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June 20, 2011

The Honorable Bob Rucho, Chair North Carolina Senate Redistricting Committee

The Honorable David Lewis, Chair North Carolina House Redistricting Committee

Dear Senator Rucho and Representative Lewis:

It is my understanding that you have asked me to access the most current official data from the US Census Bureau to measure the percentage of voting-age citizens who are Black (or any part Black) in each of the majority-Black House and Senate districts that have been proposed by the North Carolina General Assembly.

I am a professional demographer with expertise in measuring the racial, ethnic, and citizenship composition of local populations. I have chaired the US Census Bureau's Advisory Committee on Population Statistics and served as an invited participant on its Working Group on 2010 Race and Ethnicity. My c.v. is attached to this letter.

To respond to your questions, I accessed data provided at the General Assembly website (www.ncga.state.nc.us/gis/randr07/redistricting.html) on June 18, 2011. I assembled and analyzed the most current data from the US Census Bureau showing the total and citizen voting-age population by race and ethnicity in North Carolina and in each of its counties. These data derive from the American Community Survey and are issued by the Census Bureau as the "Citizen Voting Age Population (CVAP) Special Tabulation From the 2005-2009 5-Year American Community Survey." This Special Tabulation is publicly accessible at the Census Bureau's website: www.census.gov.

Data from the Census Bureau's Special Tabulation show that the percentage of voting-age citizens who are Black (or any part Black) equals or exceeds the corresponding percentage of all voting-age persons who are Black (or any part Black). Thus, for any proposed district in which persons who are Black (or any part Black) are a given percentage of the voting-age population, the ACS data indicate that the racial group is at least the same percentage, and usually a larger percentage, of voting-age citizens.

The districts proposed by the North Carolina General Assembly include 24 proposed House districts and 9 proposed Senate districts in which the percentage of voting-age *persons* who are Black (or any part Black) exceeds 50.0%.

My analyses of the ACS data for each county in North Carolina leads me to conclude, with a very high degree of certainty, that the percentage of voting-age *citizens* who are Black (or any part Black) also exceeds 50.0% in each of the 24 proposed House districts and 9 proposed Senate districts.

My opinion would not change if any of these 33 districts were to be reconfigured, either within their existing counties or within any adjoining counties.

Sincerely,

Peter A. Morrison

PETER A. MORRISON

CONTACT INFORMATION

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EDUCATION

B.A., Sociology, 1962, Dartmouth College Ph.D., Sociology, 1967, Brown University

PROFESSIONAL EXPERIENCE

1969-2009 — Senior Staff Demographer and Resident Consultant, The RAND Corporation, Santa Monica, California

1979-1990 — Founding Director, Population Research Center, RAND

1967-1969 — Assistant Professor, Department of Sociology, and Research Associate, Population Studies Center, University of Pennsylvania, Philadelphia

AREAS OF EXPERTISE

Dr. Morrison's principal expertise centers on applications of demographic analysis in tracking socioeconomic trends and envisioning their consequences for public policy and business. Domestic applications include demographic analysis for electoral redistricting; store site selection; human resource analysis; evaluating employment discrimination claims; evaluating effectiveness of school desegregation remedies; forecasting school enrollments; gauging minority representation within jury pools; and various applications of census and administrative data in monitoring local demographic contexts. International applications include business concerns with corporate strategic planning and globally emerging middle-class consumer markets; identifying and quantifying demographic precursors of expanding consumer markets; comparing and evaluating individual markets; and analyzing forthcoming demographic trends to spot potential business opportunities.

Dr. Morrison has taught at The RAND Graduate School and lectures periodically before Congressional, academic, and business audiences. He has given testimony before subcommittees of the U.S. Senate and House of Representatives and addressed meetings of the National Science Board, The Conference Board, National League of Cities, National Conference of State Legislatures, University of California Management Institute, American Bar Association, American Society of Newspaper Editors, newsroom seminars for the Casey Journalism Center, County Counsels Association of California, American College of Surgeons, National Association of Homebuilders, Missouri Legislative Forum, World Future Society, and Volunteers of America.

