

*U.S. Equal Employment Opportunity Commission*

**FEDERAL AGENCY ANNUAL EEO PROGRAM STATUS REPORT**

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**U.S. Department of Agriculture – Agricultural Research Service**

**For Period Covering October 1, 2010 to September 30, 2011**

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**EXECUTIVE SUMMARY**

**USDA – AGRICULTURAL RESEARCH SERVICE**

**Northern Plains Area**

EEOC Management Directive 715 Employment Opportunity Program Plan

**FY 2011**

**NFC Reporting Center MD715 reports utilized for all but SY data  
SY Workforce Data from Visual Power Files EEO software FY 11**

**MISSION AREA:** The Northern Plains Area (NPA) is one of eight Areas of the Agricultural Research Service (ARS) which in turn is one of four agencies in USDA's Research, Education, and Economics (REE) mission area. The NPA Area Office is located in Fort Collins, CO. The NPA encompasses eight states and 13 research locations: Colorado (Fort Collins and Akron); Kansas (Manhattan); Montana (Miles City and Sidney); Nebraska (Lincoln and Clay Center); North Dakota (Fargo, Grand Forks, and Mandan); South Dakota (Brookings); and Wyoming (Cheyenne).

**Major Findings Synopsis:**

1. **Number of Permanent Employees:** Overall, since FY07, there is an unmistakable downward trend in the number of permanent employees in both the Area and Agency.

The NPA permanent workforce dropped from 785 in 2007 to 723 in 2011, a decline of nearly 9%). ([Chart 1](#) and 1a).

2. Racial/Ethnic Demographics: The NPA permanent workforce ([Chart 2](#)) continues to be predominantly white (91%). However, in FY11 the participation of minorities increased by 1% since FY10. In FY11, there were 2 black females in the permanent workforce, compared to FY10, when there were no black females in the permanent workforce. ([Chart 2](#) and 2a)
3. SCEP Students: In FY11, there were 14 SCEP students in the NPA, 21% of whom were from under-represented groups, which is about double that of the participation rate of permanent employees from under-represented groups ([Chart 4](#)).
4. Area Co-Funded Interns: The Area Director has sponsored a summer internship program since 2001. Funding provided by the Area Director amounts to about \$17,000 per summer. In FY11, 56% of the 9 students hired were minorities, and minorities have accounted for 32% of all internships since 2004 ([Chart 4c](#)).
5. Generational Trends: The largest generation in the NPA is the Boomers ([Chart 6](#)), and these ratios are very similar to ARS. While the overall workforce has been male-dominated, women's participation has been increasing with each succeeding generation. For instance, women comprise just 13% of the traditionalist generation, but 59% of the millennial generation. Curiously, at the same time women's participation is increasing generationally, minority population is decreasing ([Charts 6](#), 6a, and [6b](#))
6. Employees With Disabilities: In the total workforce, 68 employees (roughly 8%) reported a disability, which is 1% less than in FY 09. That decrease is due largely to retirements.
7. Occupational Categories: The Technicians category is the largest occupational category, followed closely by Officials and Managers, with Professionals a distant third ([Chart 9](#))
8. Occupational Categories by Race and Gender: With the exception of American Indian males, the majority of minority males hold Professional positions. For instance 91% of all Asian males are Professionals, compared to 51% of all white males and 23% of all white females, while 50% of black females and 14% of American Indian females hold Administrative Support positions ([Chart 10](#)).
9. Occupational Categories by Gender: The technician category includes 45% of all women, while the Professional category includes 54% of all men. Only one group, Professionals, has about the same ratio of men and women ([Chart 9a](#)).
10. Grade Groupings by Race and Gender: Just as with Occupational Groupings, either men or women dominate in many grade groupings. For instance, 100% of all Hispanic, black, and American Indian females, 84% of white females, and 53% of all Asian females are in grades 1-11 ([Chart 11](#)). Looked at another way, of all positions 76% of all women hold positions in grades 1-9, and 7% of all women hold positions in GS grades 9-11 ([Chart](#)

11a). ([Chart 11a](#)), and 45% of all women in NPA hold technician positions, which are capped at the GS 9.

11. Educational Attainment: Outside of Beltsville and DC, only a handful of positions hold potential for advancement to a 12 or higher that are non-SY, which do not necessarily require a college degree. Yet, 71% of IT Specialists have at least a bachelor degree and 51% of Technicians have at least a bachelor degree ([Chart 12](#)). Employees in all racial/ethnic groups hold one or more college degrees ([Chart 12a](#)).
12. Major Occupations by Race and Gender: The 14 major occupations have a total of 465 employees (64% of the permanent workforce). All of the major occupations are in the STEM fields, which have historically been predominantly male. In FY11, women held 38% of the positions in the major occupations. Women comprise 50% or more of the employees in just two of these major occupation (IT and technicians), and less than 25% in six other occupations. Excluding the technician series (which are capped at the GS 9 while the other major occupations can go well above the GS 9), women comprise just 21% of remaining 13 major occupations ([Chart 13](#) and 13a).
13. New Permanent Hires: As in past years, in the permanent workforce, the number of separations (49) exceeded the number of new hires (21). In FY11, the hiring was almost equally split between men and women, with 52% (11) of the hires men, and 10 (48%) women. Hiring rates for minority women were more than double their overall participation rate, while hiring rates for minority men, white men and white women were lower than their overall participation rate ([Chart 14](#)).
14. Separations: A total of 49 permanent employees (about 6% of the permanent workforce) separated in FY11, a rate that is about the same as in previous years, but still impressively low. Of the 49 separations, 3 (6%) were involuntary (1 minority and 2 white males). Of the 46 voluntary separations, 44 (96%) were white (23 men and 21 women). Technicians accounted for 39% (19) of all separations; 7 (37%) resigned and one was removed ([Chart 14b](#)).
15. Awards: Overall, the NPA was generous in recognizing employee contributions through awards, in that 645 awards were given to 497 employees, or 69% of the permanent workforce. [Chart 14c](#) compares rates of awards to participation rates.
16. SY Workforce: The NPA continues to experience a continual decline in the number of SYs. In FY11 there were 238 SYs, compared to 239 in FY10, 247 in FY 09 and 250 in FY08. SYs constitute roughly 33% of the permanent workforce. Men continue to hold the majority of SY positions although the ratio dropped to 82% in FY11 from 83% in FY10. Minorities comprise 14% of the SY workforce, while white males comprise 71% of all SYs ([Chart 15](#)).
17. SY Workforce by Race and Gender: Much of the minority population in the NPA can be found in the SY group, indicating some success with the NPA efforts at recruiting nationally for top-notch talent. For example, the SY occupation is home to at least 50%

of all American Indian males, Asian males, and Hispanic males. On the other hand, less than 50% of all black males, white females, and white males hold SY positions ([Chart 16](#)).

18. **SYs by Race/Ethnicity and Gender:** The majority of female SYs are in grades 11-13, while the majority of men are in grades 14 and 15. These figures indicate that a pipeline of female SYs for advancement into higher grades and leadership positions continues to develop ([Chart 18](#)).
19. **SY New Hires:** The NPA hired 7 SYs in FY11 (including 2 RLs). Additionally, one SY transferred from another ARS location and one Cat 1 SY changed to a Cat 4. Of the 7 hires, all were white; 3 (43%) were men, and 4 (57%) were women. [Chart 20](#) shows the breakdown of all SY hires since 2004. In 3 of the last 4 years, the hiring rate of white males was below their participation rate, which is an indication that strategies to develop a more diversified SY workforce are paying off.
20. **Retention of Scientists:** Since 2004, the NPA has hired 86 new SYs, and has retained 83% (71) of those new SYs. Minority women have the highest retention rate, while white men and women and minority men have roughly the same retention rate ([Chart 21](#)).
21. **SY RPES Reviews FY 10:** There were 32 SYs in grades 12-14 who were reviewed in FY11 (grade at the time of review). The overall promotion rate in FY11 was 59% which is somewhat higher than the overall promotion rate between 2002 and 2011. Clearly, promotion rates drop as grades increase, which corresponds to the higher expectation of documented impact of research ([Chart 22](#)).
22. **SY RPES Since 2002:** [Chart 22b](#) shows the overall promotion rates by race and gender since 2002 (all reviews for grades 11 through 14 combined). The overall promotion rate is 55%, with men having a slightly lower rate than women. There are many more men than women in the SY cadre, so the difference may not be statistically significant, but does indicate that women perform at least as well as do men in the RPES process.

### Synopsis of Barriers:

1. The majority of women (76%) hold positions in grades 1-9, and 45% of all women in the NPA permanent workforce are technicians. In NPA, the technician series is the largest occupational group, and the majority of technicians are female. The Office of Personnel Management (OPM) determines full performance levels (FPL), and technicians have a FPL of GS 9. Some technicians in NPA have moved to a Category 3 scientist occupation, which has a FPL of GS 11, but that position requires higher level responsibilities and abilities. Without a change in OPM classification for the technician series, it is likely that NPA will continue to have a large number of women in grades 9 or below. Options available to technicians include earning a PhD in order to compete for a Category 1 SY position, requesting a desk audit to determine if their position duties meet the criteria for a Cat 3 Support Scientist (which has a FPL of a GS 11), seek other

positions in the administrative function (Administrative Officer, Realty, Procurement, IT Specialist, etc.) which have FPLs of 12 or higher, accept the OPM classification, or leave ARS. Certainly all of the options are complicated by individual circumstances. Area and location leadership/supervisors are very good at rewarding performance, and providing training to all employees, especially technicians, as warranted by research needs and resources.

2. Although the minority and female participation rates are increasing incrementally (both minority and female participation increased 1% in FY11), the NPA continues to be 91% white and 41% female. Two interesting trends are developing by generation: a) an increase in female participation and b) a decrease in minority participation ([Chart 6b](#)). Although these trends bode well for women, particularly if women are hired into positions that have the potential for promotion beyond the GS 11, it is curious that the millennial generation has the lowest participation rate of minorities. It may well be a reflection that much of the diversity in NPA is in the SY workforce, and the older millennials are now reaching their late twenties which is the age when PhDs are generally earned. Although NPA has been successful in recruiting, promoting, and retaining a quality workforce, and increasing minority participation in the older generations, more needs to be done to increase our success in recruiting and hiring people from under-represented populations in the younger generation. The Acting Area Director, Dr. Michael McGuire, has made it clear that one of his goals is to ramp up our diversity hiring at all levels, including the younger generation.

### **Noteworthy Activities and Accomplishments**

1. NPA has three female research leaders, up from two in FY10.
2. For at least the second year in a row, the minority participation in the NPA increased by 1% in FY11.
3. The NPA continues to utilize the SCEP program for strategic recruitment:
  - This past year, the Area Director pledged to sponsor an undergraduate black female through the USDA1890 Scholar's Program who is attending Tuskegee University and will work with the Arthropod-Borne Animal Disease Research Unit in Manhattan, KS during the summers.
  - The Soil, Plant Nutrient Research Unit in Fort Collins continues to support an Alaskan Native PhD candidate who is in her second year at Colorado State University.
  - A third minority student is pursuing a master's degree at Kansas State University and works at the Manhattan location in the Center for Grain and Animal Health Research.
  - In addition to the 3 students mentioned above, the NPA has 11 other SCEP students.
  - In FY11 2 SCEP students were converted to career conditional/permanent positions and one was converted to a term position. Since 2004, the NPA has converted 78% of SCEP students.

