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ESTIMATION OF PEAK DISCHARGE QUANTILES FOR SELECTED ANNUAL EXCEEDANCE PROBABILITIES IN NORTHEASTERN ILLINOIS

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16. Abstract

This report provides two sets of equations for estimating peak discharge quantiles at annual exceedance probabilities (AEPs) of 0.50, 0.20, 0.10, 0.04, 0.02, 0.01, 0.005, and 0.002 (recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years, respectively) for watersheds in Illinois based on annual maximum peak discharge data from 117 watersheds in and near northeastern Illinois. One set of equations was developed through a temporal analysis with a two-step least squares-quantile regression technique that measures the average effect of changes in the urbanization of the watersheds used in the study. The resulting equations can be used to adjust rural peak discharge quantiles for the effect of urbanization, and in this study the equations also were used to adjust the annual maximum peak discharges from the study watersheds to 2010 urbanization conditions.

The other set of equations was developed by a spatial analysis. This analysis used generalized least-squares regression to fit the peak discharge quantiles computed from the urbanization-adjusted annual maximum peak discharges from the study watersheds to drainage-basin characteristics. The peak discharge quantiles were computed by using the Expected Moments Algorithm following the removal of potentially influential low floods defined by a multiple Grubbs-Beck test. To improve the quantile estimates, generalized skew coefficients were obtained from a newly developed regional skew model in which the skew increases with the urbanized land use fraction. The drainage-basin characteristics used as explanatory variables in the spatial analysis include drainage area, the fraction of developed land, the fraction of land with poorly drained soils or likely water, and the basin slope estimated as the ratio of the basin relief to basin perimeter.

This report also provides: (1) examples to illustrate the use of the spatial and urbanization-adjustment equations for estimating peak discharge quantiles at ungaged sites and to improve flood-quantile estimates at and near a gaged site; (2) the urbanization-adjusted annual maximum peak discharges and peak discharge quantile estimates at streamgages from 181 watersheds including the 117 study watersheds and 64 additional watersheds in the study region that were originally considered for use in the study but later deemed to be redundant.

The urbanization-adjustment equations, spatial regression equations, and peak discharge quantile estimates developed in this study will be made available in the web-based application StreamStats, which provides automated regression-equation solutions for user-selected stream locations. Figures and tables comparing the observed and urbanization-adjusted peak discharge records by streamgage are provided at http://dx.doi.org/10.3133/sir20165050 for download.

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DISCLAIMER

The contents of this report reflect the view of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Illinois Center for Transportation, the Illinois Department of Transportation, or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

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EXECUTIVE SUMMARY

This report presents the results of a study to improve the estimation of peak discharges for urbanized watersheds in northeastern Illinois (flood-frequency region 2). In order to maintain consistent relations for the entire region and to enable the transfer of the hydrologic effects of urbanization throughout the state for similarly developed watersheds, peak discharge estimations for rural watersheds in flood-frequency region 2 were also included in the study. The study included flood-frequency analysis at streamgages and regional regression analysis that resulted in techniques for estimating peak discharge quantiles at annual exceedance probabilities (AEPs) of 0.50, 0.20, 0.10, 0.04, 0.02, 0.01, 0.005, and 0.002 (recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years, respectively) at ungaged sites throughout flood-frequency region 2. The equations were developed by a spatial analysis, applying generalized least-squares regression to flood-frequency and drainage-basin characteristics from 117 streamgages in and near Illinois flood-frequency region 2. The drainage-basin characteristics used as explanatory variables in the spatial analysis included drainage area, the fraction of developed land, the fraction of land with poorly drained soils or likely water, and the basin slope estimated as the ratio of the basin relief to basin perimeter. The report also provides peak discharge quantile estimates at 181 streamgages: the 117 streamgages that were used to develop the spatial regression equations and 64 additional streamgages in the region that were originally considered for use in the study but later deemed to be redundant through an analysis that included watershed overlap areas and streamgage record lengths.

Peak discharge quantiles at the selected AEPs for streamgages were computed by using the Expected Moments Algorithm following the removal of potentially influential low floods defined by a multiple Grubbs-Beck test. To improve estimates of the peak discharge quantiles for given exceedance probabilities at the streamgages in the study region, generalized skew coefficients were obtained from a newly developed regional skew model. The new regional skew model is an increasing function of the urbanized land use fraction.

The annual maximum discharge records of the streamgages used in the study were adjusted to 2010 urbanization conditions prior to computing the flood-frequency statistics. The adjustment is based on the temporal effect of urbanization estimated by a two-step least squares-quantile regression technique. The urbanization coefficients from the two-step temporal analysis also provide the basis for equations that can be used for adjusting rural peak discharge estimates for the effect of urbanization in other parts of Illinois. The adjusted annual maximum peak discharge records at the 181 streamgages considered for use in the study are also provided.

The accuracy of the spatial and temporal equations is described by several methods, including the model variance, standard error of prediction, and confidence intervals. The method for determining the 90% confidence interval for any estimated peak-flood discharge in flood-frequency region 2 is provided in the report, and will also be available in the USGS applications StreamStats and the National Streamflow Statistics program.

Examples are presented to illustrate the use of the spatial and urbanization-adjustment equations to estimate flood quantiles at ungaged sites and to improve peak discharge quantile estimates at and

near a gaged site. The spatial regression equations, urbanization-adjustment equations, and peak discharge quantile data used in this study will be available in StreamStats. StreamStats is a web-based application providing automated regression-equation solutions for user-selected sites on streams. Figures and tables comparing the observed and urbanization-adjusted peak discharge records by streamgage are provided at http://dx.doi.org/10.3133/sir20165050 for download.

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CONVERSION FACTORS

Inch/Pound to International System of Units

Multiply	By	To obtain
Length		
inch (in.)	2.54	centimeter (cm)
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
Area		
acre	4,047	square meter (m^2)
acre	0.4047	hectare (ha)
acre	0.4047	square hectometer (hm^2)
acre	0.004047	square kilometer (km^2)
square mile (mi^2)	259.0	hectare (ha)
square mile (mi^2)	2.590	square kilometer (km^2)
Volume		
cubic foot (ft^3)	28.32	cubic decimeter (dm^3)
cubic foot (ft^3)	0.02832	cubic meter (m^3)
acre-foot (acre-ft)	1,233	cubic meter (m^3)
acre-foot (acre-ft)	0.001233	cubic hectometer (hm^3)
Flow rate		
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as °F = (1.8 × °C) + 32.

Temperature in degrees Fahrenheit (°F) may be converted to degrees Celsius (°C) as °C = (°F – 32) / 1.8.

DATUM

Vertical coordinate information is referenced to the North American Vertical Datum of 1988 (NAVD 88).

Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27) except as otherwise noted.

Elevation, as used in this report, refers to distance above the vertical datum.

ABBREVIATIONS

AEP	annual exceedance probability
AFPD	annual flood-probability discharge
AMS	annual maximum series
BDF	basin development factor
B-GLS	Bayesian generalized least squares
B-WLS	Bayesian weighted least squares
CCPN	Cook County Precipitation Network
COOP	cooperative network
CSG	crest-stage gage
DEM	digital elevation model
EMA	Expected Moments Algorithm
Esri	Environmental Systems Research Institute, Inc.
GIS	geographic information system
GLS	generalized least squares
HDB	hand-drawn boundary
ICT	Illinois Center for Transportation
IDOT	Illinois Department of Transportation
MACS	MRCC Applied Climate System
MRCC	Midwestern Regional Climate Center
MSE	mean squared error
MWRDGC	Metropolitan Water Reclamation District of Greater Chicago
NED	National Elevation Dataset

NHD	National Hydrography Dataset
NLCD	National Land Cover Dataset
NWI	National Wetlands Inventory
NWIS	National Water Information System
NWS	National Weather Service
OLS	ordinary least squares
OVB	omitted variable bias
PDS	partial duration series
PeakFQ	Peak flow FreQuency program
PILF	potentially influential low flood
PRISM	Parameter-elevation Relationships on Independent Slopes Model
SE	standard error
SSURGO	State Soil Survey Geographic database
USGS	U.S. Geological Survey
VIF	variance inflation factor
WLS	weighted least squares
WREG	Weighted-Multiple-Linear Regression program
WY	water year

CHAPTER 1: INTRODUCTION

Estimates of the magnitude and frequency of floods, particularly in urban areas where there is an increased density of lives and property at risk, are a critical ingredient to floodplain management, emergency response planning, and infrastructure design tasks such as sizing of bridges and culverts. At the same time, urbanization, particularly the construction of impervious surfaces, changes the response of watersheds to precipitation by reducing infiltration and increasing flow velocities, which increases flood volumes and magnitudes of peaks (Konrad 2003).

Predictions of the effects of urbanization in ungaged basins or in basins where future urbanization is expected or planned are usually obtained by following one of two general approaches: (1) simulation with rainfall-runoff models driven by historical precipitation (either as design storms or by continuous simulation of long-term records), usually calibrated to observed streamflow data; and (2) regressions of peak discharge quantiles obtained from observed streamflow data at a collection of streamgages in and near the region of interest on relevant basin characteristics such as drainage area and fraction of urbanized area. The two approaches have different advantages and disadvantages (Rosbjerg et al. 2013); generally the simulation model approach is preferred for predicting the response of a basin to changes in the basin properties or climate characteristics, whereas for ungaged basins over a historical period, the regional regression approach may be more accurate (Hodgkins et al. 2007). Indeed, the regional regression-equation approach is a well-developed form of regional calibration of a watershed model, whereas for simulation models, regional calibration is a “difficult, unsolved problem” (Vogel 2006).

Regional regression equations for urbanization-affected areas of northeast Illinois were first published by Allen and Bejcek (1979), who used data beginning around 1960 and ending in 1976. Since 1976 there have been many years of additional streamflow data, extensive growth of the urbanized area of northeast Illinois, and several historic floods (Juhl 2005). As a result, the U.S. Geological Survey (USGS) Illinois Water Science Center in cooperation with the Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA), through the Illinois Center for Transportation (ICT), developed a project to update the spatial regression equations of Allen and Bejcek (1979) for urbanization-affected streams in northeastern Illinois and for adjusting rural peak discharge quantile estimates for the effect of urbanization.

1.1 PURPOSE AND SCOPE

This report presents the methods and results of a study that applied a regional spatial regression approach to develop equations for estimating peak discharge quantiles with annual exceedance probabilities (AEPs) of 0.5, 0.2, 0.1, 0.04, 0.02, 0.01, 0.005, and 0.002 (often referred to as the 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year floods, respectively) for Illinois flood-frequency region 2 (previously defined by Soong et al. 2004). Flood-frequency region 2 consists of northeastern and parts of north-central Illinois and includes the greater Chicago region. This study updates the existing spatial regression equations (Soong et al. 2004; Allen and Bejcek 1979) for northeastern Illinois in the following ways: (1) it uses streamflow data through water year (WY) 2009, compared to through 1999 for Soong et al. (2004) and through 1976 for Allen and Bejcek (1979); (2) it tests and implements wetland-open water and slope variables replacing those of Soong et al. (2004); and (3) it uses the updated flood-frequency estimation methods and software, particularly in the estimation of at-site peak discharge quantiles by using multiple Grubbs-Beck potentially influential low flood (PILF) detection, the Expected Moments Algorithm (EMA) for handling censored and historical floods, and regional skew estimation by Bayesian generalized least squares.

The study described in this report also implements the temporal regression approach of Over et al. (2016) to the analysis and adjustment of annual maximum peak discharge records for the exceedance probability-dependent effect of urbanization. By this approach the observed peak discharge records are adjusted to current (2010) urbanization conditions before they are used in the spatial regression analysis, and a set of "temporal" urbanization coefficients are obtained that are applicable wherever hydrologic effects of urbanization are similar to those in northeastern Illinois. Because the historical urbanization data used in the temporal regression approach is available beginning 1940, the earliest streamflow data used in this study is WY 1940.

There are three primary products from the study described in this report: (1) this report, published in both ICT and USGS versions, having the same content, and presenting the methods and results, including the two sets of regression equations for estimating peak discharge quantiles; (2) an implementation of the spatial and temporal regression equations in StreamStats (http://streamstats.usgs.gov); and (3) a collection of figures and tables comparing the observed and urbanization-adjusted peak discharges at http://dx.doi.org/10.1333/sir20165050.

1.2 DESCRIPTION OF THE STUDY AREA

The study area covers northeastern Illinois and portions of north-central Illinois, northwest Indiana, and southeast Wisconsin (Figures 1a and 1b). The physiography of the region is determined by recent glacial episodes. The last glacial episode was the Wisconsinan, which ended about 12,000 years ago and during which all except the western lobe of the study area in the valley of the Green River was covered in ice (Hansel and McKay 2010). The entire study region was covered with ice during the previous glacial episode, the Illinoian, which ended about 125,000 years ago. The glaciers of the Wisconsinan episode left behind various glacial features, the most prevalent of which are a series of moraines (Arnold et al. 1999). The physiographic regions of northeastern Illinois follow these glacial features, with the Chicago Lake Plain and the Wheaton Morainal Country making up the Great Lakes Section, and then, to the west and south, the Till Plains Section (Leighton et al. 1948), with corresponding regions in Indiana (Schneider 1966). As a result, the surficial geology in the study region consists of unconsolidated glacial drift of varying thickness up to 400 feet (Piskin and Bergstrom 1975). The character of the drift ranges from end moraines and till plains to outwash fans and lacustrine deposits (Hansel and McKay 2010).

Subsequent warmer and drier periods added loess to the surface, thinner toward Lake Michigan, so that soil parent materials combine the loess and the underlying drift (Fehrenbacher et al. 1984). Soil orders of the region vary with the original vegetation type, primarily alfisols, which form under forests, nearer to Lake Michigan and mollisols, which form under grasslands, over most the rest of the region (Fehrenbacher et al. 1984). The permeability of the soils varies with the parent material from very low on clayey deposits to high on sandy outwash (Arnold et al. 1999).

The climate of the study region is classified as "Dfa" in the Köppen-Geiger system, which means humid continental with warm summers (Peel et al. 2007; Belda et al. 2014). This classification means winters are cold, summers are warm, and precipitation is common during the whole year. Based on 1971–2000 data, the average temperature at Chicago is about 50°Fahrenheit (F), with average winter (December–February) daily highs of about 33°F and lows of 17°F and average summer (June–August) daily highs of about 82°F and lows of 62°F (Changnon et al. 2004). Based on 1981–2010 Parameter-elevation Relationships on Independent Slopes Model (PRISM) data (http://www.prism.oregonstate.edu/normals, accessed April 15, 2014), precipitation for Chicago is about 35 inches per year, with a minimum monthly amount of about 2 inches in both January and February, increasing to about 4 inches per month during May–August before decreasing through the fall toward the winter minimum. About half the total precipitation is the result of thunderstorms, and 3 to 3.5 inches falls as snow, based on 1941–1995 data (Changnon et al. 2004).

In the flood climate classification of Hayden (1988), the study area lies at the border of the "TsuCpSs**" region to the north and the "TsuCpSe*" region to the south, where "Tsu" indicates barotropic (nonfrontal or convective) and unorganized (that is, without tropical cyclones) in the summer, "Cp" indicates that frontal storms are possible throughout the year, and "Ss**" indicates that winter snow cover is seasonal and exceeds 50 centimeters (cm), so that there may be substantial spring snowmelt flooding, whereas "Se*" indicates seasonal, ephemeral snow cover for 10–50 days per year that may contribute to flooding during winter when rain falls on existing snow. The seasonality of precipitation in the study region and its flood classification explain the wide distribution of the timing of the annual maximum peak discharges used in this study (Figure 5), with the largest monthly fractions in March, April, and June, but also substantial fractions in February and May, with smaller fractions during July to September.

Nonurbanized land cover in the study area includes a substantial fraction of row crop agriculture but also more forest, grassland, and open water and wetlands than the surrounding regions, which are primarily agricultural (Illinois Department of Natural Resources 1996). Urbanized land use in the study area has been driven by population growth in metropolitan Chicago, which was dominated by that of the City of Chicago until 1940, when its population leveled off and population growth shifted to the suburbs (Figure 2). This suburban population growth was accompanied by even larger growth in developed land use; for example, from 1970 to 1990, the population grew by 4%, but developed land use grew by 40%, during which time more than 400 square miles (mi^2) of farmland that had been previously drained for agricultural use (Juhl 2005) were developed (Mariner 2005). This growth in developed land use is shown geographically in Figure 3.

