

1.e.ii. Demographic Trends

The Minnesota State Demographic Center 2007 and 2009 reports offer detailed projections of Minnesota's demographic composition through 2035. The reports point to significant growth in Minnesota's population, approximately on par with national averages. By 2015, the state's population is projected to reach 5.7 million—a 10% increase from 2005. By 2035, the state is expected to host 6.5 million residents—a 24% increase from 2005 (Minnesota State Demographic Center, 2007). Three noteworthy trends characterize this growth overall. Minnesota's population is aging, increasingly urban, and diversifying.

An Aging Population: All age brackets are expected to experience a population increase, or remain stable, through 2035 (Minnesota State Demographic Center, 2007). While rising birth rates will lead to a 14% increase in the number of children (ages 0 to 14) between 2005 and 2035, the number of teenagers and adults (ages 15 to 44) will experience a more modest increase, around 5%. The middle-aged group (ages 45 to 64) is expected to grow by nearly 17%. As a whole, the population under 65 will grow 10% by 2035.

The bulk of Minnesota's population growth between 2005 and 2035 will occur in the older age brackets (Figure 1). By 2035, Minnesota's population 65 and older will increase 125%. This disproportional growth will lead to noticeable changes in Minnesota's age composition. In 2005, only 12% of residents were older than 65. By 2035, projections indicate that percentage to reach 22%. The oldest age group, over 85, will account for over 3% of the population by 2035, compared to 2% in 2005.

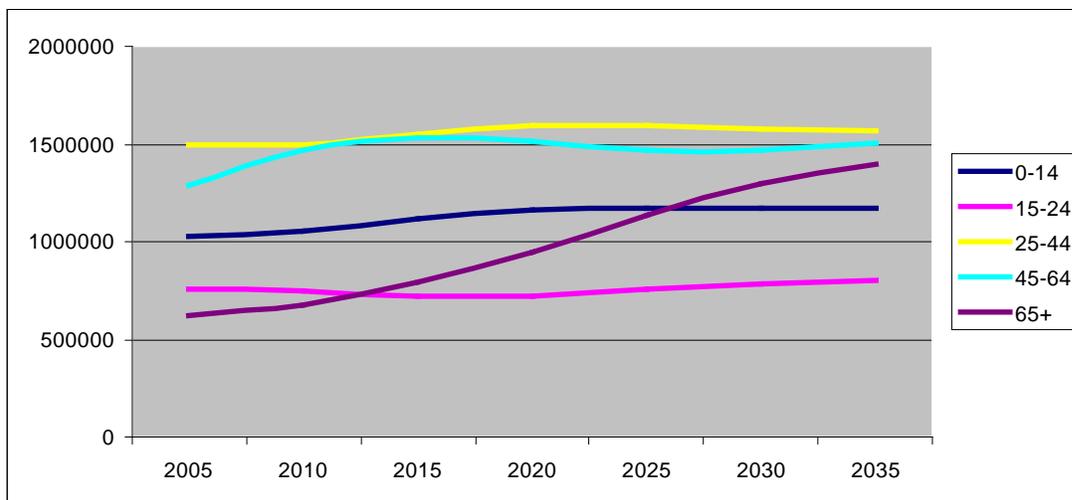


Figure 1 – Minnesota Population Projections, by Age Group, 2005 to 2035

Source: Minnesota State Demographic Center, 2007.

Large percentages of this aging population will live in Minnesota’s urbanized centers. Between 2005 and 2035, projections indicate the numbers of older residents in the Twin Cities Metropolitan Area will more than quadruple. Conversely, despite the increasing population of the older age-groups statewide, some rural counties will see a decline in the number of older residents.

An Increasingly Urban Population: The Minnesota State Demographic Center (2007) projects Minnesota’s population will increasingly reside in urban areas through 2035. While the core counties of the Minneapolis-St. Paul area will experience only modest population increases, the Twin Cities suburban areas, Rochester, and St. Cloud regions expect to see substantial growth. In contrast, portions of western, rural Minnesota will experience slow or negative growth.

