

Curriculum Vitae
JEFF TAYMAN

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EDUCATION B.A., Anthropology, Florida Atlantic University, 1974
M.S., Sociology (emphasis in Demography/Statistics),
Florida State University, 1976
Ph.D., Sociology (emphasis in Demography/Statistics),
Florida State University, 1979

SPECIALIZED SKILLS Demographic and Economic Methods, Econometric and Urban
Systems Modeling, Applied Economic and Demographic Studies,
Project Management, Information Technology Deployment

AWARDS Walt Terry Award for the Best Applied Demography paper at the
Southern Demographic Association Meetings, 1999 and 2003

PROFESSIONAL EXPERIENCE

Director of Technical Services Department, July 2003-December 2006 (retired)
San Diego Association of Governments

Full management responsibilities for the activities and operations of the 60 person Technical Services Department, including information system and Internet technologies, GIS application and database development, small area demographic and economic studies, estimates and forecasts, transportation and urban modeling, technical assistance and survey programs, criminal justice program evaluation, and the Automated Regional Justice Information System.

Director of the Service Bureau, a fee for service program. The Service Bureau averaged \$600,000-\$700,000 in annual revenues and provides services to clients in the private and public sectors.

Lead responsibility for the SANDAG Public Safety Policy Advisory Committee who advises the SANDAG Board of Directors on major policy-level matters related to public safety. Composed of both elected and top public safety officials, the goals of the Committee include improving the quality of life in the region by promoting public safety and justice through collaboration, information sharing, effective technology, and objective monitoring and assessment.

Direct the development and implementation of Department goals, objectives, policies, and priorities. Provide highly responsible and complex administrative and policy support to the Executive and Deputy Executive Directors, Board of Directors, and top public safety officials.

Manage and participate in the development and administration of a \$14 million budget and establish, within Association policy, appropriate service and staffing levels.

Participate on a variety of boards and commissions; attend and participate in professional group meetings; and stay abreast of new trends and innovations in the fields of urban planning, GIS, modeling research, information technologies and application development, criminal justice evaluation and information delivery systems to law enforcement agencies.

**Director of Research and Information Systems Division, September 1999-June 2003
San Diego Association of Governments**

Full management responsibilities for the activities and operations of the Research and Information Systems Division, including information system and Internet technologies, GIS application and database development, small area demographic and economic estimates and forecasts, transportation and urban modeling, and technical assistance and survey programs.

Direct the development and implementation of division goals, objectives, policies, and priorities.

Provide highly responsible and complex administrative and policy support to the Executive and Deputy Executive Directors.

Manage and participate in the development and administration of a \$3.2 million budget and establish, within Association policy, appropriate service and staffing levels.

Participate on a variety of boards and commissions; attend and participate in professional group meetings; and stay abreast of new trends and innovations in the fields of urban planning, GIS, and modeling research and information systems development.

**Senior Demographer, April 1984 – September 1999
San Diego Association of Governments**

Managed the Estimation and Forecasting Programs.

Developed demographic and economic estimates and forecasts for census blocks.

Designed, evaluated, and improved estimation and forecasting models, using cohort-component, econometric, and urban modeling techniques.

Designed and produced value-added applications such as market area profiles and site location analyses.

Delivered oral presentations and prepared reports and articles for publication.

Supervised and conducted complex statistical analyses and designed research strategies.

Associate Regional Planner, January 1982 - March 1984
San Diego Association of Governments

Assisted in the management of the Estimation and Forecasting Programs.

Developed and implemented statistical, demographic, and econometric forecast models.

Managed the complex socio-economic and land use database system.

Prepared written documentation and oral presentations.

Conducted complex statistical analyses and survey design.

Research Investigator, November 1979 - December 1981
State of Washington, Office of Financial Management

Managed the demographic and statistical analysis programs.

Coordinated the preparation of state, county, and municipal demographic estimates and forecasts.

Served as demographic researcher and statistics advisor for all state agencies.