4. Scientists in NPA continue to perform well in the RPES process. In FY11, the overall promotion rate (of scientists below GS 15 before review) was 59%.
5. The NPA Newly Appointed Scientists Program (NASPDP) completed its sixth year. The goal of this program is to ensure that new scientists are given the tools and information needed to successfully transition into NPA and ARS. This program includes a comprehensive review and evaluation process during the first three years of employment as well as a separate mentoring component. Overall, the NPA has retained 83% of all new SYs hired since 2004.
6. The five-year Cooperative Agreement for the NPA/ARS ODEO American Indian Internship Program expired in 2010 and was not renewed. The Fargo location hired one of the former interns for a third summer.
7. The Area also continued its longstanding practice of partially funding internships and apprenticeships at locations throughout the NPA. The Area Office solicits proposals from all locations, and awards 50% funding for those proposals demonstrating thoughtfully designed scientific projects with mentoring by the SY, as well as a recruitment plan that spells out what proactive steps the SY will use to seek applications from underrepresented groups. In FY11 56% of the students came from under-represented groups (3 American Indian males, 1 Asian female, and 1 Hispanic female). Since 2001, 111 students have been hired; 85% (95) of the students have been women, and 32% have been students from under-represented groups.
8. The Area Director fully supported the AREA ODEO PM this past year. With assistance from the ARS ODEO office, she participated in the AIHEC Conference in Mandan, ND, and also visited with United Tribes faculty and visited the Mandan location. The PM also participated in a week-long course for EEO Counselor Certification presented by the EEOC in Houston, TX. The PM was also given a new laptop computer with dual screens.
9. The Area Diversity Task Force, coordinated by the Area ODEO PM, continued to meet on a quarterly basis via teleconference and through the four working groups. The task force is in the process of analyzing data from a recruitment survey conducted in the fall of 2011. The task force produced two issues of VOICES, which is emailed to all employees and is posted to the NPA web site. The PM and task force members continue to add materials to the NPA Diversity Bulletin Board, a web site for Area employees on a wide array of diversity related materials, from resources for the designated Special Emphasis Months to emerging societal issues.

Overall, the NPA, under the direction of Dr. Will Blackburn, has demonstrated a firm commitment to increasing the participation rates of women and minorities, and that commitment has made progress in diversifying the NPA workforce. The Acting Area Director, Dr. Michael McGuire, is very interested in building upon the progress made in the

last several years and is actively engaging the task force in developing strategies that will result in furthering diversity in the Northern Plains Area.

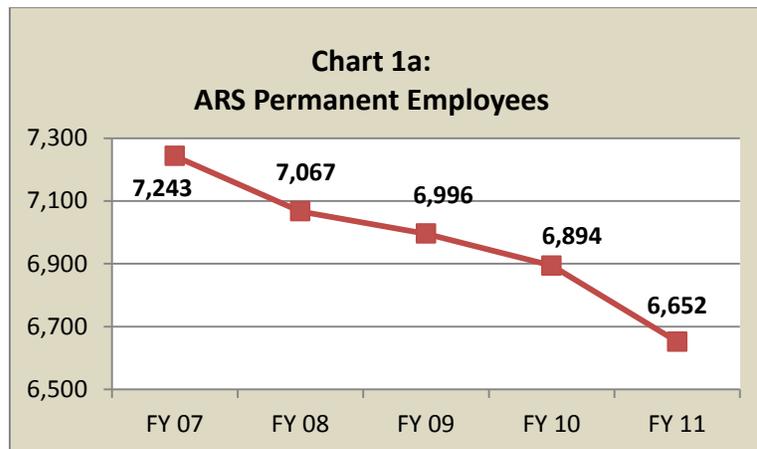
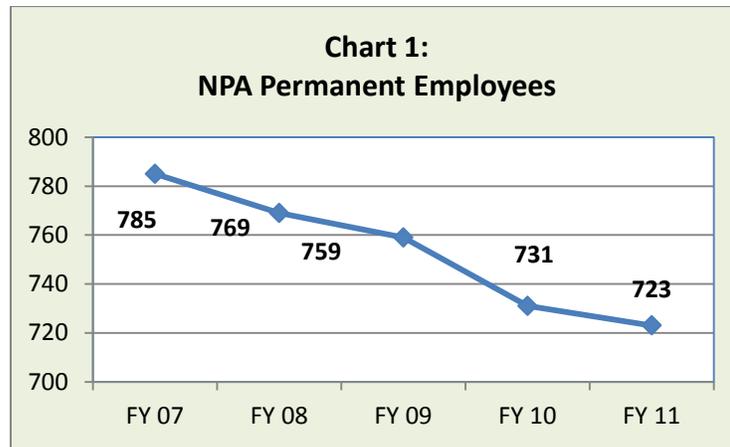
**EXECUTIVE SUMMARY APPENDIX:**

Note: Tables referenced as Table A1 refer to MD 715 data supplied by NFC and/or Visual Power EEO Files supplied by ODEO)

**NPA Workforce Overview: (Reference – Table A1)**

Number of Employees

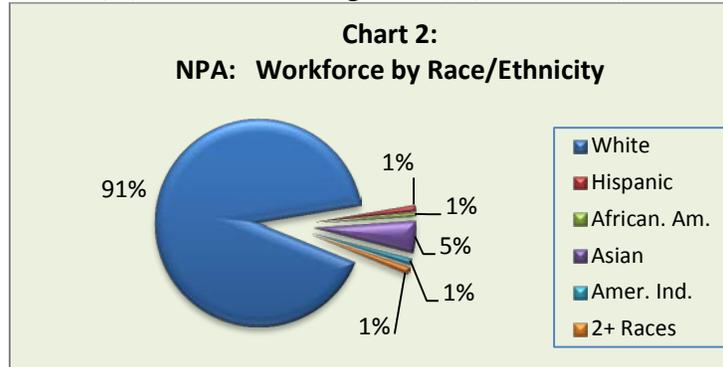
Overall, since FY07, there is an unmistakable downward trend in the number of permanent employees in both the Area and Agency, dropping from 785 in 2007 to 723 in 2011, a drop of nearly 9% (Charts 1 and 1a).



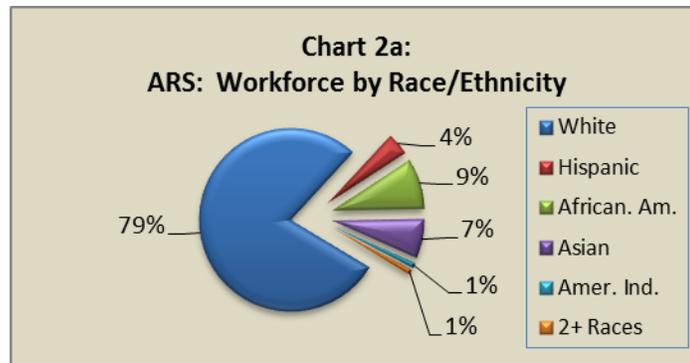
Race and Ethnicity: (Reference Table A1)

The NPA permanent workforce (Chart 2) continues to be predominantly white (91%), **although the participation of minorities increased by 1% since FY11**. Asians are the largest under-represented group. The only group with more females than males is American Indian. **In FY11, there were 2 black females in the permanent workforce, compared to**

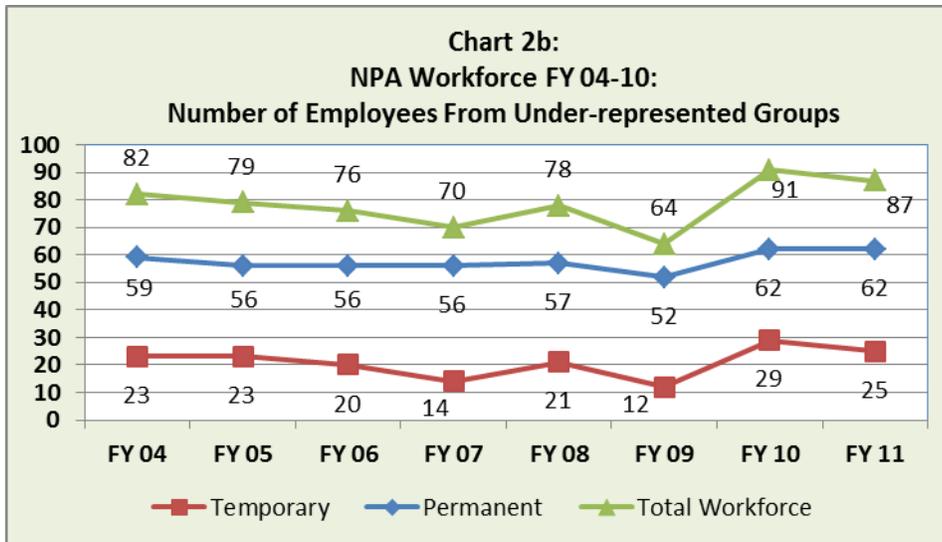
**FY10, where there were no black females in the permanent workforce.** In both the NPA and ARS permanent workforces, the overall percentage of whites has remained fairly steady over the years – low 90s (%) for NPA and high 70s (%) for ARS (Chart 2a).



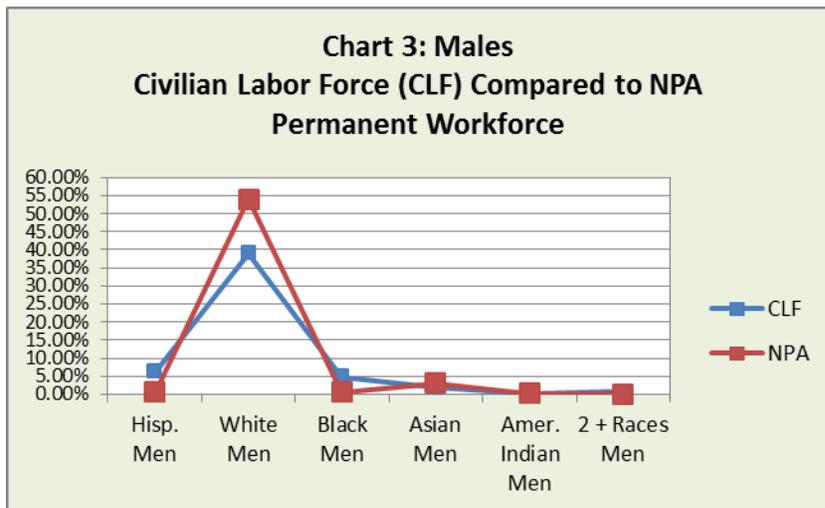
The **ARS** permanent workforce is also predominantly white, and African Americans remain the largest under-represented racial/ethnic category of the ARS permanent workforce, followed by Asians (Chart 2a). Although NPA white participation dropped by 1%, the participation of whites in **ARS** remained unchanged in FY11 from FY10.

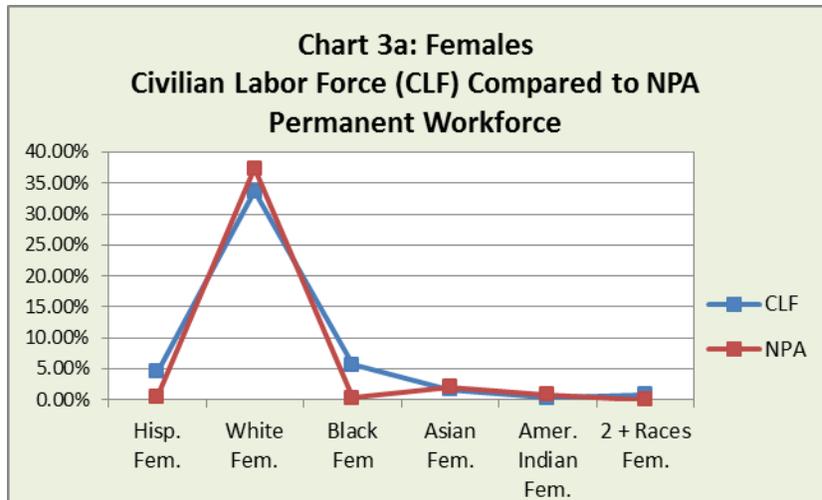


The **number** of minority employees in the permanent workforce in FY11 remained unchanged from FY10, although the number of minority employees in the temporary workforce dropped by four (Chart 2c).

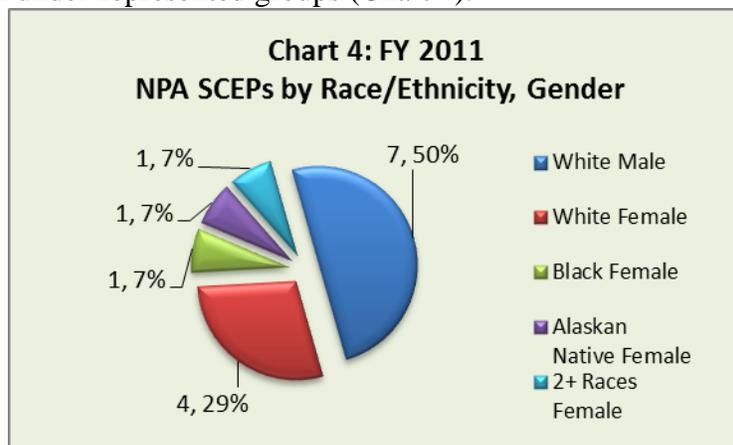


Compared to the US Labor Force (Civilian Labor Force or CLF), the NPA total workforce in FY11 was above the CLF for three groups: white males (12% above), white females (5% above), Asian males (1% above), and American Indian females (less than 1% above). Asian females, American Indian males, 2+ races males and females are about even with the CLF. Hispanics and blacks are about 5% below the CLF (Charts 3 and 3a).