He has served as advisor to the Committee for Economic Development, the Congressional Research Service, and committees of the National Academy of Sciences, U.S. Census Bureau, Department of Agriculture, National Institutes of Health, California Energy Commission, California Governor's Council on Growth Management, Center for California Studies, and United Way.

PROFESSIONAL ORGANIZATIONS/HONORS

Invited participant, U.S. Census Bureau Working Group on 2010 Race and Ethnicity

Member, L.A. Unified School District Enrollment Analysis Technical Advisory Committee

Visiting Lecturer, Helsinki School of Economics and Business Administration, summer 2001

U.S. Census Bureau Advisory Committee on Population Statistics, 1989-1995 (Chair, 1990).

Population Association of America: Board of Directors, 1978-1980; Public Affairs Committee, 1979-1986; Chair, Nominations Committee, 1981-1982; annual Program Organizing Committee, 1995, 1998; Local Arrangements Committee, 2000; Committee on Applied Demography, 1995-1999, Chair, 1998; Development Committee, 2006-.

Southern Demographic Association: Board of Directors, 1999-present; Vice President, 2001; President, 2003.

Center for Spatially Integrated Social Science, UC Santa Barbara: Advisory Board, 2000-

Research Advisory Board, Committee for Economic Development, 1988-1991.

Regents' Lecturer, UCLA, Spring 1987.

- Social Science Research Council's Committee on the Survey of Income and Program Participation, 1985-1988.
- National Advisory Child Health and Human Development Council, National Institute of Health, 1984-1987.
- Population Research Committee, National Institute of Child Health and Human Development, 1977-1979.
- Committee on Behavioral and Social Aspects of Energy Consumption and Production, National Academy of Sciences, 1980-1982.
- Committee on Urbanization and Population Redistribution, International Union for Scientific Study of Population, Chairman, 1976-1979.
- Advisory Subcommittee for Applied Social and Behavioral Sciences, National Science Foundation, 1978-1981.
- Future of Rural America Advisory Committee, FHA, 1978-1981.

Editorial Advisory Committee, *Urban Studies*, 1985-1995.

Editorial Advisory Board, J. Australian Population Assoc., 1995-1998.

SELECTED RECENT PUBLICATIONS/PAPERS

"Integrating Census Data to Support a Motion for Change of Venue," forthcoming in *Population Research & Policy Review* (coauthored with Dean Judson).

"An Evaluation of Additive and Hierarchical Classifications of Race/Ethnicity as Measured on Census 2000," coauthor (under review).

"Using the Census Bureau's Surname List to Improve Estimates of Race/Ethnicity and Associated Disparities," *Health Services and Outcomes Research Methodology* 9(2), pp.69-83 (coauthor).

"Teaching Business Demography Using Case Studies," presented at the International Union for the Scientific Study of Population Seminar on Applications of Demography in Business, Sydney Australia, October 2007 (coauthor). Appears in *Population Research & Policy Review*.

"Targeting Spatial Clusters of Elderly Consumers in the USA," presented at the International Union for the Scientific Study of Population Seminar on Applications of Demography in Business, Sydney Australia, October 2007 (coauthored with Thomas Bryan). Appears in Population Research & Policy Review.

"Assessing the Need for a New Medical School: A Case Study in Applied Demography," Population Research & Policy Review (coauthor).

"A New Method for Estimating Race/Ethnicity and Associated Disparities Where Administrative Records Lack Self-Reported Race/Ethnicity," coauthor, *Health Services Research Journal* 43(5), Oct. 2008.

"Forecasting the Supply of and Demand for Physicians in the Inland Southern California Area" (coauthor), RAND Technical Report TR524, 2007.