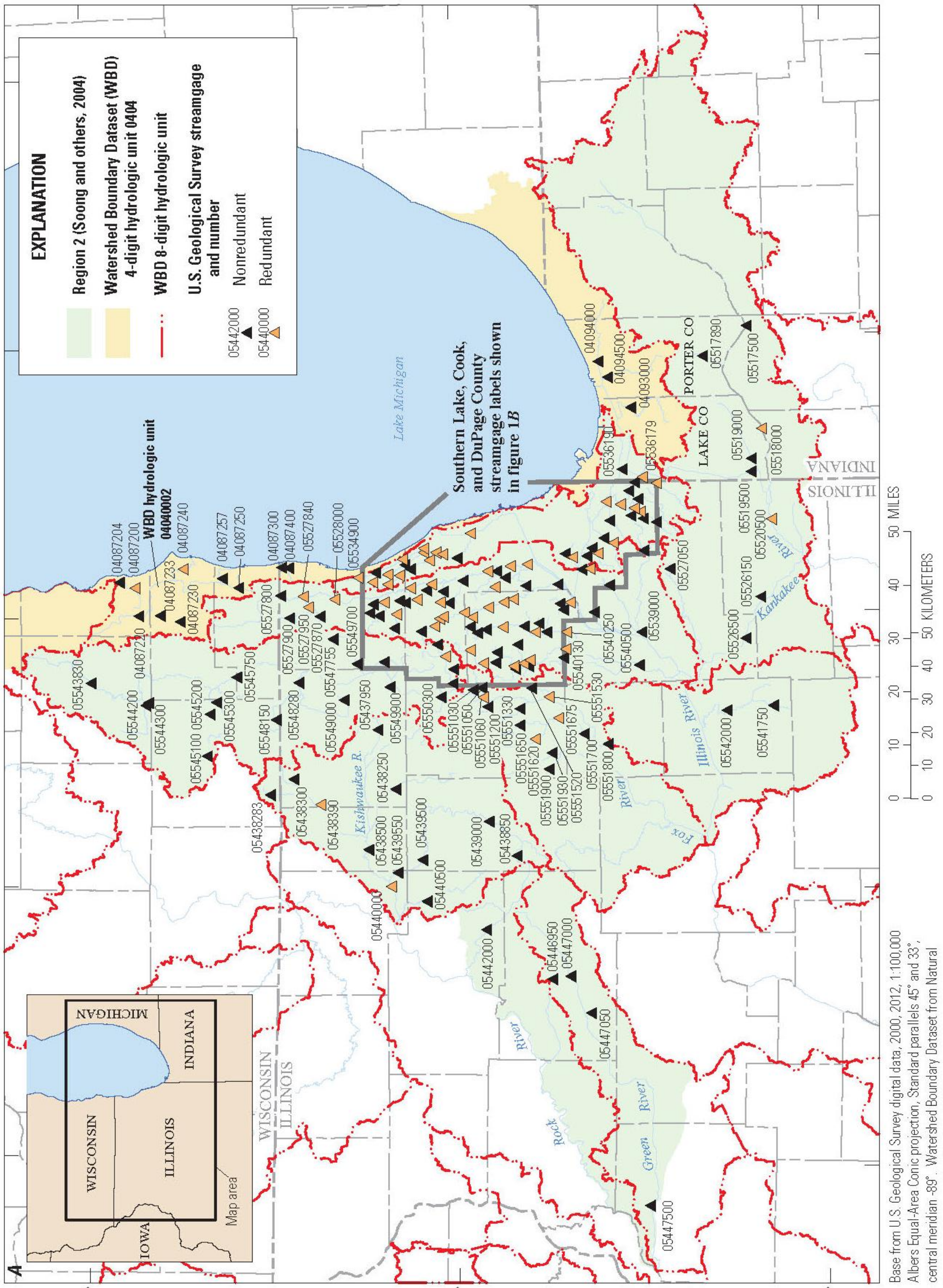


Figure 1a. Map of entire study area and streamgages used in this study.

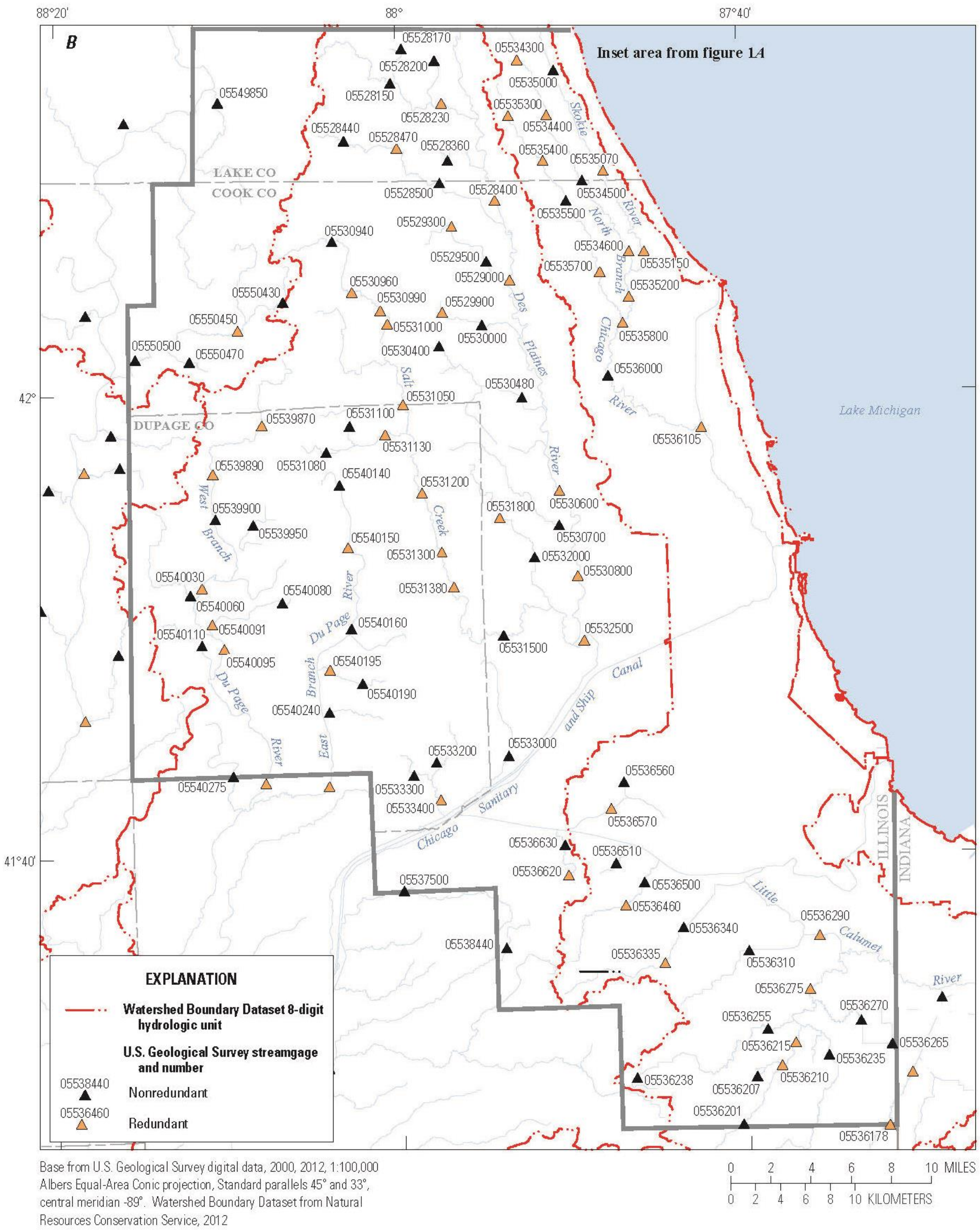


Figure 1b. Map of study area and streamgages used in this study showing southern Lake, Cook, and DuPage counties in detail.

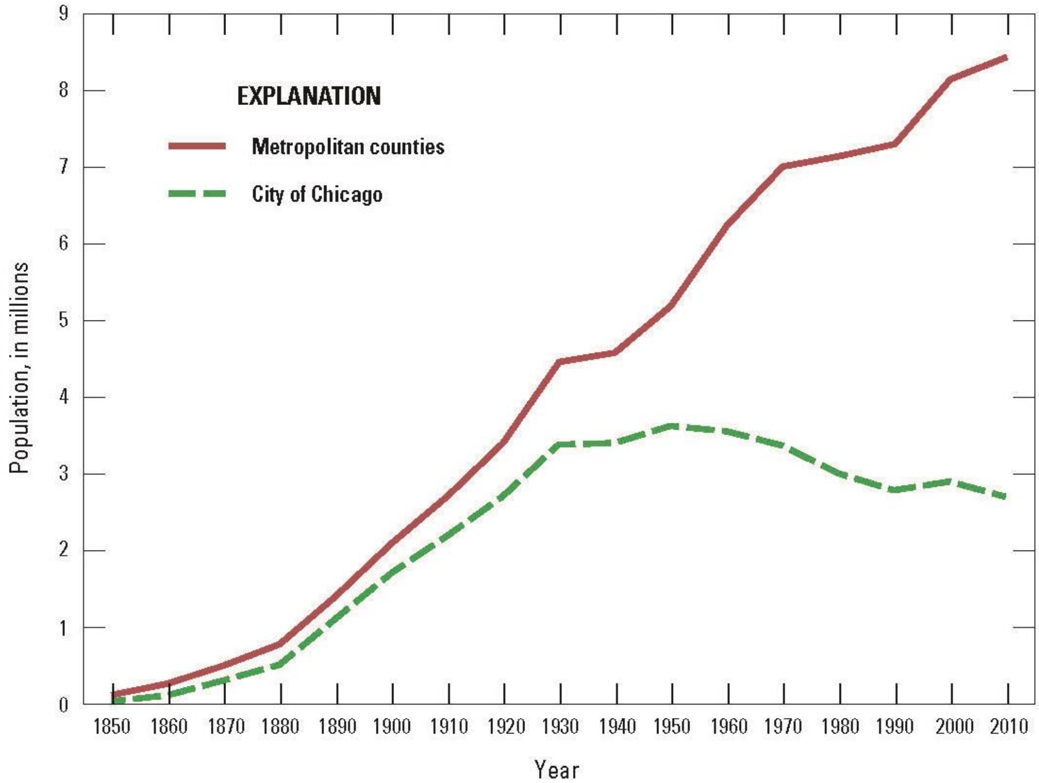


Figure 2. Plot of population growth in northeastern Illinois, 1850–2010 (from Karstensen et al. 2013).

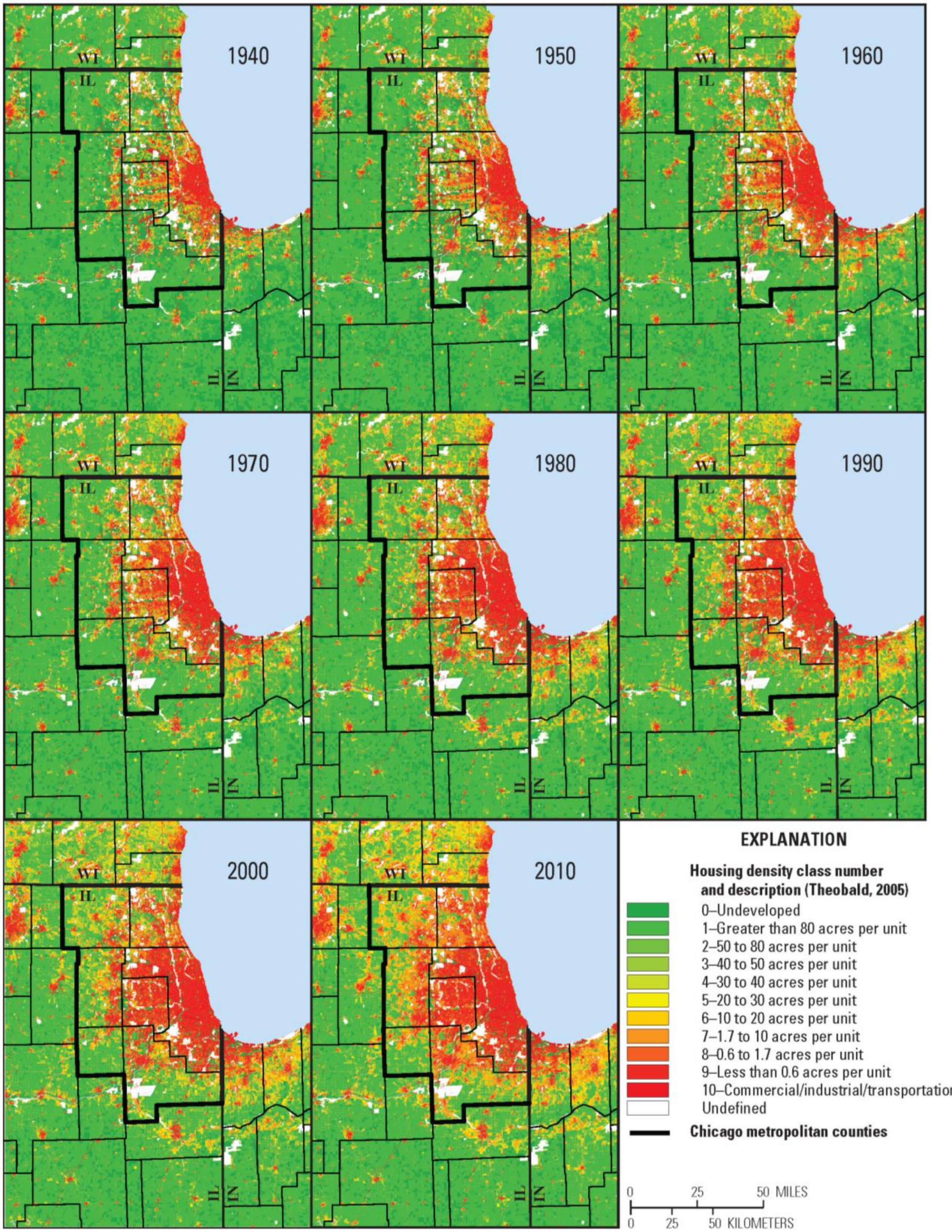


Figure 3. Map of housing density by decade in northeastern Illinois (modified from Karstensen et al. 2013).

The hydrologic effects of this expansion of developed land in northeastern Illinois can be inferred from the series of historic floods that began in the 1950s and have extended to the present (2015) (Juhl 2005; Changnon 1999; Changnon and Westcott 2002a, 2002b; Angel and Changnon 2008; Changnon 2010, 2011; Fazio and Sharpe 2012; Villarini et al. 2013), though increases in precipitation have also been identified (Rougé and Cai 2014; Winters et al. 2015). These floods led to several policy and engineering responses (Juhl 2005). One such policy response was the introduction of ordinances requiring stormwater detention on new development, the first of which was promulgated in 1972 by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC). Another policy response was the passage of legislation by the State of Illinois allowing five suburban counties to plan and fund countywide stormwater management programs (Resource Coordination Policy Committee 1998). A third policy response was the planning and construction of channel improvements and flood-control reservoirs (Resource Coordination Policy Committee 1998).

1.3 PREVIOUS STUDIES

Allen and Bejcek (1979) developed regional spatial regression equations for peak discharge quantiles for the urbanized area of northeastern Illinois using data through WY 1976 as a function of impervious percentage, drainage area, and slope (all log-transformed). They used 103 streamgage records, including 70 crest-stage gages (CSGs), for many of which they developed stage-discharge ratings as part of the study. Drainage areas of the basins ranged from 0.07 to 630 mi^2 and impervious fractions from 1% to 38.7%. A decreasing effect of urbanization (measured as an estimated fraction of impervious area) was determined with increasing flood magnitude (decreasing AEP), as is generally expected (Konrad 2003). The authors also suggest that the urbanization effect factor from their equations would be appropriate to use outside their study area elsewhere in Illinois and surrounding regions to adjust existing rural equations for use in urban areas, but that their results would not be appropriate for basins “completely served by underground drainage systems” or where “flood detention or retention reservoirs substantially affect the flood peaks.”

Sauer et al. (1983) completed a nationwide spatial regression study of the effect of urbanization on flood frequency that used the results of Allen and Bejcek (1979). Sauer et al. used 199 streamgage records including 18 from Illinois, excluding streamgages with substantial manmade detention effects and those for which the developed fraction had increased by more than 50% during the period of record. They developed three sets of spatial regression equations. Two sets include seven explanatory variables and the remaining set has three. The two seven-variable equation sets have the same variables except one uses basin lag time (estimated from observed rainfall-runoff data, where available) in place of a measure of channel efficiency determined following the methods of Espey and Winslow (1974). All three sets of equations include as explanatory variables drainage area, the rural peak discharge quantile, and the basin development factor (BDF), which is a numerical index of the presence of channel improvements, curbs and gutters, and storm sewers, and is not easily computable from standard GIS databases. These three common explanatory variables constitute the variables of the three-variable equation set. Impervious area fraction is included in the two seven-variable sets of equations, but it is not as significant as BDF. The coefficients of their equations also indicate a decreasing effect of urbanization for larger floods.