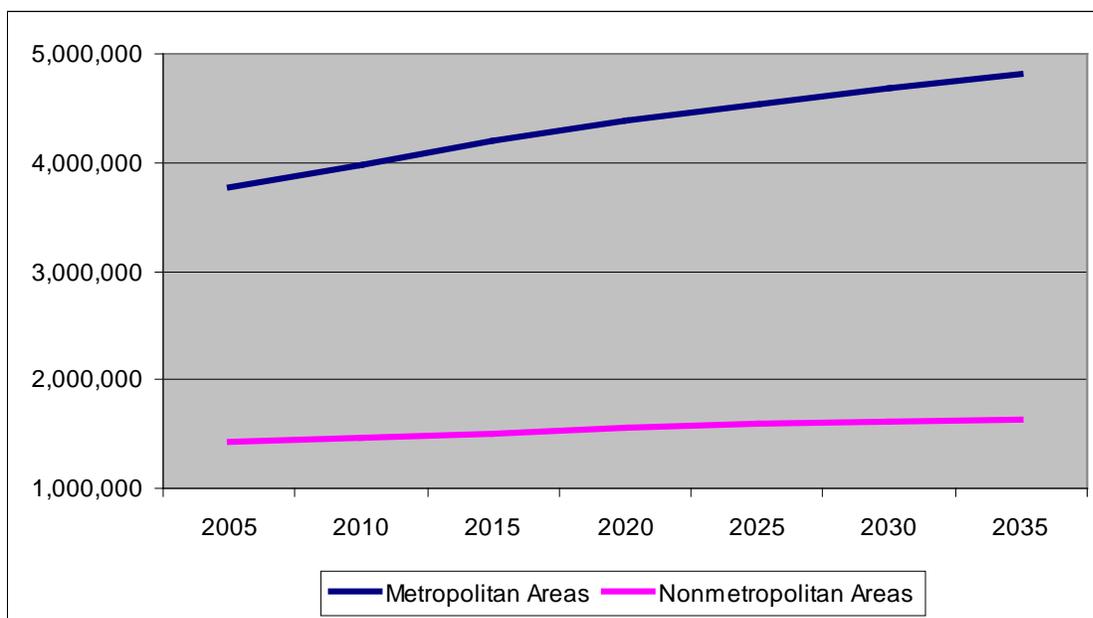


Figure 2 – Minnesota Population, by Metropolitan and Nonmetropolitan Areas, 2005 to 2035

Source: Minnesota State Demographic Center, 2007.

While the state overall is projected to grow 24% between 2005 and 2035, growth in metropolitan areas far outpaces growth in nonmetropolitan areas at 28% and 15%, respectively (Figure 2). All in all, 83% of population growth in Minnesota is expected to occur in urban areas.

A Diversifying Population: In addition to becoming older and more urban, Minnesota’s population is projected to diversify in race and ethnicity by 2035 (Minnesota State Demographic Center, 2009). As of 2010, the majority of Minnesota’s minority populations reside in the Twin Cities Metropolitan Area. While the Twin Cities will remain the most diverse region of the state, it is important to note all regions will become more racially and ethnically diverse between 2005 and 2035.

Statewide, Minnesota’s total population of racial and ethnic minorities is expected to grow 112% between 2005 and 2035. This growth will be most acute in the metro regions, while the northwest and northeast regions will experience the smallest amount of growth. Even in the northern regions, however, the total minority population can be expected to grow by 60 to 80%.

All minority populations are expected to see growth across the state. The Hispanic/Latino population is projected to increase almost 200%, growing from an estimated 196,300 residents in 2005 to 551,600 in 2035. The African American and Asian/Pacific Islander communities will also experience a sharp rise in population, approximately doubling in size by 2035. Large majorities of these groups are projected to reside in the Twin Cities Metropolitan Area.

The population of white Minnesotans will also experience growth, but at a slower rate. While the total minority population is projected to grow by 112% between 2005 and 2035, the white population is expected to grow by only 9%. Thus, by 2035, a quarter of all Minnesotans are projected to be nonwhite or Latino, compared to 14% in 2005 (Figure 3).

