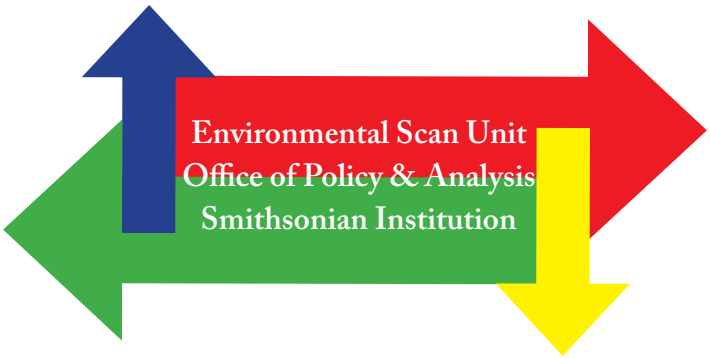

Changing Faces:

Museum Visitorship and Demographic Change

White Paper 2006-1

August 2006

Smithsonian Institution
Office of Policy and Analysis

Foreword

This is the first in a series of White Papers identifying and analyzing major demographic, social, economic, technological, and business trends that will affect the museum operating environment over the next few decades. The intention of the Office of Policy and Analysis (OP&A) is to examine the challenges and opportunities resulting from these trends, thus enabling museums to allocate and leverage resources appropriately, to better serve the needs of museum users, and to provide satisfying experiences.

This first White Paper was prepared by David Karns with the assistance of Lance Costello, James Smith, and Ioana Munteanu. The ideas expressed in this White Paper reflect the analysis by the staff of OP&A and do not represent the official position of the Smithsonian Institution.

I would appreciate any suggestions that readers may have on additional trends affecting museums and on ways in which this series can be made most useful to the museum community.

Carole M. P. Neves, Director
Office of Policy and Analysis, Smithsonian Institution

Changing Faces:
Museum Visitorship and Demographic Change

White Paper 2006-1
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Introduction

As older generations die and are replaced by new Americans—both native born and immigrants—the racial and ethnic composition of the American population will change. As it changes, the population of museum visitors will also change. This White Paper lays out some basic demographic changes which will affect the American population over the period from 2000 to 2050. It also projects the likely size and racial and ethnic composition of art museum audiences in 2020.

This White Paper does not deal with trends in areas such as education, literacy, communications, income, and gender, or their effects on museum audiences; those will be addressed in future White Papers prepared by Office of Policy and Analysis.

The American Population: 2000 to 2050

By 2050, America is projected to change from a majority White population to a population comprised entirely of minorities—White, Black, Asian, American Indian, Hispanic. No single group will constitute more than half of the population. America will also be older.

The United States Census Bureau projects the size of the American population to assist the formulation of policies and the planning of programs.[1] The total population is projected to increase from today's 282 million to 336 million in 2020 and 420 million in 2050, increases of 19 percent and 49 percent respectively. Within these totals, the increases are dramatic for some ethnic groups: Hispanics will increase by 68 percent by 2020 and 188 percent by 2050—nearly tripling. The Asian population also is projected to triple by 2050. Meanwhile, growth in these

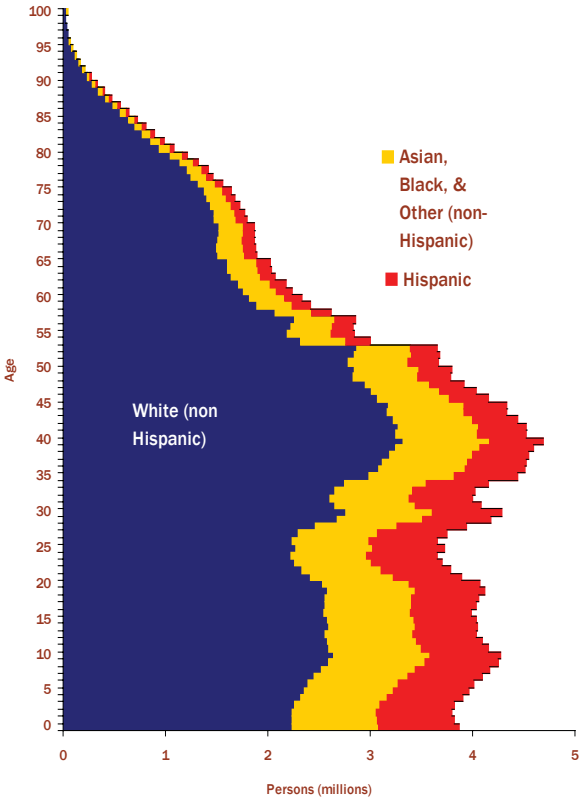
1 Interim projections are available at *http://www.census.gov/ipc/www/usinterimproj/usproj2000-2050.xls.* Source: U.S. Census Bureau, Population Division, Population Projections Branch.