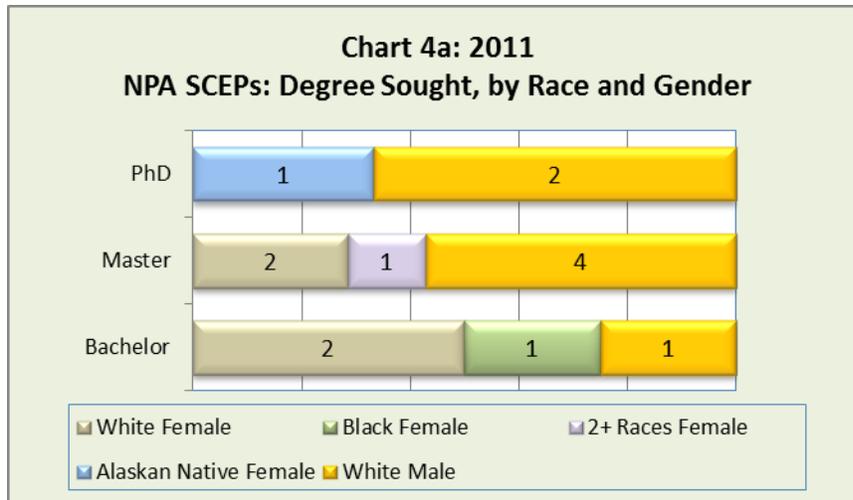




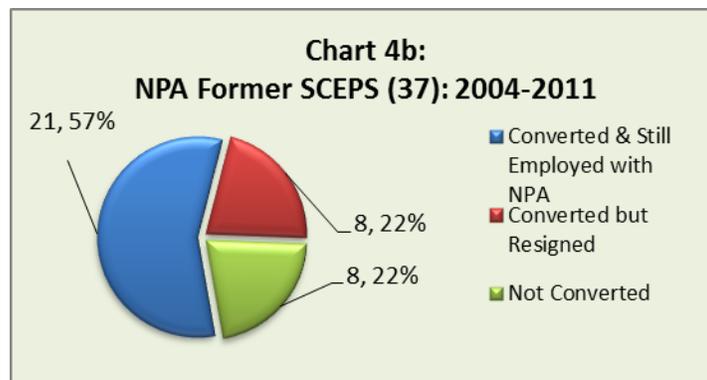
**Student Career Exploration Program (SCEP) and Area Co-Funded Interns:**  
 In FY11, there were 14 SCEP students in the NPA, 21% of whom were from under-represented groups, which is about double that of the participation rate of permanent employees from under-represented groups (Chart 4).



Of the current SCEP students, 3 are seeking a PhD, 7 are seeking a Masters, and 5 are seeking Bachelors (Chart 4a):

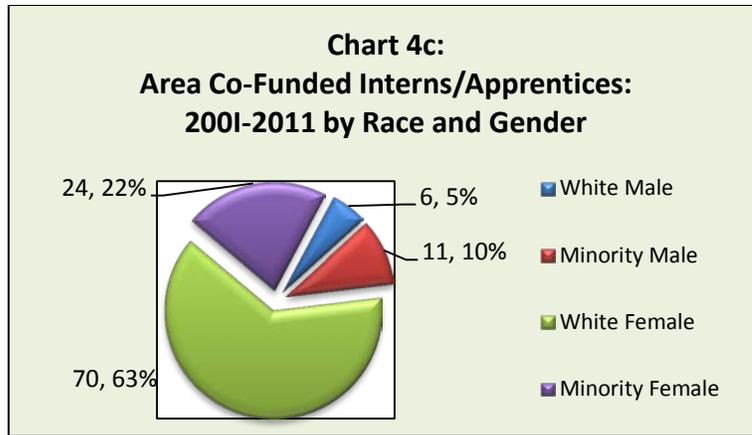


Conversion and Retention: There have been 37 SCEP students since 2004 (not counting the current SCEPs), and 29 (78%) of those were converted to permanent positions. Of those 29 conversions, 21 are still with NPA, for a conversion retention rate of 57% (Chart 4c):



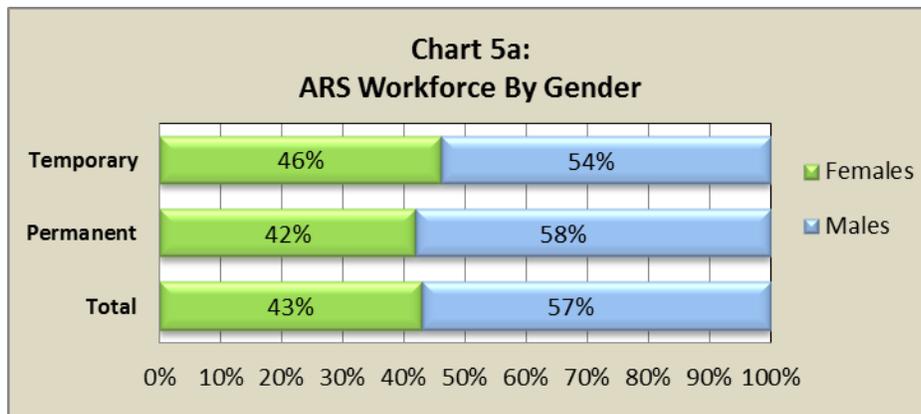
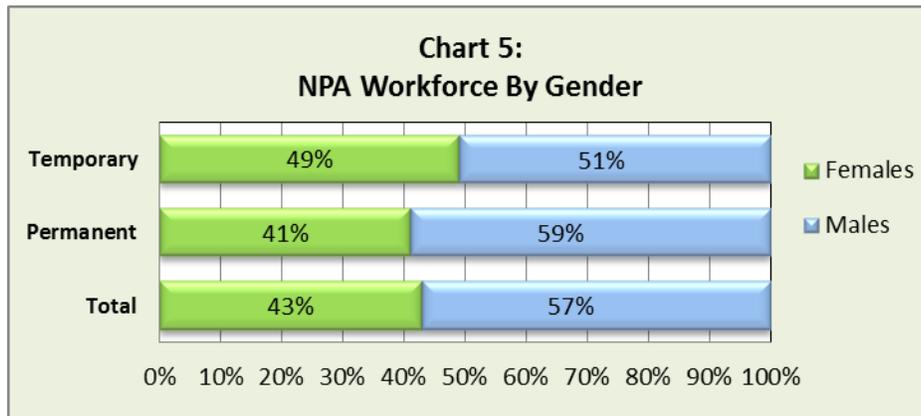
The Area Director has sponsored a summer internship/apprenticeship program since 2001. Funding provided by the Area Director amounts to about \$17,000 per summer, and competition for co-funding is fierce. This program has been very successful in recruiting undergraduate and graduate students who work closely with a mentor scientist for eight weeks and complete their internship by presenting their findings to the research unit. Proposals for funding must show a clearly defined project, a strong mentoring component by the scientist, and a proactive plan to recruit students from under-represented groups. Clearly, the program is successful on all counts. For instance, **in FY11, 56% of the 9 students hired were minorities** (1 Hispanic male, 1 Asian female, and 3 American Indian males).

Since 2004, minorities have accounted for 32% of all internships (Chart 4c).



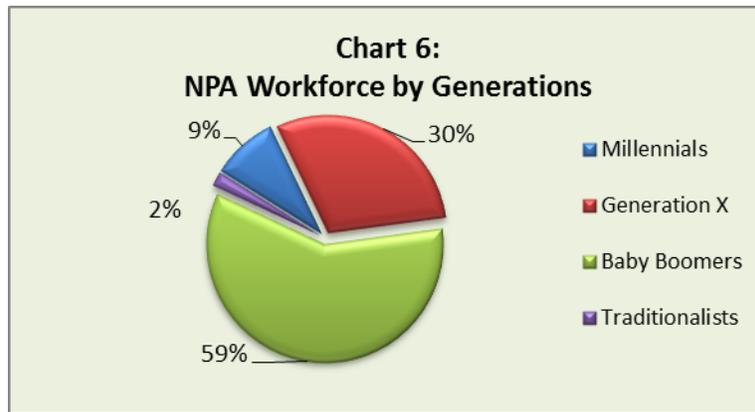
Gender: (Reference Table A1)

The NPA workforce is predominantly male in all three sectors (Chart 5). This ratio has remained fairly steady for the past several years, and is similar to ARS as a whole (Chart 5a).

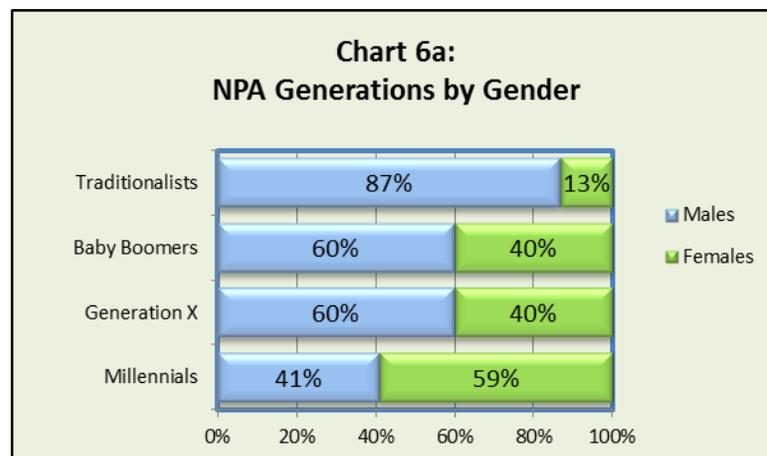


Age:

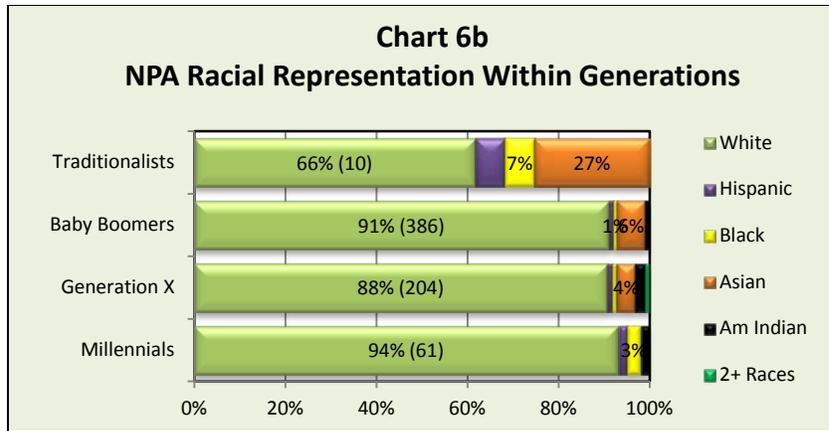
There has been much made in the popular media and various federal publications on the phenomenon of having four generations in the workplace: traditionalists, baby boomers, generation X, and millennials. The largest generation in the NPA is the Boomers (Chart 6), and these ratios are very similar to ARS.



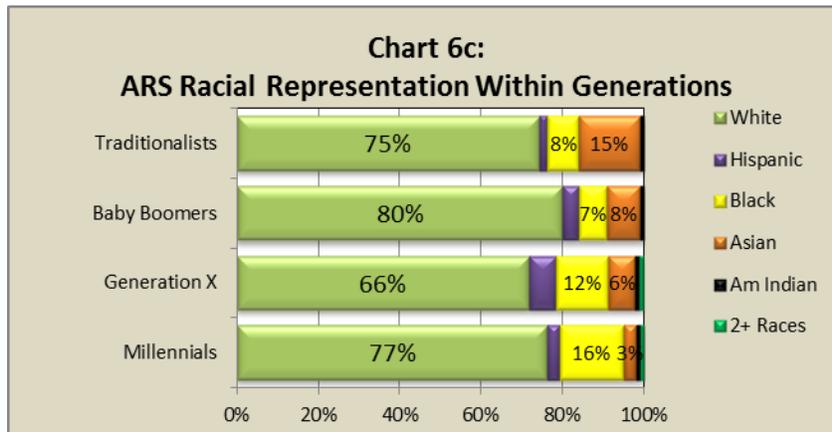
While the NPA overall workforce has been male-dominated, women’s participation has been increasing with each succeeding generation. For instance, women comprise just 13% of the traditionalist generation, 40% of the baby boomers and Gen X, but 59% of the millennial generation (Chart 6a).



