## Segregation, Race, and Bias: The Role of the US Census:

Comments of John Goering ${ }^{1}$

Ph.D. Program in Political Science and School of Public Affairs<br>Graduate Center and Baruch College<br>CUNY

Issue: The US Bureau of the Census has requested commentary upon the utility of measures of segregation used in the 2002 report on residential segregation, "Racial and Ethnic Segregation in the United States: 1980-2000." Daniel Weinberg and John Iceland are noted as the principal analysts for this report. The purpose of the following is to comment on general issues regarding race and segregation measurement tools, to offer some thoughts on the technical adequacy of segregation analyses, and then to provide reference to research in the allied issue of housing integration.

Some recent media attention and a report on the measurement and meaning of segregation and integration in Milwaukee have highlighted the importance and benefits of periodic public discussion of the measurement of racial segregation and integration. A paper by Lois Quinn and John Pawasarat (2003), suggests some issues that merit comment. They are provided in the second section of this paper. The paper provides a concluding assessment.

## Summary Analysis:

There is typically merit in public attention to the nature of racial inequalities in American cities. It is also advantageous when careful, state of the art research advances the analysis of the complex relationships between race, class and degrees of separation or mixing.

Measures of segregation have served as a core measurement tool in appreciating the decadal change in the nature of racial separation across American metropolitan areas. Research over the last half-century has indicated that changes in the degrees of racial separation or mixing occur quite slowly, with unclear estimates of the causal impacts on these changes.

The Census Bureau has provided an important public service by offering their analysis of multiple measures of segregation. Rank ordering of metro areas according to specific measures is a by-product of statistical measurement using multiple measures; the Bureau has provided a clear caveat about the meaning and utility of such rank orderings.

[^0]A recent study of racial integration in Milwaukee has selected a single measure of integration to attempt to dispute the utility of the Census and prior social science analyses of segregation. The report is flawed and biased in its analytical strategy and in its research conclusions. Press attention to the Milwaukee research has dramatized the story of "integration" in comparison with the underlying patterns of separation in an either-or manner. The press and the Milwaukee research unfairly criticized the social science validity of recent research on segregation by the Bureau and others. Ample commentary in the Milwaukee press has highlighted the limitations of the news coverage of the Milwaukee study.

The Bureau is to be commended for producing a high quality study of racial separation using state of the art measurement. There are suggestions for consideration in planning the comparable analysis for the 2010 census.

## The Census report:

The Census Bureau has produced a high-quality professional report on the analysis of racial and ethnic segregation in US metropolitan areas. The report makes use of and reflects the current state of the art on the analysis of multiple measures of racial separation, segmentation, and dispersal. The Census report sensibly focused in detail on only a small (five) number of measures but provided information on the full set of roughly 19 measures. The report includes necessary data and analysis qualifications and caveats.

In a useful appendix (B), for example, the authors provide some of their thinking about the utility of the 19 measures initially introduced by Massey and Denton in 1988. It is clear that a number of the measures have overlapping meanings or are more difficult to translate into a readily comprehensible lay interpretation. The measures include therefore both 'well-known' measures used by academic social scientists and the media, as well as some that have only a technical audience.

It has been noted for decades that measures of centralization appear somewhat analytically limited given the complex patterns of multi-centered metropolitan areas (Alihan 1964: 166; Taeubers 1965: 62-63 on the overlap of centralization and evenness measures). A comparable criticism of the utility of measures of centralization was made in the census report (appendix B; p. 121). Nonetheless, for metro areas, such as New York, the relative positioning of minority communities in relation to the central business district and its employment opportunities remains a valid analytic exercise. Readers need to exercise care in using or interpreting such indices for their own city. A large number of the alternative measures are provided to the public and to social scientists as a public service.

The Census report also includes (p.15) a relevant caveat on rank ordering:
"We think it crucially important to note that the values and ranks we report for metropolitan statistical areas on the several indices can readily be misinterpreted
as indicating that residential segregation is a more serious problem in some metropolitan areas, and a less serious one in others. We strongly emphasize that the reported measures cannot necessarily sustain such inferences or interpretations."

They continue: "For these reasons, the measures reported here should be viewed as representing a starting point for research in contemporary patterns of residential segregation in the United States." This is advice that is relevant for social scientists as well as the media.

## I. Measuring segregation and racial mixing: issues of bias:

1. Segregation Analyses: The measurement of racial and ethnic segregation has been among the more prominent and policy relevant social science analyses of race, ethnicity, and residential patterning that has been provided to the public with each decennial census over the last 40 years. The dissimilarity index, the early focus of social science attention, has over the last four decades become a virtual laypersons' guide to the issues of race and housing concentration. It has become, therefore, a useful/important tool for consistent cross-censal comparisons of change; it is often considered the "workhorse" of segregation studies. The index has some welldocumented limitations that suggest the importance of making use of supplementary measures (Cohen, Falk and Cohen 1976; Winship 1978; White 1983).

Central to the utility of such measures is that they allow the reader to easily compare levels across different cities or metropolitan areas, and to do so controlling for the size/composition of the unit of geography. I cannot recall that over the last 40 years that there has there been significant policy misinterpretation of the technical scoring of racial unevenness - or of the palpable fact that racial ghettos exist in virtually ever American city - with the terminology used to explain the scores which suggests hypothetical movement patterns to illustrate the degree of separation. One question that has emerged from recent commentaries is whether the merits of comparability of measures of dissimilarity outweigh what some judge to be its "outdated" character. Comparability is critically useful in understanding change and persistence, as long as readers are aware of the limits of any single measure.