groups is matched by 12 percent and 28 percent decreases in the number of non-Hispanic Whites.

Part of this population growth is due to projected increases in births and immigration, but part of it is also due to increasing life expectancy. Exhibit 1 shows the numbers of Hispanics, White non-Hispanics, and Other Persons[2] by age in 2000. Whites constitute a majority of all age ranges, although the size of the majority is smaller among children. The figure is dominated by two large bulges; the first is roughly between ages 40 and 60—the Baby Boom Generation—and the second is roughly between ages 14 and 30—Generation Y.

Between 2000 and 2020, the number of persons in earlier generations (e.g., born before World War II) is will decrease due to death. With the Baby Boomers and other generations growing older, the bulges will move up the vertical axis (age) and generate a larger proportion of elderly Americans. Meanwhile, the number of children will continue to increase, with a larger share among both Hispanics and non-Whites. Overall, the population distribution will become more rectangular in contrast to the more triangular pattern of 2000.

Exhibit 1
United States Population in 2000 by Age and Hispanic Status



Two observations emerge from Exhibit 1 (2000), Exhibit 2 (2020), and Exhibit 3 (2050):

- The average American will be older in 2020 than today, while the average American will be younger in 2050 than in 2020.
- Americans will be racially and ethnically more diverse as the nation moves towards the middle of the century.

2 The United States Census Bureau defines race as White, Black, American Indian/Alaskan Native, Asian, and Native Hawaiian/Pacific Islander. More than one race may be selected. Hispanic ethnicity is defined with a separate question. Thus, Other Persons includes Asians, American Indians, more than one race, etc., who are not Hispanic. The three categories: White, non-Hispanic; Hispanic; and Other Persons account for 100 percent of the population.

Exhibit 2
Estimated United States Population in 2020 by Age and Hispanic Status

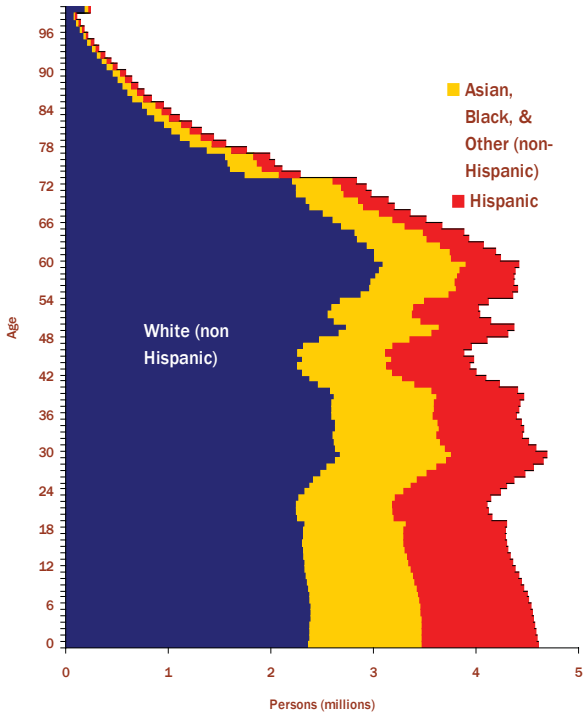
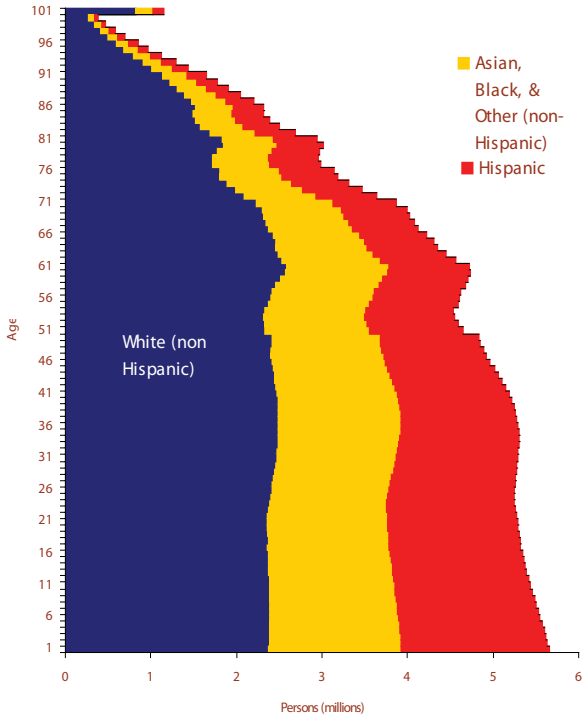


