirangan, K., & Bekhor, S. (2003). Activity-based modeling as a tool for better understanding travel behaviour. *Conference Proceedings*. 10th International Conference on Travel Behaviour Research, Lucerne, Switzerland. August. http://www.ivt.ethz.ch/news/archive/20030810_IATBR/shiftan.pdf. Accessed May 23, 2012.

Shmueli G., Minka T., Kadane J.B., Borle S., & Boatwright, P.B (2005). A useful distribution for fitting discrete data: revival of the Conway–Maxwell–Poisson distribution. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 54(1), 127–142.

Shoup, D. (2002). Roughly right vs. precisely wrong. Access, No. 20, Spring. 20-25.

Siegel, S. (1956). *Nonparametric Statistics for the Behavioral Sciences*. McGraw-Hill: New York.

Silverman, B. W. (1986). *Density Estimation for Statistics and Data Analysis*. Chapman & Hall: London.

Simon, H. A. & Newell, A. (1963). The uses and limitations of models. In Marx, M. (ed), *Theories of Contemporary Psychology*, Macmillan: New York, 89-104.

Skiena, S. S. (1997). Convex hull. §8.6.2 in *The Algorithm Design Manual*. Springer-Verlag: New York, 351-354.

Smirnov, N. V. (1948). Table for estimating the goodness of fit of empirical distributions. *Annuals of Mathematical Statistics*, 19, 279-281.

Smith, T. S. (1976). Inverse distance variations for the flow of crime in urban areas. *Social Forces*, 25(4), 804-815.

Smith, W., Glave, S. & Davison, E. (2000). Furthering the integration of routine activity and social disorganization theories: Small units of analysis and the study of street robbery as a diffusion process. *Criminology*, 38, 489-523.

Sneath, P. H. A. (1957). The application of computers to taxonomy. *Journal of General Microbiology*, 17, 201-226.

Snook, B. (2004). Individual differences in distance travelled by serial burglars. *Journal of Investigative Psychology and Offender Profiling, 1*, 53-66.

Snook, B., Cullen, R. M., Mokros, A., & Harbort, S. (2005). Serial murderers' spatial decisions: factors that influence crime location choice. *Journal of Investigative Psychology and Offender Profiling*, 2, 147-164.

Snook, B., Zito, M., Bennell, C. & Taylor, P. J. (2005). On the complexity and accuracy of geographic profiling strategies. *Journal of Quantitative Criminology*, 21 (1), 1-26.

Snook, B., Taylor, P. & Bennell, C. (2004). Geographic profiling: the fast, fugal and accurate way. *Applied Cognitive Psychology* 18: 105-121.

Snyder, J. P. (1987). *Map Projections - A Working Manual*. U.S. Geological Survey Professional Paper 1395. U. S. Government Printing Office: Washington, DC.

Snyder, J. P. & Voxland, P. M. (1989). *An Album of Map Projections*. U.S. Geological Survey Professional Paper 1453. U. S. Government Printing Office: Washington, DC.

Sokal, R. R. & Sneath, P. H. A. (1963). *Principles of Numerical Taxonomy*. W. H. Freeman & Co.: San Francisco.

Sokal, R. R. & Michener, C. D. (1958). A statistical method for evaluating systematic relationships. *University of Kansas Science Bulletin*, 38, 1409-1438.

Son, D., Tsutakawa, R. K., Kim, H. & He, Z. (2000). Spatio-temporal interaction with disease mapping. *Statistics in Medicine*, 19, 2015-2035.

So, A. M., Ye, Y., & Zhang, J. (2007). Greedy algorithms for metric facility location problems. In Gonzalez, T. F. (ed), *Handbook of Approximation Algorithms and Metaheuristics*, CRC Computer & Information Sciences Series, Chapman & Hall/CRC: Boca Raton, FL, Chapter 39.

Springer (2001). Polya distribution, *Encyclopedia of Mathematics*, Springerlink: London, http://eom.springer.de/p/p073540.htm.

Spitzer, F. (1976). Principles of Random Walk (second edition). Springer: New York.

Stack, S. (1984). Income inequality and property crime, *Criminology*, 22, 229-257.

StatSoft (2010). Tolerance, *StatSoft Electronic StatisticsTextbook*, StatSoft:Tulsa, OK. http://www.statsoft.com/textbook/statistics-glossary/t/button/t/

Stephenson, L. (1980). Centrographic analysis of crime. In George-Abeyie, G. & Harries, K. D. (eds), *Crime*, *A Spatial Perspective*, Columbia University Press: New York.