The Census report authors join a long list of analysts of segregation (and integration) who have noted the limits of segregation and integration measures and the need to treat all of them with sociological nuance and circumspection. There are, for example, a number of seemingly minor technical issues that can importantly influence both the measurement and meaning of both segregation and integration. The selection of the unit for analysis is a well-noted measurement concern that systematically affects scoring (e.g. the use of census blocks, tracts, or wards). Measurement-wise, while the Taeuber's (1965) made use of census block data many others have relied upon tract information with the well-established recognition that the size or scale of the unit for analysis will systematically alter results. Segregation analyses also establish rules for the exclusion of certain thresholds of minority population. The Taeuber's used at least

1000 occupied housing units with a non-white head as their minimum (p.31). Such rules for exclusion are an analytic and not policy choice.
2. Multiple measures of segregation: Additional measures of the spatial distribution and patterning of race and ethnic groups has evolved over the last fifteen or more years to include isolation and exposure measures as well as those synthesized by Massey and Denton in the late 1980s, including their reference to hyper-segregation. Important critical analyses of segregation measures by James and Taeuber (1985) and Reardon and Firebaugh (2002) have suggested the technical standards against which segregation or diversity measures should be evaluated; including measures that can address multi-group comparisons. The latter appears to be an area warranting consideration for inclusion in future decennial analyses. Moreover, measures used in the analysis of the distribution of racial and ethnic minorities of varying numbers or proportions need to be tested against the standards in the field including being "size invariant" as well as the importance of addressing "transfers" or exchanges between units of geography. ${ }^{2}$

Social science has therefore over the last decades evolved in its use of peer-reviewed, multiple measures with somewhat overlapping meanings as well as measures with only technical interpretations. This has occurred in part because of the increasing ease of geo-spatial analyses, the ease of calculations, combined with the importance of capturing the changing meaning and forms or patterns of ethnic segmentation and spatial distance for cities, suburbs and metropolitan regions. The Census report appropriately makes use of this standard of multiple measurements such that each measure does not have equally weighted, comparable analytic meaning.

Recent research by Reardon (2002; 2004) suggests that there may be some merit both analytically and mathematically in culling out measures whose utility is only marginal. A number of quite useful suggestions have been recently made for additional measures that the Bureau may wish to consider at the time of the next decadal analysis of segregation and diversity. This includes the importance of making use of measure of multi-group segregation, the need to focus on spatial measures of evenness, and the utility of assessing point-to-point proximity measures (Reardon and O'Sullivan 2004). ${ }^{3}$

## 3. Racial Classification:

The 2000 census has introduced substantive alterations in the manner in which race and ethnicity are categorized and reported. These choices have accordingly allowed analysts and researchers options in the categorization and deciding of what "race" means in the U.S.. The full impact and meaning of these behaviorally based choices

[^1]have not been fully assessed, although both recent Population Association and Sociology meetings included sessions focused on the meaning of multi-race categories and the learning, as well as the meaning, of ethnic choices for "minorities ${ }^{4}$.

The analysis of census data therefore now permits a number of minor to quite substantive choices many of which have not achieved a standardized or agreed upon academic and social science status. Key among the choices that must be made include which categories of ethnic choice will be used to define "Blacks." ${ }^{5}$ If you select as black anyone who elects `only-black' and exclude those who have selected black as well as another ethnic or racial label (the one drop rule), you have made a critical sociological and cultural choice. These choices, as they are new to the 2000 census, have not become standardized as a matter of social science permitting a degree of apparent arbitrariness to intrude into analytic work that can be interpreted as bias. Sociologically, though, testing evidence clearly suggests that individuals will typically be treated as black even when they define themselves mixed race. This onedrop sociological and institutional reality is slowly evolving and fading but currently remains a social construct that cannot be avoided as an analytic/measurement choice.

Another key issue that will attract growing attention is the development of measures of multi-group diversity or segregation (see for example Reardon and Firebaugh 2002: 56). The recommendation of the H index seems persuasive for consideration for the 2010 census (see their table 3, "Properties of Multigroup Segregation Indices").

## 4. Rank Ordering:

The Taeuber's (1965: 32-34) offered a listing of the dissimilarity scores for 207 cities as of 1960 based upon block data. Reynolds Farley and William Frey’s (1994: 33) analysis of 1980 and 1990 segregation data included a ranking of the 15 most and least segregated MSAs. ${ }^{6}$ The rank ordering of cities or metro areas from highest to lowest scores has become a focus of press attention, along with changes from the prior census. For the 1990 census Bureau staff, most notably Daniel Weinberg and Roderick Harrison, conducted analyses of segregation using multiple measures for several race and ethnic groups and made those data available to academic researchers and policy centers, including HUD. For the 2000 census there were several academic analyses of segregation released to the public followed soon after by the official

[^2]census report. ${ }^{7}$ As noted above, the Census Bureau provided a clear caveat concerning the use and interpretation of such rank orderings. Rank ordering is though not an essential part of the analysis of segregation.