Exhibit 3
Estimated United States Population in 2050 by Age and Hispanic Status



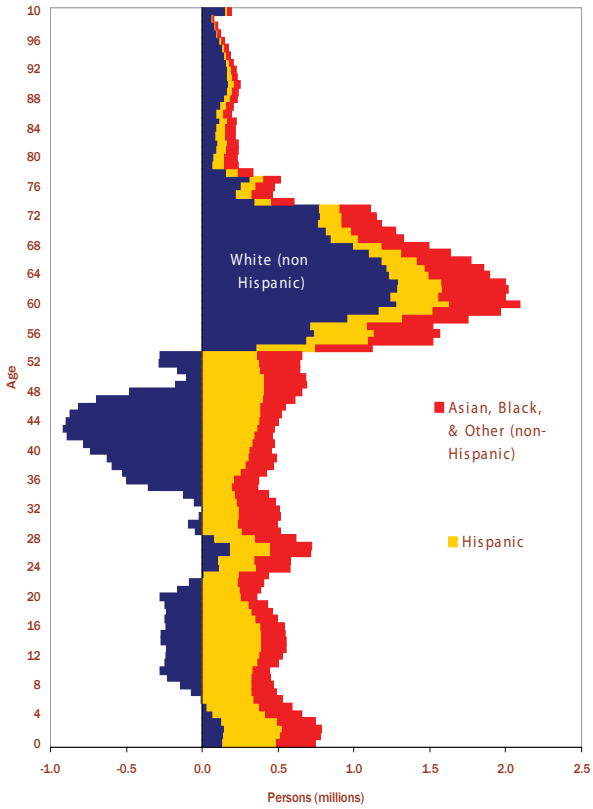
As Exhibit 4 (page 4) illustrates, the sizes of two age segments of the American population will increase dramatically between 2000 and 2020. The older group will be between mid-50's and mid-70's—the Baby Boom Generation—and largely White. The second group will be in its early 30's in 2020—the tail end of the so called Generation Y (born between 1977 and 1994) and the succeeding generation (born after 1994). The second group will be a result of dramatic increases in the number of younger non-Whites, Hispanics and others, that occurred in recent decades.

The environment in which museums operate has changed continually over the past few decades as technology and cultural norms have changed. Looking forward twenty years—the approximate life of a permanent exhibition at the Smithsonian—expectations of museum visitors are likely to change even more. For example, in a few more years, the automobile spare tire may become a museum artifact, as the slide rule has already. Older visitors may remember spare tires, but even today, some expensive cars are sold without a spare because there is no space for it (Toyota Sienna mini-van) or there are different sized tires on the front and rear (Chrysler Crossfire). Such changes in design are supported by more reliable tires that rarely go flat from road hazards. Expectations regarding commercial products will carry over to expectations about museum experiences.[3]

3 See Chris Denove and James Power IV, *Satisfaction: How Every Great Company Listens to the Voice of the Customer* (NY: Portfolio Hardcover, 2006) for a fuller explanation of increasing consumer expectations of quality based on the experience of J. D. Power and Associates.