Developed and maintained computerized data bases and software.

Organized the statewide network for processing and disseminating demographic information.

TEACHING AND RESEARCH APPOINTMENTS

**Adjunct Research Associate, March 2007-
Center for Population Studies, University of Mississippi**

**Lecturer, January 2003 -
Economics Department, University of California, San Diego**

Teach upper division undergraduate class in demography, forecasting, and the economics of population.

**Adjunct Professor, May 1984 - September 1991
College and Business Administration, National University, San Diego, California**

Taught graduate seminars in applied statistical methods, research design, and market research.

CONSULTING

Washoe County, Nevada

Developed a strategic plan for implementing a GIS-based, annual population and demographic characteristics estimation program for census blocks and other subcounty geographic areas

TRW, Environmental and Safety Systems

Developed a 50-year forecast for census tracts and blocks for southern Nevada as part of the evaluation of the Yucca mountain nuclear waste dump site.

State of Washington

Implemented a methodology for estimating household income distributions for the state, counties, and cities.

Reviewed the system for estimating salmon caught by non-commercial licensed fisherman. Provided recommendations for improving the statistical reliability of the estimates and reducing program cost.

Designed and implemented a computer simulation model to forecast prison populations.

PUBLICATIONS

Refereed Journal Articles

Census Data for Transportation Planning, Analysis, and Implementation. Journal of Social and Economic Measurement (Forthcoming spring 2007) (with Kristen Rohanna)

Precision, Bias, and Uncertainty for State Population Forecasts: An Exploratory Analysis of Time Series Models. Population Research and Policy Review (forthcoming June 2007) (with Jeff Lin and Stan Smith)

An Evaluation of Population Projections by Age. Demography 2003 40(4): 741-757 (with Stan Smith)

Toward a Ideal Measure of Accuracy for Subnational Demographic Estimates Demography 2000 37: 193-201 (with Dave Swanson and Charles Barr)

In Search of the Ideal Measure of Accuracy for Subnational Demographic Forecasts Population Research and Policy Review 1999 18: 387-409 (with Dave Swanson and Charles Barr)

On the Validity of MAPE as a Measure of Population Forecast Accuracy Population Research and Policy Review 1999 17: 299-322 (with Dave Swanson)

The Role of Population Size in the Determination and Prediction of Population Forecast Errors: An Evaluation Using Confidence Intervals for Subcounty Areas Population Research and Policy Review 1998 17: 1-20 (with Edward Schafer and Larry Carter)

On the Utility of Population Forecasts Demography 1996 33(4): 523-528. (with Dave Swanson)

Forecasting, Growth Management, and Public Policy Decision-Making Population Research and Policy Review 1996 15(5-6): 491-508.

The Accuracy of Small Area Population Forecasts Based on a Spatial Interaction Land Use Modeling System. Journal of the American Planning Association 1996 62(1): 85-98.

Between a Rock and a Hard Place: The Evaluation of Demographic Forecasts. Population Research and Policy Review 1995 14(2): 233-249. (with Dave Swanson)

Retail Site Selection and Geographic Information Systems. Journal of Applied Business Research 1995: 46-54. (with Louis Pol)

On the Utility of Lagged Ratio-Correlation as a Short-term County Population Projection Method. Journal of Economic and Social Measurement 1995 21: 1-16. (with David Swanson and Donald Beck)

Toward a Casual Model of Drug Use. Crime and Delinquency, 1992 38(4): 583-601. (with Susan Pennell)

Guardian Angels: A Unique Approach to Crime Prevention. Crime and Delinquency, 1989 35(3): 378-400. (with Susan Pennell, Christine Curtis, and Joel Henderson)

Postcensal Estimates of Household Income Distribution. Demography, 1989 26(1): 149-159. (with Lois Fonseca)

The Impact of Coefficient Drift and Measurement Error on the Accuracy of Ratio-Correlation Population Estimates. The Review of Regional Studies, 1985 15(2): 3-10. (with Edward Schafer)