Stewart, J. Q. (1950). The development of social physics. *American Journal of Physics*, 18, 239-53.

Stoe, D., Watkins, C. R. Kerr, J., Rost, L. & Craig, T. (2003). *Using Geographic Information Systems to Map Crime Victim Services: A Guide for State Victims of Crime Act Adminstrators and Victim Service Providers*. National Institute of Justice, U. S. Department of Justice: Washington, DC.,

http://www.ojp.usdoj.gov/ovc/publications/infores/geoinfosys2003/welcome.html.

Stopher, P. R. & Meyburg, A. H. (1975). *Urban Transportation Modeling and Planning*. Lexington, MA: Lexington Books.

Stouffer, S. A. (1940). Intervening opportunities: a theory relating mobility and distance. *American Sociological Review*, 5, 845-67.

Stout, B. (2000). The basics of A* for path planning. In DeLoura, M.. *Game Programming Gems*. Charles River Media, Inc.: Rockland, MA., 254-263.

Systat, Inc. (2008). Systat 13: Statistics I. SPSS, Inc.: Chicago.

Tabachnick, B. G. & Fidell, L. S.(1996). *Using Multivariate Statistics* (3rd ed). Harper Collins: New York.

Taylor, P. J. (1970). *Interaction and Distance: An Investigation into Distance Decay Functions and a Study of Migration at a Microscale*. PhD thesis, University of Liverpool: Liverpool.

Thompson, H. R. (1956). Distribution of distance to nth neighbour in a population of randomly distributed individuals. *Ecology*, 37, 391-394.

Thorndike, R. L. (1953). Who belongs in a family?. Psychometrika, 18, 267-276.

Thrasher, F. M. (1927). *The Gang*, University of Chicago Press: Chicago.

Thünen, J. H. Von (1826). *Der Isolierte Staat in Beziehung auf Landwirtshaft und Nationalökonomie* (The Isolated State in Relation to Agriculture). Hamburg.

Thurstone, L. L. (1947). Multiple-Factor Analysis. Chicago: University of Chicago Press.

Tita, G., & Griffiths, E. (2005). Traveling to Violence: The Case for a Mobility-Based Spatial Typology of Homicide. *Journal of Research in Crime and Delinquency*, 42, 275-308.

Train, K. (2009). *Discrete Choice Methods with Simulation* (2nd edition). Cambridge University Press: Cambridge.

Train, K. E. (1980). A Structured Logit Model of Auto Ownership and Mode Choice. *The Review of Economic Studies*, 47(2), 357-370.

Trigg, D. W. (1964). Monitoring a forecasting system, *Operational Research Quarterly*, 15, 271–274.

Tukey, P. A. & Tukey, J. W. (1981). Graphical display of data sets in 3 or more dimensions. In Barnett, V. (ed), *Interpreting Multivariate Data*. John Wiley & Sons: New York.

Turnbull, B. W., Iwano, E.J., Burnett, W. S., Howe, H. L. & Clark, L. C. (1990). Monitoring for clusters of disease: application to leukemia incidence in upstate New York, *American Journal of Epidemiology*, 132, S136-S143.

Turner, S. (1969). Delinquency and distance. In Wolfgang, M. E. & Sellin, T. (eds), *Delinquency: Selected Studies*. John Wiley & Sons: New York.

Turner, S., Shunk, G. & Hottenstein, A. M. (1998). *Development of a Methodology to Estimate Bicycle and Pedestrian Travel Demand*. Report 1723-S, Texas Transportation Institute: College Station. http://tti.tamu.edu/publications/catalog/record/?id=146. Accessed April 28, 2012.

U.S. Census Bureau (2012). *Commuting (Journey to Work)*. U.S. Census Bureau: Washington, DC. http://www.census.gov/hhes/commuting.

U.S. Census Bureau (2011). Summary File 3 (SF3). U.S. Census Bureau: Washington, DC. http://www.census.gov/census2000/sumfile3.html.

U.S. Census Bureau (2009). Commuting (Journey to Work) Main. U.S. Census Bureau, U.S. Department of Commerce: Washington, DC. http://www.census.gov/hhes/commuting/. Accessed June 1, 2012.