Museums in 2020 will have to serve two large audiences that may have different needs, expectations, and interests. For example, older persons may require higher and constant lighting levels in exhibits, while younger persons may be interested in spectacular, theatrical exhibit lighting. Will accessibility or excitement win in exhibition design? Similarly, older persons may require greater contrast and larger fonts on label than younger eyes due to the effects of aging such as constricted pupils and cataracts. And these two differences do not even begin to address inter-generational and inter-cultural preferences in music, colors, languages, etc.

Exhibit 4
Estimated Change in United States Population by Age and Hispanic Status Between 2000 and 2020



Museum operations will have to adapt to these demographic changes, which are already in motion, as well as to new technological trends or fads that may emerge. The demographic changes can be anticipated and planned for before they manifest. While the present discussion has focused on the relative changes between the White and non-White parts of the American population, it should be noted that within the latter group, Americans of Chinese, Japanese, Vietnamese, Korean, Indian, and other Asian origins are projected to increase more rapidly than African Americans.

The next section turns to the topic of how these demographic changes in the American population may affect the size of museum audiences—specifically the audience for art museums—through 2050.

Is Museum Visitation an Acquired Taste or a Life Stage?

Joan Miró, Sun Eater, 1955. © Successió Miró, VG Bild-Kunst, Bonn 2005

Projecting art museum visitors: Laying out prospective changes in the demographic composition of the American population draws upon the geography of the future. This section applies general population dynamics to art museum visitors.[4] The analysis is based on Surveys of Public Participation in the Arts (SPPA) conducted by the National Endowment for the Arts (NEA)[5]. In particular, NEA contracted with the U.S. Bureau of the Census in 1982, 1992, and 2002, as part of continuing Census surveys. One question that was included in all three surveys was "Did you visit an art museum or gallery in the last twelve months?" [6]

Two simple models can be used to understand the relationship between going to museums and age. One model assumes that the likelihood of visiting museums is approximately the same for persons of the same age, say 21, in 1992 and 2002, when the surveys were conducted—this model is called the Stage of Life model. A second model assumes that an individual becomes interested in visiting museums in early adulthood. Thus, the propensity to visit is set during early adult years and continues at approximately the same level as individuals age, with deviations due to infirmities, children, etc.—this model is called the Habitual model. In both cases, blockbuster exhibitions or increasing numbers of new museums distributed throughout the country may increase the likelihood that people of all ages will visit museums.

The combination of the large samples and the fact that the same questions were asked during each of the three decades helps explain the relationship between age and art museum visitation,[7] as well as the relationship between visitation and race or ethnicity. Exhibit 5 shows the empirical relationship between age and art museum visitation in the three years.

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4 Museum visitors, especially Smithsonian museum visitors, have traditionally over represented some parts of the American population. For example, museum visitors are more likely to have college degrees than non-visitors.