More recently, Moglen and Shivers (2006) developed an iterative method of adjusting rural flood-frequency equations for the effects of time-varying urbanization, measured by one of two GIS-computable quantities—estimated impervious fraction and population density. Among their 78 study streamgages are 22 from Illinois, of which just one (Boneyard Creek at Urbana, USGS streamgage 03337000) is outside northeastern Illinois. One of the conclusions of the study listed as “Model Weaknesses” is that the apparent effects of urbanization are “relatively mild.” In the use of GIS-computable quantities as the urbanization variable and directly incorporating time-varying urbanization, Moglen and Shivers’ study is similar to the current study. Their method does not, however, produce an adjusted time series of annual maximum peak discharges for each streamgage; rather, it produces just a set of urbanization-adjusted peak discharge quantiles.

Other studies that have characterized the effect of urbanization on flooding in northeastern Illinois include Changnon and Demissie (1996), Changnon et al. (1996), Hejazi and Markus (2009), Villarini et al. (2013), and Rougé and Cai (2014).

Soong et al. (2004) divided the state of Illinois into seven hydrologic regions and developed regional regression equations for both annual maximum series (AMS) and partial duration series (PDS) peak discharges for rural basins in each region, using data through WY 1999. The basin characteristics used in the regression equations are drainage area, main channel slope, basin length, soil permeability, and percentage of open water and herbaceous wetland. For region 2, which is the focus area of the current study, they used drainage area, main channel slope, and percentage of open water and herbaceous wetland. The AMS regression equations from the study were later implemented in StreamStats (Ishii et al. 2010).

CHAPTER 2: DATA DEVELOPMENT

Data development for this study consisted of the computation of two sets of data values: (1) observed peak discharge quantiles; that is, the statistical relation between flood magnitudes and frequencies based on observed floods at selected streamgages and (2) basin characteristics; that is, quantitative descriptors of characteristics of the basins draining to the locations of the streamgages. Regression equations for estimating the peak discharge quantiles at ungaged locations were then developed using the basin characteristics.

2.1 PEAK DISCHARGE QUANTILES AT STREAMGAGES

To develop equations for estimating peak discharge quantiles for ungaged stream locations, such quantiles were first computed at selected streamgages with at least 10 years of annual maximum peak discharges. This computation included four steps: (1) streamgage selection; (2) removal of redundant streamgages, where one streamgage of streamgage pairs whose basins are nested with substantial overlap are removed from the set of streamgages on which the regression analyses are done; (3) regional skew analysis, where a regional regression of at-streamgage skewness values is done to provide a regional estimate that is weighted with the at-streamgage skewness values in the frequency analysis; and (4) frequency analysis, where peak discharge quantiles at the selected AEPs are computed for each selected streamgage by fitting to the log-Pearson type III by a generalized method-of-moments method.

2.1.1 Streamgage Selection

The streamgages were chosen from the urbanized area of northeastern Illinois and nearby urbanized areas in northwestern Indiana and southeastern Wisconsin within hydrologic unit 0404, along with region 2 of Soong et al. (2004) (Figures 1a, 1b, and 3). In Indiana, the nearby urbanized area was selected as Lake and Porter counties, and in Wisconsin, as consisting of the 8-digit hydrologic unit 04040002 (Pike-Root) (Figures 1a and 1b). The decision to update only region 2 of Soong et al. (2004) as part of this study was in part made on the assumption that only this region includes substantial numbers of streamgages identified as rural drainage basins that contain substantial fractions of urbanized land use. This assumption is verified in Figure 4, which shows, for example, that 40% of gaged basins in region 2 used by Soong et al. (2004) had urbanized fractions greater than 20% as of the last year of record used by Soong et al. (2004), whereas only about 2% of gaged basins outside region 2 used by Soong et al. (2004) had such an urbanized fraction.

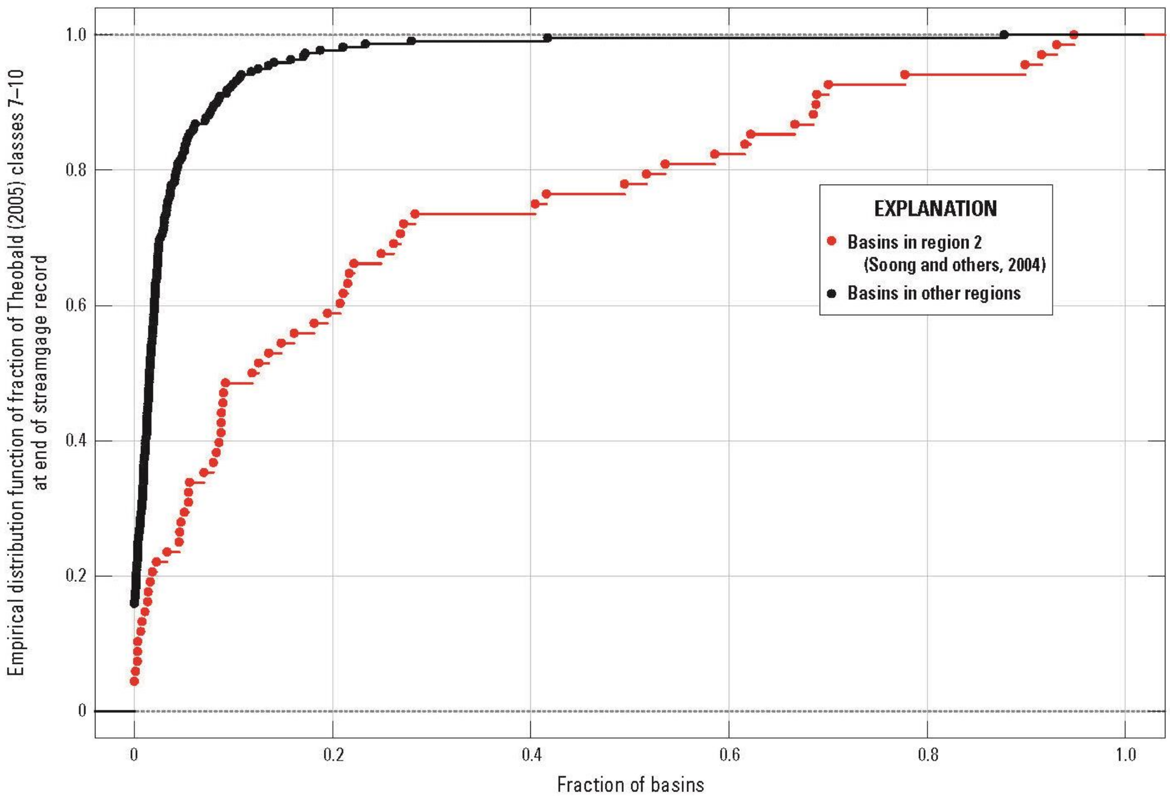


Figure 4. Empirical distribution functions of urbanized fraction of gaged basins in Illinois flood-frequency regions of Soong et al. (2004).

A minimum record-length criterion of 10 years of record between WYs 1940 and 2009 was applied when selecting stations. Water year 1940 was chosen as the starting point of the study period because that is the earliest year available in the housing density data of Theobald (2005) used to estimate historical urbanization in this study. Water year 2009 was chosen as the ending point of the study period for consistency with the analysis of Over et al. (2016).

The list streamgages with at least 10 years of record in the study area was screened to eliminate those with potential measurement accuracy issues, using several criteria. One was to refer to the list of streamgages used in the most recent published rural flood-frequency studies (Soong et al. (2004) in Illinois, Rao (2006) in Indiana, and Walker and Krug (2003) in Wisconsin). John Walker (USGS, written commun. 2013) also provided a list of streamgages being used in an ongoing flood-frequency study in Wisconsin. If a streamgage had been used in one of those studies, it was retained for this study unless specific problems were identified by data section staff at the Illinois, Indiana, or Wisconsin USGS Water Science Centers.

The 181 selected streamgages and some properties of their records and drainage basins are listed in Table 1. Histograms of the annual maximum peak discharge record properties at the selected streamgages are shown in Figure 5. These histograms show a maximum in streamgage records beginning around 1960 and ending around 1980, which were primarily CSGs on small (less than about 10 mi^2) drainage basins (Table 1). Histograms of the urban fractions of the streamgage drainage basins in Figure 6 show substantial urban fraction increases throughout the streamgage periods of record and further increases between the ends of the streamgage records and 2010. These urban fraction increases in urbanization underscore the nonstationary nature of the land use in the study basins and the need for adjustment to current (2010) conditions. Overall, drainage areas range from less than 0.01 mi^2 to more than 1000 mi^2, but the most are between 1 and 300 mi^2 (Figure 6).

Annual maximum peak discharge data for the selected stations were retrieved from the National Water Information System (U.S. Geological Survey 2013).

Table 1. Information regarding U.S. Geological Survey streamgages used in this study in northeastern Illinois and adjacent states.

[See Appendix 2.]

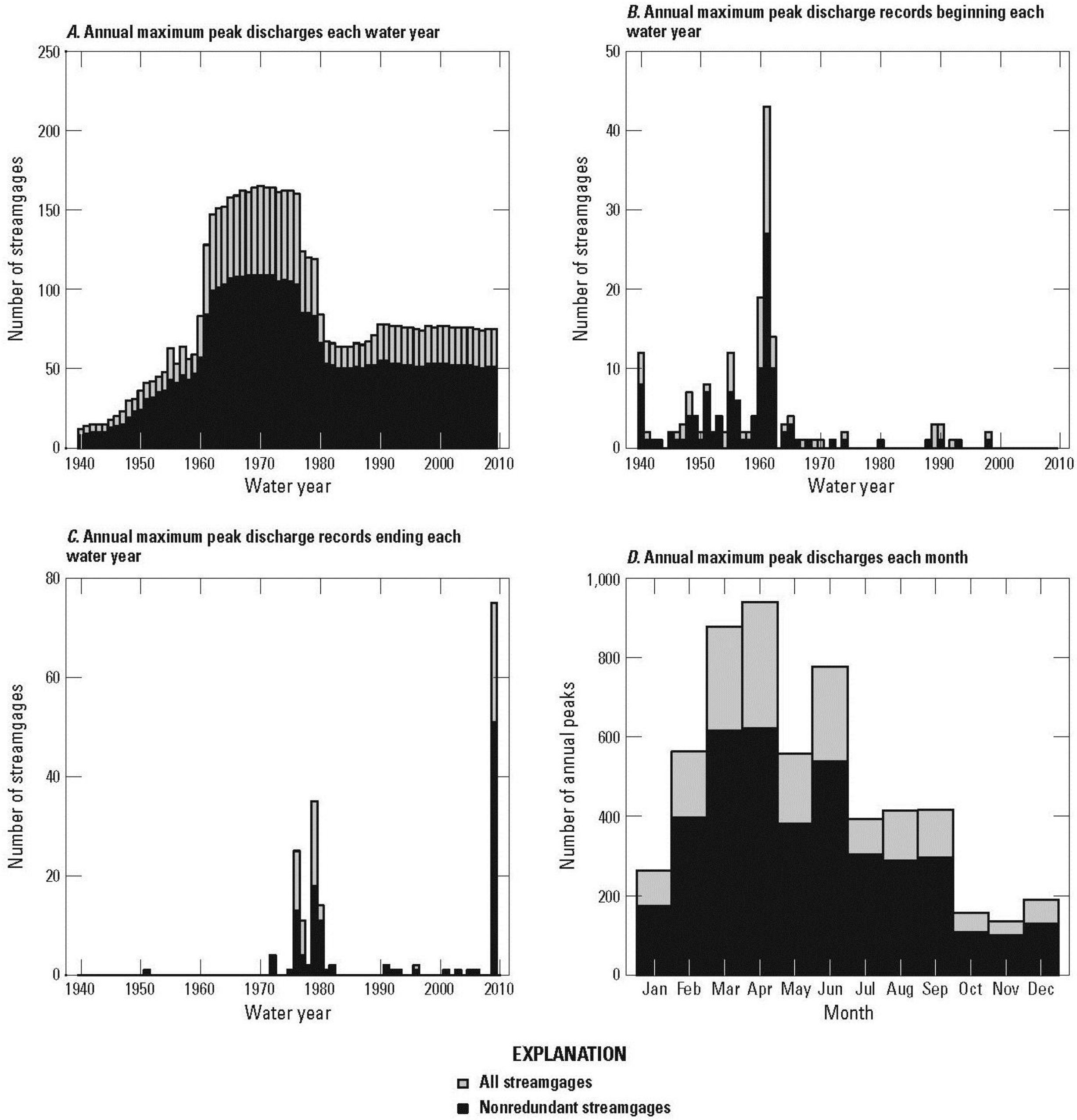


Figure 5. Properties of U.S. Geological Survey streamgage records used in this study in northeastern Illinois. (a) number of streamgages with annual maximum peak discharges each water year; (b) number of streamgages with annual maximum peak discharge records beginning each water year; (c) number of streamgages with peak discharge records ending each water year; (d) number of annual maximum peak discharges in each month of the year.

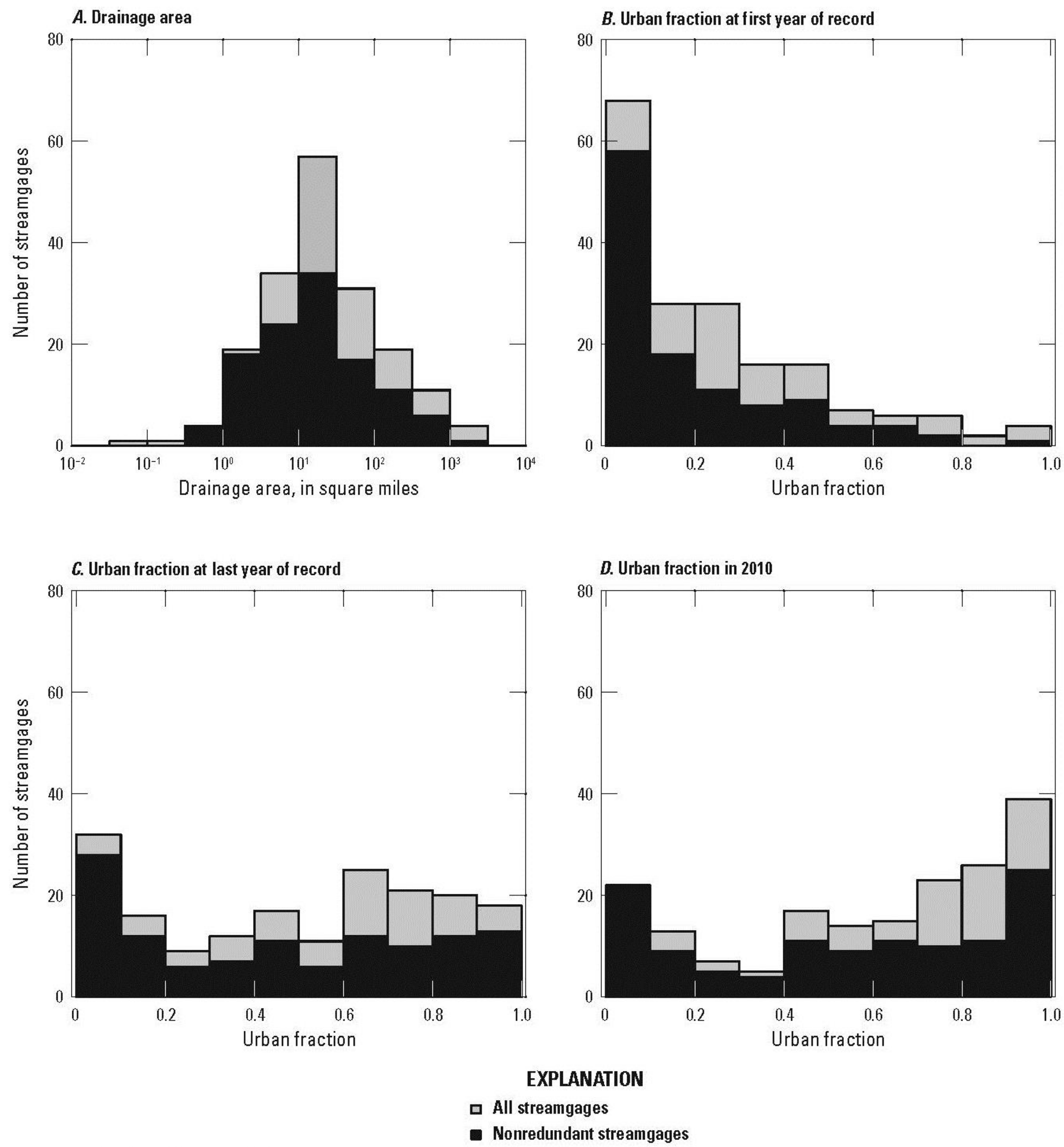


Figure 6. Properties of basins of U.S. Geological Survey streamgages used in this study in northeastern Illinois. (a) basin drainage areas, (b) urbanized basin fractions at first year of streamgage records, (c) urbanized basin fractions at last year of streamgage record, and (d) urbanized basin fractions in 2010, where urbanized is defined as Theobald (2005) housing density greater than 10 acres per house plus commercial/industrial/transportation land use.