## 5. The Measurement of Integration and Its Stability:

The description and analysis of block or tract level housing `integration' has been a parallel although much less intensely studied accompaniment to regular census based segregation studies. ${ }^{8}$ Nearly a half-century ago, Charles Abrams (Forbidden Neighbors 1955), suggested the political and social limits to racial mixing and highlighted the relevance of segregative and discriminatory forces in the housing market. The classic work on integration by Bradburn, Sudman and Gockel (1971) emphasized the critical importance of time series comparison in order to be able to distinguish temporarily mixed areas from those with analytically essential stability in their degree of integration. This has been followed more recently by Ingrid Ellen's (2000) census and survey analysis of 1980-1990 data as well as a recent, as yet unpublished paper, including 2000 data. The Urban Institute also recently released a report on stable neighborhood integration (Rawlings, et al. 2004) ${ }^{9}$.

In the process of seeking a more thorough set of measures of spatial patterning, is there any advantage of including such measures of ethnic mixing or integration? Ellen (2000: 180; note 12), for example, notes some of the merits of including the analysis of integration as a complement to studies of segregation. She states: "It is also true that the dissimilarity index tends to underestimate shifts over time, because it does not change in response to population shifts across neighborhoods that are above or below the average racial composition...Thus, we would not expect increases in the stability of integrated neighborhoods - even significant shifts - to necessarily be reflected in the dissimilarity index." Accordingly, consideration of transfers and exchanges appears a useful addition.

It is also quite important to be clear about what categories or boundaries are used to define an integrated neighborhood (as there has been little administrative practice of establishing or maintaining them). Ellen (2000: 16), for example, defines a racially integrated neighborhood as one that is between 10 and $50 \%$ black, and tested for sensitivity to other thresholds. The Urban Institute also uses 10-50\% to classify areas as "mixed-majority white," but includes several other categories and labels to identify

[^3]varying proportional mixtures. ${ }^{10}$ This choice is not fully arbitrary but rather represents that core middle band of neighborhoods where racial mixing would need to occur in order to affect the overall patterning of racial distributions.

Areas with fewer minorities, say those that are $80 \%$ of more white, are typically those where whites have felt more at racial ease and where discriminatory actions, such as steering, are most effective in preventing higher levels of minority in-migration. Areas that are predominantly (e.g. 79\% or more) minority typically have infrequent inclusions of whites. Such areas that do experience such mixing have often been those experiencing "gentrification" or are in some degree of slow racial transition. Proportionally there appear to be relatively few such transitions.

It is also important to be sensitive to the amount of relative change between censuses that is allowed in order to continue to define an area as stably integrated rather then temporarily balanced but moving towards a gentrified, re-segregated or "tipped" population. Ellen, for example, uses a $10 \%$, and a $5 \%$, change or loss over a decade as the percent change that she allows in defining stable integration. She (Ellen 2000: 24) notes: "there is considerably more movement within the integrated category (i.e. between 10 and 50\%) than there is within the segregated group." It is therefore a well- recognized analytic error to report only a single point in time measure of "integration" given the critical importance of stability over time.

Ellen's findings, as of the 2000 census, show modest overall progress towards more racial mixing (just as segregation measures have shown some degree of decline over the last 20 years). She enumerates $25.5 \%$ of all tracts as totally integrated in 1980 and $36 \%$ by 2000. A good deal of this integration, it is essential to note, is with non-black minorities. She also reports that only $47 \%$ of tracts remained stable, with $10 \%$ or less change in racial proportions. Roughly half of all tracts that were integrated in 1990 lost whites; nearly $51 \%$ lost white residents while only $2.4 \%$ gained whites. Without a comparable analysis for an individual city, such as Milwaukee, it is inappropriate to be confident that the analysis has provided more than a surface assessment of quite probably unstable, shifting racial proportions.

It is central to note that the measures of integration noted above do not standardize or control for the total size of the areas minority population. That is, such a measure of integration is biased by the proportion black/minority in the metro area. Areas with few blacks proportionally will have quite different options for the "integration" of neighborhoods than an area with $70 \%$ blacks in the overall population. QP therefore err in proposing their "integration" measure as analytically comparable to current segregation/diversity measures.

[^4]It is useful to recall that low scores on a segregation measure imply, as Reardon and Firebaugh (2002) and others have noted, a measure of diversity or integration. Measures of interaction or exposure are most notably used in this regard, when standardized or normalized. Reardon and O'Sullivan (2004) make use of a set of eight criteria in determining the utility of the spatial information theory index (H) to offer a useful measure of the diversity in local spatial areas. Such recent analysis suggests the need to consider including such complementary measures for the 2010 census.

## II. Comments on Quinn and Pawasarat (QP). ${ }^{11}$

There is merit in addressing the value of living in integrated communities.
The QP report begins with concern about having the city of Milwaukee ranked quite low on one segregation/dissimilarity index for 2000; as the second or third most segregated city in the US (p.3). They then proceed to attempt two tasks: 1. to critique segregation measures and; 2. to offer an alternative though flawed definition focused on the racial integration of census blocks. The latter will show, in rank ordering, a comparatively higher level of integration.