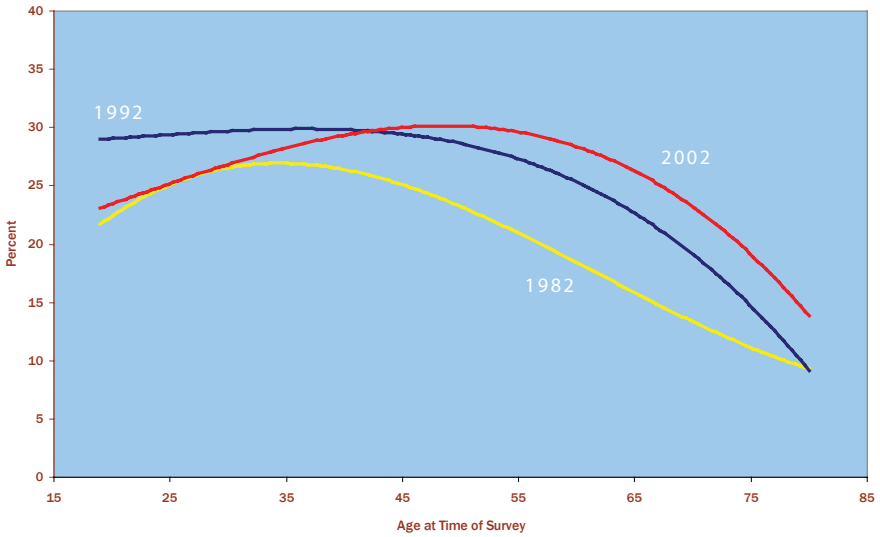
5 NEA has deposited its survey data in the Cultural Policy and the Arts National Data Archive (CPANDA). Neither the NEA nor CPANDA is responsible for the accuracy of any analysis or conclusions presented in this White Paper.

6 Unfortunately, only the 1982 survey includes zoos, aquaria, science centers, or natural history museums. All three surveys included going to a history museum or site and an amusement park.

7 The term "visitation" is defined as having visited an art museum in the past year. It does not cover the number of visits made during the year or whether visits were made to more than one museum. Thus, the term indicates art museum "visitors" rather than art museum "visits."

- One common characteristic of the three curves is that art museum visitation declines after middle age, and does so rather sharply in later years.

Exhibit 5
Likelihood of Visiting an Art Museum by Age: 1982, 1992 and 2002



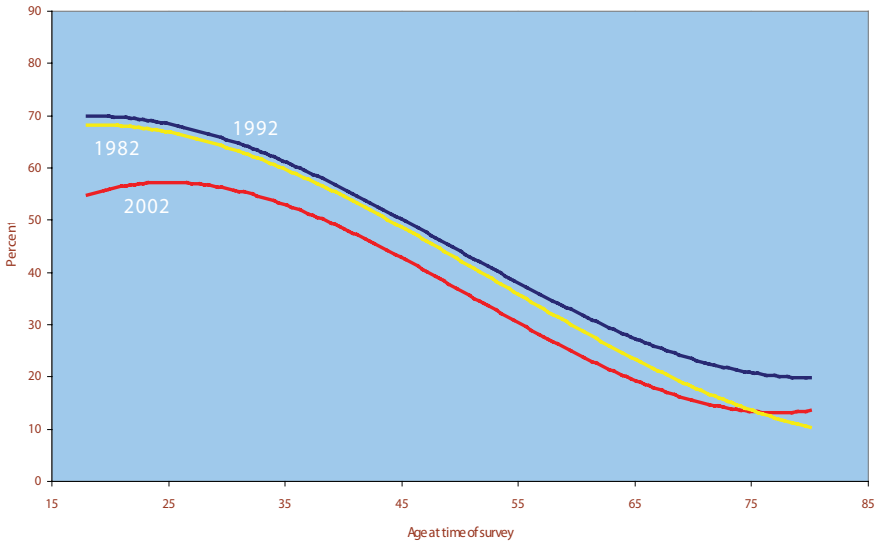
- For two of the surveys (1982 and 2002), art museum visitation appears to increase from lower levels for teens to higher rates in mid-life. This pattern was not as apparent in the 1992 survey. In 1992, the rate of art museum visitation is almost constant from the late teens through middle age, and it starts to decline around age 45.

- The lowest levels of overall visitation appear in 1982. The curve is lower at all ages than in either 1992 or 2002. 1982 also displays an earlier decline with increasing age than either 1992 or 2002.

- Comparing 2002 and 1992, the 2002 art museum visitation curve extends into an older age before declining. At the same time, the 1992 curve indicates a higher likelihood of art museum visitation by younger persons than in 2002; in other words, Generation Y persons in 2002 were less likely to visit art museums than Generation X (born 1966 to 1976) persons in 1992.