Confidence Intervals for Postcensal State Population Estimates. Demography, 1982 19(2): 191-210. (with Thomas Espenshade)

Measuring Temporal Stability in Regression Models of Population Estimation. Demography, 1982 19(1): 135-146. (with Marylou Mandel)

Changing Metropolitan Morphology and Municipal Service Expenditures in Cities and Rings 1960-1970. Social Science Quarterly, 1980 62: 595-611. (with David Sly)

Metropolitan Morphology and Population Mobility: The Theory of Ecological Expansion Reexamined. The American Journal of Sociology, 1980 86(1): 119-138. (with David Sly)

Migration and the Ecological Complex Reexamined. American Sociological Review, 1977 42(5): 783-794. (with David Sly)

Non-Refereed Articles

Meeting Local Information Needs: A Case Study in Team Applied Demography. Applied Demography 2002 14(1): 1-3.

Small Area Demographic Forecasts: The Contributions of Robert C. Schmitt. Applied Demography 1994 9(1): 2-4.

Books and Book Chapters

Population Projections. In *Methods and Materials of Demography, 2nd Edition*. Elsevier: New York, New York, March 2004 (With Stan Smith, Dave Swanson, and MV George)

State and Local Population Projections: Methodology and Analysis. Kluwer-Plenum: New York, New York, March 2001 (with Stan Smith and Dave Swanson)

Locating Fire Station Sites: The Response Time Component. In *Demographics: A Case Book for Business and Government*. Westview Press: Boulder, Colorado, 1994. (with Sue Carnevale and Bob Parrott)

Proceedings

New Directions in Population Forecasting. In *Proceedings of the 4th International Conference on Prediction and Non-Linear Dynamics*. Institute of Information Technologies, Faculty of Technology, Tomas Bata University, Zlin, Czech Republic, 2001 (with Stan Smith and Dave Swanson)

On Measuring Accuracy in Subnational Demographic Forecasts. In *Proceedings of the 52nd Session of the International Statistical Institute*. International Statistical Institute, Voorburg, Netherlands, 1999 (With Charles Barr and Dave Swanson)

Population and Employment Estimates for Micro-Geographic Areas. In *Issues in Applied Demography: Proceedings of International Conference on Applied Demography*. Bowling Green State University, 1994.

PROFESSIONAL CONFERENCE PARTICIPATION

Contributed Papers

Empirical Prediction Intervals for County Population Forecasts. Population Association of America Conference, New York, NY, April 2007 (with Stefan Rayer and Stan Smith)

Census Data for Transportation Planning, Analysis, and Implementation. Southern Demographic Association Meetings. Durham, NC, November 2006. (with Kristen Rohanna)

Prediction Intervals for County Population Forecasts. British Society for Population Studies Conference. University of Southampton, Southampton, UK, September 2006 (with Stefan Rayer and Stan Smith)

Prediction Intervals for County Population Forecasts. Southern Demographic Association Meetings, Oxford, MS, November 2005. (with Stefan Rayer and Stan Smith)

Keys to Successful Data Development Partnerships. North American Travel Monitoring Exposition and Conference, Coronado, CA, June 2004.

Confidence Intervals for Population Forecasts: A Case Study of Time Series Models for States. Population Association of America Conference, Boston, MA, April 2004 (with Stan Smith)

An Evaluation of Population Projections by Age. Southern Demographic Association Meetings, Washington, DC, October 2003 (with Stan Smith- Received Walt Terrie Award for Outstanding paper in applied demography)

Integrating and Analyzing Land Use, Land Cover, and Activity Information Using remote Sensing Technology. Third National Symposium on Remote Sensing for Transportation, Denver, Colorado, November 2002.