It is appropriate to note that the segregation patterns for blacks in Milwaukee have been at the highest end of the distribution for decades. The Taeuber's, for example, note a score for 1940 for Milwaukee of 92.9, 91.6 in 1950, and 88.1 in 1960. Farley and Frey (1994), show scores of 85 for 1980 and 84 ten years later (block based). In the Census report (tract based) the score for 1980 was 84 ; 1990 was 82.6 ; and 81.8 for 2000). There has then been a quite slow decline in levels of unevenness that should not surprise local residents. ${ }^{12}$

QP state that "the segregation index appears to represent an obsolete and racially-biased approach based on a white view of segregation." The Quinn report, regarding the index of dissimilarity, questions the utility of continuing to use language that suggests that a certain percentage of families would have to move to achieve an even distribution. (The fact that some analysts have misinterpreted the scores does not translate into the scores being `outdated'.)

QP propose an alternative definition of black-white integration, "not as a competitive model for ranking cities and metro areas, but to expose the biases and limitations of the segregation indexes." The actual intent though appears to be to show that Milwaukee is not as segregative an environment as suggested by the rank ordering of dissimilarity scores for 2000. They proceed to offer a new single measure of `integration' to prove that, far from being racially isolated, blacks are relatively well integrated compared to other metro areas. There was a period of press attention to this report including an exchange of

[^5]letters concerning press bias between Prof. John Logan and the Milwaukee Journal Sentinel. ${ }^{13}$

Thus in order re-characterize the negative ranking of the metro area the authors propose a single, non-peer reviewed measure of integration. Unlike Ellen and the Urban Institute, they select a 20/20 measure. "Blocks are considered "black-white integrated" if at least a fifth (20 percent) of their population is black and at least a fifth is white." Thus, an area that is $80 \%$ black is counted as integrated. The measure does not adjust or control for the size of the total population in the area.

They find that roughly $5.3 \%$ of Milwaukee's metro-wide white population lives on an integrated block using their measure. Overall, $9 \%$ of the Milwaukee metro area population lives on integrated blocks; this includes 21.7 percent of the city of Milwaukee's population and $1 \%$ of the suburbs. That is, $99 \%$ of the suburban population is segregated. They further note that over $85 \%$ of the metro areas' whites lived on blocks that are $80 \%$ or more white (p. 23). They make use of a table of rankings (table 2; p. 13 by cumulating/adding up integrated blocks for cities) to show that by using their integration measure that Milwaukee is not among the worst but 43 out of $100 .{ }^{14}$

The following comments focus on specific issues in the QP report:

- P. 1. "While claiming to be race neutral, the index has historically been used to measure progress towards the dispersal of blacks into geographic units where they would remain a minority."

The dissimilarity index has been a method that ecologists, geographers and other social scientists have used to provide one assessment of the residential distribution of minorities across metro areas or cities. The term `race neutral' is not germane for social science purposes since the measure explicitly incorporates race and intends to describe and not predict distributions and concentrations. Their report makes too much of the index's importance and does not adequately credit the analysts with their considerable circumspection and care in its use, including acknowledgments of the limits of single measures.

- P. 1. "...cities are declared continuingly resistant to integration." No such declaration has ever been issued by a federal agency, or by a state or local government agency to my knowledge. The index values themselves are subject to continual decadal change, mostly in the direction of reductions, and no implication of absolute immutability has been associated with the measures in

[^6]social science publications. The measures usefully report on the palpable fact of racial separation in American cities.

- "Hispanics are excluded." Data on Hispanic segregation is presented in the census report as well as Logan's analyses.
- "The remaining black-white racial categories reflect $19^{\text {th }}$ century definitions." The Census has made use of 1977 and then 1997 OMB Directive 15 to establish its racial classifications. See:
http://nces.ed.gov/programs/handbook/docs/pdf/Appendices_A.pdf
- The authors refer to the selection of anyone who self identifies as black-alone as well as combination with other groups. Whites, in the census report (p. 117), are defined as those who report being white but who are not also of Hispanic origin. These choices have been explicitly made and reflect traditional social science practice. Census acknowledges that using the `alone' category will tend to increase segregation values and state that the effects for blacks "tend to be particularly small." (P. 117). The complex choice of including Hispanics who define themselves as white into the white-alone category will introduce as much sociological and policy uncertainty into the measures of separation as they will help in reducing apparent category bias. Moreover, in housing tester-based discrimination studies Latinos, even with lighter skin, encounter discrimination and are not typically treated as "white." This is unfortunately the $21^{\text {st }}$ century reality and the census' category choices appropriately sensibly reflect that reality. These categorical decisions will in all likelihood evolve within social science research practice over the next decades.
- Measure of integration: They select as integrated areas that are either $20 \%$ white or black; an area that is $20 \%$ white but $80 \%$ black would therefore quality as integrated. This alters Ellen's and The Urban Institute's focus on the mid-band of neighborhoods that sustain a pattern of racial mixing between 10 to $50 \%$, with less than a $10 \%$ v shift over 10 years. Their focus upon the ends of the distribution of racial proportions might ensure attention to areas with lower levels of demographic volatility; e.g., largely white communities. They also do not address the 30-year concern over stability of integrative patterns. For social science purposes, there should have been an analysis of 1990 census block or tract data to define the racial proportions in these integrated areas a decade earlier and to calculate stability. The Quinn measure does not therefore constitute an improvement upon existing studies of integration but rather represents a step backwards.
- They also state that: "Given housing preferences and electoral successes of African Americans in majority black neighborhoods and cities, emphasis on even dispersal of African Americans throughout each metropolitan area can hardly be considered a national goal with broad-based consensus." The degree of racial separation and isolation of African Americans cannot be interpreted solely or exclusively as a matter of choice or electoral convenience as judged from surveys of residential preferences. Housing dispersal of minorities is not now nor ever has been a national policy goal, outside of extremely small judicially mandated programs such as Gautreaux for the city of Chicago or a two-year HUD demonstration than enrolled 5 city PHAs in 1994 and 1995 and then ended. The
authors appear to confuse social science measurement using traditional indices with a policy or political purpose that has been absent from such analysis. There is no US policy promoting housing integration; many argue that the effects-based opposite is the case.
- Preferences for Racial Mixing: There is a tendency for their report to suggest that blacks prefer segregated living and that this represents the key causal component in their isolation. There is some evidence that persons of color may derive some benefits from living together including a sense of community and local support systems. However, we also have clear evidence that the real estate industry practices discrimination against those attempting to move into more integrated communities. Research on housing vouchers and public housing, including the Gautreaux program, clearly indicated that many black families when offered the opportunity will elect to move away from isolated, ghetto like conditions. There are long waiting lists for families to make such moves. It is also useful to note that communities that are $80 \%$ or more black also typically have substantially higher levels of poverty compared to neighborhoods that are $80 \%$ or more white. ${ }^{15}$ Using a single, simple measure focused on the two ends of the distribution of racial residential patterns fails therefore to address the limitations associated with living in such communities and the ample motivation for families to seek to leave them.
- P. 5. It is incorrect to say that the "dissimilarity segregation (sic) index continued to be used by academics as the primary measure of black-white trends." Recent National Academy of Sciences work on race indicates that wide range of measurement tools, including surveys and administrative data that are used today. Surveys of racial attitudes have become a major tool for assessing racial patterns and trend differences.