One way to increase museum audiences is to make museums even more interesting and rewarding, and thus attract a larger percentage of the population at all ages. That is, to move the entire curve up. Another way to increase museum audiences is to keep visitors for a longer time, e.g., keep more older persons visiting at the same rates as they did when they were younger, rather than making fewer visits with increasing age as the negative slopes of all three trend lines suggest; that is, stretch or pull the age-trend line to the right (towards older age).

Exhibit 6
Amusement Park Visitors by Age: 1982, 1992, 2002



Looking at the lines representing art museum visitation in 1982, 1992, and 2002 in Exhibit 5, both sources of audience growth have occurred in recent decades. The rate of visitation is clearly lowest in 1982. A larger percentage of persons of all ages visited art museums in succeeding decades—perhaps because of increased educational levels or expanding opportunities to visit as a result of the growth in the number of art museums.

To the extent that increased visitation between 1982 and 2002 is a result of individuals continuing to visit museums at almost the same rate as they age, it implies that art museum visitation is an acquired, or learned, characteristic—habitual.

Statistical analyses of art museum visitation in 2002 and 1992 demonstrate that the percentage of adults visiting art museums in 2002 is more significantly correlated with the Habitual Model than it is with the Life Stage Model. In contrast, visiting amusement parks (Exhibit 6) follows the Life Stage Model. The stronger correlation for visiting amusement parks is between identical ages in 1992 and 2002. Young folks go to amusement parks, but participation drops with age. As people grow older, amusement parks are perhaps more terrifying. Art museum visitation seems to remain interesting and brings visitors back as they age. Once hooked, art museum visitation sticks better than amusement park visitation.

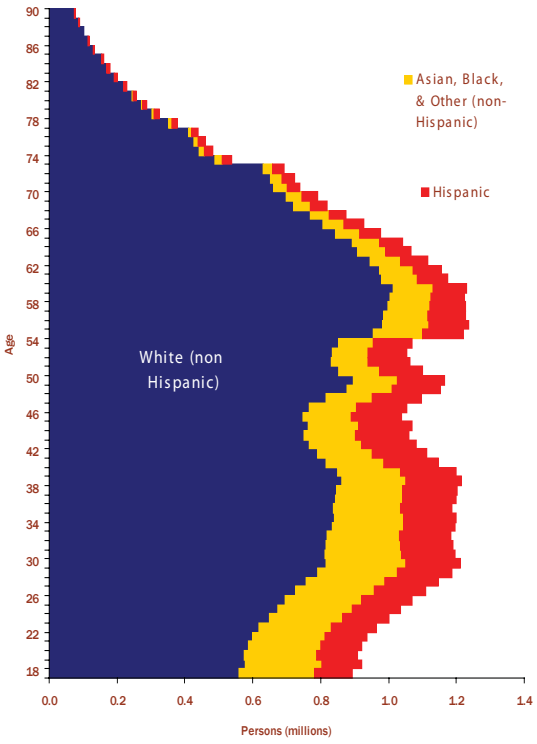
Interestingly, the rate of amusement park visitation was lower in 2002 than in either 1982 or 1992—except for persons over 75. Remember that art museum visitation was higher for older ages in 2002; however, it was lower among younger Americans.[8]

8 The lower visitation rates in 2002 may be a consequence of increasing diversity or decreasing interest among Generation X and Generation Y Americans. These two possible sources of lower visitation would require different strategies to increase visitation.

Projecting art museum visitation levels and diversity: This section applies the findings of the previous section in projecting the likely number of Americans who will visit an art museum in 2020 and 2050. The assumptions underlying these projections are:

- Art museum visitation primarily follows the Habitual Model; thus, healthy and mobile Americans are likely to continue to visit museums past middle age into their later years. The curve from fifty onward shifts to the right.[9]
- As the Baby Boom Generation ages, boomers will continue to be more active than earlier generations.[10]
- Older Americans are healthier today than ever before and are likely be somewhat healthier in the future.[11]
- Basic art museum visitation rates for persons under 30 years old will remain the same as the 2002 rates for Whites, Hispanics, and non-Whites. The rates for older persons will reflect the shifting of the 2002 curve to the right; that is, higher rates of visiting later into life.