While the rise in the level of female participation in the millennial generation is not surprising, given that women now comprise slightly more than half of the American workforce, it is curious that the ratio of minorities in the NPA permanent workforce is smaller with each succeeding generation (i.e., 34% of traditionalists are minorities compared to just 6% of millennials) (Chart 6b).



The ARS permanent workforce is most diverse in the Gen X generation (34% minority), with blacks being the largest minority group in Gen X and millennials, and the second largest in traditionalists and baby boomers (Chart 6c).

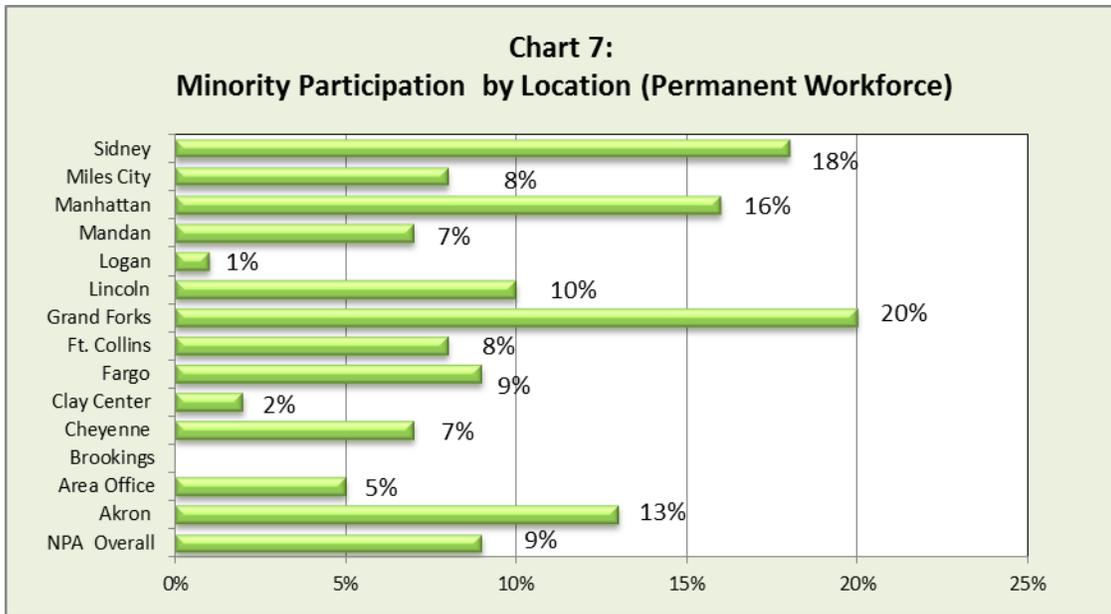


Employees With Disabilities: (Reference Table B-1)

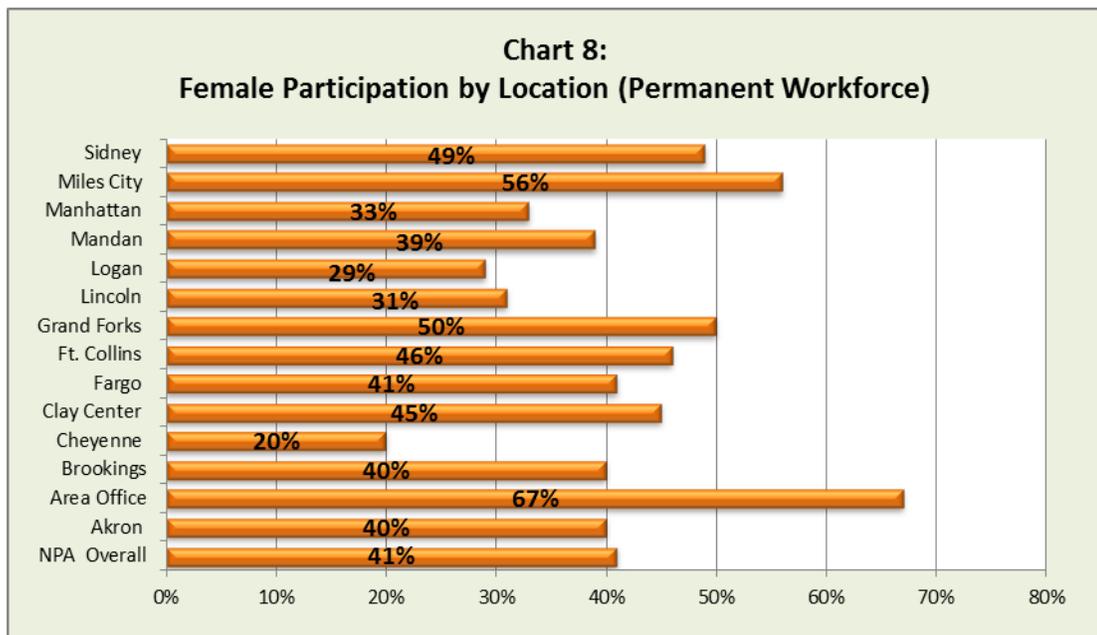
In the total workforce, 90 employees (roughly 9%) reported a disability, which is nearly 1% lower than in FY11. A total of 11 employees (1% of the total workforce) reported a targeted disability in FY11, which is below the federal goal of 2%. Six (55%) of the employees with targeted disabilities are in the permanent workforce.

Minority and Female Participation by Location – Permanent workforce: (Reference Table A2)

Five locations have a minority participation rate 10% or higher: Sidney, Manhattan, Lincoln, Grand Forks, and Akron, while just one location (Brookings) has no minority employees (Chart 7).

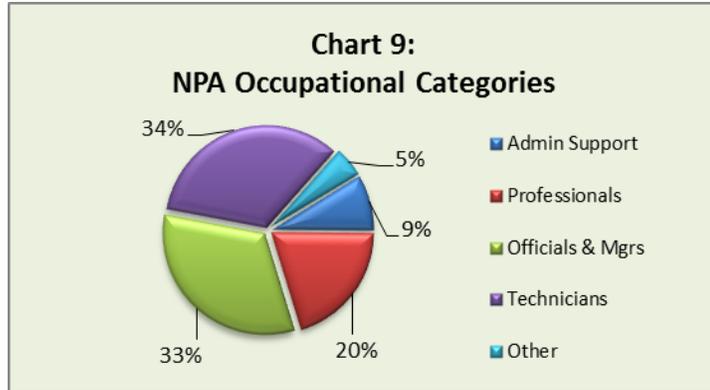


The Area Office has the highest rate of female participation (67%) while Cheyenne has the lowest rate at 20% (Chart 8).

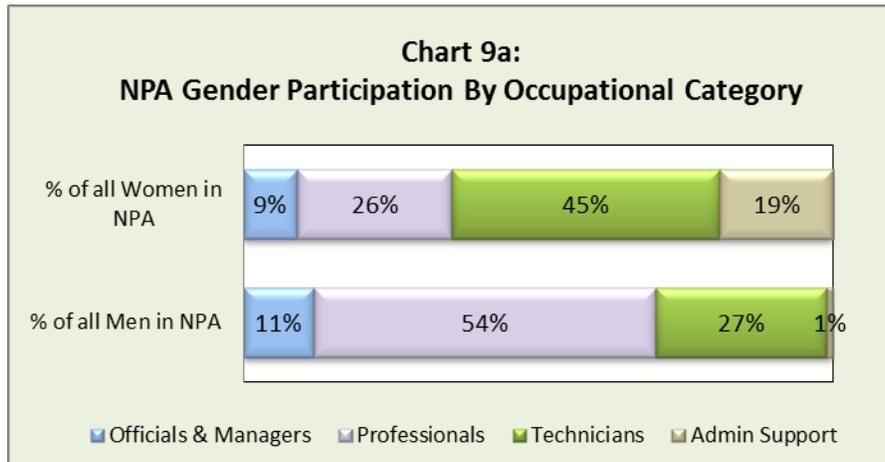


**Occupational Categories: (Reference: Tables A3, Occupational Categories, Permanent Employees)**

The Technicians category is the largest occupational category, followed closely by Officials and Managers, with Professionals a distant third (Chart 9).



The four major occupational categories are Officials and Managers, Professionals, Technicians, and Administrative Support. The technician category includes 45% of all women, while the Professional category includes 54% of all men. Only one group, Professionals, has about the same ratio of men and women (Chart 9a).



In all but one of the categories (Other Officials and Managers), the majority of positions are held by men (Chart 9c). The ratios in ARS are very similar to the NPA.

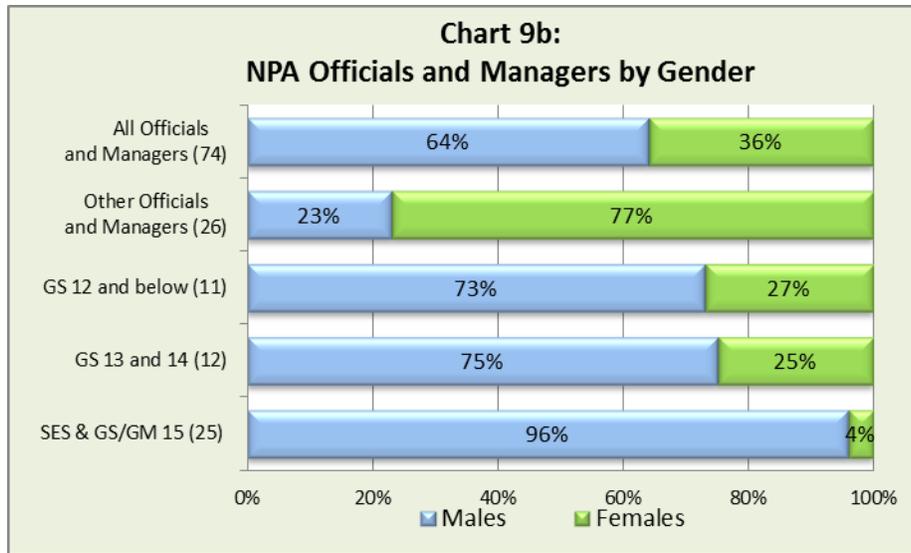
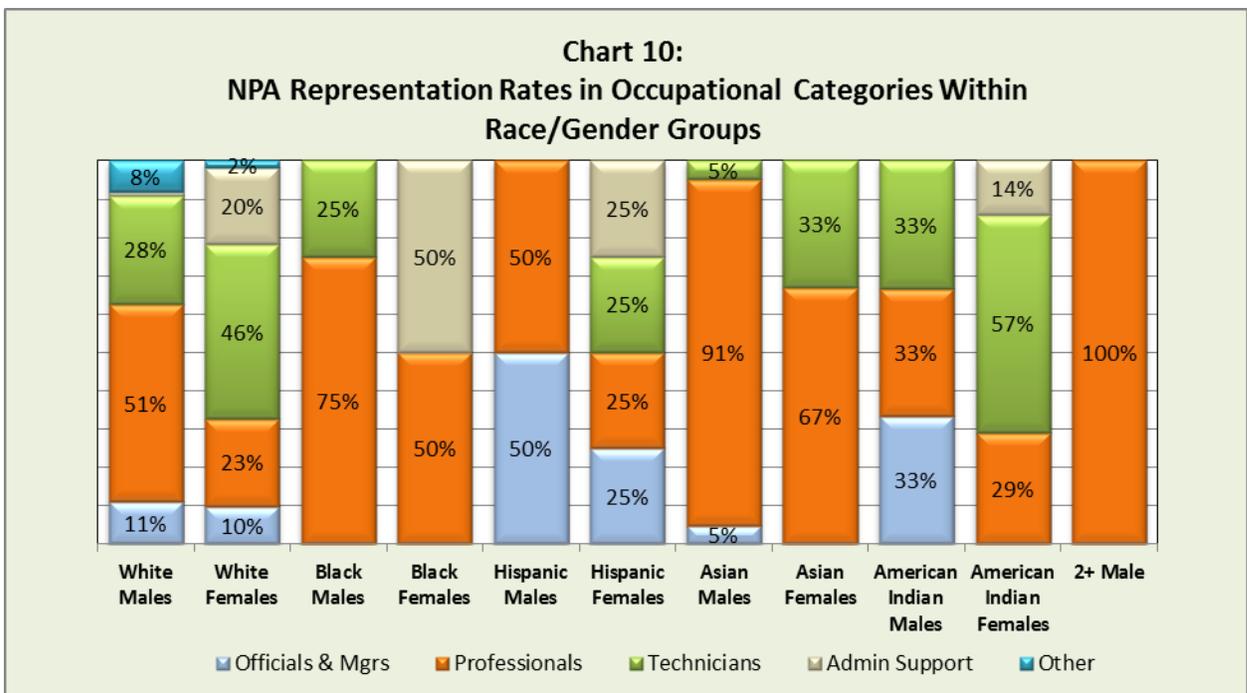


Chart 10 shows what percent of each racial/ethnic and gender group holds what occupation. With the exception of American Indian males, the majority of minority males hold Professional positions. For instance 91% of all Asian males are Professionals, compared to 51% of all white males and 23% of all white females, while 50% of black females and 14% of American Indian females hold Administrative Support positions (Chart 10). In contrast, the majority of women, with the exception of Asian women, do not hold Professional positions.