Multiple measures and careful metropolitan based studies are essential to appreciate both the underlying segregative patterns as well as the typically fragile moves towards more stable integrative options. With only $1 \%$ of Milwaukee's suburbs and $5 \%$ of its metro area whites living on integrated blocks, it appears unwise to argue that integration has succeeded and feel gratified by the fact that others are far worse; choosing a $43^{\text {rd }}$ place ranking as better than 1 or 2 . This arbitrary substitution of a new ranking distorts the fundamental meaning of race and residential spatial analyses and trivializes the policy discussion. There is no reason for the press or public to seek comfort in statistical sleight of hand. As one Milwaukee commentator stated: "This series (based upon the Quinn report) may leave a reader with the impression that all is well, and we no longer need to be concerned about such segregation in our communities" (William Tisdale).

## III. Concluding Assessment:

The de facto segregation of America's minority's is a palpable component of the metropolitan experience of African Americans, Hispanics, and others. There is ample corollary evidence of related race-based inequalities, including rates of unequal access to mortgage credit and racially disparate rates of unemployment that serve to reinforce and

[^7]sustain the practice of unequal allocation of space and critical housing related resources. The experience of balanced integrated living is now, as it has been for a hundred years or more, a proportionally marginal part of the residential options and experiences for whites and non-whites. Thus, the experience of most minorities will be of predominately segregated, and often disproportionately poor communities. There has been slow progress in the increase in the proportion of stably racially mixed neighborhoods over the last two decades. This progress is in general not the result of national policies aimed at desegregation. It is unclear whether anti-discrimination policies have had any measurable impact.

The historical, comparative analysis of metropolitan race and ethnic separation is considerably aided by measures of segregation including dissimilarity. Multiple measures of segregation offer a relevant bird's eye view of overall metro-wide levels of separation, controlling for population size, while measures of diversity/integration provide some insight into the marginal distribution of those mixed neighborhoods which either transitorily or with some persistence resist, or side-step, segregative patterning.

It is of course essential not to confound overall structure and patterning of race and residence with marginal or exceptional options. Even though integrative choices have increased somewhat over the last 20 years, the predominant geo-spatial reality is of separation for virtually all metropolitan areas. Measures of the proportionally infrequent experience of stable integrated living are necessarily a secondary focus, methodologically, analytically and policy-wise to the measurement and causal analysis of patterns of segregation which have been, and are certain to remain for the foreseeable future, the dominant experience for minorities and whites in residential spatial allocations.

To the extent that they have been measured, both white and minority preferences include the choice of communities with higher levels of mixing than are demographically revealed in patterns of distribution. That is, preferences provide a limited guide to the actual distributions of households in part because of the historical, institutional and discriminatory patterning of housing options. Nevertheless, there should be increased interest in new indices that offer insights into relative exposure or diversity as well as multi-group comparisons. Segregation measures should be calculated making use of all possible comparisons, including assessment of white's segregation.

Policy and public attention has over the past several decades focused on the dissimilarity index and measures of exposure as sensible, robust guides to appreciate national and regional trends in racial pattering. The decennial analysis of racial/ethnic separation has served as an important basis for focusing policy conversations and varying degrees of academic research on the social process and causes underlying the stated patterns. Segregation analyses have been a quite useful - necessary but not sufficient - tool and platform for the more complex discussions of necessary programs and policies. ${ }^{16}$ No

[^8]government agency has, to my knowledge, ever used dissimilarity measures to programmatically "measure progress", as QP suggest, as it has been clearly understood that the causes of the patterning of race include a significant economic and income component, as well as factors such as housing discrimination. ${ }^{17}$ The government has exercised more policy and program attention to combating discrimination than it has to promoting racial integration. The latter has typically only occurred when there was a judicial finding of unconstitutional and illegal treatment of minorities. ${ }^{18}$

Dissimilarity measures do not provide insight into within tract levels of diversity and this can be amended through the addition of new measurement tools for the 2010 Census. Measures of integration have been used less frequently in recent decades and, when correctly constructed, can be complementary tools for assessing within city or MSA racial distributions, as in the work of Ellen. They not disturb the finding of overall segregative structure for the ecology of American cities, nor do they obviate the slow level of progress in achieving lower levels of segregation.