2.1.2 Redundancy Analysis

The generalized least-squares analysis that is used to fit the regression models for the peak discharge quantiles that form the basis of the final results of this study allows for cross-correlation among the observed quantiles that is induced by temporal factors such as the same storm hitting two nearby basins and causing the annual maximum peak discharge for both. Generalized least-squares regression, however, does not account for correlation in the model error that arises when two nested basins have an appreciable overlap in drainage area (Veilleux 2009). When the overlap is large enough, one of the basins is considered redundant for purposes of regional regression modeling (Veilleux 2009). To address this issue, a redundancy analysis was carried out to determine an optimal nonredundant subset of the original 181 stations.

Because any one gaged basin may be nested within multiple other gaged basins or have multiple other gaged basins nested within it, a way to decide in what order basins should be removed was needed. For this study, the decision was made by assigning a score to each gaged basin based on its record length and drainage-basin properties and its amount of overlap with other gaged basins, removing the basin with the worst (highest) score, followed by re-computation of the scores, removing the remaining basin with the worst recomputed score, and proceeding in this way until no basin remained with an overlap fraction larger than 0.205, where the overlap fraction DAR_{ij} for two nested basins *i* and *j* is defined as

$$DAR_{ij} = \min\left[\frac{DA_i}{DA_j}, \frac{DA_j}{DA_i}\right], \qquad (1)$$

where DA_i and DA_j are the drainage areas of basins *i* and *j*, respectively.

Originally a maximum overlap fraction of 0.2 as suggested by Veilleux (2009) was chosen, but it was determined that a few basins could be retained by increasing the value slightly to 0.205. A script was written in R (R Core Team 2014) to implement this algorithm.

The details of computation of the score are as follows: The score $S_i(t)$ for basin *i* at iteration step *t* is computed as the sum, $\sum_j s_{ij}(t)$, over all remaining basins *j* having basins overlap with basin *i*, where $s_{ij}(t)$, the subscore of basin *i* with overlapping basin *j* at step *t*, is computed as

$$s_{ij}(t) = DAR_{ij}\left[2 - RL_i/\max(RL)\right]\left[d_i(t) + 1\right], \qquad (2)$$

where

DAR_{ij} is the overlap fraction between basins *i* and *j* (equation 1),

RL_i is the record length of the streamgage at basin *i* in years,

max(*RL*) is the maximum record length in the dataset (70 years), and

$d_i(t)$ is the probability density value of the drainage area of station *i* at step *t* scaled to lie between 0 and 1.

Based on their definitions, DAR_{ij} lies between 0 and 1, $2 - RL_i / \max(RL)$ between 1 and 2, and $d_i + 1$ between 1 and 2. The effect of each of the factors making up the subscore s_{ij} on its value is as follows: (a) with more overlap of basin areas, DAR_{ij} is larger, and so is s_{ij}; (b) with shorter record length RL_i, $2 - RL_i / \max(RL)$ is larger and so is s_{ij}; and (c) when the drainage area of basin *i* is at a larger density value (where there are many basins of similar drainage areas), d_i is larger and so is s_{ij}; consequently, larger basin overlaps, shorter records, and larger drainage area overlaps raise the subscore and therefore the score, making the associated streamgage more likely to be removed.

The result of applying this algorithm was to remove 64 of the original 181 to leave 117 nonredundant streamgages, of which 56 were CSGs throughout their peak discharge record, 10 were CSGs during part of their peak discharge record, and 51 had continuous record throughout their peak discharge records. These 117 streamgages were used for all subsequent analyses. Streamgages that were used and streamgages that were considered redundant are indicated in the study area maps (Figures 1a and 1b), the histograms describing the basic properties of the streamgage records and their basins (Figures 5 and 6), and in the table listing the basic properties of the streamgage records and their basins (Table 1).

2.1.3 Regional Skew Analysis

Although the Expected Moments Algorithm (EMA) (Cohn et al. 1997, 2001) used in this study to obtain estimates of the peak discharge quantiles generalizes the method-of-moments method of Bulletin 17B (U.S. Interagency Advisory Committee on Water Data 1982), it still relies on estimates of the mean, variance, and skewness of the logarithms of the annual maximum peak discharge data at each streamgage. Of these moments, the skewness, because it involves raising the data values to the third power, is very sensitive to extreme values and thus has a large uncertainty when estimated from the data at a single site. Therefore, weighting at-site and regional skew estimates in inverse proportions to their uncertainties to obtain a weighted skew estimate was recommended in Bulletin 17B and continues to be recommended. Because the map in Bulletin 17B showing a grid of regional skew values has become outdated, newer and more refined maps have been created, such as the one in Soong et al. (2004) for Illinois. These maps, however, do not address the effects of urbanization. Furthermore, a new approach to the estimation of regional skew through Bayesian generalized least-squares (GLS) analysis has been developed (Reis et al. 2005; Gruber et al. 2007; Gruber and Stedinger 2008; Veilleux 2011) that has shown the ability to reduce the uncertainty in regional skew estimates and allows the regional skew estimate to take into account basin characteristics where applicable.

Details of the new approach and its application in this study are given in Appendix 1. The data analyzed was the annual maximum peak discharges at the nonredundant streamgages adjusted to 2010 urbanization conditions. The selected regional skew model is dependent on the urban fraction as measured by the *NLCD*_22_23_24 variable; that is, the sum of fractions of National Land Cover Database (NLCD) 2011 classes 22 (developed, low intensity), 23 (developed, medium intensity), and 24 (developed, high intensity), according to the linear relation:

$$\hat{\gamma}_R = -0.39 + 0.97 NLCD\_22\_23\_24^{1/2}, \tag{3}$$

where $\hat{\gamma}_R$ is the regional skewness.

Skewness increases substantially with urbanization from a value of –0.39 for a basin with no urbanization (*NLCD*_22_23_24 = 0) to –0.39 + 0.97 = 0.58 for a basin where the *NLCD*_22_23_24 fraction is 100%. The skewness estimate from this relation was combined with the at-site skew according to their associated uncertainties to obtain a weighted skew estimate for use in obtaining the at-site peak discharge quantile estimation as described in the Frequency Analysis section.

2.1.4 Frequency Analysis

The peak discharge quantiles with AEPs of 0.50, 0.20, 0.10, 0.04, 0.02, 0.01, 0.005, and 0.002 for redundant and nonredundant streamgages (Table 2) were computed by applying the EMA approach (Cohn et al. 1997, 2001), along with the Multiple Grubbs-Beck test (Cohn et al. 2013) to detect and remove PILFs, to the annual maximum peak discharges adjusted to 2010 urbanization conditions as described in the Temporal Analysis and Adjustment section below. The EMA methodology generally follows guidelines provided in Bulletin 17B of the U.S. Interagency Advisory Committee on Water Data (1982) by using the log-Pearson Type III distribution fitted by the method-of-moments for estimating discharge frequency; however, the EMA methodology provides updated procedures for incorporating historical and censored peak discharges. Use of the EMA approach and the Multiple Grubbs-Beck test are as recommended by the Hydrologic Frequency Analysis Work Group (http://acwi.gov/hydrology/Frequency/HFAWG-B71B-Recommended-Rev-SOH-12June2013-revised-final.pdf). Software developed by the USGS to analyze peak discharge data (PeakFQ version 7.1) was used for these computations (Veilleux et al. 2013).

As part of the frequency analysis, the skewness values for each streamgage were computed as a weighted average $\hat{\gamma}_W$ of the station and regional skew values following the method suggested in Bulletin 17B (U.S. Interagency Advisory Committee on Water Data 1982):

$$\hat{\gamma}_W = \frac{AVP[\hat{\gamma}_R]*\hat{\gamma}_S + MSE[\hat{\gamma}_S]*\hat{\gamma}_R}{AVP[\hat{\gamma}_R] + MSE[\hat{\gamma}_S]}, \quad (4)$$

where

$\hat{\gamma}_W$ is the weighted skewness,

$\hat{\gamma}_R$ is the regional skewness computed as described in the Regional Skew Analysis section and in Appendix 1,

$\hat{\gamma}_S$ is the station skewness computed by using the EMA approach as implemented in PeakFQ for each streamgage,

$AVP[\hat{\gamma}_R]$ is the average variance of prediction of the regional skewness computed as described in Appendix 1, and

$MSE[\hat{\gamma}_S]$ is the mean square error of the at-site skewness, which also is computed by using the EMA approach as implemented in PeakFQ.

Table 2. Estimated peak discharge quantiles for 181 streamgages in northeastern Illinois and adjacent states, at selected annual exceedance probabilities.

[See Appendix 3.]

2.2 BASIN CHARACTERISTICS

The starting point in defining basin characteristics for regional statistical analyses is to delineate the basin boundaries. Following delineation, basin characteristics for this study were computed following two main approaches. The first was the traditional approach in projects of this type, using spatially averaged or basin-wide properties such as drainage area, fractions of various land uses and soil types, average soil properties, and physiographic properties such as basin slope. The second approach was to develop and analyze spatially distributed basin characteristics based on properties of estimated instantaneous unit hydrographs (for example, Grimaldi et al. 2010). The spatially distributed approach was proposed as a way to see if the effects of basin shape and the location, not just the amount, of different types of hydrologically relevant characteristics such as urbanized areas and open water and wetland on flood-frequency characteristics were significant and could improve flood-frequency prediction. Preliminary results with the spatially distributed approach were not promising and as a result it was dropped from further consideration. As this approach was not used in the final results, it is not discussed further in this report.

2.2.1 Basin Delineation

Most basins were delineated by using the online Illinois StreamStats application (http://streamstats.usgs.gov), which is based on Environmental Systems Research Institute's (Esri's) Arc Hydro Tools software (Maidment 2002). Illinois StreamStats uses the 1:100,000-scale National Hydrography Dataset (NHD) for hydrography and the 30-meter National Elevation Dataset (NED) resampled to a 10-meter resolution for elevation information for Illinois, Wisconsin, and Indiana. Seven Indiana basins were delineated using the Indiana StreamStats application, a similar application to Illinois StreamStats, because the results were slightly better in delineating the Kankakee River than the Illinois StreamStats results. Eight Wisconsin basins in the hydrologic unit 0404 (Lake Michigan) were provided by the Wisconsin Water Science Center because the Illinois StreamStats does not cover that area and Wisconsin StreamStats did not exist at the time of the analysis. Resulting drainage areas from the Illinois StreamStats application were compared to the drainage areas of hand-drawn boundary (HDB) basin delineations, which are considered to be the most accurate delineation type. For those basins with discrepancies larger than about 10%, it was decided that the HDB delineations were preferable. These basins are usually small urban basins with records that ended around 1980, where it is difficult to determine basin boundaries because of urban development and the related potential for later modifications to the hydrography and topography.

2.2.2 Spatially Averaged Basin Characteristics

A common challenge in projects of this type is to select among the many basin characteristics that are available in GIS databases. As this project is in part an update of the regional regression equations for region 2 from the rural flood-frequency study by Soong et al. (2004), which used spatially averaged basin characteristics, it was decided to simplify the process of the selection of basin characteristics by considering only the categories of characteristics used by Soong et al. (2004) in that region, which were drainage area, slope, and wetland-open water fraction, plus measures of urbanized area (Table 3).

The slope variable used in Soong et al. (2004) is main channel slope. The determination of the main channel requires sometimes lengthy computations in StreamStats and is in any case ambiguous, so alternative slope variables were considered for this study. These alternatives included the basin average of digital elevation model (DEM) slopes, the basin average of the State Soil Survey Geographic Database (SSURGO) soil slopes, and basin slope computed as maximum–minimum basin elevations divided by basin perimeter (Table 3).

The wetland-open water variable used in Soong et al. (2004) was the percentage of water and herbaceous wetland from the 2001 NLCD (Soong et al. 2004, p. 16). Additional open water and wetland variables derived from the 2011 NLCD, National Wetlands Inventory (NWI), and SSURGO were considered in this study (Table 3).

The urbanized area variable used for temporal analysis and adjustment of the annual maximum peak discharge records (Over et al. 2016) was derived from a year 2000 U.S. Census housing density database developed by David Theobald (Theobald 2005). For the spatial modeling of the peak discharge quantiles, it was preferred that the urbanization variable be something that is regularly updated; therefore, developed area fractions and impervious percentage from the 2011 NLCD were chosen, with the Theobald housing density urbanization estimates retained for comparison (Table 3).

Table 3. Spatially averaged basin characteristics considered for developing spatial regression equations in this study in northeastern Illinois.

[See Appendix 4.]

CHAPTER 3: REGIONAL TEMPORAL ANALYSIS AND ADJUSTMENT

The purpose of the temporal analysis of the annual maximum peak discharges is to provide a means of adjusting the peak discharge records from the streamgages used in the study to their levels of urbanization at a common year (2010). This adjustment is needed to provide approximately stationary and contemporary streamgage records. The method of the analysis is to use regression to determine values of coefficients that characterize the regional average effect of urbanization on peak discharge quantiles as a function of exceedance probability in Illinois flood-frequency region 2. The coefficients also are used to develop factors for adjusting estimates of peak discharge quantiles in other regions of Illinois for the effect of urbanization. The adjusted annual maximum discharges and associated peak discharge quantiles also are made available herein for general use (see Table 2 for quantiles and Table 6 for discharges).

The effects of changes in urbanization in a streamgage record are potentially problematic in a regression analysis of peak discharge quantiles on basin characteristics for at least two reasons. One is that peak discharge records on basins with substantial changes in the fraction of urbanization over the streamgage period of record are difficult to use because no single value of urbanization fraction characterizes the entire record. The second is that historical urbanization information is needed to characterize the urban fraction of records that ended some time ago and urbanization of their basins continued after the records ended. Because both of these situations are fairly common in the study region (Figure 6), a method for adjustment of peak discharge records to their levels of urbanization at a common year was needed if such stations were going to be included in the study.

The methods used here for temporal analysis and adjustment were described by Over et al. (2016); a summary of the application of their method in this study follows. Over et al. use a two-step regression method applied to annual maximum peak discharge records as a function of contemporaneous urbanization and precipitation. In the first step, after breaking the peak discharge records into segments at the time of major abrupt changes in the basins, if any, ordinary least-squares (OLS) regression is used to estimate an intercept for each segment. In the second step, after subtracting the segment intercepts to homogenize the data across all the segments, the homogenized data is analyzed with quantile regression, which provides regional urbanization and precipitation coefficients for a sequence of AEPs and a means of assigning AEPs to each flood-discharge observation. The urbanization coefficient for the AEP assigned to each peak discharge observation is then used to adjust the observation to the estimated 2010 urbanization level in the basin where it was observed. Adjustment for changes in precipitation was not implemented because, unlike changes in urbanization, changes in precipitation are highly uncertain and may reverse themselves in the future.

3.1 DATA USED IN THIS ANALYSIS

In addition to the annual maximum peak discharge data from the nonredundant streamgages, three types of data were used for the temporal analysis and adjustment method applied in this study: (1)

historical urbanization, (2) precipitation associated with each peak discharge, and (3) information on reservoirs and other structural flood-control measures such as channelization.

The historical urbanization data used, as in Over et al. (2016), were those of Theobald (2005), which are 1940–2010 decadal housing density data based on the 2000 U.S. Census for 10 categories of housing density (including undeveloped) plus nonhousing urbanization (commercial, industrial, and transportation) (Figure 3). Theobald's nonhousing urbanization estimates, which are constant year 2000 values, were adjusted in proportion to changes in housing density for each basin according to a technique presented in Over et al. to obtain 1940–2010 decadal estimates. Following Over et al., the decadal values of housing density classes 7–10 (Figure 3), which encompass areas with housing densities of no more than 10 acres per unit plus adjusted nonhousing urbanization, were linearly interpolated to annual values and used as the urbanization measure for the temporal analysis and adjustment in this study.