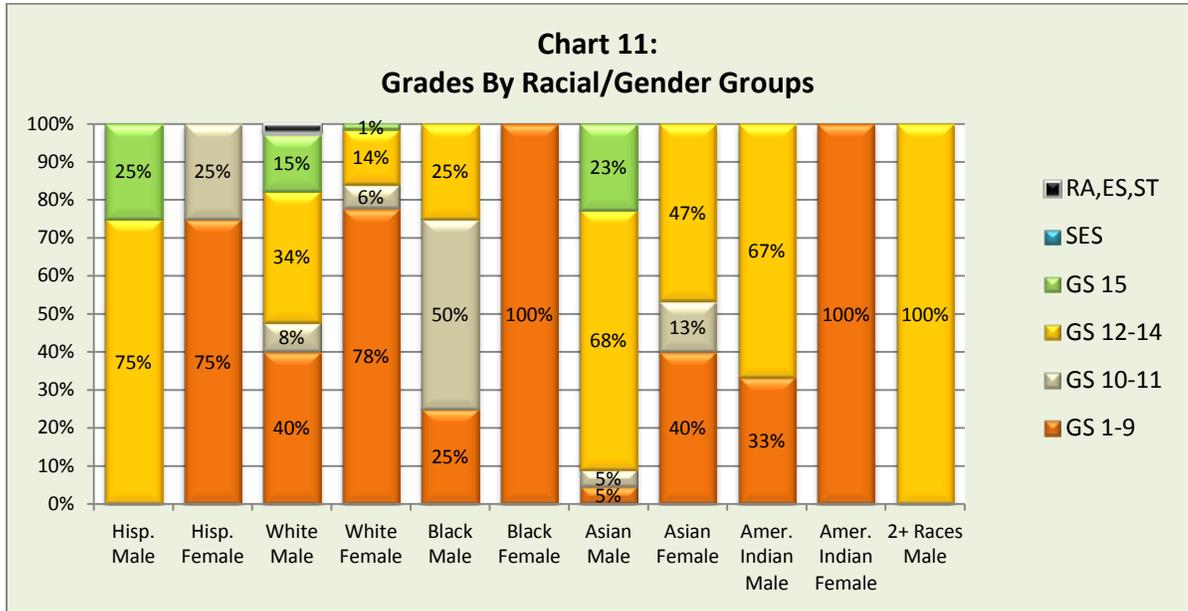


Occupational Groups and Employees Reporting Disabilities (Reference: Table B3)  
Six permanent employees reported a Targeted Disability; 3 are technicians, one is a professional, one is administrative support, and one is a service worker.

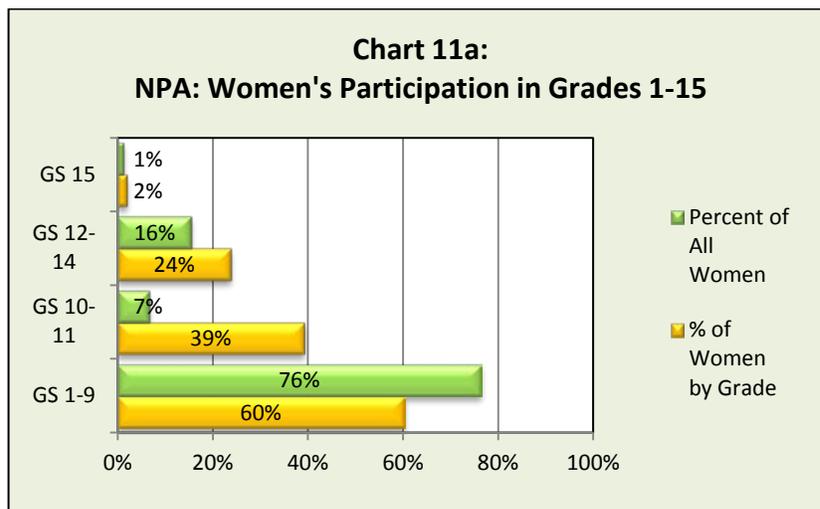
**Grade Groups: Race and Gender (Reference: Tables A41, A4, A5)**

**General Schedule, SES and Other Grades:**

Just as with occupational groupings, either men or women dominate in many grade groupings. For instance, with the exception of Asian females, the majority of females in the NPA hold positions in grades 1-9. In comparison, with the exception of black males, the majority of men hold positions in grades 12 and above (Chart 11).



Looked at another way, 76% of all women hold positions in grades 1-9, and 7% of all women hold positions in GS grades 9-11 (Chart 11a). This is not especially surprising since 45% of all women in NPA hold technician positions, which are capped at the GS 9.



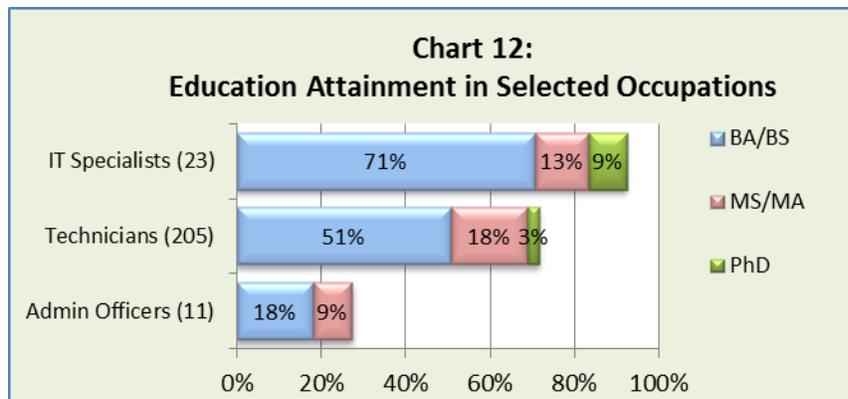
SES/Other Senior Level: There are three SES and four Other Senior Level employees in the NPA, and all are all white males.

Wage Grades: There are 33 employees in the Wage grade system, 32 are male and one is female, and all are white.

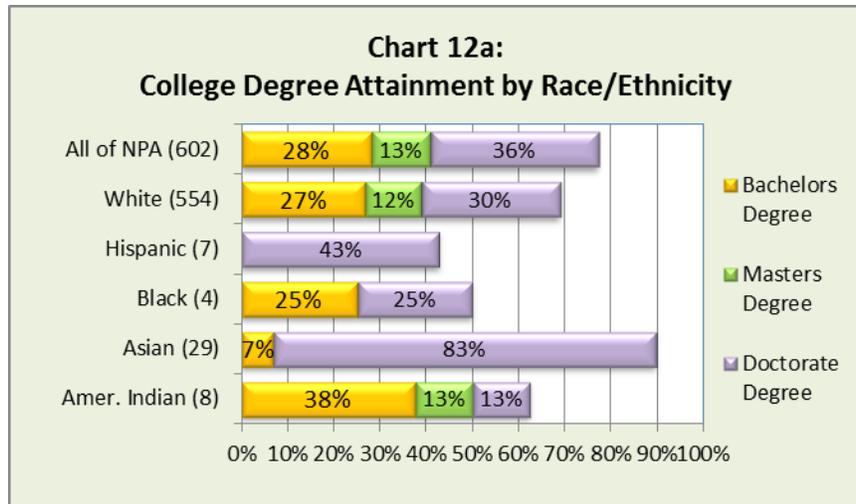
**College Degree Attainment: (Reference NFC Database, Education)**

Outside of Beltsville and DC, only a handful of positions hold potential for advancement to a 12 or higher that are non-SY, and those are in administrative positions (Administrative Officer, Procurement, Safety, Program Analyst, etc.) which do not necessarily require a college degree.

College degree attainment is common in both IT Specialists and Technicians, in that 71% of IT Specialists have at least a bachelor degree and 51% of Technicians have at least a bachelor degree. On the other hand, just 18% of Administrative Officers have at least a bachelor degree, even though that series has a GS 12 as the full performance level, compared to GS 9 for Technicians and GS 13 for IT Specialists (Chart 12). This difference in educational attainment may indicate that many positions provide on-the-job training, including specific certification courses, in lieu of requiring a college degree and/or specific coursework of applicants. (Note: data may reflect information as of initial hiring and does not include any degree/certification earned since that initial hire unless the employee made a point of adding that information to their profile.)



Employees in all racial/ethnic groups hold one or more college degrees. For instance, of the 29 Asian employees, 7% hold a bachelor degree as their terminal degree and 83% hold a PhD. Of the 554 white employees, 27% hold a bachelor degree as their terminal degree, 12% hold a masters as their terminal degree, and 30% hold a PhD as their terminal degree (Chart 12a).

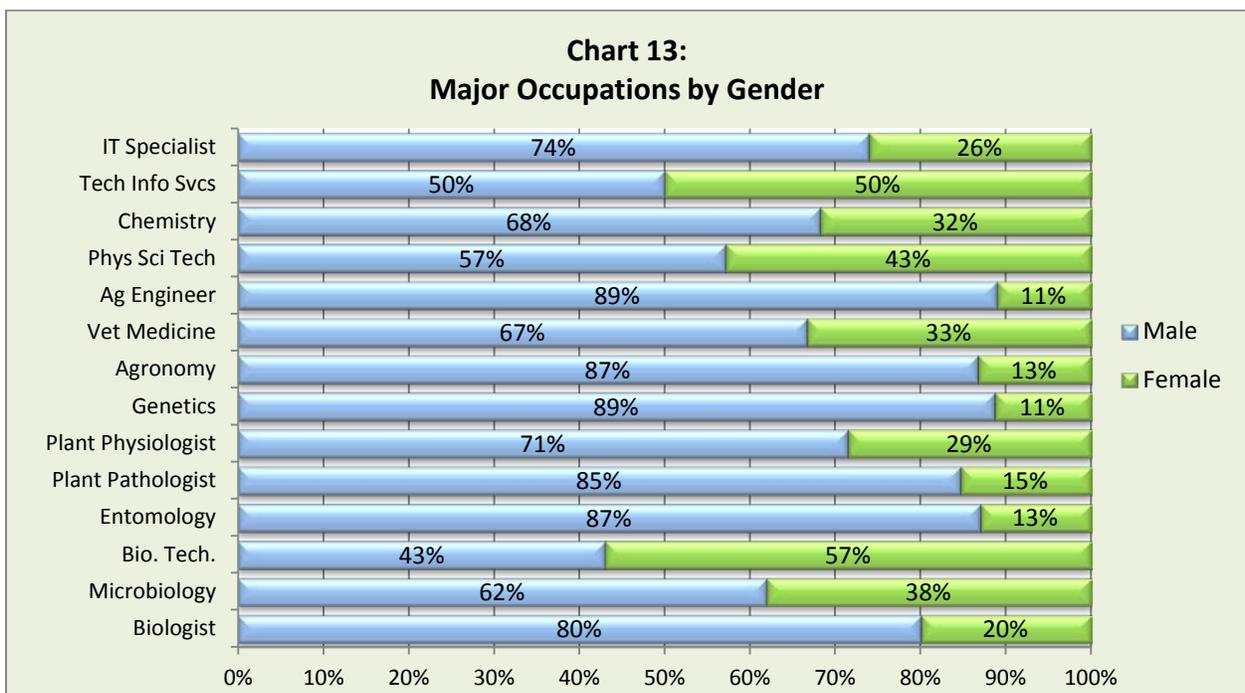


Grade Groups: Disabilities (Reference: Tables B4-1)

Five of the 6 permanent employees reporting a targeted disability hold a position in the GS pay system. Four employees are in GS 5-9 and one is a GS 15.