MAPE-R: Its Features and Results from A National Block-Group Test. Meetings of the American Statistical Association. New York, NY, August 2002 (with Dave Swanson, Tom Bryant, and Charles Barr)

An Evaluation of State Population Projections by Age. Population Association of America Conference. Atlanta, GA, May 2002 (with Stan Smith)

New Directions in Population Forecasting. 4th International Conference on Prediction and Synergetic. Tomas Bata University, Zlin, Czech Republic, September 2001 (with Stan Smith and Dave Swanson)

Developing Age-Specific Migration Typologies for Small Area Population Estimates. Population Association of America Conference. Washington, DC, March 2001 (with Ed Schafer and Charles Rynerson)

Leveraging Extant Data To Meet Local Information Needs: A Case Study In Team Applied Demography. Population Association of America Conference. Los Angeles, March 2000 (with Peter Morrison, Carol Popoff, Irina Sharkova and Dave Swanson).

We are what We Measure: Toward a New Approach for Assessing Population Forecast Accuracy. Southern Demographic Association Meetings. San Antonio, TX, October, 1999 (with Dave Swanson and Charles Barr- Received Walt Terrie Award for Outstanding paper in applied demography)

On Measuring Accuracy in Subnational Demographic Forecasts. 52nd meeting of the International Statistical Institute. Helsinki, August, 1999. (with Dave Swanson and Charles Barr)

On the Measurement of Accuracy of Subnational Population Estimates. U.S. Bureau of the Census Population Estimates Conference. Washington, DC., June 1999 (with Dave Swanson and Charles Barr).

In Search of the Optimal Measure of Error for Demographic Forecasts. Population Association of America Conference. Chicago, D.C., March 1999. (with Charles Barr and Lucky Tedrow)

Preparing Subcounty Population Estimates: An Evaluation of Two Sources of Administrative Records. Population Association of America Conference. Chicago, D.C., April 1998. (with Charles Rynerson)

An Integrated System for Estimating Subcounty Household Income Distributions. Population Association of America Conference. Washington, D.C., May 1997. (with Charles Rynerson)

The Effect of Outliers and Asymmetrical Distributions on Measures of Forecast Error. Population Association of America Conference. Washington, D.C., May 1997. (with David Swanson)

The Role of Forecasting in Public Policy. Population Association of America Conference. New Orleans, May 1996.

An Evaluation of Subcounty Estimates by Age and Ethnicity. Population Association of America Conference. New Orleans, May 1996. (with Charles Rynerson).

Forecasting, Growth Management, and Local Decision Making. International Forecasting Symposium. Toronto, June 1995.

Alternative Measures for Evaluating Population Forecasts: A Comparison of State, County and Sub-county Geographic Areas. Population Association of America Conference. San Francisco, April 1995. (with Dave Swanson)

Forecasting Errors and Confidence Intervals for Small Area Population Forecasts: The Relationship Among Population Size, Rate of Growth, and Precision and Bias. Population Association of America Conference. San Francisco, April 1995. (with Ed Schafer and Larry Carter)

On the Utility of Lagged Ratio-Correlation as a Short-term County Population Projection Method: A Case Study of Washington State. International Conference on Applied Demography, Bowling Green, September 1994. (with Dave Swanson and Don Beck)

Between a Rock and a Hard Place: The Evaluation of Demographic Forecasts. XIVth International Forecasting Symposium. Stockholm, June 1994. (with Dave Swanson)

Confidence Intervals for Small Non-Standard Geographical Area Populations. International Forecasting Symposium. Stockholm, June 1994. (with Ed Schafer and Larry Carter)

Confidence Intervals for Small Area Population Forecast Error: A Repeated Sampling Approach. Population Association of America Conference. Miami, May 1994. (with Ed Schafer and Larry Carter)

Measuring the Utility of Population Projections. Ohio Academy of Sciences Conference. Toledo, April 1994. (with David Swanson)

The Accuracy of Census Tract Population Forecasts. American Statistical Association Conference. San Francisco, August 1993.

Can we Accurately Project Small Area Populations? Population Association of America Conference. Cincinnati, March 1993.