To account for effects of trends in precipitation alongside the effects of urbanization on peak discharges, precipitation values were estimated for each observed peak discharge used in this study. Because the density of daily precipitation gages is much higher than that of hourly gages, daily data were used. Three sets of daily precipitation data were used for the estimates: (1) National Weather Service (NWS) cooperative network (COOP) stations in the study area; (2) the Cook County Precipitation Network (CCPN) (Westcott 2015); and (3) precipitation data collected by the Argonne National Laboratory (http://www.atmos.anl.gov/ANLMET, accessed March 10, 2011). Data from COOP were downloaded from the Midwestern Regional Climate Center (MRCC) Applied Climate System (MACS) at http://mrcc.isws.illinois.edu/MACS. Missing data during the study period (WYs 1940–2009) were filled by using a weighted average of values at neighboring gages, where weights were determined by an inverse-distance weighting technique (Over et al. 2016). Precipitation data were distributed spatially by using Thiessen polygons (Thiessen 1911) (Figure 7), and daily values for the basin upstream from each streamgage in the study were computed as area-weighted average of the values in each Thiessen polygon overlying the basin. An estimate of the precipitation associated with each annual maximum peak discharge was obtained by selecting the maximum daily precipitation during the period from three days before to one day after the date of the peak discharge. Precipitation data dated after the peak discharge was used because NWS cooperative precipitation measurements typically are made during the early morning of the date assigned to the data, and therefore include precipitation from the previous day.

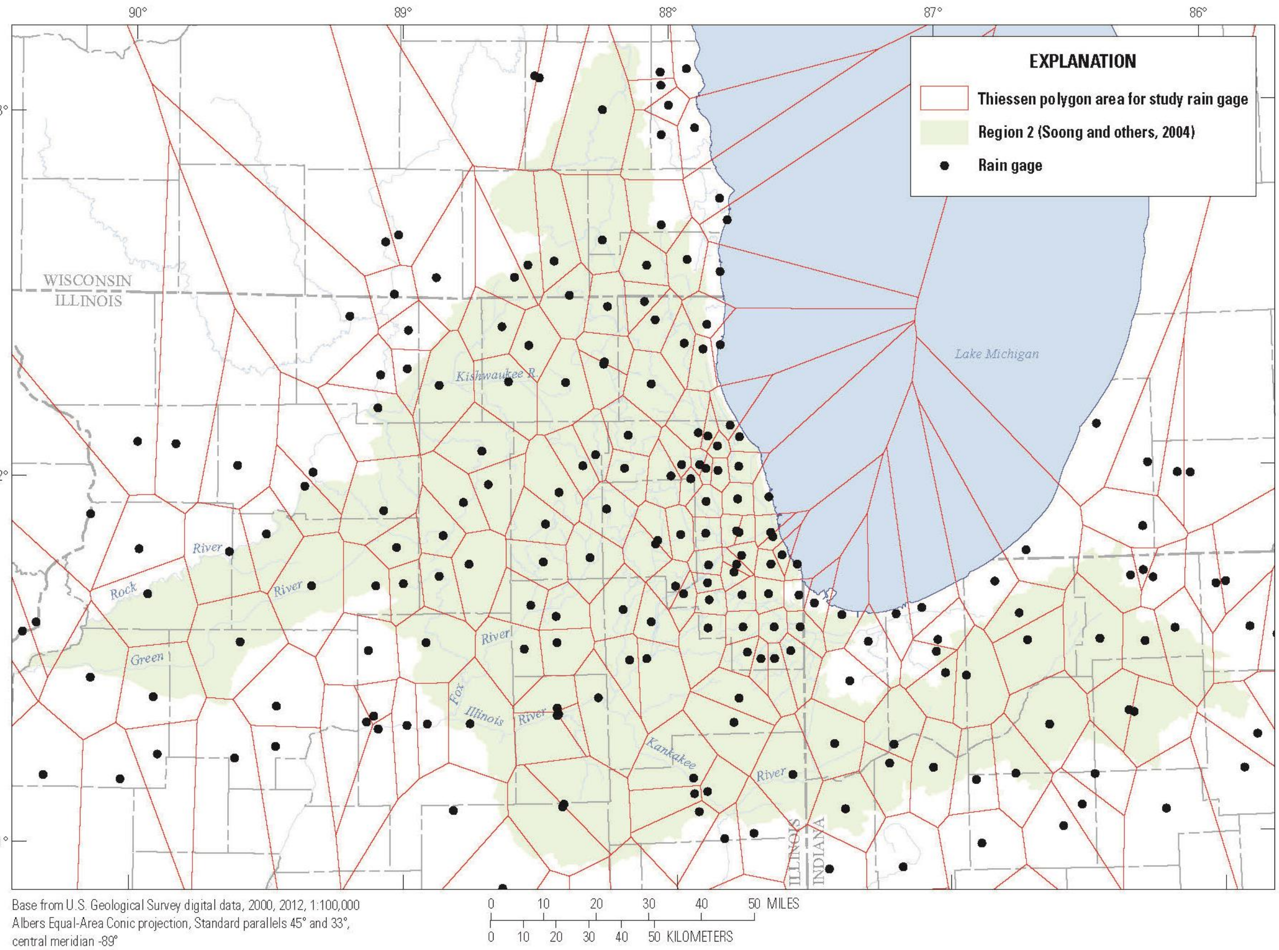


Figure 7. Locations of precipitation stations used in this study and their Thiessen polygons.

Information on reservoirs and other structural flood-control measures were obtained by accessing the National Inventory of Dams (NID), reviewing relevant reports, inquiring of various federal, state, county, and local agencies involved in flood control in northeastern Illinois, and searching historical imagery on Google Earth. By reviewing this information, reservoirs and other structural flood-control measures (for example, channelization) within the basins of the streamgages used in this study were determined. For the identified reservoirs, three particular quantities were obtained: (1) the year of construction, (2) the volumetric capacity, and (3) the basin area upstream of the reservoir or other flood-control measure.

The volumetric capacity and upstream area were used to estimate the magnitude of the hydrologic effect of the reservoir. When a reservoir controlling at least 10% of the streamgage drainage area and with a volumetric storage capacity divided by the streamgage drainage area of 0.40 inches or other substantial change in the effect of a basin’s structural flood-control measures was deemed to have changed during the period of record of a streamgage used in the study, the year of the change was dropped from the temporal analysis and the remaining record was broken into segments at that year. After the segment y-intercept values were obtained by a preliminary run of the first, ordinary least-squares (OLS), step of the temporal analysis procedure, if the intrastreamgage y-intercept values were anomalous (for example, showing a significant increase following the construction of a flood-control reservoir), further research was completed on the basin history. If no reason to explain the anomaly was found, the segment break where the anomaly occurred was dissolved and the record was re-connected. The final set of segments is presented in Table 4. According to Table 5, all but 18 of the 117 nonredundant streamgages have only one segment, and only three streamgage records were split into more than two segments. Peak discharges associated with segments shorter than 5 years, historic peak discharges, censored peak discharges, and peak discharges for which the date is not known also were dropped from the temporal analysis.

Table 4. Segment information for 181 U.S. Geological Survey streamgages used in this study, northeastern Illinois and adjacent states.

[See Appendix 5.]

Table 5. Number of segments per streamgage record used in regression analysis of peak discharge for 117 streamgages, northeastern Illinois and adjacent states.

Number of segments per streamgage record	>0	>1	>2	>3	>4
Number of records	117	18	3	2	0

3.2 TEMPORAL ANALYSIS OF URBANIZATION EFFECT

The annual maximum peak discharges at the nonredundant streamgages during the study period, separated into segments as necessary based on the construction of structural flood-control measures with certain years of data dropped as described in the Data Used in this Analysis section, along with associated precipitation and urban fraction values, constituted the database for the temporal analysis of the effect of urbanization (Table 6). The results of this analysis were used to adjust the annual maximum peak discharges to their urban factions at a common year (2010) based on an analysis to determine the regional effect of changes in urban fraction on peak discharge magnitude.

In addition to the peak discharge values dropped from the temporal analysis because of segment breaks, certain coded peak discharge values were also dropped. Peak codes as they appear in the peak discharge data downloaded from NWIS are given in table 6, column titled “NWIS peak codes”, and whether or not a particular peak discharge value was used in the temporal regression analysis to perform the urbanization adjustment is indicated in table 6, column titled “Discharge value used in adjustment regression”. As documented by those two columns of table 6, peak discharge values with codes of 1, 4, 7, 8, or B were dropped from the temporal regression analysis. These codes indicate that the published values are subject to censoring (codes 1, 4, 8), are historic peaks (code 7), or the date of the peak discharge event is not known (code B). These peak discharge values were nevertheless adjusted, and the adjusted values appear in table 6. These values also were used in the spatial regression analysis, because the spatial analysis does not require knowing the date of the event and the EMA methodology is designed to handle censored and historic values, as discussed in the Frequency Analysis section.

Table 6. Observed and urban-adjusted annual maximum peak discharges and associated urbanization and precipitation values at 181 streamgages in northeastern Illinois and adjacent states.

[See Appendix 6.]

The temporal analysis was carried out by the method described in Over et al. (2016), which follows a two-step linear regression technique suggested by Canay (2011), where the first step uses OLS regression to estimate intercepts for each segment of peak discharge data, and the second step applies quantile regression (Koenker 2005) to the peak discharge data with the segment intercept values subtracted. The segment intercepts are subtracted from the peak discharge observations to obtain segment-independent observations that are approximately homogeneous (that is, segment-independent), to which quantile regression can be applied. Quantile regression is used in the second step because it provides an estimate of the coefficients of the regression model for different quantiles (exceedance probabilities). Because of this property, the disparate effect of urbanization at different exceedance probabilities (Espey and Winslow 1974 and references therein; Allen and Bejcek 1979; Konrad 2003 and references therein; Over et al. 2016 and references therein) can be estimated, and the adjustment of the peak discharges to their urban fractions at a common year (2010) can take this disparate effect into account.

The independent variables in the two-step regression analysis are urban fraction and precipitation. Precipitation is used in the regression analysis not so that the peak discharges can be adjusted to a present (2010) precipitation regime, as it was beyond the scope of this study to establish one, but so that by including precipitation, trends that happened to exist in the precipitation causing the observed peak discharges would not be falsely interpreted as the effect of changes in the urban fraction.

The following linear regression model was used for the least-squares regression analysis and was the first step of the method:

$$y_i(t) = \hat{y}_i(t) + \varepsilon_i(t) = a_i + b_1 P_i(t) + b_2 U_i(t) + \varepsilon_i(t), i = 1, 2, \ldots, N, \quad (5)$$

where

$y_i(t) = \log_{10} Q_i(t)$ is the base-10 logarithm of the annual maximum peak discharge at the *i*th segment during year *t*,

$\hat{y}_i(t)$ is the fitted value of $y_i(t)$ according to the regression relation,

a_i is the intercept of the *i*th segment,

$P_i(t)$ and $U_i(t)$ are the precipitation and urban fraction, respectively, for the *i*th segment during year *t*,

b_1 and b_2 are the regression coefficients for precipitation and urban fraction, respectively, and

$\varepsilon_i(t) = y_i(t) - \hat{y}_i(t)$ is the regression error for the *i*th segment during year *t*.

Notice there is one intercept for each segment, whereas there is only one value of each of the coefficients; therefore, they are estimated from the effect of precipitation and urbanization on all the segments combined, and are equivalent in value to an uncertainty-weighted mean of the coefficients of segment-by-segment least-squares regression analysis (Frees 2004, p. 32). Therefore, the segment intercepts contain all the information that distinguishes one segment from another; the effects of urbanization and precipitation, captured in their coefficients in equation 5, are assumed to be the same for all segments. The computation of the regression model was done in R (R Core Team 2014) using the plm function from the plm package (Croissant and Millo 2008).

The coefficients obtained by fitting the regression relation (equation 5) are given in Table 7, and the values of the intercepts for each segment are given with the other segment information in Table 4 and are plotted in Figure 8. As can be seen from the linear relation with limited scatter in Figure 8, the segment intercept values are mostly but not completely explained by drainage area. According to the coefficients in Table 7, there is a small, positive effect of precipitation, which is highly significant because the magnitude of the coefficient is much larger than its standard error (SE). The urban fraction coefficient is also positive but larger and also highly significant. Because the regression relation is of the form $\log_{10} Q = a + b_2 U$, the ratio of peak discharge for two different values of urban fraction U_1 and U_2 at the same site is given by $Q_2 / Q_1 = 10^{b_2(U_2 - U_1)}$, the value of the urban fraction coefficient b_2 indicates that for a 10% increase in urban fraction, ratio of peak discharges is $Q_2 / Q_1 = 10^{b_2(0.10)} = 10^{0.5079*0.10} = 1.124$, or about a 12% increase. Although the urbanization coefficient from this step of the analysis method is not used for adjustment of the peak discharges, the median value from the results of the next step is quite similar, so this coefficient gives an approximation of the average result.

Table 7. Results of ordinary least-squares linear regression of 117 streamgages in northeastern Illinois and adjacent states to diagnose the temporal effects of urbanization and precipitation on annual maximum peak discharges in this study.

Precipitation coefficient b_1	Precipitation coefficient SE	Urban fraction coefficient b_2	Urban fraction coefficient SE	Weighted mean dummy variable (log units)
0.110	0.005	0.508	0.042	2.388[a]

[a]See equation 6 for the computation of the weighted mean dummy variable value. [SE, standard error]

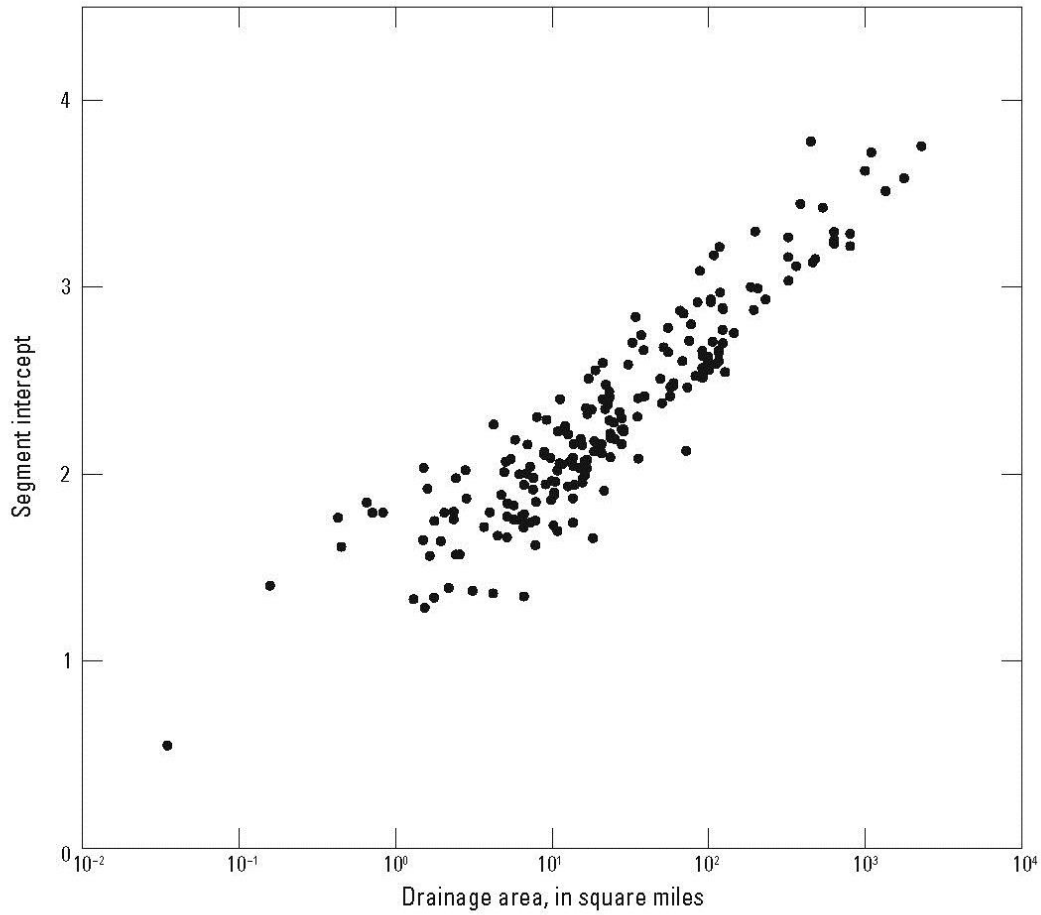


Figure 8. Segment intercepts as a function of drainage area for 181 streamgages used in this study in northeastern Illinois.