## Social Science and the Media:

Social science analysis as well as public debate and discussion about the role the role measurement of race and of have typically been positive. It has been typically beneficial for the overall analysis of patterns and causes of racial separation to engage in periodic, serious social science and public debate about the linked meanings and causes of "race", segregation, housing integration, and public policies. Such analyses should make use of carefully established and well-tested methods recognizing that they reflect inherent limits of census classifications and geo-spatial measurement. ${ }^{19}$ There is no ideal/perfect single measurement tool that effectively captures all of the isolation and mixing that occurs residentially between and within the neighborhoods of American cities on an ongoing basis. The practice of using segregation measures is a clear, indispensable benefit in appreciating spatial racial inequalities and, in turn, the behavioral dynamics underlying these patterns.

It of course has not been helpful to have debates driven by the almost inescapable simplifications and even distortions that frequently creep into press accounts of race. Such erroneous interpretation is signaled by comments of John Norquist, former mayor of Milwaukee, who made use of the press accounts of the QP report to inappropriately and incorrectly conclude that the Census Bureau does "subjective", "racist" research. ${ }^{20}$ The research methods used by the Bureau were fully objective is making use of standard, professionally recognized measurement tools. The use of political labels is inappropriate in that officials should see merit in addressing the content of racial inequality rather than

[^9]attacking the messenger. It is also accordingly unhelpful to frame debates in this area as "either-or", given the need for carefully nuanced measures of the evolving shapes and meaning of race and residence in cities. ${ }^{21}$ The need for such multiple, nuanced interpretations of the racial residential experience has been well established in social science for over two decades.

Because of the seemingly inevitable shortcomings of media attention to issues of race, it is critically important to not allow media based exaggerations or hyperbole to distort or alter long term benefits of well-established social science analytic measurement tools. ${ }^{22}$ Virtually every American city is racially divided and to pretend that integration is the fundamental social pattern and experience is political and analytic imprudence. The fact that only modest degrees of residential integration exist forty years after the enactment of Federal fair housing laws, within a largely segregative environment, is ample reason to reexamine and reinvigorate commitment to policy and program tools, not to celebrate an arbitrary and misleading race ranking. Media interest in civic boosterism should not in any context be seen as surrogate for valid analytic and policy arguments and evaluation

It is therefore misleading to portray the very slow development of incrementally integrating neighborhoods as the predominant urban race housing "story." As the Census report makes abundantly clear, quite the converse is the case. The Milwaukee Journal Sentinel's reporting of the Quinn/Pawasarat study has selected a single measure - a new professionally untested measure of integration - and proposed this as the basis for reevaluating the experience of minority's in Milwaukee and elsewhere. While I do not wish to comment on this as a press tactic, it is inappropriate and biased as a research matter. The Milwaukee Journal Sentinel, making use of the Quinn and Pawasarat report, may have served to mislead the public. The trend over time is clear that Milwaukee has had a long term, pronounced pattern of segregative housing. Moreover, the Quinn report's style of analysis appears unusually polemical for a serious social science study and is notable for the absence of reference to established studies of housing integration, including those noted above, or to any sensitivity testing of the their analytic choices. To use the statistical artifice of a relative ranking on marginal degrees of "integration" to make it appear as if the underlying reality had somehow changed is not only disingenuous it can be seen as more politically than analytically intended.

Academic research by the Census Bureau, a critical center for demographic research using decennial, CPS, and other data, should not be distorted or influenced by the spate of media attention in Milwaukee to improving their relative ranking through the manipulation of a new and misleading measure of race mixing. The analysis of racial integration or diversity offers a line of investigation that serious social scientists have intermittently pursued for decades. There is merit to ensuring that the NSF and other funding agencies, including HUD, fund research that extends these complementary lines of inquiry including establishing a clearer understanding of patterns of causality and testing for the sensitivity of analyses to alternative formulations of integrative

[^10]thresholds. ${ }^{23}$ Measures of integration or diversity that are sensitive to the major variation in the population size of minority groups, as well as to multi-ethnic measurement, seem quite desirable (Reardon and Firebaugh 2002; Reardon and O'Sullivan 2004).

There appears therefore some utility to adding spatially attuned diversity and multi-group measures, of being attentive to recharacterizations of the racial stratigraphy of the country over the next decades, to being careful with measures of centralization and clustering, and, most importantly, to sustain the analytic focus on both segregation and diversity. In addition, Reardon and O'Sullivan (2004), as well as others, have stressed the importance of ensuring the inclusion of measures of spatial proximity to complement a-spatial tools. ${ }^{24}$ Other research-focused agencies should be encouraged to support incremental segregation, integration, causal patterning, and policy impact research in this area. Upon the development of standardized professionally peer reviewed measures, the Bureau might well consider including such measures of diversity or integration in addition to those already offered to the public.

