

## APPENDIX A

A previously used indicator of the completeness of crime data has been “agency months”. Agency months refers to the formula that counts the number of months in a year times the number of agencies, divided into the number of actual months some data is entered for all of the agencies. For example, in 1991 through 1993 Iowa had 225 reporting law enforcement agencies times 12 possible months of data submission equals 2,700 months that could be possible for 100% reporting. In 1991, crime data was entered in 1,872 months divided by the possible months would equal 69.3 percent complete reporting. In 1992, 2033 agency months had some crime data entered for a total of 75.3 percent complete reporting. There were 2,171 months entered for 1993 to account for 80.0 percent completeness. Eight agencies joined the direct reporting agencies in 1994. Therefore, the possible months of reporting rose to 2,796 in 1994. There were 2,323 months entered in 1994 to account for 83.1 percent completeness. One more agency joined the direct reporting agencies in 1995 to bring the total to 2,808 possible months. There were 2,391 months entered in 1995 to increase to 85.1 percent completeness. The same number (2,808) of months was possible in 1996, but completeness decreased to 2,306 months entered or 82.1 percent. In 1997, the number of months possible was again 2,808 and completeness increased to 84.0 percent with 2,360 months entered. In 1998 some data was entered in 2,455 months, which raised completeness to 87.4 percent of the possible 2,808 months. Three agencies were deleted in 1999 and one was added to bring the total number of reporting agencies to 232 with 2,784 possible months. Decreasing slightly, the months complete for 1999 was 86.4 percent. In 2000 the number of agencies stayed constant with 2,784 possible months and 2,364 months entered for 84.9 percent. A total of 237 agencies or 2,844 months were possible in 2001 with 2,481 months entered or 87.2 percent complete. Five agencies were deleted in 2002 for a possible 2,784 months for 232 agencies. In 2002, 2,467 agency months were entered for 88.6 percent complete. An additional agency was added in 2003 for a total of 233 agencies or 2,796 months. Additionally, 2,445 months were entered for 87.4 percent complete in 2003 and 2004. In 2005, 2,473 agency months were entered for the 233 agencies or 88.4 percent complete. In 2006, 2,527 agency months were entered for the 233 agencies or 90.4 percent complete. In 2007, 2,458 agency months were entered for the 233 agencies or 87.9 percent complete. (This method does not account for completeness of the number of crimes entered per month.)

The second indicator of completeness of the data is a comparison of the crime index between the final years of summary reporting and reporting in the incident based system. Table 2 in this report converts the incident-based data back to the summary-based crime index. If we compare the 1991 through 1999 crime index figures with the final three years of reporting in the summary system (1988 through 1990), we estimate that the 1991 data is approximately 52 percent complete, the 1992 data is approximately 58 percent complete, the 1993 data is approximately 67 percent complete, the 1994 data is approximately 69 percent complete. The 1995 data increased to approximately 83 percent complete, the 1996 data is 80.5 percent complete, the 1997 data is 80.0 percent complete, the 1998 data is 76.0 percent complete and the 1999 data is 75.7 percent complete. The year 2000 data was 78.7 percent complete and 2001 data rose to 80.8 percent complete, the 2002 data rose to 85.7 percent complete, but the 2003 data was 80.4 percent complete, and the 2004 and 2005 data was 79.4 percent complete. (This method does not account for an authentic decrease or increase in crime.)

Another way that can be used to indicate completeness involves comparisons of completeness of populations for participating in a given year with the statewide total populations. Considering only agencies which reported in all 12 months in each year, 1991 data represents 54.6 percent of the state’s population, 1992 data represents 60.8 percent of the state’s population and the 1993 data represents 74.2 percent of the state’s population. The 1994 data represents 72.1 percent of the state’s populations while the corresponding figure for 1995 is 81.7 percent of the state’s population and the 1996 figure is 70.9 percent. Increasing again in 1997, the data represents 79.9 percent of Iowa’s population but dropped to 77.8 percent of Iowa’s 1998 population. In 1999, the data represented 82.9 percent of the state’s population but again dropped to 74.6 percent of the 2000 population and 75.5 percent of the 2001 population. The 2002 data increased markedly to 89.2 percent of the population, 2003 was 88.6 percent of the population but decreased in 2004 to represent 79.4 percent of the total population and 2005 to represent 78.5 percent of the population. The 2006 and 2007 data also increased markedly to 94.4% in 2006 and 94.2% of the population in 2007. (This method does not account for small agencies that would truly have no crimes during a month or does not account for the completeness of the number of crimes entered per month in larger agencies).