**Participation Rates for Major Occupational Series – Permanent Employees (Reference: Table A6)**

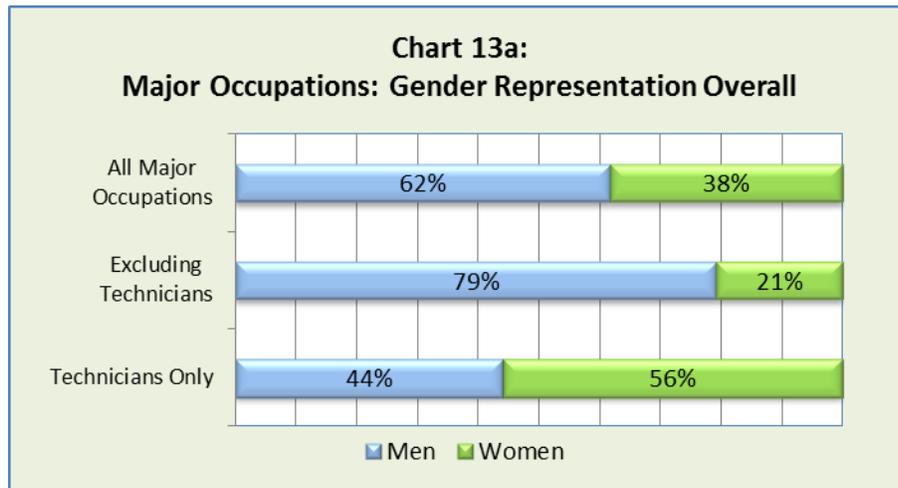
The 14 major occupations have a total of 465 employees (64% of the permanent workforce). (Chart 13).



Gender

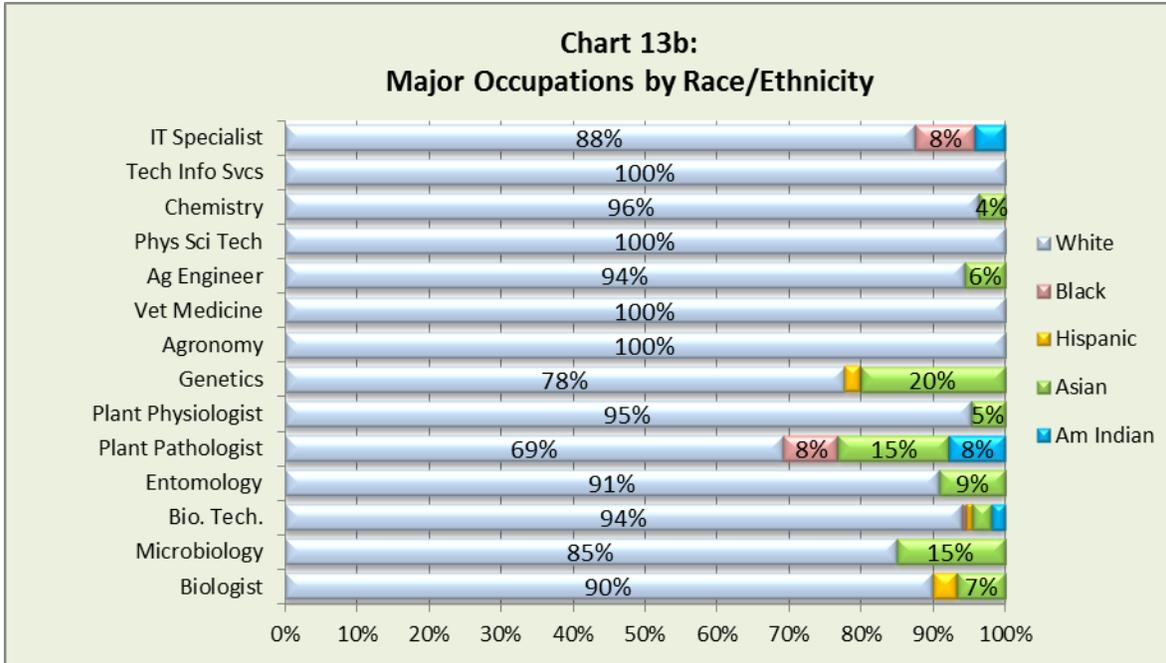
All of the major occupations are in the STEM fields, which have historically been predominantly male. The NPA workforce reflects this historical profile, although women are entering those occupations, albeit slowly. In FY11, women held 38% of the positions in the major occupations. Women comprise 50% or more of the employees in just two of these major occupation (IT and technicians), and less than 25% in six other occupations.

Excluding the technician series (which are capped at the GS 9 while the other major occupations can go well above the GS 9), women comprise just 21% of remaining 13 major occupations (Chart 13a).



Race and Ethnicity

The plant pathologist series is the most racially/ethnically diverse of the major occupational series, followed by genetics and microbiology. Four series are all white: technical information services, physical sciences technician, vet sciences, and agronomy (Chart 13b).



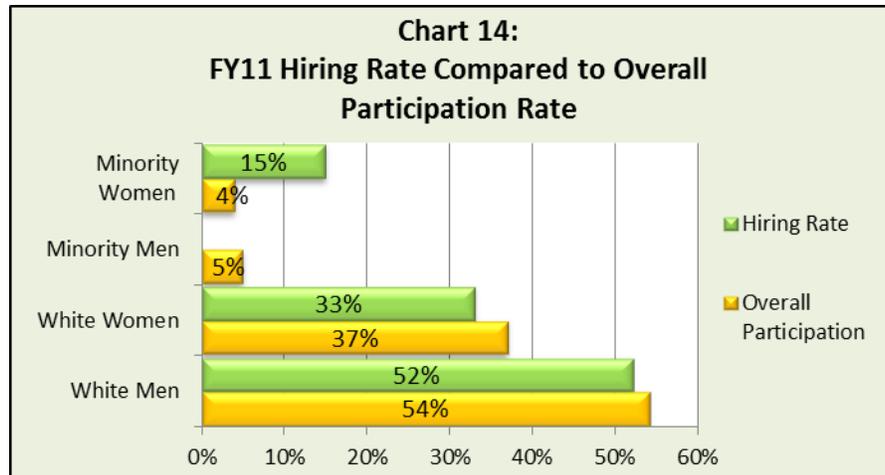
**Participation Rates for Major Occupations by Disability (Reference: Table B6)**

About 9% (67) of the permanent workforce reported a disability, and 6 reported a targeted disability. The 6 employees with a targeted disability hold a position in one of the major occupations.

**New Hires, Promotions, Separations: Race and Gender (Reference: Tables A8, A10, A14)**

**Hires (Reference A8):**

As in past years, in the permanent workforce, the number of separations (49) exceeded the number of new hires (21). In FY11, the hiring was almost equally split between men and women, with 52% (11) of the hires men, and 10 (48%) women. Hiring rates for minority women were more than double their overall participation rate, while hiring rates for minority men, white men and white women were lower than their overall participation rate (Chart 14).

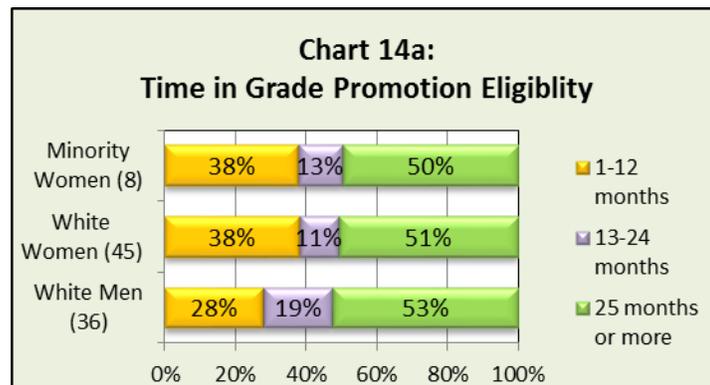


Hires (Reference B8):

Of the 21 permanent hires, 3 (34%) reported a disability, and 1 of the 3 reported a targeted disability.

Non-Competitive Promotions (Reference A10):

The NFC reported a total of 119 employees were eligible for a career ladder promotion, although just 89 were in excess of the minimum time in grade for a promotion (1-12 months, 13-24 months, or 25 or more months). White women (45) were 51% of those in excess of the minimum time in grade for a promotion, white men (36) constituted 40%, and minority women (8) constituted 9% (no minority men were represented). Chart 14a shows that all three groups are just about equal in their time in excess in all three time frames.

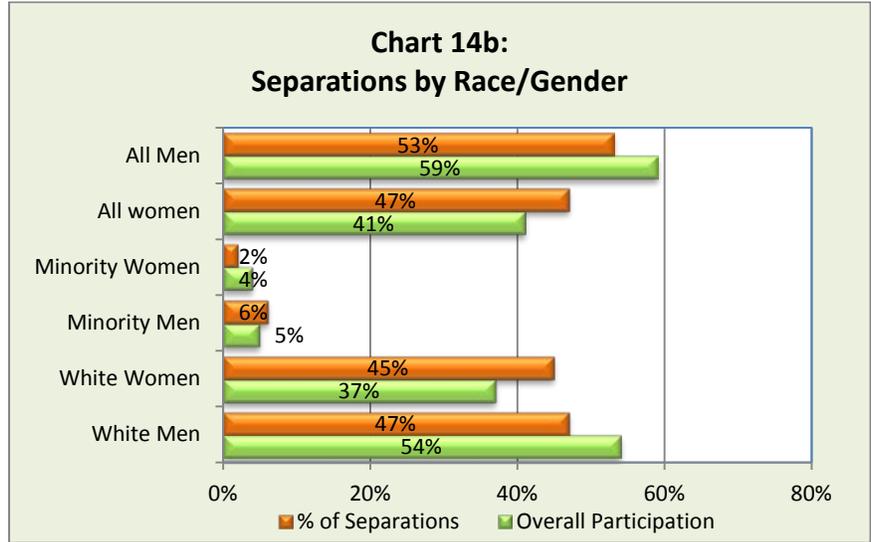


Separations (Reference A14):

Due to separations, the NPA lost 3 Hispanic employees. A total of 49 permanent employees (about 6% of the permanent workforce) separated in FY11, a rate that is about the same as in previous years, but still impressively low. Of the 49 separations, 3 (6%) were involuntary (1 minority and 2 white males). Of the 46 voluntary separations, 44 (96%) were white (23 men

and 21 women). Technicians accounted for 39% (19) of all separations; 7 (37%) resigned and one was removed.

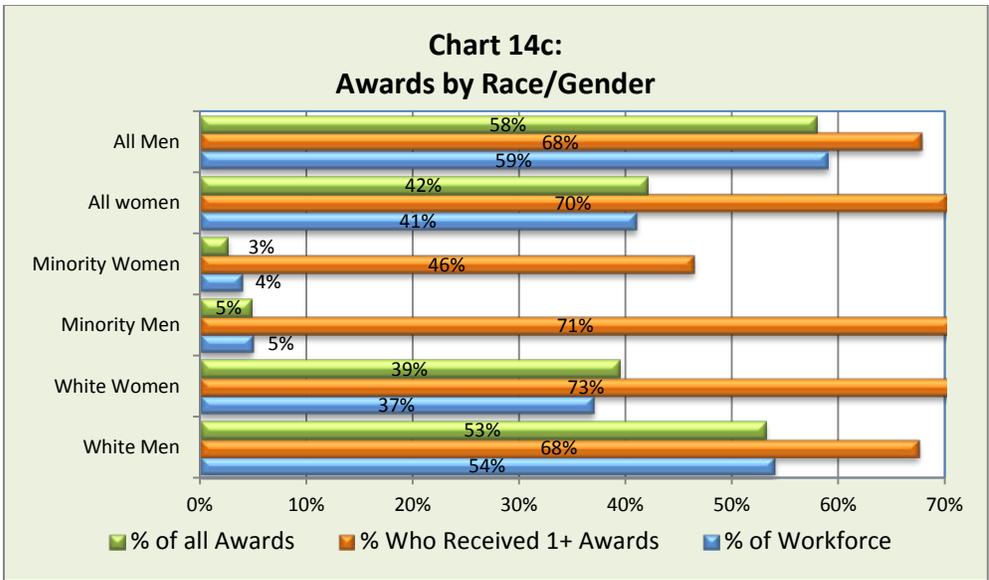
Chart 14b compares rate of separation by race/gender to rate of participation in the permanent workforce, and shows that men had a lower separation rate than their participation rate while women had a higher rate of separation compared to their participation rate.