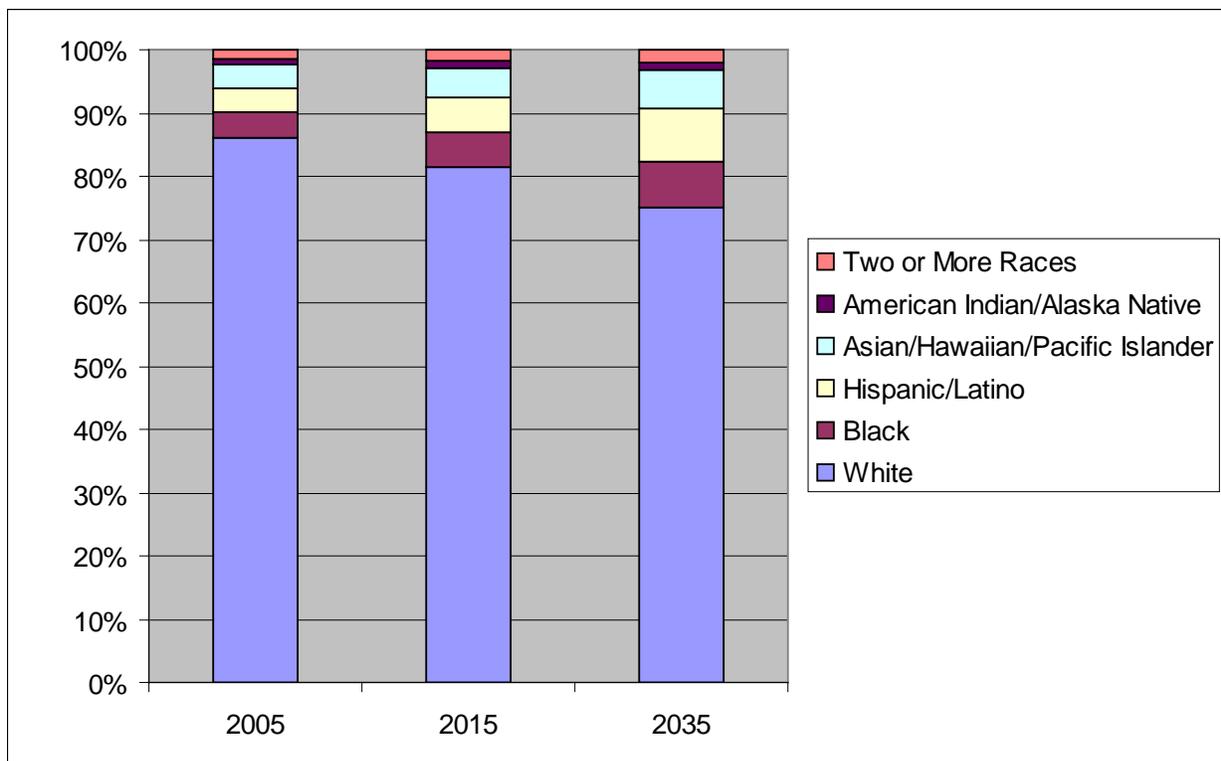


Figure 3 – Race and Ethnicity, by Percent of Population, 2005 to 2035

Source: Minnesota State Demographic Center, 2009.

1.e.iii. Recreation Activity Trends

Nature-based recreation management initially focused solely on activity participation with measures of success related to the number of people participating in a given activity. While the field has evolved toward experience- and benefits-based management, documenting activity trends remains of interest. However, as with any social activity, there are often unpredictable cycles and trends influencing outdoor recreation such as economic conditions, technological progression, demographic changes, fads, and cultural evolutions. Regardless, historical trends, current outdoor-activity preferences, and demographic patterns can inform park and trail planning and management.

Historical National Trends: The National Survey of Fishing, Hunting, and Wildlife Associated Recreation (conducted since 1955) and National Survey on Recreation and the Environment (conducted since 1960) both provide historical trends in outdoor-activity participation. Together, these surveys clearly indicate that participation in outdoor-based activities grew steadily between the mid-1950s and early 1990s (Cordell, 2009). During the 1990s, however, state and national-level outdoor recreation participation trends generally indicate participation numbers reached their peak and have since remained fairly stable (Kelly, 2007). Supporting this trend, Cordell, Betz, and Green (2008) have noted that visitation to public natural lands—after strong growth in the 1950s, 1960s, and 1970s—has leveled off and remained stable since the 1990s. A forthcoming National Survey on Recreation and the Environment found the total number of people who participated in nature-based recreation grew by 4.4% between 2000 and 2008 (Cordell, 2009). However, as growth in total participation lagged behind general population growth, nature-based recreation participation decreased per capita.