In the second, quantile regression-based, step of the method, the distinction between the segments is removed by subtracting the applicable segment intercept value from the dependent variable values for each segment; that is,

$$y'_k = y_i(t) + \bar{a} - a_i, \tag{6}$$

where $\bar{a} = \sum_i T_i a_i \Big/ \sum_i T_i$, where T_i is the number of observations in the ith segment, is the weighted mean of the segment intercepts obtained from the least-squares regression.

The independent variables are again the urban fractions and precipitation values associated with each peak discharge.

The quantile regression model is as follows:

$$y'_k = \hat{y}'_k(p) + \varepsilon'_k(p) = a'(p) + b'_1(p)P_k + b'_2(p)U_k + \varepsilon'_k(p), \tag{7}$$

where

p is an element of a sequence of AEPs (Table 8),

$\hat{y}'_k(p)$ is the fitted value of the quantile with *AEP* = *p* of the *k*th log-transformed peak discharge value y'_k,

$a'(p)$ is the intercept of the fitted linear relation between $\hat{y}'_k(p)$ and the independent variables,

P_k and U_k are the precipitation and urban fraction, respectively, of y'_k,

$b'_1(p)$ and $b'_2(p)$ are the quantile regression coefficients as a function of *p* (*AEP*) for precipitation and urban fraction, respectively, and

$\varepsilon'_k(p) = y'_k - \hat{y}'_k(p)$ is the regression error for the *k*th observation at *AEP* = *p*.

This model was solved with the rq function of the quantreg package (Koenker 2013) of the R language.

Two post-processing steps were applied to obtain the final quantile regression coefficients and their standard errors (SEs). First, a bootstrap resampling approach suggested by Canay (2011) was applied to obtain SEs and unbiased mean coefficient values. Second, a continuous and monotonic version of the bootstrap mean urban fraction coefficients as a function of exceedance probability was obtained by fitting a seventh-order polynomial. The original and bootstrap mean and SE values for all the quantile regression coefficients, along with the fitted urban fraction coefficients, are given in Table 8, and the three sets of urban fraction coefficients are plotted in Figure 9. A subset of the urbanization coefficients at the AEPs of the standard flood-frequency quantiles are given in Table 9.

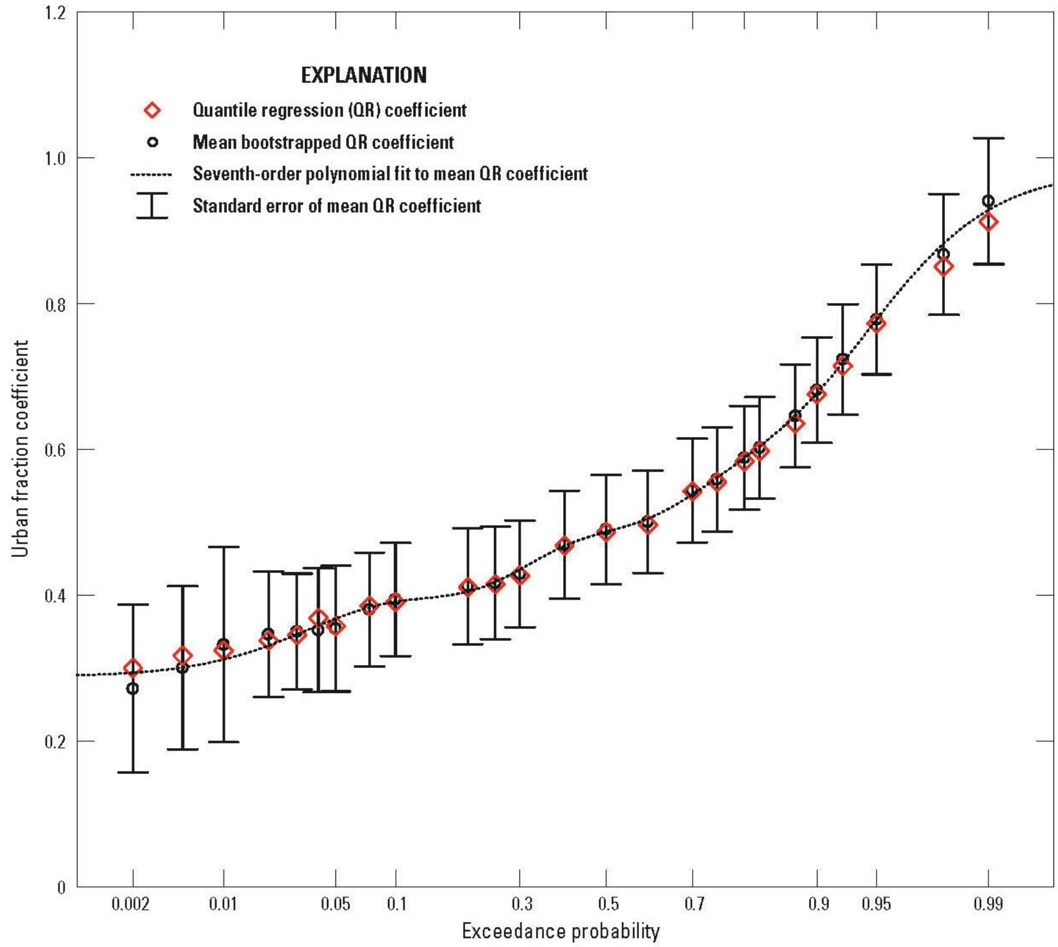


Figure 9. Urban fraction coefficients from temporal regression analysis of 117 streamgages in northeastern Illinois and adjacent states, as a function of exceedance probability.

Table 8. Quantile regression coefficients from temporal analysis of 117 streamgages in northeastern Illinois and adjacent states, as a function of annual exceedance probability.

[See Appendix 7.]

Table 9. Quantile regression coefficients of urban fraction from temporal analysis of 117 streamgages in northeastern Illinois and adjacent states, at selected annual exceedance probabilities.

AEP	0.5	0.2	0.1	0.04	0.02	0.01	0.005	0.002
Coefficient	0.487	0.405	0.391	0.359	0.331	0.312	0.301	0.294
Standard error	0.075	0.080	0.078	0.085	0.086	0.134	0.112	0.115

[AEP, annual exceedance probability]

The results in Tables 7–9 indicate that the median urban fraction and precipitation coefficients are quite similar to the values computed by the OLS regression carried out in the first step of the analysis, with values of about 0.5 and 0.1. Results in these tables indicate that the precipitation coefficient varies only slightly with exceedance probability, whereas the urban fraction coefficient has a strong, mostly monotonic trend with exceedance probability, from a maximum value of 0.929 at an exceedance probability of 0.99 down to 0.294 at an exceedance probability of 0.002. The dependence of the urban fraction coefficient on exceedance probability gives direct empirical evidence that urbanization in the study area affects the magnitudes of the more common, large exceedance probability peak discharges more than it does the rarer, small exceedance probability peak discharges.

3.3 ADJUSTMENT OF PEAK-FLOOD VALUES TO CURRENT (2010) URBAN FRACTIONS

Following the application of the two-step method to obtain exceedance probability-dependent urbanization and precipitation coefficients, each peak discharge is assigned an exceedance probability by a procedure described in Over et al. (2016). This procedure was developed to adjust only for urbanization and therefore reduces the three-dimensional $\log_{10} Q$, *U*, and *P* space in which the least-squares and quantile regressions were carried out to a two-dimensional $\log_{10} Q$ and *U* space in which the quantile regression results are a set of lines in that space (Figure 10), where the diminishing effect of urbanization on the larger, rare floods can be seen graphically.

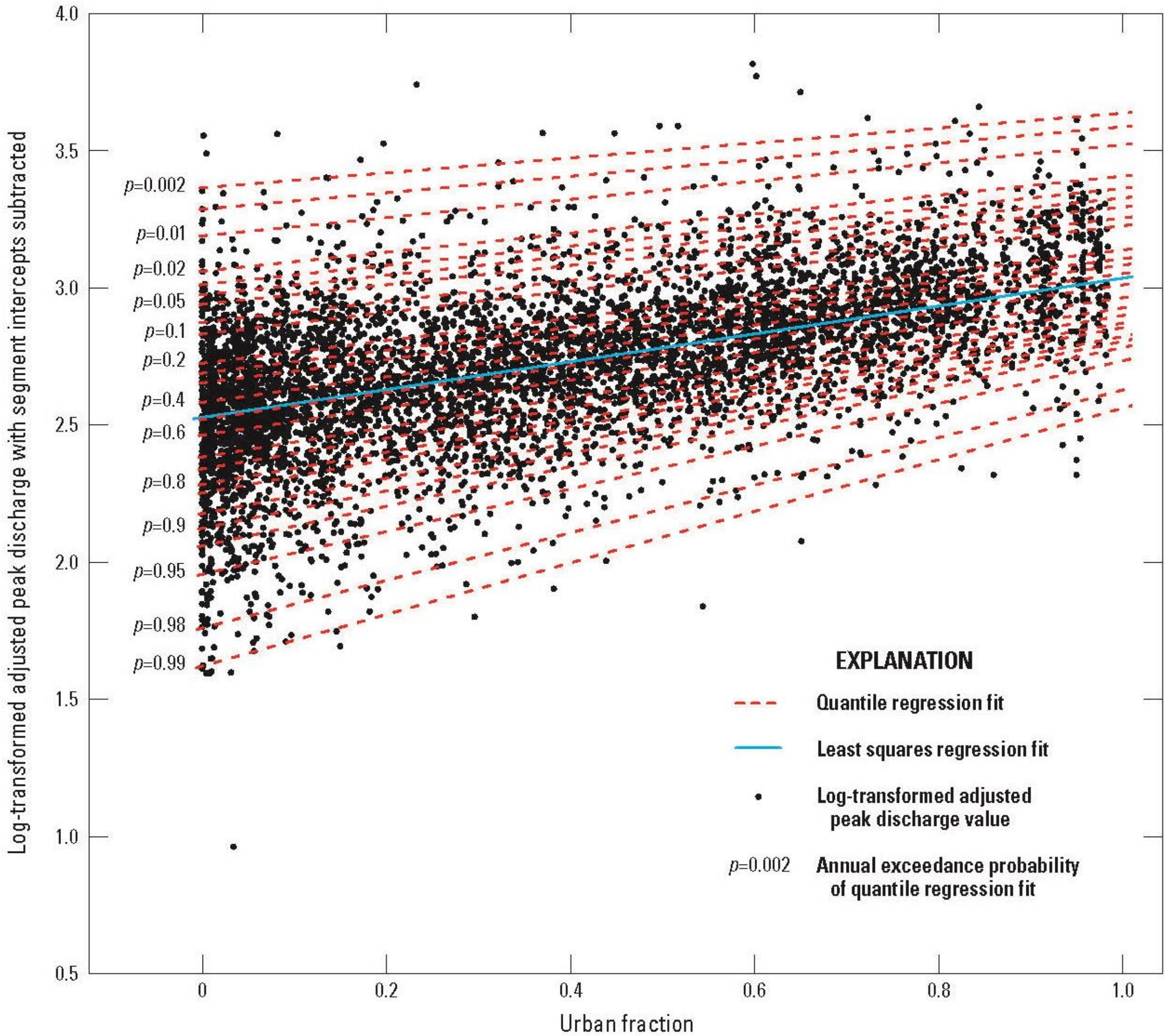


Figure 10. Segment intercept-subtracted log-transformed annual maximum peak discharge from 181 streamgages in northeastern Illinois and adjacent states as a function of urban fraction, with quantile regression and least-squares regression line fits.

Using the exceedance probability assigned to each peak discharge observation and the continuous urban fraction coefficient function $\bar{b}_2''(q)$, the annual maximum peak discharges were adjusted to the 2010 urban fraction obtained from the Theobald (2005) data by using the following equation applied to each streamgage record segment *i*:

$$y_i''(t) = a_i^* - a_i + y_i(t) + \bar{b}_2''(q)\left[U_i(t^*) - U_i(t)\right], \tag{8}$$

where

$y_i''(t)$ and $y_i(t)$ are the base-10 logarithm of the adjusted and unadjusted, respectively, peak discharge value for year *t* and segment *i*,

a_i^* and a_i are the segment intercept values for the most recent and current segments, respectively, of the streamgage record containing segment *i*,

$\bar{b}_2''(q)$ is the urban fraction coefficient value corresponding to the exceedance probability *q* assigned to the peak discharge value $y_i(t)$, and

$U_i(t^*)$ and $U_i(t)$ are the urban fraction values for basin corresponding to segment *i* during the year t^* to which the peak discharges are being adjusted (here, 2010) and the year *t* of the observation of the peak discharge $y_i(t)$, respectively.

Notice that if a streamgage record has only one segment, then $a_i^* = a_i$ and the quantity $a_i^* - a_i$ drops out.

For the peak discharges and censoring levels that were dropped from the temporal analysis, where the correct segment could be determined, the adjustment method allows those values also to be adjusted so that these data can be used for at-site frequency analysis. For peak discharge values between two segments, the adjustment was interpolated. As a result, only peak discharge values associated with segments shorter than five years were not adjusted and thus were dropped from the at-site frequency analysis.

The set of adjusted values $Q_i''(t) = 10^{y_i''(t)}$ and the assigned exceedance probability values, *q*, on which the adjustment depends are given in Table 6. The effects of the adjustment on mean, standard deviation, and skewness of the log-transformed peak discharges at each streamgage in the study are shown in Figure 11. The change in mean, which results from adjusting peaks with urban fractions less than the 2010 value upward, is almost always positive, and the change in standard deviation, which results from removal of urban fraction-induced trends in peak discharge in the observed data by the adjustment process and from the adjustment of smaller peak discharges more than larger ones, is almost always negative. The skewness increases more often than it decreases, also showing the effect of adjustment smaller peaks more than larger ones. The overall increase in skewness as peaks are adjusted to more urbanized conditions is also consistent with the increase in skewness with urban fraction determined in the spatial analysis, as discussed in the Regional Skew Analysis section and Appendix 1.

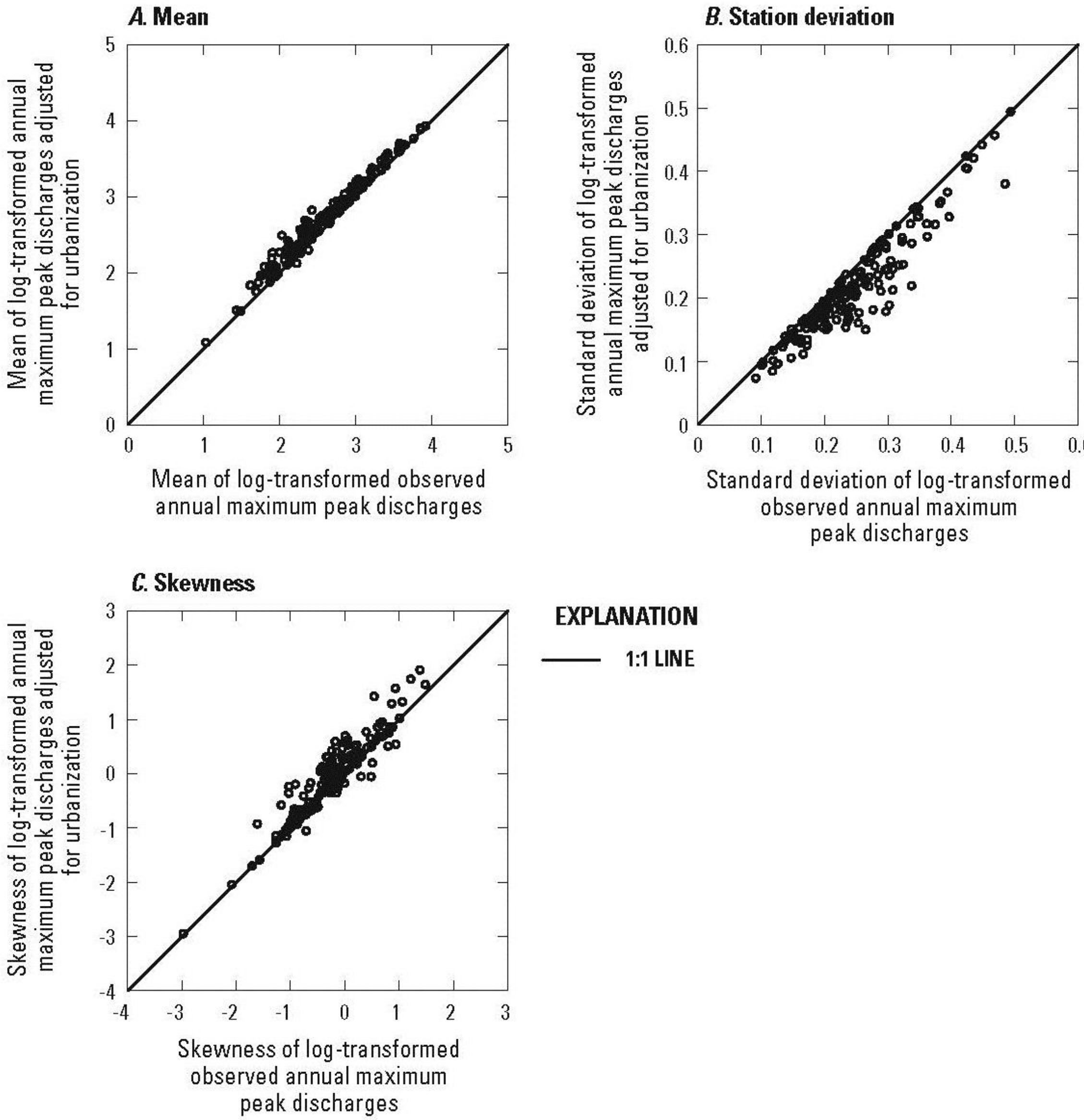


Figure 11. Changes in the mean, standard deviation, and skewness of the log-transformed annual maximum peak discharge records for 181 streamgages used in this study in northeastern Illinois, resulting from adjustment to 2010 urban fraction values.