- U.S. Census Bureau (2004a). *TIGER/Line 2004*. Bureau of the Census, U. S. Department of Commerce: Washington, DC.
- U.S. Census Bureau (2004b). *Journey to Work and Place of Work*. Bureau of the Census, U.S. Department of Commerce: Washington, DC. http://www.census.gov/population/www/socdemo/journey.html
- U.S. Census (2003). Net Worth and Asset Ownership of Households: 1998 and 2003 (Table A). *Current Population Reports*, P70-88. U. S. Census Bureau, U. S. Department of Commerce: Washington, DC. http://www.census.gov/prod/2003pubs/p70-88.pdf. Accessed April 28, 2012.
- U.S. Census Bureau (2000). All across the USA: Population distribution, 1999, In *Population Profile of the United States: 1999*. Bureau of the Census, U. S. Department of Commerce: Washington, DC., chapter 2.

USDOJ (2000). *Regional Crime Analysis Geographic Information System (RCAGIS)*. Criminal Division, U.S. Department of Justice: Washington, DC. http://www.usdoj.gov/criminal/gis/rcagishome.htm.

USDOT (2003). *Title XXIII, Part 450.* Code of Federal Regulations. Code of Federal Regulations, Title 23, Part 450, Volume 1. 23CFR450. Washington, DC.

van Koppen, P. J, van der Kemp, J. J. & Christianne J. P. (2002) Geografische daderprofilering (Geographic offender profiling) in van Koppen et al, *Het Recht Van Binnen: Psychologie Van Het Recht* (The Law from Inside: Psychology of the Law), Deventer, Netherlands Kluwer.

van Koppen, P. J., Christanne J. P. & Koppen, V. V. (2000). Cirkels van delicten: over pleegplaatsen van misdrijven en de woonplaats van de daders (Circles of crime: incident location and the residences of the offenders), *De Psychologie en Recht* (The Psychologist, Psychology and Law), Oktober, 435-442.

van Koppen, P. J. & Jansen, R. W. J. (1998). The Road to robbery: travel patterns in commercial robberies. *British Journal of Criminology*, 38 (2), 230-246.

van Koppen, P. J. & de Keijser, J. W. (1997). Desisting distance decay: on the aggregation of individual crime trips. *Criminology*, 35 (3), 505-516.

Venables, W. N. & Ripley, B. D. (1997). *Modern Applied Statistics with S-Plus (second edition)*. Springer-Verlag: New York.

von Thünen, J. (1826). *The Isolated State in Relation to Agriculture and Political Economy*. English edition, van Suntum, Ulrich. Palgrave Macmillan:Houndsmills, Basingstoke, Hampshire, England, 2009.

Wachs, M., Taylor, B., Levine, N. & Ong, P. (1993). The Changing Commute: A Case Study of the Jobs/Housing Relationship Over Time. *Urban Studies*. 30 10, 1711-1729.

Wachter, S. M. & Cho, M. (1991). "Interjurisdictional price effects of land use controls". *Washington University Journal of Urban and Contemporary Law*, 40, 49-63.

Waller, L. A. & Gotway, C. A. (2004). *Applied Spatial Statistics for Public Health Data*. John Wiley & Sons: Hoboken, NJ.

Ward, J. H. (1963). Hierarchical grouping to optimize an objective function. *Journal of the American Statistical Association*. 58, 236-244.

Warren, J., Reboussin, R., Hazelwood, R., Cummings, A., Gibbs, N. & Trumbetta, S. (1998). The distance correlates of serial rape. *Journal of Quantitative Criminology*, 14, 35-58.

Wartell, J. & McEwen, T. (2001). *Privacy in the Information Age: A Guide for Sharing Crime Maps and Spatial Data*. National Institute of Justice, U. S. Department of Justice: Washington, DC., http://www.ncjrs.org/pdffiles1/nij/188739.pdf.

WASHCOG (1974). *Citizen Safety and Bus Transit*. Metropolitan Washington Council of Governments. National Technical Information Service, Springfield, VA. PB 237-740/AS.

Weber, A. (1909). Über den Standort der Industrien (Theory of Location of Industries).

Weisburd, D., Groff, E. R., & Yang, S-M (2012). *The Criminology of Place*. Oxford University Press: New York.