Exhibit 7
Estimated Art Museum Audience 2020
(18 years and older)

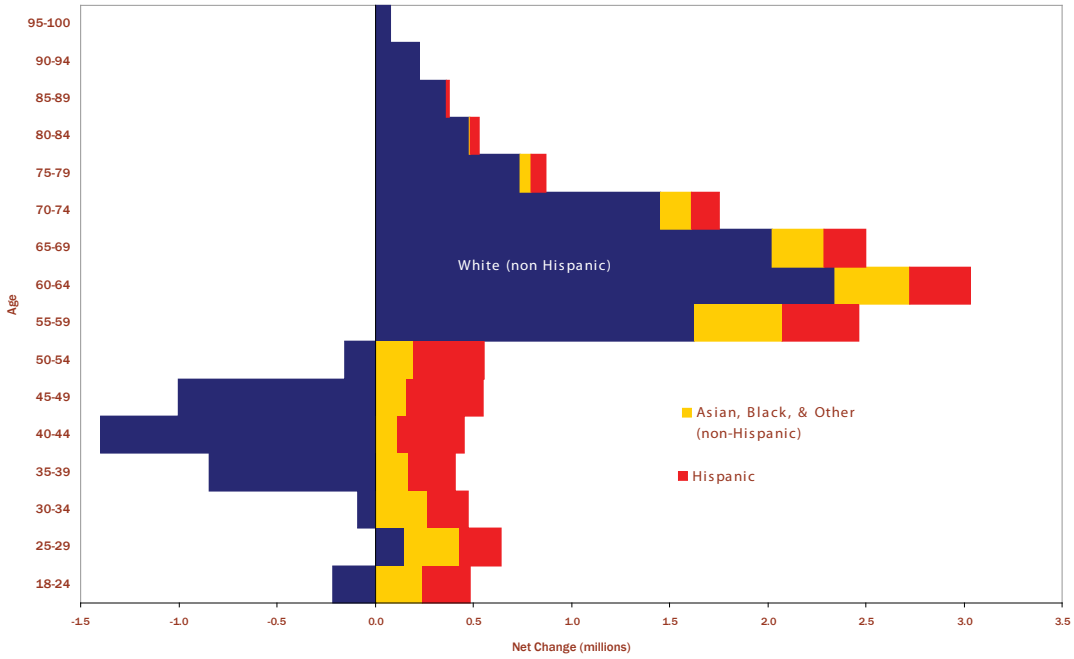


Notice that there are no assumptions about:

- Increasing the interest of younger persons in art museums; that is, raising the percentage of Generations X and Y, and succeeding generations, who visit art museums.

9 The actual calculations used both the Habitual (2/3) and Life Stage (1/3) Models.
10 This assumption is based on the research conducted by The Boomer Project, http://www.boomerproject.com/.
11 This assumption is based on *65+ in the United States: 2000* released by the National Institutes on Aging and prepared by the Bureau of the Census, http://www.nih.gov/news/pr/mar2006/nia-09.htm.

Exhibit 8
Estimated Change in Art Museum AudienceBetween 2000 and 2020 by Age and Hispanic Status



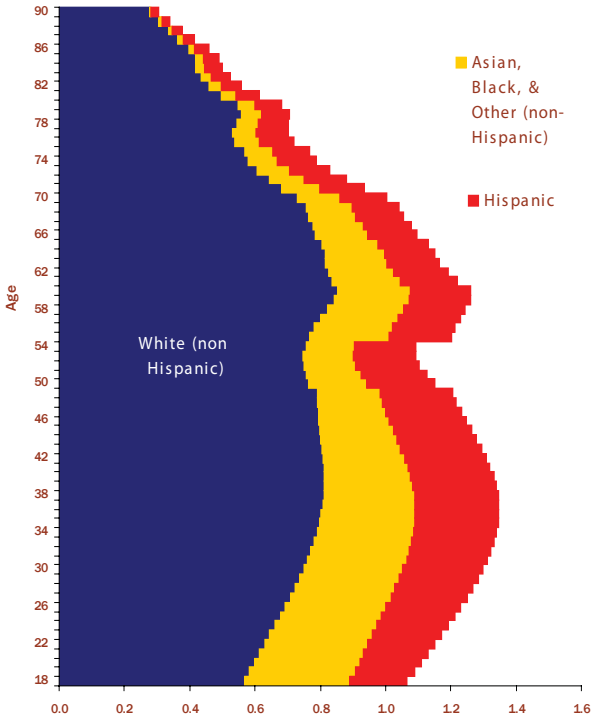
- Altering the amount and distribution of college education across the American population.
- Increasing the interest of ethnic and racial minorities in art museums.
- Spreading technological innovations and resulting social changes.
- Changing levels of literacy and reading.
- Rising consumer expectations with regard to quality, involvement, and stimulation
- Transforming the leisure time behavior of Americans in coming decades.