CHAPTER 4: REGIONAL SPATIAL REGRESSION ANALYSES

After the annual maximum peak discharges were adjusted to their levels of urbanization at a common year (2010) as described in the Regional Temporal Regression Analysis and Adjustment section, peak discharge quantiles for the selected AEPs were computed as described in the Flood Frequency section, including weighting with the regional skew model developed for this study. The computed quantiles constitute the dependent variable for the spatial regression analyses; the spatially averaged basin characteristics developed as described in the Spatially Averaged Basin Characteristics section constitute the independent variables.

4.1 SELECTION OF BASIN CHARACTERISTICS

The predictive capability of the basin characteristics in each category (Table 3) were investigated by fitting weighted least-squares (WLS) linear regression models with regression weights in proportion to record length for each AEP for all possible combinations of basin characteristics where at most one variable is selected from each category with $\log_{10}$-transformed drainage area always included. An R script (R Core Team 2014) was written to do the regression computations. The general form of the regression models fitted in this investigation was:

$$\log_{10} Q_p = (\beta_0)_p + (\beta_A)_p \log_{10} A + (\beta_U)_p (U + c_2)^{d_2} + (\beta_W)_p (W + c_3)^{d_3} + (\beta_S)_p (S + c_4)^{d_4}, \quad p = 0.50, 0.20, 0.10, 0.05, 0.02, 0.01, 0.005, 0.002 \qquad (9)$$

where

Q_p is the estimated peak discharge quantile with weighted skew in ft^3/s with annual exceedance probability *p*,

$(\beta_0)_p$, $(\beta_A)_p$, $(\beta_U)_p$, $(\beta_W)_p$, and $(\beta_S)_p$, are coefficients estimated by the WLS procedure,

A is the drainage area in square miles,

U is an urbanization measure,

W is a basin water and wetness measure,

S is a basin slope measure,

d_2, d_3, and d_4 are exponents used to transform the distribution of urbanization, water and wetness, and slope measures, respectively, to an approximately Gaussian shape ($d_i = 1, 1/2, 0$, where 1 implies no transformation, 1/2 a square-root transformation, and 0 a $\log_{10}$-transformation were tested), and

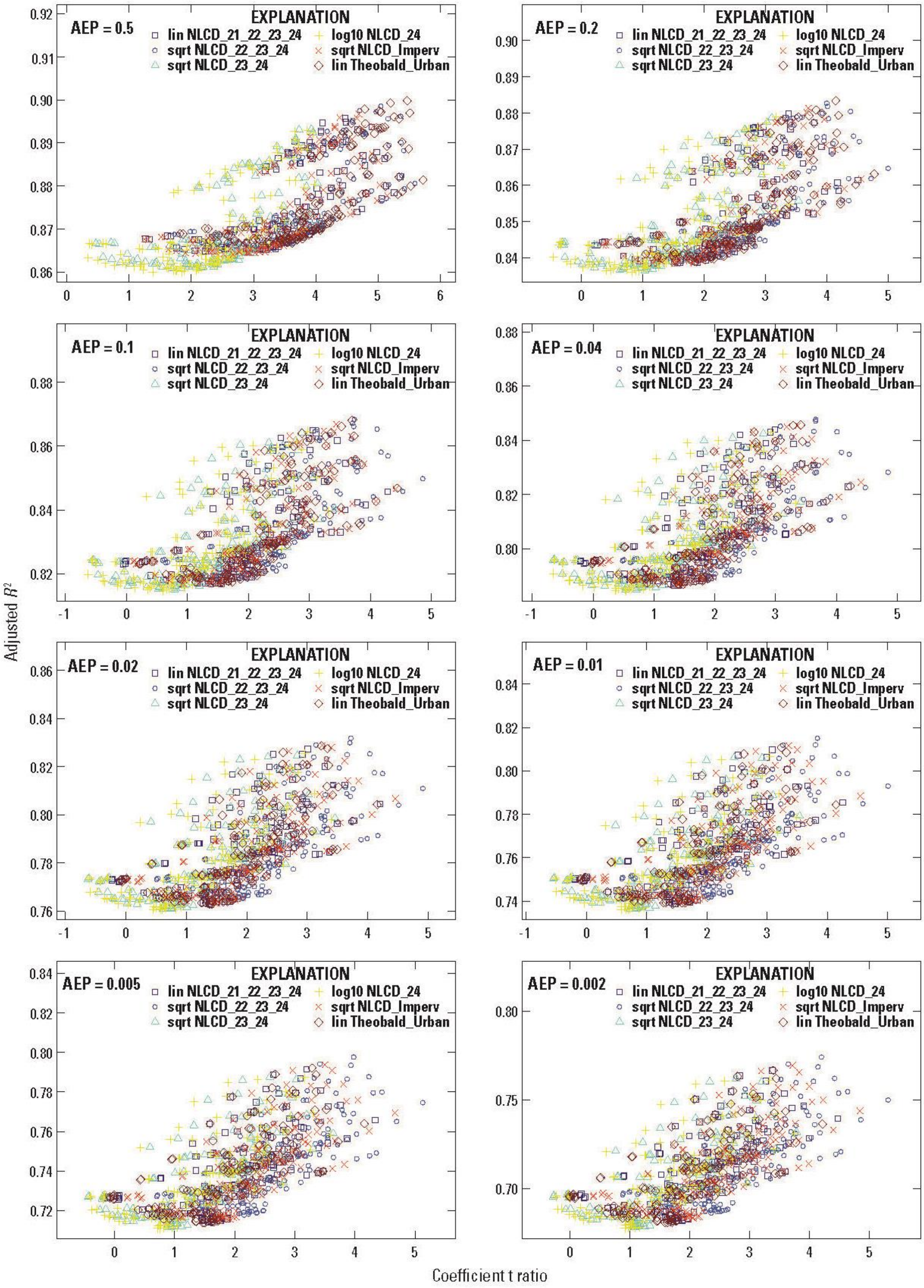
c_2, c_3, and c_4 are constants added to the urbanization, water and wetness, and slope measures when a $\log_{10}$-transformation was used and the basin characteristic had zero values).

The selected transformations are listed in Table 3.

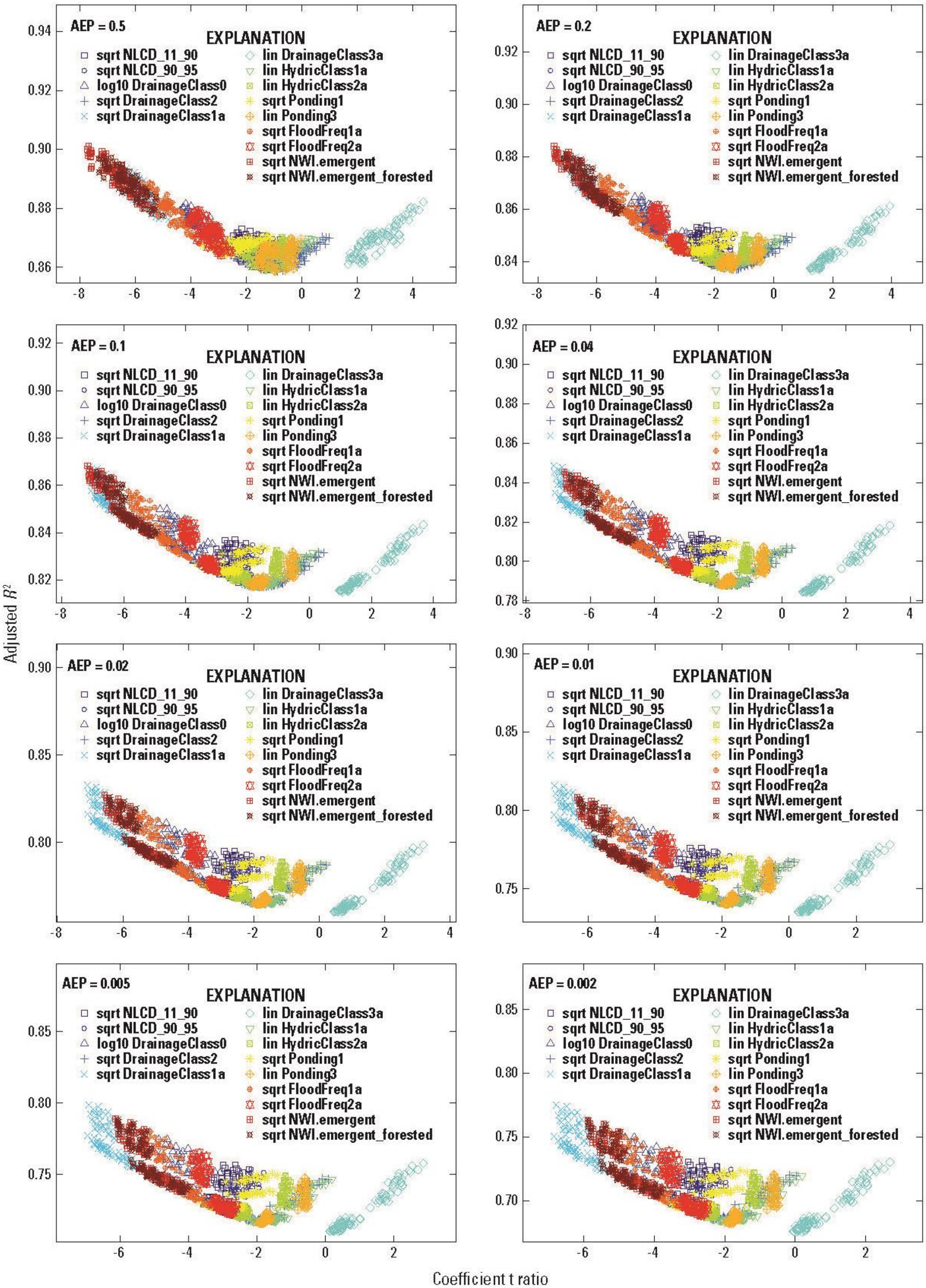
Various plots of the regression results were made to facilitate examination of the results; the most useful plot was determined to be the adjusted R^2 (Helsel and Hirsch 2002, p. 313) as a function of the t ratio of the coefficients of variables of the urbanization, slope, and wetness categories (Figure 12), where the t ratio is the coefficient value divided by its standard error (Helsel and Hirsch 2002, p. 238). Such a plot shows which models provide the best fit (highest adjusted R^2) and the most significant coefficient values (largest magnitude t statistics), and, by retaining the sign of the coefficient values, such plots show if the sign of the coefficient is physically reasonable. The variables whose corresponding regression model fits have the largest magnitude t ratio values and highest adjusted R^2, along with the sign of the coefficient being physically reasonable, were selected as candidate variables for the development of the final spatial regression equations.

Plots of this type for each of the categories (urbanization, slope, and water and wetland) are shown in Figure 12. The urbanization variable with the largest t ratio values and highest adjusted R^2 values is usually the square root of *NLCD*_22_23_24, except for AEPs 0.5 and 0.2 where Theobald_Urban is of similar quality, as shown in Figure 12a. Both *NLCD* 22_23_24 and Theobald_Urban have positive coefficients, as is physically expected. Because only the NLCD-based urbanization variables are expected to be updated in the future, Theobald_Urban was eliminated from consideration for the spatial regression equations and *NLCD*_22_23_24$^{(1/2)}$ was chosen for all AEPs as the candidate urbanization variable for the final equations. Because there are too many water and wetland variables to distinguish on a single plot, the results for these are plotted on two sets of plots (Figures 12b and 12c). The variable with the highest adjusted R^2 values and largest magnitude t ratio values varies from smaller to larger peak discharge quantiles, being NWI.emergent for the 0.5 annual exceedance probability (AEP) flood, NWI.total$^{(1/2)}$ for 0.2 to 0.04 AEP floods, and DrainageClass1a$^{(1/2)}$ for the larger floods (0.02 to 0.002 AEP), and all have physically expected negative coefficient values. Because NWI.total is almost as good as NWI.emergent for the 0.5 AEP flood, it was selected as the candidate variable for the smaller floods (AEPs of 0.5 to 0.04), and DrainageClass1a was selected for the larger floods (AEPs of 0.02 to 0.002). It can be seen in Figure12d that the slope variable with the highest adjusted R^2 values and largest magnitude t statistic values for all AEPs (and physically expected positive coefficients) is $\log_{10}$(DEM_1_0_P), so $\log_{10}$(DEM_1_0_P) was chosen for all AEPs as the candidate urbanization variable for the final equations.