State Trends and Current Participation: Minnesotans participate in a wide variety of outdoor activities. Perhaps not surprisingly, summer activities generally have the highest participation rates among Minnesotans 20 years of age and older (Kelly, 2005a). More than 4 of 10 Minnesotans surveyed indicate they participate in walking and hiking (54%), boating (43%), and swimming (41%). Other activities enjoyed by large numbers of people on Minnesota's trails and park land include picnicking (36%), fishing (30%), biking (29%), camping (26%) and nature observation (24%).

Despite high levels of participation, however, projections from the Minnesota Department of Natural Resources clearly indicate declining per-capita participation in the majority of recreation activities monitored, and participation rates are projected to continue to decrease (Kelly, 2005b; Table 1). Notable exceptions exist however, with anticipated increases in participation in camping, running, and off-road ATV use.

The Minnesota DNR anticipates decreasing participation in nature/wildlife observation. In contrast, both national data (Cordell, 2009) and data from neighboring Wisconsin (Wisconsin DNR, 2010) anticipate wildlife viewing to rapidly increase as an aging population searches for leisurely recreation opportunities. As with any activity trend, ongoing monitoring of participation rates will be needed.

Table 1
Ten-year Projections of Selected Summer Outdoor Activities

	<i>Percent of population participating annually</i>		
	<u>2004</u>	<u>2014</u>	<u>% Change</u>
Walking/Hiking	54.4%	54.4%	+0.0%
Swimming	40.8%	30.7%	-24.8%
Boating of all types, excluding fishing	35.5%	31.4%	-11.5%
Fishing of all types	30.2%	24.7%	-18.4%
Biking	29.0%	17.8%	-38.6%
Camping of all types	25.8%	29.9%	+15.9%
Viewing and identifying Wildlife	20.4%	15.9%	-22.0%
Hunting of all types	16.0%	14.2%	-11.3%
Running/Jogging	14.2%	15.2%	+7.0%
Off-road ATV driving	10.3%	13.8%	+34.7%

Note: ATV numbers were revised by Minnesota DNR in 2007 (T. Kelly, Personal Communication, July 1, 2010).

Demographic Patterns and Participation: Participation in nature-based outdoor recreation activities varies by place of residence (urban/rural), age and race/ethnicity. In terms of recreation time spent outdoors, statewide participation studies indicate rural residents, people 65 and older, and minority race and ethnicity groups tend to spend less time recreating outdoors (Kelly, 2005a). Thus, as Minnesota's population continues to become more urban, grow older, and diversify, participation rates may continue to decline.

Minnesota's changing demographics also may have an effect on the types of outdoor recreation activities sought across the state. The 2004 Outdoor Recreation survey found that nature observation was strongly associated with non-whites and/or Hispanics. Additional studies have shown non-white populations prefer to recreate in large groups, whether picnicking, camping, or fishing (Legislative-Citizen Commission on Minnesota Resources, 2007). Nature-based recreation managers interested in boosting outdoor recreation participation should consider the changing demographics of the communities they serve when planning facilities, designing programs, or communicating with visitors.

1.e.iv. Recreation Experience Trends

We briefly review nature-based recreation experiences and their trends, pertinent factors influencing experiences, and their implications for the future of Minnesota parks and trails.

Experiences & motivations: According to a 2005 statewide recreation participation study, 80 % of Minnesotans surveyed claim outdoor recreation is at least “moderately important” in their life (Kelly, 2005a). Outdoor recreation is important to an even greater proportion of park visitors. A 2007 survey of state park visitors revealed that 99 % of frequent visitors believe that outdoor recreation is at least moderately important in their life (Kelly, 2008). Core motivations are well documented: people engage in outdoor recreation to experience nature, be with friends and family, escape typical daily demands and be physically active (Driver, 1977; Kelly, 2007). Since recreation experience assessments began, these motivations have consistently remained important for outdoor recreationists.