An Evaluation of Sub-County Population Forecasts. Urban and Regional Information Systems Conference. Atlanta, July 1992.

Demographics and Crime. Western Association of Criminology. San Diego, February 1992.

Population and Housing Estimates for Micro-Geographic Areas: A Blend of GIS and Demographic Techniques. Population Association of America Conference. Washington, D.C., March 1991.

Impact of Illegal Immigration on the Criminal Justice System. Academy of Criminal Justice Sciences Meeting. Washington, D.C., April 1989. (with Susan Pennell and Christine Curtis)

Improvements to the Projective Land Use Model for Producing Small Area Forecasts. Population Association of America Conference. Baltimore, March 1989.

Population Estimates for Micro-level Geographic Areas. Pacific Sociological Association Conference. Las Vegas, April 1988.

Postcensal Estimates of Household Income Distributions Using a Modified Lognormal Probability Function. Population Association of America Conference. Chicago, April 1987. (with Lois Fonseca)

Linking the Demographic and Information Needs of Businesses, State and Local Governments and Universities. Conference on Applied Demography. Bowling Green, Ohio, September 1986.

An Integrated System for Subcity Population Estimation. Population Association of America Conference. San Francisco, April 1986.

A Methodology and Computer System for Preparing Population Estimates for Census Tracts. Urban and Regional Information Systems Conference. Ottawa, August 1985.

Demographic Data Information and Computerized Retrieval Sources. Computer Planning Workshop sponsored by the American Planning Association. San Diego, November 1982.

Current and Future Demographic and Economic Trends in the San Diego Region. Conference on Future Policing Issues. San Diego, October 1982.

The Impact of Temporal Instability and Measurement Error on the Accuracy of Ratio-Correlation Population Estimates. Population Association of America Conference, San Diego, April 1982. (with Edward Schafer)

Social and Economic Implications of Changing Demographic Trends in the 1980's. Labor Market Information Workshops sponsored by the Washington State Occupational Information Coordinating Committee. May-August 1981.

Ridge Regression for Population Estimation: Some Insights and Clarifications. Population Association of America Conference. Washington, D.C., March 1981. (with Felix Dellasandro)

Academic versus Applied Careers in Demography. Applied Sociology Colloquium, Washington State University. Pullman, November 1980.

Confidence Intervals for Postcensal State Population Estimates. Population Association of American Conference. Denver, April 1980. (with Thomas Espenshade)

Total and Occupied Housing Units as Useful Symptomatic Indicators in Population Estimation Models. Federal-State Cooperative Program for Population Estimates. Denver, April 1980.

Future Population Trends in the Northwest. Northwest Institutional Research Council Conference. Seattle, March 1980.

A Test of the Accuracy of the Ratio-Correlation and Difference-Correlation Methods in States with Varying Growth Rates. Southern Regional Demographic Group Conference Myrtle Beach, October 1979. (with Marylou Mandel)

Components of Demographic Change and Their Effect on Municipal Expenditures in Central Cities. Southern Regional Demographic Group Conference. San Antonio, October 1978. (with Edward Schafer)

Changing Metropolitan Morphology and Municipal Service Expenditures in Cities and Rings 1960-1970. Population Association of America Conference. Atlanta, April 1978. (with David Sly)

The Theory of Ecological Expansion and Patterns of Metropolitan Net Migration. American Sociological Association Conference. Chicago, September 1977. (with David Sly)

Metropolitan Expansion and Commutation. Southern Regional Demographic Group Conference. New Orleans, October 1976.

Invited Presentations

Applied Demography in Local and Regional Government. Graduate and Faculty Symposium, Institute for Demographic and Socioeconomic Research, University of Texas at San Antonio, February 2007

Keynote address, Keeping San Diego Moving with Good Information., North American Travel Monitoring Exposition and Conference, Coronado, CA, June 2004.

Invited Panelist, The Use of Population Projections for Policy Analysis and Planning, Federal-State Cooperative Program for Population Projections. Los Angeles, March 2000.