"Evaluating a Claim of Discriminatory Annexation Using Demographic Analysis: An Instructional Case," at 2005 annual Southern Demographic Association meetings.

"Evaluating Evidence of Discrimination in Multi-Ethnic Housing Markets," *Population Research & Policy Review,* 2008 (coauthored with William A. V. Clark).

"Methods for Gauging the Target Populations that Community Colleges Serve," *Population Research & Policy Review* 26(1), 2007 (coauthored with L. Santibañez, G. Gonzalez, S. J. Carroll).

"Lingering Effects of Discrimination: Tracing Persistence Over Time in Local Populations," *Population Research & Policy Review*, 2006.

- "China: Bachelor Bomb," op-ed in *International Herald Tribune*, Sept. 14, 2005 (coauthored with Dudley Poston).
- "Small-Area and Business Demography," chapter in D. Poston and M. Micklin, *Handbook of Population*, 2005 (coauthored with Stan Smith).
- "Future Demographic Challenges to California School Districts," presented at 2005 annual Population Association of America meetings, session on School Demography.
- "Demographic Overview of California's K-12 Public School Student Population," chap. 2 in S. J. Carroll et al., California's K-12 Public Schools: How Are They Doing? RAND MG-186, 2005.
- "Counting on Demography: Fostering Applications of the Social Sciences," invited plenary address at the 2005 Southwestern Social Science Association meetings, New Orleans
- "How Migration Flows Shape the Elderly Population of Metropolitan Pittsburgh," at 2004 annual Southern Demographic Association meetings, Hilton Head, SC (coauthored with Chris Briem)
- "The Bright Lights in Pittsburgh's Future," op ed appearing in <u>Pittsburgh Post-Gazette</u>, Sept. 19, 2004 (coauthored with Barry Balmat)
- "New Approaches to Spotting Enclaves of the Elderly Who Have Aged in Place," presented at 2004 Population Association of America meetings (coauthored with Tom Bryan).
- "Developing an Arab-American Surname List: Potential Demographic and Health Research Applications," at 2003 Southern Demographic Association meetings (coau. with B. Kestenbaum, D. Lauderdale, A. Abrahamse, S. El-Badry).
- "A Demographic Overview of Metropolitan Pittsburgh," RAND Issue Paper IP-256 (2003).
- "Confronting a Race-Based School Admissions Policy," Chance 16(1), 2003.
- "An Overview of Business Demography in the U.S.A.," invited paper for the Australian Population Association's 11th Biennial Conference, Sydney, October 2002.
- "Internal Migration and Short-Distance Mobility," Chapter 19 in D. Swanson, et al., *The Methods and Materials of Demography*, rev. ed., 2003 (coau. with T.M. Bryan and D.A. Swanson).
- "Business Demography," in P. Demeny and J. McNicholl, eds., *Encyclopedia of Population*, 2003 (coauthored with Stan Smith).
- "A National Legacy of Migration," in Carla Blank, Rediscovering America (2003).
- Review of J. S. Siegel, Applied Demography: Applications to Business, Government, Law, and Public Policy in Population and Development Review 28(1), 2002.
- "A Demographic Perspective on Our Nation's Future," RAND Documented Briefing, 2001.