Nature-based recreation motivations differ by age or life stage and, given Minnesota’s demographic changes and trends toward aging, addressing these differences is important. In Minnesota specifically, trail user data analysis revealed that those in Generation Y (i.e., those born between 1980 and 1999) identified “challenging myself/skills” as a significantly stronger motivation than other generations (Baby Boomers born between 1946 and 1964, and Generation X born 1965 to 1979) for park-related leisure time (Schneider, Schuweiler, & Bipes, 2009; Figure 4). The 2007 state park visitor study revealed that older adults place greater emphasis on learning-related experiences (e.g., experience a sense of history, learn about nature), while young adults desire achievement and stimulation (e.g., taking risks, being active, feeling exhilarated, being adventurous; Kelly 2008). Data analysis focused on physical activity participation in Minnesota select state parks supports these generational differences: achievement was more important to Generation Y than the other generations (Wilhelm Stanis & Schneider, 2010). Among ATV riders, Generation X participants indicated thrills and excitement were more important to their experience than Baby Boomers (Schoenecker & Schneider, 2007).

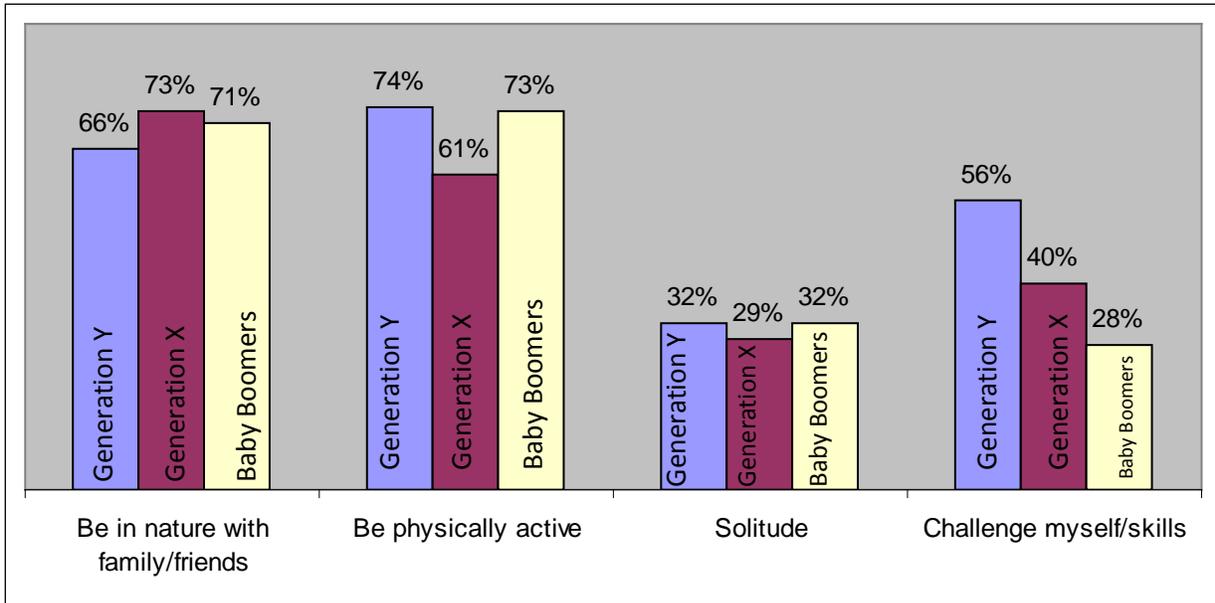


Figure 4 – Percent Reporting Motivation for Outdoor Recreation, by Generation

Source: secondary data analysis of Schneider, Schuweiler & Bipes, 2009

Besides motivations for individual experiences like solitude or physical challenge, many recreationists pursue social experiences with family and friends in outdoor recreations settings. Research has documented differences in group sizes between white and non-white populations (Burns, Covelli, & Graefe, 2008). Specifically, studies have shown that Asians and Hispanics are more likely than other ethnic groups to recreate with immediate or extended family and therefore seek social experiences and settings that accommodate larger groups. Though specific data for Minnesota is wanting in these areas, design and programming efforts need to consider differences in group sizes among the diversifying nature-based recreationist.

Experience duration & distance from home: Beyond motivations for a nature-based recreation experiences are the experiences themselves: their duration and their distance from home. Since 2000, experience duration and distance have both decreased, with participants generally seeking shorter and closer-to-home experiences (Schneider, et al. 2009). A 2009 recreational trail study in Minnesota revealed that the majority of trail-related recreation occurred within 30 minutes of participants’ homes (Schneider, et al. 2009). In contrast to this trend, Minnesota state park surveys reveal that the median miles travelled increased between 2001 and 2007 from 80 miles to 97 (Kelly, 2008). This shortening of time and distance travelled for nature-based recreation experiences impacts recreation management and planning.