With the foregoing caveats, what does the projected adult[12] art museum visitation look like in 2020, remembering that everyone in this audience is already alive. (See Exhibit 7)

12 Since the NEA SPPA surveys interview respondents 18 years old and older, the projections in this section are restricted to adults. However, children can make up an important part of a museum's visitation. For example, approximately 10 percent of visitors to the National Museum of American History were under 18 in 1994. See Audrey E. Kindlon, and Andrew J. Pekarik, and Zahava D. Doering, *Visitors To History: A Report Based on the 1994–95 National Museum of American History Visitor Study*, Smithsonian Institution, Institutional Studies Office (ISO), 1996. http://www.si.edu/opanda/Reports/Earlier/96-3B-HistoryVisitors.pdf.

The 2020 audience is likely to be roughly 22 percent larger than the 2000 art museum audience—equivalent to the change in the total population. It will remain overwhelmingly White, although by a smaller margin than in 2000, and with substantially larger numbers of non-Whites among younger visitors. If Hispanics and non-Hispanic non-Whites were to attend art museums at the same rate as Whites in 2020, the total audience would increase by 46 percent between 2000 and 2020—twice the projected increase with current rates of museum visitation for these groups. In addition, one-third of the audience (36%) would be non-White minorities rather than the one-quarter (24%) projected using 2002 participation rates.

Exhibit 9
Estimated Art Museum Audience 2050
(18 years and older)



As Exhibit 8 (page 9) dramatically illustrates, the same two factors that will alter the composition of the total American population will drive changes in art museum audiences. First, the number of older patrons—predominantly White—will expand greatly. Concurrently, the number of younger patrons will increase as well—with the increase due to the growing number of young non-White minorities. Audience changes in the decades leading up to 2020 pose a potential challenge in designing programs that attract two audiences with different needs and expectations.

Extending the projections to 2050 amplifies the trend of a larger, more diverse museum audience (see Exhibit 9). The overall size of the art museum audience will increase by nearly half from 2000 (47%). Minorities will constitute increasing shares of the art museum audience. As minority persons form a larger share of older Americans between 2020 and 2050, the cultural differences between older White patrons and younger non-White patrons will decrease and be replaced by the traditional differences between young and old, as visitors of all ages will be more diverse.

Observations

The preceding discussion focused on changes in the demographic composition of the American population, and the resultant changes in the audience for art museums, between 2000 and 2050. Because data sets comparable in quality, size and time to the Surveys of Public Participation in the Arts conducted by the National Endowment for the Arts are unavailable, audience projections for other types of museums are even more conjectural. Nevertheless, the dominant demographic trends will affect all types of museums. All museums should prepare to serve 50 percent more visitors. All museums are likely to face the challenge of satisfying audiences with divergent wants and needs. In addition, the lowered visitation rate among Generation Y is disturbing because the Habitual Model projects that this generation will continue to visit at relatively lower rates into the future. If participation rates of younger generations of Americans remain lower than previous generations, it is possible—but unlikely—that overall museum visitation might decrease while the population of America is growing.

Future White Papers from the Smithsonian Office of Policy and Analysis will address more specific trends that may affect how museums can attract more visitors. They will address trends in technology, economic inequality, gender issues, marketing, education, and literacy.