- "Using First Names to Estimate Racial Proportions in Populations," presented at the 2001 Population Association of America meetings.
- "At-Large Elections Under Legal Challenge: Where Demographic Analysis Fits In," presented at the 2000 Population Association of America meetings.
- "Meeting Local Information Needs: A Case Study in Team Applied Demography," *Applied Demography Newsletter*, Population Association of America, Spring 2002 (coauthored).
- "Gauging Future Prospects for a Neighborhood Vehicle: Where Demographic Analysis Fits In," at 1999 Southern Demographic Association meetings, San Antonio.
- "Forecasting Enrollments for Immigrant Entry-Port School Districts," Demography, Nov. 2000.
- "Charting Alternatives to a Segregated School Admissions Policy: Where Demographic Analysis Fits In," at 1998 Population Association of America meetings, Chicago (abridged version appears in *Chance*).
- "Unveiling the Demographic 'Action' in Class Actions," *Population Research and Policy Review*, 1999.
- "Family Policies and Demographic Realities," chapter in J.W. Hughes and J.J. Seneca, eds., *America's Demographic Tapestry: Baseline for the New Millennium*, Rutgers Univ. Press, 1999.
- "Applying Demographic Analysis in Affirmative Action Disputes: An Instructional Case," *Population Research and Policy Review*, 1998.
- "Demographic Influences on Latinos' Political Empowerment: Comparative Local Illustrations," *Population Research and Policy Review*, 1998.
- "Demographic Change and School District Response: Assessing Alleged Discriminatory Effects of Boundary Changes," under review (with W.A.V. Clark).
- "Forecasting Enrollments During Court-Ordered Desegregation," *Population Research and Policy Review*, 1996.
- "Applying Demographic Analysis to Store Site Selection," *Population Research and Policy Review*, 1996 (with A. F. Abrahamse).
- "Tracking Growth of Emerging Consumer Markets Worldwide: Where Demographic Analysis Fits In," presented at Sixth International Conference on Applied and Business Demography, Bowling Green, OH (coauthored).
- "Tying Knots in the American Tapestry," Op-ed article, Los Angeles Times, Sept. 18, 1995.
- "Broadening Client Perspectives on Business Concerns," Applied Demography, Summer 1995.
- "Demographic Foundations of Political Empowerment in Multi-Minority Cities," *Demography*, May, 1995 (with W.A.V. Clark).

"Demographic Perspectives on the Voting Rights Act," RAND P-7905, 1995 (briefing cohosted by U. S. House Subcommittee on Census and The Population Resource Center, Oct.19,1994).

Demographics: A Casebook for Business and Government, Westview Press, 1994 (coeditor).

"Empowered or Disadvantaged? Applications of Demographic Analysis to Political Redistricting," chapter in *Demographics* (cited above).

"A Riot of Color: The Demographic Setting of Civil Disturbance in Los Angeles," RAND P-7819 (with Ira S. Lowry). Condensed version appears in Mark Baldassare (ed.), *The Los Angeles Riots: Lessons for the Urban Future*, Westview, 1994.

"Surname Analysis for Estimating Local Concentration of Hispanics and Asians," *Population Research and Policy Review*, 1994 (with A. F. Abrahamse).

"The Demographic Context of Army Family Support Policy," chapter in M.J. Eitelberg and S.L. Mehay (eds.), *Marching Toward the 21st Century* (Greenwood Press, 1994).

"Strategic Sleuths," Forecast Magazine, Nov/Dec 1993.

"Congress and the Year 2000: Peering into the Demographic Future," *Business Horizons*, Nov/Dec 1993 (condensation of RAND N-3279 cited below).

"A California That Can Work: People, Productivity, and Energy," RAND P-7828 (invited testimony before the California Energy Commission, June 1993).

"Goodbye Past, Hello Future: California's Demographic Shift," Op-ed article, Los Angeles Times, September 13, 1993.

"More than Meets the Eye," Chance, May 1993.

"Employment Discrimination: How Demographic Analysis Fits In," presented at Fourth International Conf. on Applied Demography, Bowling Green, Ohio, September 1992.

"Is 'Aging in Place' a Blueprint for the Future?" Association of American Geographers Meeting, San Diego, RAND, P-7794, 1992.

"Gauging Hispanic Voting Strength: Pitfalls and Paradoxes," *Population Research and Policy Review*, 1992 (with W.A.V. Clark).

"Local Redistricting: The Demographic Context of Local Boundary Drawing," *National Civic Review*, Winter/Spring 1992 (with W.A.V. Clark).

"Mirroring the Mosaic: Redistricting in a Context of Cultural Pluralism," RAND, P-7789, 1992.