**Employee Recognition and Awards (Reference: Table A13, B13)**

Overall, the NPA was generous in recognizing employee contributions through 645 awards. Of those 645 awards, 497 (69% of the permanent workforce) received one or more awards. Chart 14c notes the percent of awards given to each group, the percent of each group that received an award, and the percent of the workforce for each group.

Minority women received a lower percentage of awards compared to their workforce participation (46%). For instance, white men comprise 54% of the workforce and received 53% of all awards, minority men are 5% of the workforce and received 5% of the awards, white women are 37% of the workforce and received 39% of all awards, and minority women are 4% of the workforce and received 3% of all awards.

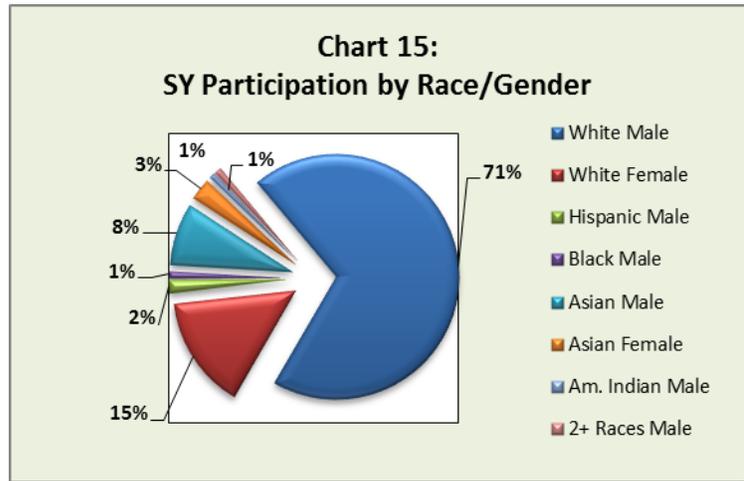


Awards to employees with disabilities: 12% of the awards went to employees with disabilities, which is 3% above the ratio of employees with disabilities.

**Scientific Workforce**

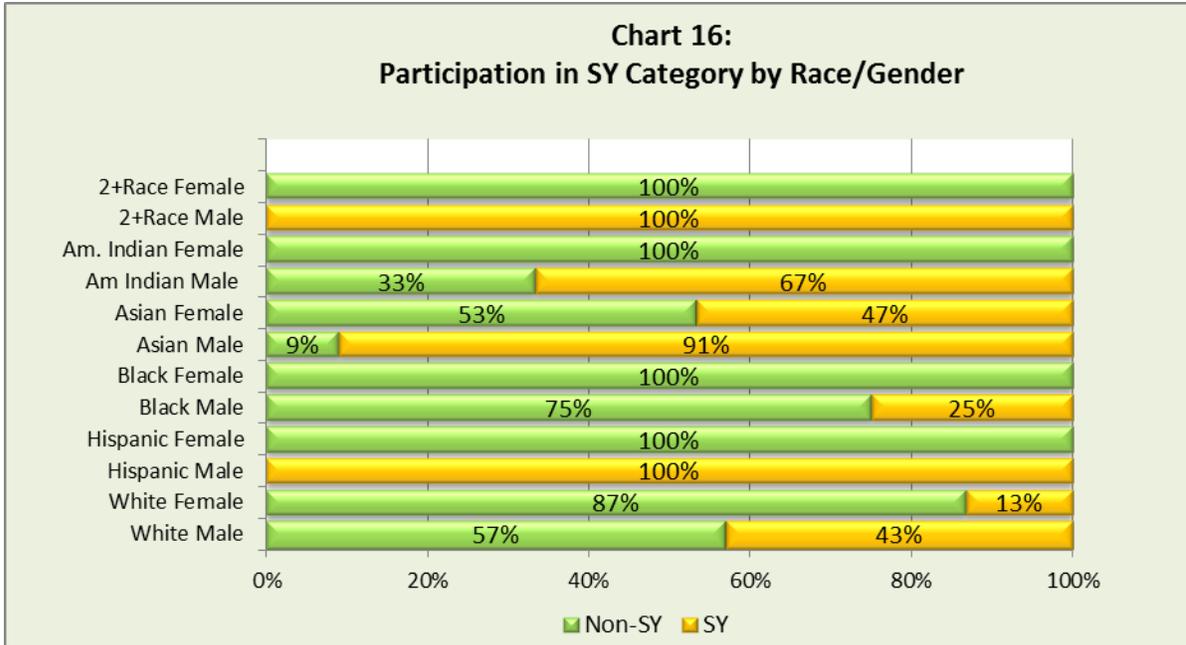
**Number of SYs**

The NPA continues to experience a continual decline in the number of SYs. At the end of FY11 there were 238 SYs working in NPA, compared to 239 in FY10, 247 in FY09 and 250 in FY08. Due to the hiring freeze implemented during FY11, NPA had 9 vacant SY positions. The SY cadre constitutes roughly 33% of the permanent workforce. Men continue to hold the majority of SY positions although the ratio dropped to 82% in FY11 from 83% in FY10. Minorities comprise 14% of the SY workforce, while white males comprise 71% of all SYs (Chart 15).



Race and Gender

Much of the minority population in the NPA can be found in the SY group, indicating some success with the NPA efforts at recruiting nationally for top-notch talent. For example, the SY occupation is home to at least 50% of all American Indian males, Asian males, and Hispanic males. On the other hand, less than 50% of all black males, white females, and white males hold SY positions (Chart 16). With the exception of larger metropolitan areas (Fort Collins, Lincoln, Manhattan, and Fargo), most NPA locations are largely white, especially compared to the east, west and southern geographic regions of the country.



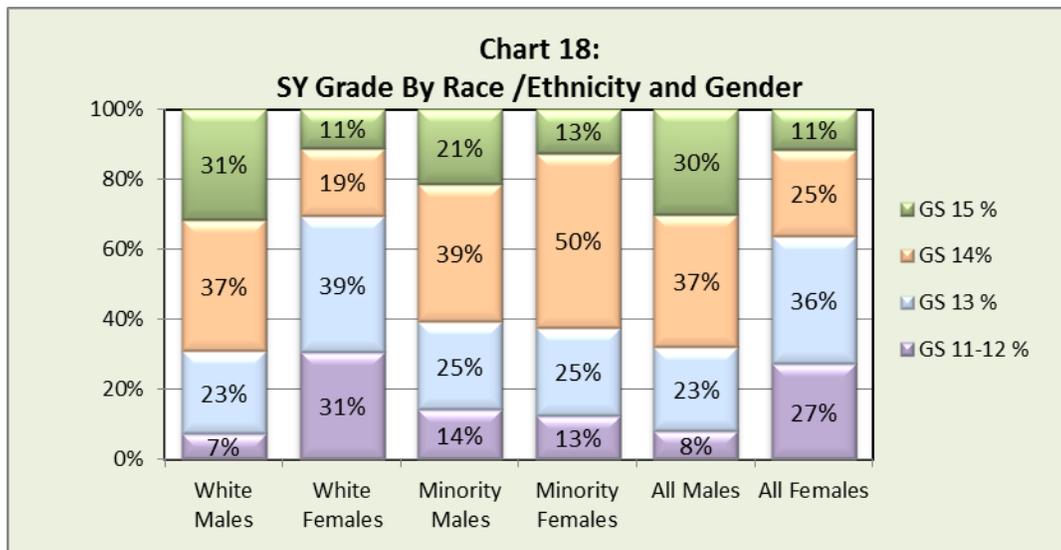
SY Workforce by Location

Most locations have about 30% of their workforce holding SY positions, although 4 locations (Logan, Miles City, Clay Center and Sidney) have 36% to 40% of their workforce holding SY positions. Three locations, Grand Forks, Mandan and Manhattan have less than 30% of their workforce holding an SY position (Chart 17).

| <b>Chart 17:<br/>NPA SY Positions as % of Total<br/>Permanent Positions by NPA<br/>Location</b> |                |                        |                           |
|-------------------------------------------------------------------------------------------------|----------------|------------------------|---------------------------|
|                                                                                                 | <b># of SY</b> | <b># of Perm Staff</b> | <b>SY % of Perm Staff</b> |
| Fort Collins                                                                                    | 27             | 91                     | 30%                       |
| Akron                                                                                           | 5              | 15                     | 33%                       |
| Cheyenne                                                                                        | 5              | 15                     | 33%                       |
| Logan                                                                                           | 26             | 69                     | 38%                       |
| Manhattan                                                                                       | 24             | 87                     | 28%                       |
| Miles City                                                                                      | 9              | 25                     | 36%                       |
| Sidney                                                                                          | 16             | 41                     | 39%                       |
| Clay Center                                                                                     | 44             | 110                    | 40%                       |
| Lincoln                                                                                         | 19             | 49                     | 39%                       |
| Fargo                                                                                           | 35             | 101                    | 35%                       |
| Mandan                                                                                          | 8              | 28                     | 29%                       |
| Brookings                                                                                       | 8              | 25                     | 32%                       |
| Grand Fks                                                                                       | 12             | 46                     | 26%                       |

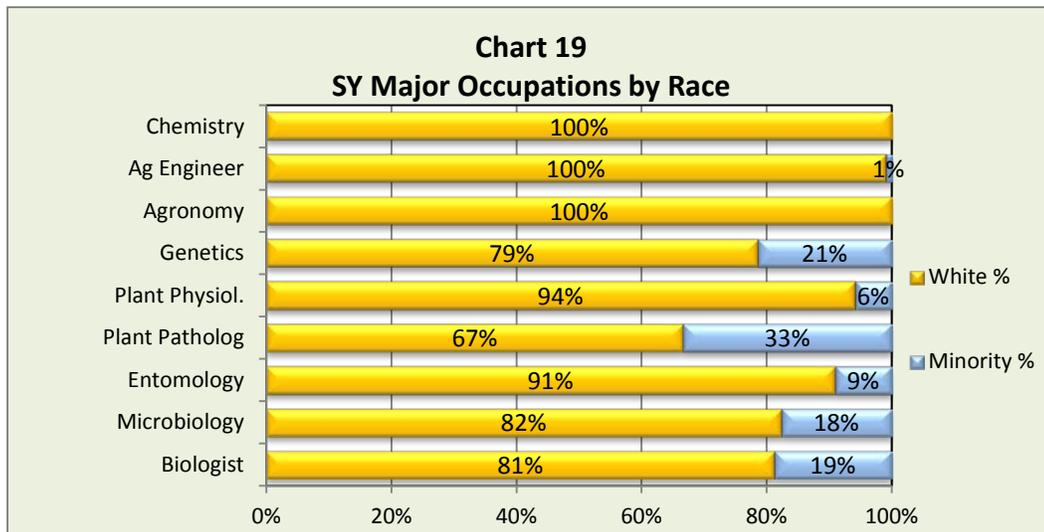
SY Workforce by Grade (Reference: Table A4)

The majority of female SYs are in grades 11-13, while the majority of men are in grades 14 and 15 (Chart 18). These figures indicate that a pipeline of female SYs for advancement into higher grades and leadership positions continues to develop.

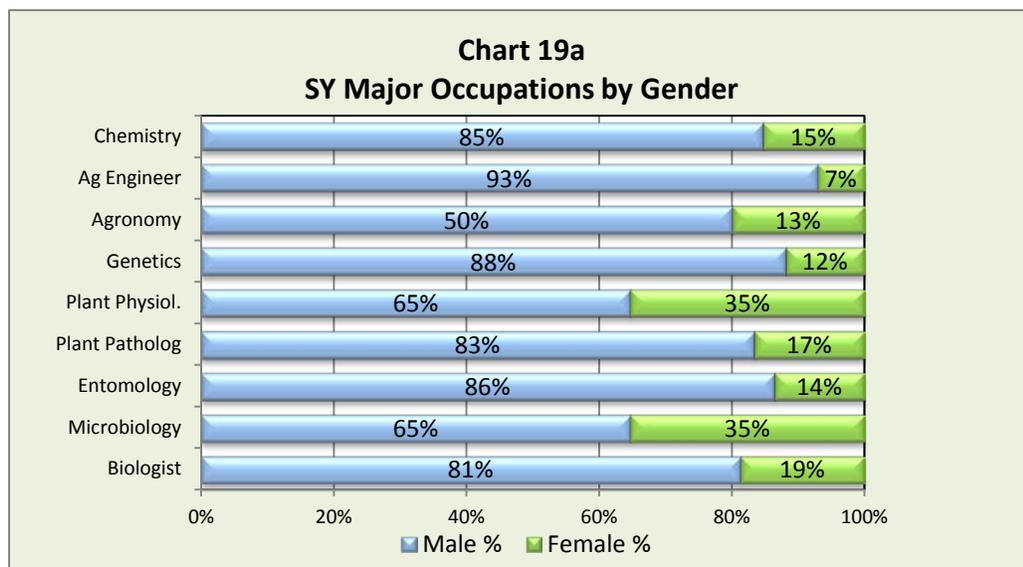


SY Workforce by Major Scientific Occupation (Reference: Table A6)

About 68% (162 out of 238) of NPA SYs hold positions in the nine major occupational series (Chart 17). The largest series is genetics with 42 SYs, and the smallest is agronomy with 9 SYs.