Weisburd, D., Bushway, S., Lum, C. & Yang, S. (2004). Trajectories of crime at places: A longitudinal study of street segments in the City of Seattle. *Criminology*, 42 (2), 283-321.

Weisburd, D. & McEwen, T. (1998). *Crime Mapping Crime Prevention*. Criminal Justice Press: Monsey, NY.

Weisburd, D. & Green, L. (1995). Policing drug hot spots: the Jersey City drug market analysis experiment. *Justice Quarterly*. 12 (4), 711-735.

Weisburd, D., Maher, L., & Sherman, L. (1992). Contrasting crime general and crime specific theory: the case of hot-spots of crime. *Advances in Criminological Theory*, 4, 45-70.

Weishart, D. (1969). Mode analysis. In Cole, A. J. (ed), *Numerical Taxonomy*, Academic Press: New York.

White, R. Clyde (1932). The relationship of felonies to environmental factors in Indianapolis. *Social Forces*, 10 (4), 488-509.

Whittle, P. (1958). On the smoothing of probability density functions. *Journal of the Royal Statistical Society, Series B*, 55, 549-557.

Whittle, P., 1954. On stationary process in the plane. *Biometrika*, 41, 434–449.

Wikipedia (2013a). Instrumental variable. Wikipedia. http://en.wikipedia.org/wiki/Instrumental variable. Accessed January 31, 2013.

Wikipedia (2013b). Specification (regression). Wikipedia. http://en.wikipedia.org/wiki/Specification (regression). Accessed January 31, 2013.

Wikipedia (2012a). Condition number. *Wikipedia*. http://en.wikipedia.org/wiki/Condition_number. Accessed March 19, 2010

Wikipedia (2012b). Geometric mean. http://en.wikipedia.org/wiki/Geometric_mean and "Weighted geometric mean" http://en.wikipedia.org/wiki/Weighted_geometric_mean.

Wikipedia (2012c). Greedy algorithm, *Wikipedia*. http://en.wikipedia.org/wiki/Greedy_algorithm. Accessed March 12, 2010.

Wikipedia (2012d). Harmonic mean. http://en.wikipedia.org/wiki/Harmonic mean and "Weighted harmonic mean" http://en.wikipedia.org/wiki/Weighted_harmonic_mean.

Wikipedia (2012e). Maximum likelihood, *Wikipedia*. http://en.wikipedia.org/wiki/Maximum likelihood. Accessed March 12, 2010.

Wikipedia (2012f). Negative binomial distribution, *Wikipedia*, http://en.wikipedia.org/wiki/Negative_binomial_distribution Accessed February 24, 2010.

Wikipedia (2012g). Modifiable Area Unit Problem. Wikipedia. http://en.wikipedia.org/wiki/Modifiable_areal_unit_problem

Wiles, P. & Costello, A. (2000). The 'road to nowhere': The evidence for travelling criminals, *Home Office Research Study, No. 207*. Research, Development and Statistics Directorate, London. http://www.homeoffice.gov.uk/rds/prgpdfs/brf400.pdf

Wilson, A. G. (1970). *Entropy in Urban and Regional Planning*. Leonard Hill Books: Buckinghamshire.

Wilson, J.Q. & Kelling, G. (1982) Broken Windows: The Police and Neighborhood Safety. *Atlantic Monthly*, March. 29-38.

White, R. C. (1932). The relation of felonies to environmental factors in Indianapolis. *Social Forces*, 10(4), 498-509.

Wooldridge, J. (2002). Examining the (Ir)Relevance of Aggregation Bias for Multilevel Studies of Neighborhoods and Crime with an Example Comparing Census Tracts to Official Neighborhoods in Cincinnati. *Criminology* 40:681-710.

Wong, D. W. S. & Lee, J. (2005). Statistical Analysis of Geographic Information with ArcView GIS and ArcGIS. J. Wiley & Sons, Inc.: New York.

Wright, R. T. & Decker, S. H. (1997). *Armed Robbers in Action: Stickups and Street Culture*. Northeastern University Press, Boston.

Xie, X. L. & Beni, G. (1991). A validity measure for fuzzy clustering. IEEE Trans. Pattern Analysis Machine Intell., 13, 841-847.

Zhao, F., Chow, L-F, Li, M-T, Gan, A., & Shen, D. L. (2001). *Refinement of FSUTMS Trip Distribution Methodology*. Lehman Center for Transportation Research, Florida International University: Miami, FL.