"Testimony before House Subcommittee on Census and Population," RAND, P-7784, 1992.

"Healthier Childhoods and Family Responsibility: Two Issue Papers," RAND, P-7788, 1992.

"How Demographic Analysis Supports Redistricting," for Mandatory Continuing Legal Education course sponsored by County Counsels Association of California, January 1992.

"California's Future: More to Come," Op-ed article, *The Los Angeles Times*, Dec. 3, 1991.

Soldiers' Families: Tracking Their Well-Being During Peacetime and War, RAND, N-3405-A, 1992 (coauthor).

"The Changing Demographic Context of Postsecondary Education," RAND, P-7737, 1991.

"The Demographer's Role in the Local Boundary-Drawing Process," RAND, P-7711, 1991 (coauthor).

"Looking In From Outside: Enhancing Demographic Perspectives on Business Concerns," given at 1991 Population Association of America meetings.

"Demographic Paradoxes in the Los Angeles Voting Rights Case," *Evaluation Review*, 1991 (with W.A.V. Clark).

"Future Images—Childhood, The Workplace, Our Communities," RAND P-7656, 1990.

"The Changing Demographic Context of Municipal Governance," RAND P-7654, 1990.

"Pitfalls in Estimating Eligible Voters Among Hispanics," coauthored, given at 1990 Population Association of America meetings.

"Demographic Factors Reshaping Ties to Family and Place," *Research on Aging*, Dec. 1990.

"Applied Demography: Its Growing Scope and Future Direction," *The Futurist*, March/April 1990.

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"Leaving School Early: 'Stopping Out' and Dropping Out Among American Youth," given at the 1989 American Sociological Association meetings (with Jane Mauldon).

A Taste of the Country: A Collection of Calvin Beale's Writings, editor and author of introduction (Perin State Univ. Press), 1990.

Families in the Army: Looking Ahead, RAND, R-3691-A, 1989 (coauthor).

"Quantifying Legal Standards in Section 2 Voting Rights Cases," paper given at Population Association of America.

Congress and the Year 2000: A Demographic Perspective on Future Issues, RAND, N-3279, March 1991.

"What Tomorrow's Demographers Will Be Called Upon to Do," RAND P-7469, 1988.

Beyond Stereotypes: Who Becomes a Single Teenage Mother?, RAND R-3489, 1988 (coau.).

"Government Must Help Families With Long-term Care for Elderly," op-ed article, *The Atlanta Constitution*, April 19, 1988.

"Teens Willing to Consider Single Parenthood: Who is at Greatest Risk?" Family Planning Perspectives, Jan/Feb, 1988 (coauthor).

The Current Demographic Context of Federal Social Programs, RAND, N-2785, 1988.

"Demographic Factors Reshaping the U.S. Market for New Housing," RAND, P-7467, 1988.

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"Pro-Family Laws May Miss the Mark," op-ed article in *The Wall Street Journal*, Dec. 5, 1986.

Changing Family Structure: Who Cares for America's Dependents? RAND, N-2518, 1986.

"Accounting for the Educational Shortfalls of Mothers," *Journal of Marriage and the Family*, 1986 (coauthored).

"The Prism of Migration," Social Science Quarterly, 1986 (with Julie DaVanzo).

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"Characteristics of Migrants from Metropolitan to Nonmetropolitan Areas in the U.S.A.," Espace Populations Societes, 1985 (with Kevin McCarthy).

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"Tracking People," Group Practice Journal, July/August 1984.

Demographic Forces Reshaping Small Communities in the 1980s, RAND, N-1887, 1982 (coauthor). Appears in Southwestern Review of Management and Economics, 1984.

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"The Energy Situation and the World of Californians," in *Regional Perspectives on Energy Issues*, (The Conference Board, July 1982).

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"There Are Just Too Many Uncertainties," op-ed article, The Sacramento Bee, 9/20/81.