The Census Bureau has provided a carefully written, high-quality, useful analysis of residential segregation including identifying critical methodological choices and data limitations. The report presents multiple measures, concentrating attention on five core measures of evenness and isolation. The Census Bureau and scores of others have shown the advantages of offering multiple, professionally evaluated -peer reviewed measuring tools to express varying facets and forms of the racial residential experience. None should be taken and used in isolation as the solitary tool for calibrating a judgment of racial equity or inequity in housing. The report is also careful its treatment of the rank ordering of places in their degrees of segregation and acknowledges the tenuous quality of such rankings. Census has therefore produced a carefully written, analytically useful analysis of race and ethnic separation in America's metropolitan areas. The Census Bureau report on race and residence is key among the valid, objective, and critically useful analytic tools for the continual monitoring of this country's all too slow progress towards racial and ethnic diversity in housing. They are to be commended for providing a substantial public benefit.

## Select References:

Alihan, Milla. 1964. Social Ecology: A Critical Analysis. New York: Cooper Square.
Bickford, Adam, and D. Massey. 1991. "Segregation in the Second Ghetto: Racial and Ethnic Segregation in American Public Housing, 1977." Social Forces. 69 (June): 10111036.

[^11]Bobo, Larry. 2001. "Racial Attitudes and relations at the Close of the Twentieth Century: Racial Trends and their Consequences." PP. 264-301 in America Becoming. Washington, DC: NRC.

Bonilla-Silva. Eduardo. 2004. "From Bi-Racial to tri-racial: Towards a New System of Racial Stratification in the USA." Ethnic and Racial Studies. 27 (November, 6): 931-950

Bradburn, Norman, Seymour Sudman, and Galen Gockel. 1971. Side by Side: Integrated Neighborhoods in America." Chicago: Quadrangle.

Clemetson, Lynette. 2004. "Census Policy on Providing Sensitive Data is Revised." The NYTimes. August 31.

Cortese, Charles, R. Frank Falk, and Jack Cohen. 1976. "Further Considerations on the Methodological Analysis of Segregation Indices." ASR. 41 (August): 630-637.

DeParle, Jason. 2004. American Dream. New York: Viking.
Ellen, Ingrid. 2000. Sharing America's Neighborhoods: The Prospects for Stable Racial Integration. Harvard.

Ellen, Ingrid. 2004. "How Integrated Did We Become During the 1990s?" chapter for book by John Goering (ed.). Fair Housing into the Twenty-First Century, forthcoming.

Farley, Reynolds and William Frey. 1994. "Changes in the Segregation of Whites from Blacks in the 1980s: Small Steps toward a More Integrated Society." ASR, 59 (February): 23-45.

Farley, Reynolds, Sheldon Danziger, and Harry Holzer. 2000. Detroit Divided. New York: Russell Sage.

Fischer, Mary and Douglas Massey. 2004. "The Ecology of Racial Discrimination." City\&Community. 3 (September): 221-241.

Goering, John and M. Coulibaly 1989. "Investigating Public Housing Segregation:Conceptual and Methodological Issues." Urban Affairs Quarterly. 25 (December).

Goering, John, A. Kamely and T. Richardson. 1997. "Recent Research on Racial Segregation and Poverty Concentration in Public Housing in the United States." Urban Affairs Review. 32 (May)

Goetz, Edward. 2003. Clearing the Way: Deconcentrating the Poor in Urban America. Washington, DC: Urban Institute Press.

Grannis, Richard. 1998. "The Importance of Trivial Streets: Residential Streets and Residential Segregation. AJS. 103 (May): 1530-1564.

Hirsch, Arnold. 1983. Making the Second Ghetto: Race and Housing in Chicago, 19401960. New York: Cambridge.

James, David and Karl Taeuber. 1985. "Measures of Segregation." Sociological Methodology. 15: 1-32.

Quinn, Lois and John Pawasarat. 2003. "Racial Integration in Urban American: A Block Level Analysis of African American and White Housing Patterns." Employment and Training Institute, School of Continuing Education, University of Wisconsin-Milwaukee.

Rawlings, Lynette, Laura Harris, and Margery Turner. 2004. "Race and Residence: Prospects for Stable Neighborhood Integration." (March). Washington DC: The Urban Institute.

Reardon, Sean. and G. Firebaugh. 2002. "Measures of Multi-group Segregation." Sociological Methodology. 32: 33-68.

Reardon, Sean and David O'Sullivan. 2004. "Measures of Spatial Segregation." (January). Working Paper 04-01. Population Research Institute, Pennsylvania State University.

Swarns, Rachel. 2004. "`African-American' becomes a term of debate." New York Times. August 29: A1.)

Taeuber, Karl and Alma. 1965. Negroes in Cities. Aldine.
White, Michael. 1983. "The Measurement of Spatial Segregation". AJS. 88(5): 10081018.

Winship, Christopher. 1978. "The Desirability of Using the Index of Dissimilarity and any Adjustment of it." Social Forces. 57: 717-720


[^0]:    ${ }^{1}$ These comments are based upon both academic and policy use of segregation and census/race data as an academic researcher and as manager of research and demonstrations on fair housing issues at HUD for two decades, including analyses of segregation in public housing.