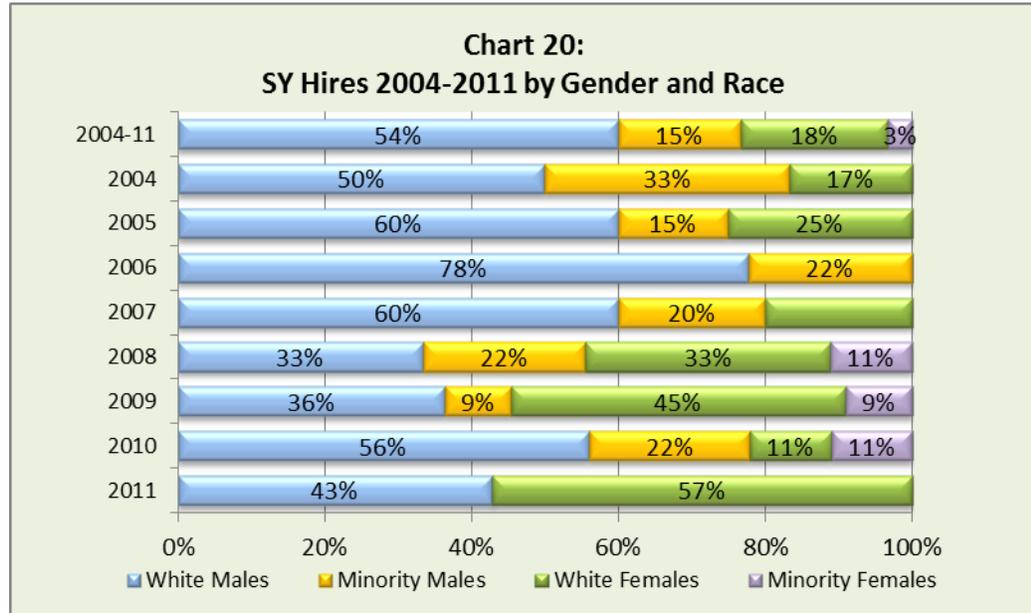


Men are the majority of each of the nine major occupations. Women’s participation ranges from 7% of Ag Engineers to 35% in both Plant Physiologists and Plant Pathologists (Chart 19a).



SY New Hires, Awards, and Separations (Data supplied by Area ODEO PM)

The NPA hired 7 SYs in FY11, including 2 RLs). Additionally, one SY transferred from another ARS location and one Cat 1 SY changed to a Cat 4. Of the 7 hires, all were white; 3 (43%) were men, and 4 (57%) were women. Chart 20 shows the breakdown of all SY hires since 2004. In 3 of the last 4 years, the hiring rate of white males was below their participation rate, which is an indication that strategies to develop a more diversified SY workforce are paying off.



SY Awards (Reference Table A13)

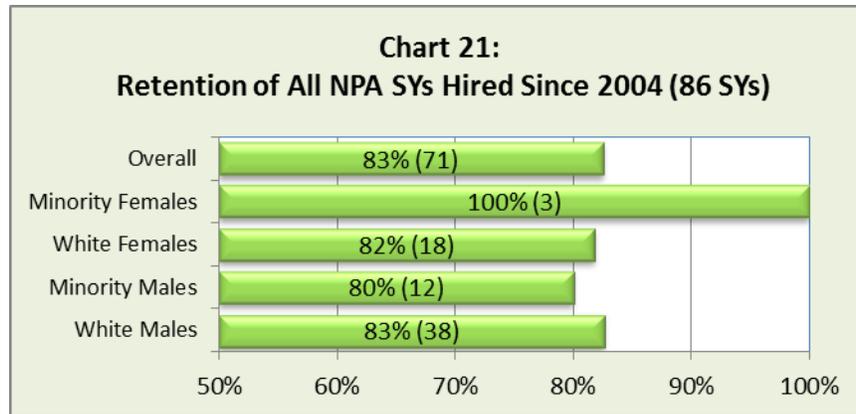
See [Chart 14c](#) for a discussion of awards in NPA, which includes SYs.

Separations (Reference Table A14 and data supplied by Area ODEO PM)

Data supplied by VPEEO indicates that just one SY separated from NPA in FY11, which is highly doubtful, given that 49 separations occurred in FY11 (Table A14). In fact, 8 SYs separated in FY11, which was 15% of the total separations (NFC data from Table A14). Of the 8 SYs who separated, 6 (75%) were retirements, one was a removal due to a declined transfer/closure, and one was a termination during the probationary period. See the [Separations](#) discussion for details on race/gender/ethnicity of separations.

Retention of SYs: (Data supplied by NPA ODEO Program Manager)

Since 2004, the NPA has hired 86 new SYs, and has retained 83% (71) of those new SYs. Minority women have the highest retention rate, while white men and women and minority men have roughly the same retention rate (Chart 21).



Promotions: (Data supplied by Area ODEO PM)

The VPPEO data provided for SY promotion shows that only 10 SYs were eligible for non-competitive promotion. That information is not accurate. Instead of using the VPPEO data, the Area RPES case data were used for this analysis (which was compiled by the NPA ODEO PM).

Under the RPES (Research Position Evaluation System), SYs undergo a rigorous review on a scheduled basis according to their GS grade. For instance, GS 11s and 12s are reviewed every three years; GS 13s are reviewed every four years; GS 14s and 15s are reviewed every five years. These reviews are mandatory and have six possible outcomes: upgrade (UPG); retain in grade (RIG); insufficient factual basis (IFB); grade category problem (GCP); refer to super grade (ST); or split decision. It is rare for GS 15s to be referred for ST, and rarer yet to be promoted to ST, which is why results for SYs at the GS 15 review are not included in the detailed analysis.

There were 32 SYs in grades 12-14 who were reviewed in FY11 (grade at the time of review). Additionally, 9 GS 15s were reviewed: 7 were retained, and 2 referred for review for promotion to ST, although the outcome of each of those reviews will not be known until 2012. Chart 22 shows the results of the reviews by race and gender for each grade (no minority women were reviewed in FY11). The overall promotion rate in FY11 was 59% which is somewhat higher than the overall promotion rate between 2002 and 2011. Clearly, promotion rates drop as grades increase, which corresponds to the higher expectation of documented impact of research (Chart 22).

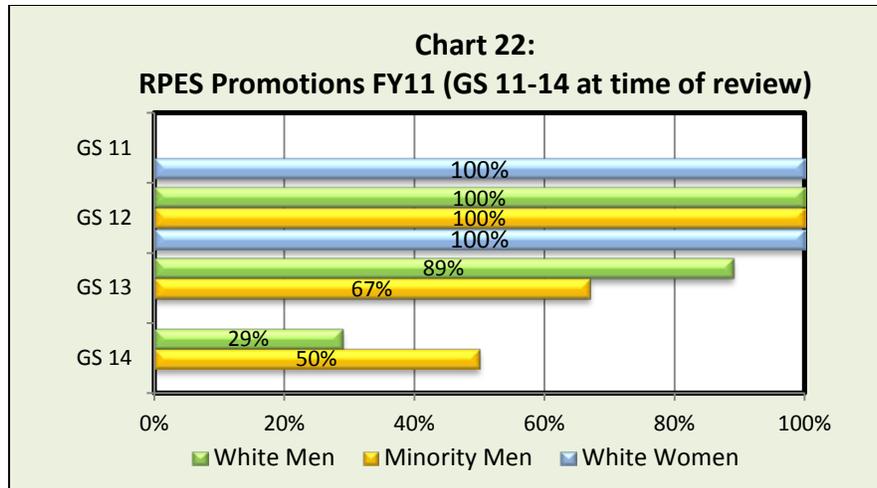


Chart 22a shows the rate of promotion by each grade, sorted by race and gender between 2002 and 2011. Just as shown in Chart 22, promotion rates for all four groups (white men, white women, minority men, minority women), decline as grades increase. For instance, 100% of white males were promoted from GS 11 to 12, 68% were promoted from GS 12 to 13, 51% were promoted from GS 13 to 14, and 42% were promoted from GS 14 to 15.

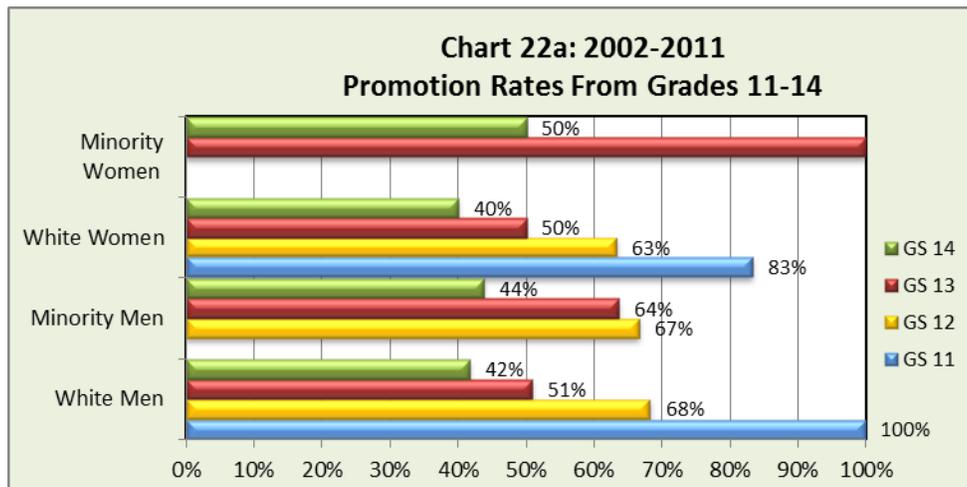
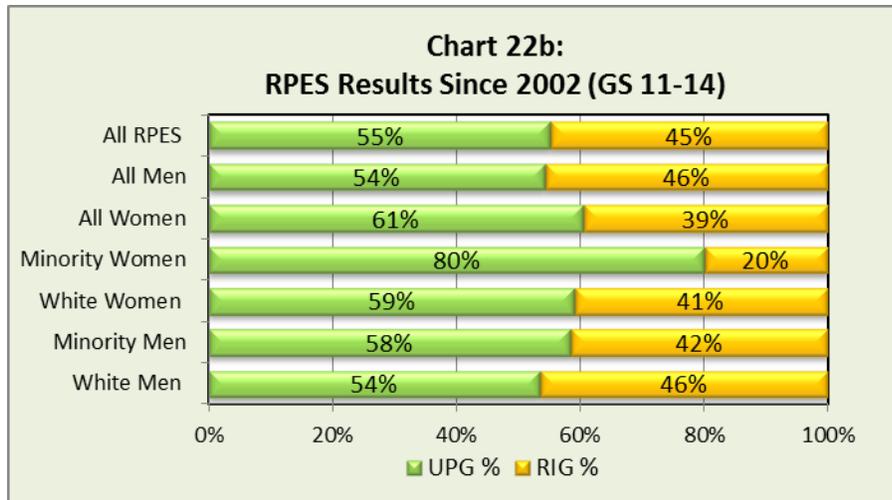


Chart 22b shows the overall promotion rates by race and gender since 2002 (all reviews for grades 11 through 14 combined). The overall promotion rate is 55%, with men having a slightly lower rate than women. There are many more men than women in the SY cadre, so the difference may not be statistically significant, but does indicate that women perform at least as well as do men in the RPES process.



Disabilities Within the SY Workforce (Reference Table B)

There were 9 reported disabilities within the SY workforce, or about 4% of the SY workforce. One Targeted Disability is found in the SY workforce (there are 67 reported disabilities in the permanent workforce).