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"How Demographers Can Help Legislators," Policy Analysis, 1980.

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The Future Demographic Context of the Health Care Delivery System, RAND, N-1347, 1979.

"The Transition to Zero Population Growth in the Midwest," chapter in C. C. Roseman (ed.), *Population Redistribution in the Midwest.*

"Current Demographic Change in Regions of the United States," chapter in V. L. Arnold (ed.), Alternatives to Confrontation: A National Policy Toward Regional Change; condensed version appears in American Demographics, May 1979.

Overview of Demographic Trends Shaping the Nation's Future, RAND, P-6128, 1978 (testimony before Joint Economic Committee of Congress).

The Current Demographic Context of National Growth and Development, RAND, P-5514, 1975 (Congressional testimony); published in condensed form in L. S. Bourne and J. W. Simmons (eds.), Systems of Cities, Oxford Univ. Press, 1978, Chap. 6.6.

"Emerging Public Concerns Over U.S. Population Movements in an Era of Slowing Growth," in T. Espenshade and W. Serow (eds.), *The Economic Consequences of Slowing Population Growth*, 1978.

"The Image of Elsewhere' in the American Tradition of Migration" (coauthored), in W. H. McNeill and R. S. Adams (eds.), *Human Migration: Patterns, Policies, Implications*, Indiana University Press, Bloomington, Indiana, 1978.

"New York State's Transition to Stability: The Demographic Outlook," in Ben Chinitz (ed.), *The Declining of New York in the 1970s: A Demographic and Economic Analysis*, Praeger, 1978.

Toward A Policy Planner's View of the Urban Settlement System, RAND, P-5357, 1975; condensed version appears in L. S. Bourne and J. W. Simmons (eds.), Systems of Cities, Oxford University Press, 1978, Chap. 7.3.

"The Changing Demographic and Economic Structure of Nonmetropolitan Areas in the U.S.," *International Regional Science Review*, 2(2), 1977 (with Kevin McCarthy).

"Forecasting Population of Small Areas: An Overview," in *Population Forecasting for Small Areas*, Oak Ridge Associated Universities, Oak Ridge, Tennessee, 1977.

"Demographic Trends That Will Shape Future Housing Demand," *Policy Sciences*, 1977.

"The Functions and Dynamics of the Migration Process" (Chap. 4); and "Urban Growth and Decline in the U.S.: A Study of Migration's Effects in Two Cities" (Chap. 14), in A. Brown and E. Neuberger (eds.), *Internal Migration: A Comparative Perspective*, Academic Press, 1977.

San Jose and St. Louis in the 1960s: A Case Study of Changing Urban Populations, RAND, R-1313-NSF, 1973; adaptation appears in S. Goldstein and D. Sly (eds.), Patterns of Urbanization: Comparative Country Studies, International Union for Scientific Study of Population, Liege, Belgium, 1977.

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National Longitudinal Study of High School Seniors: An Agenda for Policy Research, RAND, R-1964-HEW, 1976 (coauthored).

The Demographic Context of Educational Policy Planning, Occasional Paper of the Aspen Institute for Humanistic Studies, 1976.

"A Method for Monitoring Small-Area Population Changes in Cities," *Review of Public Data Use*, April 1975 (coauthored).

Population Movements and the Shape of Urban Growth: Implications for Public Policy, RAND, R-1072-CPG, 1972 (Commission on Population Growth and the American Future, Research Reports, Vol. V, 1973); adaptation appears in J. Friedmann and W. Alonso, Regional Policy: Readings in Theory and Applications, MIT Press, 1975.

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Review of Federal Programs to Alleviate Rural Deprivation, RAND, R-1651, 1974 (coauth.).

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"The Role of Migration in California's Growth," in K. Davis and F. Styles (eds.), California's Twenty Million: Research Contributions to Public Policy, Institute of International Studies, University of California, Berkeley, 1971.

"Duration of Residence and Prospective Migration," Demography, 1967.

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