Visitor Conflict and Satisfaction: The majority of visitor studies point to high levels of satisfaction overall and sustained satisfaction of visitors over time (Kelly, 2007; Three Rivers District, 2009). One caveat, however, is that visitor surveys do not capture the perspectives of former visitors who may have been displaced from a park or trail as a result of a conflict or constraint they encountered. In other words, those who are not satisfied their visit are less likely to visit the park or trail (and thus less likely to be surveyed) than those who are satisfied with their visit.

Similarly, trends on recreation conflict are not generally documented in the published literature. However, nature-based recreation managers have identified visitor conflict as an issue for more than 20 years (Jakes, Gregerson, Lundgren, & Bengston, 1990).

Among Minnesota trail users (Schneider, Schuweiler, & Bipes, 2009), a 2008 study revealed between 48 and 70% of all users experienced a conflict. Most frequently, the conflict is affiliated with litter, the behaviors of other users or too many users (Schneider, et al. 2009). In response to these conflicts, trail users most often follow rules for trail behavior, refuse to get too serious about it, or talk with group members about it. Among state park visitors, a 2007 study revealed between 26% and 50% of all users identified crowding as an obstacle to park visitation (Kelly, 2007). In response to crowding, state park visitors report that they most often change their recreation time or location. A single assessment of a select source of conflict, crowding, was identified in the Three Rivers District. Specifically, the percent of visitors indicating they were crowded at some level rose from 39% to 45% between 1998 and 2008 (Three Rivers, 2009).

Constraints: When discussing recreation experiences, constraints to such recreation experiences must be recognized. Constraints are defined as “factors that are assumed by researchers and/or perceived or experienced by individuals to limit the formation of leisure preferences and/or to inhibit or prohibit participation and enjoyment in leisure” (Jackson, 2000, p. 62). Constraints are typically identified as intra-personal, inter-personal or structural. Intra-personal constraints refer to those within a person, such as fear of nature, while inter-personal constraints refer to those between people, such as inability to find someone with whom to recreate. Structural constraints often relate to time, money or equipment.

Minnesota-based research documents that time and family obligations are among the most constraining factors across recreation opportunity areas (Kelly, 2008; Wilhelm Stanis, Schneider, Shinew, Chavez & Vogel, 2009; Schroeder, Schneider & Schwaller, 2010). Constraints change through time, depending on an individual’s life stage, and are influenced by a variety of factors (Schroeder & Schneider, 2010; Green, Bowker, Johnson, Cordell, & Wang, 2007). Green et al.’s comparison of wilderness recreation visitation

constraints indicated that minority racial and ethnic groups, women, those with lower levels of income and education, and elderly populations were more likely to perceive constraints to wilderness visitation.

Significant popular literature and increasingly more academic literature addresses youth's constraints to outdoor recreation, with an emphasis on preference formation and participation. For example, participation among 6 to 17 year-olds dropped 16.7% between 2006 and 2008 (The Outdoor Foundation, 2009). Youth report lack of time, lack of interest, and too much schoolwork as main constraints. In Minnesota, Kelly (2008) reports that the steepest declines in recreation participation are in young adults (under 45) and their children. Richard Louv's *Last Child in the Woods* (2005) identifies the challenges to U.S. youth and the implications of what he terms "nature-deficit disorder."

Unfortunately, only limited data exist on outdoor recreation experiences among racial and ethnic minorities in Minnesota. In focus groups with Hmong participants, Bengston, Schermann, Moua, and Lee (2008) revealed that harassment and racism were a problem in both Minnesota and Wisconsin. In surveys of park visitors in Minnesota and beyond, Wilhelm Stanis, Schneider, Chavez and Shiness (2009) found that non-Hispanic whites were the least constrained in their outdoor recreation participation and that other groups felt significantly more unwelcome and fearful. Outside of Minnesota, these results are similar and include lack of information and transportation as constraints experienced by Asians and Hispanics in particular (Burns, et al. 2008).

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