[^1]:    2 "The principle of size invariance requires that the measured level of segregation be unaffected if the numbers of students of each race in each school are changed by a constant proportion" (James and Taeuber 1985: 12).
    ${ }^{3}$ The effect of spatial discontinuities, such as highways and rivers, affects the calculation and meaning of proximity measures, as noted by Reardon and O'Sullivan (2004).

[^2]:    ${ }^{4}$ The NY Times (Swarns 2004), for example ran a front-page story on differences and similarities between how African-Americans and Africans living in the US view racial identity and make use of racially based programming. In addition the National Academy of Sciences recently noted: "Shifts in societal views on race, political pressures from different groups, increasing diversity in the country's population, and consequent changes in data collection standards and practices add ambiguity to the way we understand race and interpret data on race." (p.33). Measuring Racial Discrimination. 2004. See also the American Anthropological Association: http://www.aaanet.org/gvt/ombdraft.htm. See Bonilla-Silva 2004.
    ${ }^{5}$ See for example the census report on Blacks: http://www.census.gov/prod/2001pubs/mso01-bp.pdf
    ${ }^{6}$ In their analysis, Gary Indiana ranked first or worst, Milwaukee ranked $7{ }^{\text {th }}$ with a score of 84 .

[^3]:    ${ }^{7}$ See John Logan, et. al. 2001. "Ethnic Diversity Grows: Neighborhood Integration Lags Behind." Lewis Mumford Center. (December 18). Albany: SUNY. http://mumford1.dyndns.org/cen2000/WholePop/WPreport/page1.html
    8 "`Racial integration,' like neighborhood is a term that is widely used in both popular and academic literature but is rarely defined precisely. In part, this lack of specificity is due to the fact that most researchers exploring racial patterns of settlement have focused not on evaluating integration, but on measuring segregation." (Ellen 2000: 14).
    ${ }^{9}$ Larry Bobo (2001) and Camille Charles' trenchant analyses of the shifting meanings of housing integration to minorities complement these demographic analyses. This survey work illustrates another part of understanding the full meaning of integration and the movement towards or away from it.

[^4]:    ${ }^{10}$ The Urban Institute defines areas as exclusively white when they have a population of $5 \%$ of fewer blacks. Areas that are $90 \%$ or more black are counted as predominantly black. Both of theses groups of tracts are included within the Quinn/Pawasarat report as part of their racially integrated group. For 1990, 83\% of whites lived in areas with $10 \%$ or fewer blacks (Ellen 2000: 21).

[^5]:    ${ }^{11}$ In addition to their report, they provided some detailed responses (on January 18, 2003) to extensive criticisms in the Milwaukee Journal Sentinel; see: http://www.jsonline.com/news/editorials/jan03/111441.asp
    ${ }^{12}$ Useful context explaining Milwaukee's segregative forces is contained in DeParle 2004; see chapter 4.

[^6]:    ${ }^{13}$ The URL for this material is: http://mumford1.dyndns.org/cen2000/milwaukee.htm
    ${ }^{14}$ It is noteworthy that Detroit, among this country's most racially separated metro areas, is counted as having $7.1 \%$ of its population living on integrated blocks and this places them $57^{\text {th }}$ rather than among the most segregated. Chicago, another long-term segregated and polarized city, has $6.3 \%$ of its population living on integrated blocks and ranks $63^{\text {rd }}$. Milwaukee is keeping company with places that have quite pronounced histories of public and private sector actions promoting segregation (Hirsch 1983; Farley, Danziger and Holzer 2000).

[^7]:    ${ }^{15}$ By some estimates, areas that are $80 \%$ of more black have eight times the poverty of areas that are mainly white.

[^8]:    ${ }^{16}$ HUD for years incorporated segregation analyses into its National Urban Policy Reports as one means for descriptively addressing the issue of race and housing disparities.
    http://www.huduser.org/Publications/pdf/upr.pdf The analysis of public housing segregation is included in

[^9]:    American Apartheid; see also analyses of public housing segregation by Bickford and Massey (1991); Goering and Coulibaly (1989); Goering, Kamley, and Richardson (1997).
    ${ }^{17}$ While HUD included the measure in a number of National Urban Policy Reports it has found no means to incorporate it programmatically into regulations, funding, or other methods to direct policies.
    ${ }^{18}$ For example, illegal segregation and discrimination were key factors involved in Minneapolis in the Hollman case, as described in Goetz (2003).
    ${ }^{19}$ See Clemetson 2004.
    ${ }^{20}$ For these comments see: http://www.jsonline.com/news/metro/jan03/111860.asp?format=print

[^10]:    ${ }^{21}$ For some of this debate see: http://www.jsonline.com/news/editorials/jan03/111459.asp
    ${ }^{22}$ See for example, Dennis Rome, Black Demons: Mass Media's Depiction of the African American Male Criminal Stereotype (2004): http://newsinfo.iu.edu/news/page/normal/1580.html

[^11]:    ${ }^{23}$ Causal analyses should include the role of public sector policies, at the federal and non-federal levels, in adumbrating the pernicious effects of separation and discrimination.
    ${ }^{24}$ Grannis (1998) has made the research suggestion that T-communities (or trivial streets) be used in measuring segregation as it offers a more fine-grained analysis. He states: "being connected by tertiary streets explains more racial variability than merely being spatially adjacent." Methodologically such an approach appears a costly and unduly challenging option for the next census.