Invited Panelist, Postcensal Population Estimates for Census Blocks: The San Diego Experience. U.S. Bureau of the Census Population Estimates Conference. Washington, DC., June 1999.

Invited Panelist, Using Spatially Referenced Data in Demographic Applications. Population Association of America Conference. Chicago, March 1999.

Invited Panelist, Innovation in Land Use Modeling- MEDPLAN, Urban and Regional Information Systems Conference. Salt Lake City, July 1996.

Invited Panelist, Innovation in Land Use Modeling- DRAM/EMPAL, Urban and Regional Information Systems Conference. Salt Lake City, July 1996.

Invited Speaker, Small-Area Forecasting: The San Diego Experience, Federal-State Cooperative Program for Population Projections. New Orleans, May 1996.

Invited Panelist, Issues for the 2000 Census. Population Association of America Conference. New Orleans, May 1996.

Invited Speaker, On the Stochastic Properties of Subcounty Forecast Errors. Economics Policy Seminar. Portland State University, March 1996.

Invited Panelist, Land Use Models: The Practitioners View. Urban and Regional Information Systems Conference. San Antonio, July 1995.

Invited Panelist, Teaching Applied Demography. Population Association of America Conference. San Francisco, April 1995.

Invited Speaker, The Projective Land Use Model for Producing Small Area Forecasts. Second Annual Demographic Workshop. University of Southern California, May 1989.

Invited Panelist, Interpreting Population Projections Workshop. Bay Area Association of Governments. Oakland, March 1988.

Invited Panelist, Growth Modeling Workshop. Urban and Regional Information Systems Association. Los Angeles, November 1987.

Discussant

Innovations in State and Local Population Estimation Session. Population Association of America Conference, Boston, MA, April 2004

Making Decisions: Case Studies in Applied Demography. Population Association of America Conference. Los Angeles, March 2000.

Statistical Methods for Standardized Comparisons. American Statistical Association Conference. Anaheim, August, 1990.

Utilizing Geographic Information System Techniques in Demographic and Economic Estimates. Third Annual Demographic Workshop. University of Southern California, April 1990.

Methodological Advances in Applied Business Demography. Population Association of American Conference. Baltimore, March 1989.

Methodological Advances in State and Local Demography. Population Association of America Conference. New Orleans, April 1988.

Session or Panel Organizer

Session Organizer and Co-Chair, Issues in Estimation and Forecasting, Applied Demography Conference, San Antonio, TX, January 2007.

Panel Organizer and Chair, The Census at the Dawn of the 21st Century. Southern Demographic Association Meetings. Durham, NC, November 2006

Moderator, New Data and Directions in the Bureau of Transportation Statistics. Urban and Regional Information Systems Conference. San Antonio, July 1995

Chair, Small Area Demographic and Economic Estimates and Projections Session. Population Association of America Conference. Boston, April 1985.

Chair, State and Local Demographic Estimates Session. Population Association of America Conference. Minneapolis, May 1984.

OTHER PROFESSIONAL ACTIVITIES

Member, California Statewide PECAS Advisory Committee, March 2007-

Chair, San Diego PECAS Technical Committee, April 2007-

Member FHWA and FTA Model Peer Review Panels, March 2003-December 2006

Member State of California Forecast Working Group, November 2005-December 2006

Member, National Research Council Steering Committee on Census and Transportation, August 2003-December 2005

Member, National Research Council Steering Committee on Remote Sensing and Spatial Information Technologies for Transportation, June 2000-June 2003

Chairman, Population Association of America Committee on Applied Demography, 2000

Member, Population Association of America Committee on Applied Demography, 1997-1999.

Member, Population Association of America and Southern Demographic Association.

Grant reviewer for National Institutes of Health, March 2005-December 2006

Reviewer for *Demography*, *Population Research and Policy Review*, *Journal of the American Planning Association*, *International Journal of Forecasting*, *Demographic Research*, *Journal of Population Research*