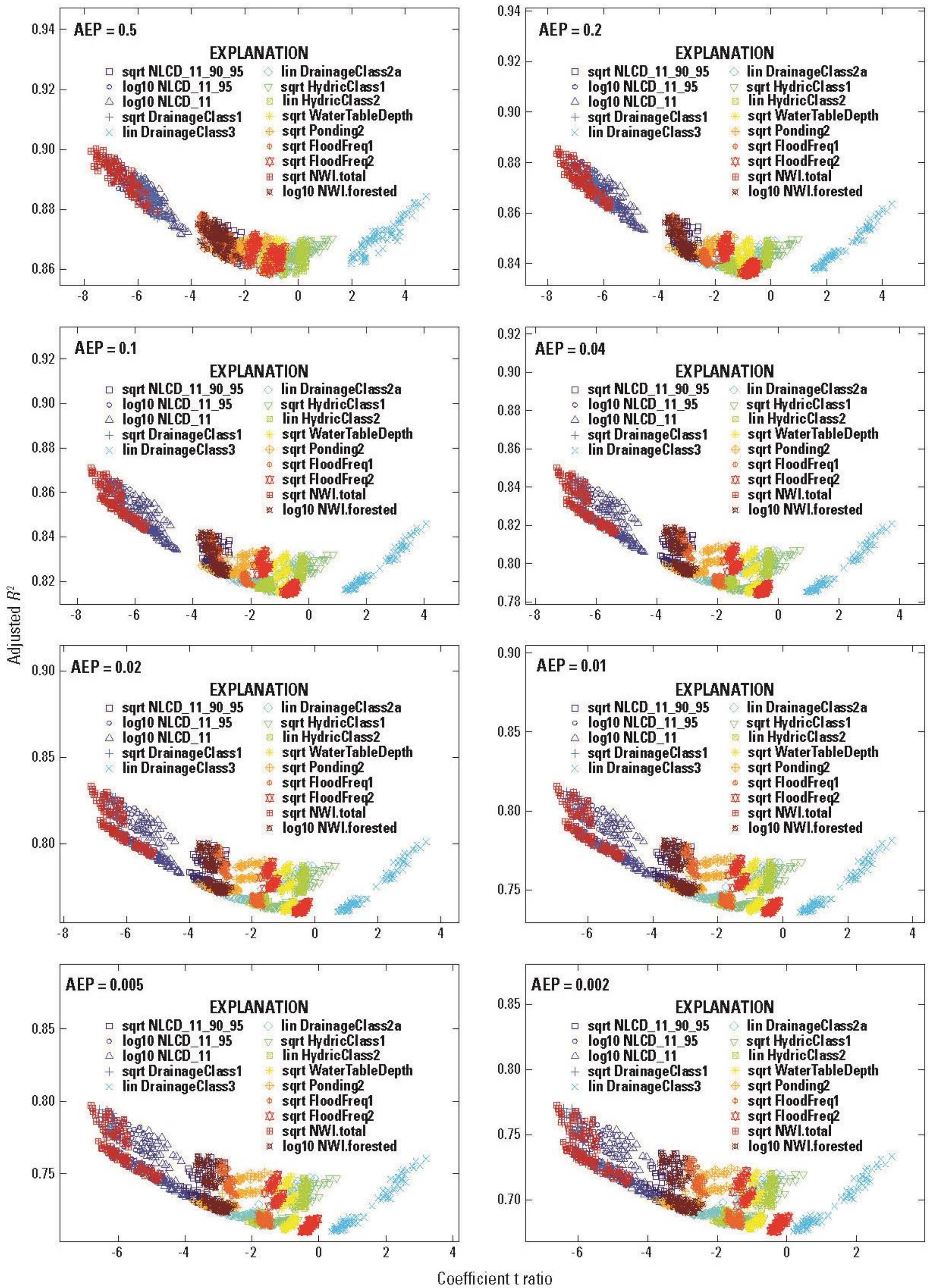
A. **Urbanization variables**



B. **Water and wetland variables**



C. **Water and wetland variables**



***D.* Slope variables**

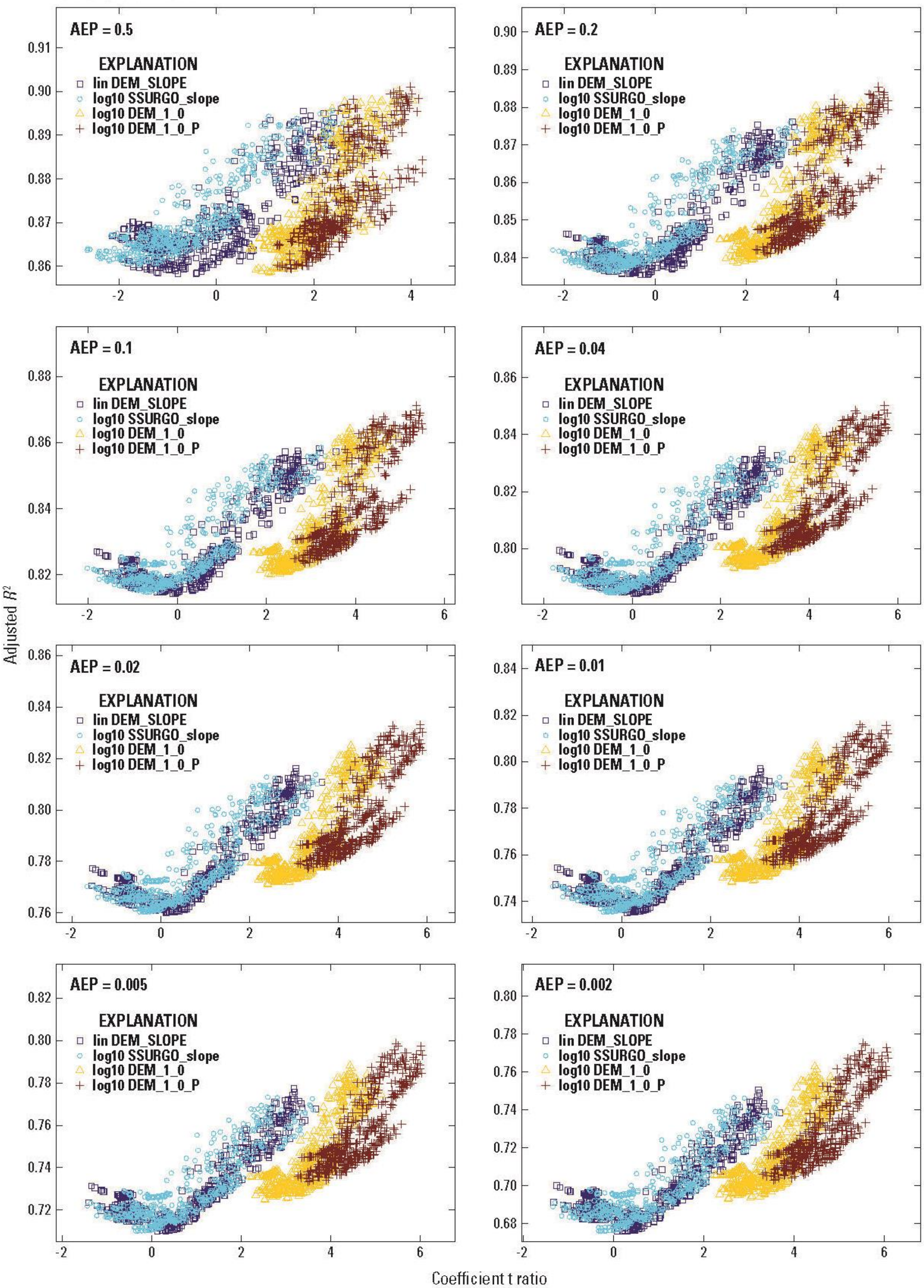


Figure 12. Plots by annual exceedance probability of adjusted R^2 as a function of the regression coefficient t ratio values for basin characteristic categories considered in this study in northeastern Illinois: (a) urbanization variables; (b) and (c) water and wetland variables; and (d) slope variables. When the absolute value of the t ratio is greater than 2, then the coefficient is significantly different from zero at about the $\alpha = 0.05$ significance level (Helsel and Hirsch 2002, p. 238). The variable names in the figure explanations are defined in Table 3; the strings preceding the variable names in the figure explanations indicate the transformation applied to the variable, where "lin" means "linear" (that is, no transformation), "sqrt" means a square-root transformation, and "log10" means a $\log_{10}$ transformation.

4.2 DEVELOPMENT OF FINAL SPATIAL REGRESSION EQUATIONS

Following the selection of the most promising basin characteristics in each category by the WLS regression investigation, the final equations were computed with generalized least-squares (GLS) regression, which generalizes WLS regression by taking into account cross-correlations that arise among nearby streamgages with concurrent records. Stedinger and Tasker (1985) showed that GLS regression for regional spatial flood-frequency analysis provides more accurate coefficients and error estimates than ordinary least squares, with more modest improvement compared to WLS regression depending on the amount of cross-correlation among the streamgage records.

The GLS regression models were fitted with the computer program WREG (Eng et al. 2009), version 1.05, which was downloaded from http://water.usgs.gov/software/WREG. WREG implements a GLS approach to the estimation of peak discharge quantiles fit to a log-Pearson type III distribution using techniques as developed by Stedinger and Tasker (1985), Tasker and Stedinger (1989), Griffis and Stedinger (2007), and Griffis and Stedinger (2009). The cross-correlations $\hat{\rho}_{ij}$ among streamgage records are estimated by selecting streamgage record pairs with a minimum number of concurrent years and fitting a function of the form:

$$\hat{\rho}_{ij} = \theta^{d_{ij}/(\alpha d_{ij}+1)}, \qquad (10)$$

where

d_{ij} is the distance between streamgages *i* and *j*, and

α and θ are dimensionless parameters fitted by a graphical method.

For this study the minimum number of concurrent years was taken as 45, and α and θ were taken as 0.005 and 0.975, respectively.

When the selected water and wetland variables were used in the GLS regression analysis, it was found that use of DrainageClass1a gave a better fit than NWI.total from AEP 0.002 up to AEP 0.20 and had only a very small difference at AEP 0.50, in the final equations, so DrainageClass1a is used for all AEPs in the final spatial regression equations. Values of the selected variables for each streamgage are given in Table 1 and their cross-correlations and variance inflation factors (VIFs) in Table 10.

Table 10. Correlation matrix and variance inflation factor (VIF) values of basin characteristics selected for use in spatial regression analysis of 117 streamgages in northeastern Illinois and adjacent states.

	$\log_{10}$(DA)	*NLCD*_22_23_24$^{1/2}$	DrainageClass1a$^{1/2}$	$\log_{10}$(DEM_1_0_P)
$\log_{10}$(DA)	1	—	—	—
***NLCD*_22_23_24$^{1/2}$**	–0.156	1	—	—
DrainageClass1a$^{1/2}$	0.288	0.221	1	—
$\log_{10}$(DEM_1_0_P)	–0.816	0.077	–0.215	1
VIF	3.4	1.12	1.19	3.02

DA, drainage area in mi^2; *NLCD*_22_23_24, Sum of fractions of 2011 National Land Cover Dataset (NLCD) classes 22, 23, and 24; DrainageClass1a, sum of fractions of SSURGO fractions “very poorly drained” and “unknown (likely water)”; DEM_1_0_P, basin elevation range divided by basin perimeter in feet per mile; —, redundant value; VIF, variance inflation factor.

The general form of the selected equations follows in equation 11:

$$\log_{10} Q_p = (b_0)_p + (b_A)_p \log_{10} A + (b_U)_p U^{1/2} + (b_W)_p W^{1/2} + (b_S)_p \log_{10} S\ , \quad p = 0.50, 0.20, 0.10, 0.05, 0.02, 0.01, 0.005, 0.002\ , \tag{11}$$

where

Q_p is the peak discharge quantile in cubic feet per second with annual exceedance probability p,

A is the drainage area in square miles,

U is the selected urbanization measure for the spatial equations *NLCD*_22_23_24 (a decimal fraction),

W is the basin soil wetness measure DrainageClass1a (a decimal fraction),

S is the basin slope measure DEM_1_0_P (basin elevation range divided by basin perimeter) in feet per mile, and

$(b_0)_p$, $(b_A)_p$, $(b_U)_p$, $(b_W)_p$, and $(b_S)_p$ are coefficients estimated by using WREG (Table 11).

After inverting the logarithmic transformation, the Q_p prediction equation 12 is the result:

$$Q_p = 10^{(b_0)_p} A^{(b_A)_p} 10^{(b_U)_p U^{1/2}} 10^{(b_W)_p W^{1/2}} S^{(b_S)_p}\ , \quad p = 0.50, 0.20, 0.10, 0.05, 0.02, 0.01, 0.005, 0.002\ , \tag{12}$$

Table 11. Coefficients of the selected spatial regression equations in this study in northeastern Illinois.

Annual exceedance probability	b_0	SE(b_0)	b_A	SE(b_A)	b_U	SE(b_U)	b_W	SE(b_W)	b_S	SE(b_S)
0.50	1.498	0.133	0.786	0.043	0.259	0.070	–0.781	0.151	0.304	0.101
0.20	1.694	0.136	0.778	0.044	0.207	0.074	–0.879	0.155	0.375	0.104
0.10	1.786	0.144	0.774	0.047	0.202	0.080	–0.928	0.164	0.413	0.110
0.04	1.877	0.153	0.771	0.050	0.214	0.089	–0.978	0.176	0.453	0.117
0.02	1.932	0.162	0.768	0.053	0.232	0.096	–1.010	0.186	0.478	0.124
0.01	1.980	0.171	0.766	0.056	0.255	0.103	–1.038	0.197	0.500	0.131
0.005	2.020	0.180	0.764	0.059	0.281	0.109	–1.064	0.207	0.521	0.138
0.002	2.068	0.191	0.761	0.062	0.319	0.118	–1.095	0.221	0.545	0.147

b_0, intercept; b_A, coefficient of $\log_{10}$ of drainage area in square miles; b_U, coefficient of square root of urbanization measure *NLCD*_22_23_24 as a decimal fraction; b_W, coefficient of square root of basin wetness measure DrainageClass1a as a decimal fraction; b_S, coefficient of $\log_{10}$ of slope measure DEM_1_0_P as a percentage; SE, standard error.

4.3 ACCURACY OF FINAL SPATIAL REGRESSION EQUATIONS

Several measures of the average accuracy of the final GLS spatial regression equations are presented in Table 12, along with comparative values of the standard model error as a percentage from the corresponding WLS equations and the previous studies by Allen and Bejcek (1979) and Soong et al. (2004). All these measures are averages for all the streamgages in the analysis. The pseudo R^2 measures the fraction of variability in the dependent variable that is explained by the regression model after removing the effect of the time-sampling error (Eng et al. 2009) and is analogous to the standard coefficient of determination (R^2). The average variance of prediction includes both the model error and time-sampling error components and indicates the expected accuracy of a prediction at an ungaged location with basin characteristics that are near the centroid of the basin characteristics used in the GLS analysis. The standard model error indicates the accuracy of the model fit without the component in the average variance of prediction that indicates the additional error of making a prediction at an ungaged location; as a result it is always somewhat smaller than the average variance of prediction. All the accuracy measures decrease as the AEP decreases, as expected, because of the fewer data available for less frequent events.

Table 12. Measures of the average accuracy of the selected spatial regression equations in this study in northeastern Illinois.

Annual exceedance probability	Pseudo R^2 (percent)	Average variance of prediction (log units)	Average standard error of prediction (percent)	Model error variance γ^2 (log units)	Standard model error (percent)	Standard model error (percent), WLS fit	Standard error of estimate (percent) from Allen and Bejcek (1979), Table 4	Standard model error from Soong et al. (2004), table 4 (applicable to regions 2, 6, and 7)
0.50	87.4	0.0362	46.0	0.0341	44.5	45.4	36	39.1
0.20	85.7	0.0378	47.1	0.0354	45.5	46.4	38	39.3
0.10	83.7	0.0414	49.6	0.0387	47.7	48.3	40	40.6
0.04	81.1	0.0465	52.9	0.0432	50.8	51.5	43	43.1
0.02	78.7	0.0513	55.9	0.0476	53.6	54.2	45	45.2
0.01	76.1	0.0570	59.4	0.0527	56.8	56.9	48	47.3
0.005	73.8	0.0622	62.5	0.0575	59.7	59.8	—	—
0.002	70.5	0.0698	66.9	0.0644	63.8	63.7	52	52.8

WLS, weighted least squares.

Techniques for computing accuracy estimates at individual locations (streamgages or ungaged locations) are also available, including the variance and standard error of prediction and confidence interval values. According to Hodge and Tasker (1995), the variance of prediction V_i at an individual location based on a GLS regression analysis is:

$$V_i = \gamma^2 + x_i \left(X^t \Lambda^{-1} X \right)^{-1} x_i^t, \qquad (13)$$

where

γ^2 is the model error variance (Table 12),

$x_i = \left[1, \log_{10} A_i, U_{spat,i}^{1/2}, W_i^{1/2}, \log_{10} S_i \right]$ is a row vector specifying the basin characteristics of the individual location augmented with a 1,

X is a $(n \times p)$ matrix whose rows are the transformed basin characteristics for each streamgage used in the GLS model augmented by a 1 ($n = 117$ is the number of streamgages and $p = 5$ is the number of basin characteristics plus 1),

Λ^{-1} is the matrix inverse of Λ, the $(n \times n)$ covariance matrix used in the GLS regression analysis,

X^t is the matrix transpose of X, and

x_i^t is the matrix transpose of x_i.

The $\left(X^t \Lambda^{-1} X \right)^{-1}$ matrices for the selected AEPs are given in Table 13.

Table 13. Components of variance of prediction for the selected spatial regression equations in northeastern Illinois.

[See Appendix 8.]

The variance of prediction V_i can be converted to a standard error of prediction in log units by taking the square root; that is, $S_i = V_i^{1/2}$ and in percentage units by using the following formula:

$$S_{pi} = 100\left\{\exp\left[(\ln 10)^2 V_i\right] - 1\right\}^{1/2}, \quad (14)$$

(Eng et al. 2009).

The confidence intervals of the predicted discharge quantile Q_i are computed as:

$$\log_{10} Q_i \pm t_{\alpha/2,n-p} S_i \ , \quad (15)$$

where $t_{\alpha/2,n-p}$ is the critical value of the *t* distribution at the alpha level α (for example, $\alpha = 0.05$ for 90% confidence intervals) and $n - p$ degrees of freedom, where $n = 117$ is the number of streamgages used in the spatial regressions and $p = 5$ is the number of basin characteristics plus 1.

After inverting the logarithmic transformation, the interval is:

$$\left[Q_i 10^{-t_{\alpha/2,n-p} S_i} < Q_i < Q_i 10^{t_{\alpha/2,n-p} S_i}\right]. \quad (16)$$

In equation (16), Q_i is the median prediction, and $Q_i 10^{t_{\alpha/2,n-p} S_i}$ and $Q_i 10^{-t_{\alpha/2,n-p} S_i}$ are the upper and lower $1 - 2\alpha$ confidence limits, respectively. For example, for $\alpha = 0.05$ (therefore, 90% confidence limits), according the data and methods used in this study, the probability that the true value of the discharge quantile exceeds the upper limit $Q_i 10^{t_{\alpha/2,n-p} S_i}$ is $\alpha = 0.05$; likewise, the probability that the true value of the discharge quantile is less than the lower limit $Q_i 10^{-t_{\alpha/2,n-p} S_i}$ is $\alpha = 0.05$, so that the probability that the true value lies between the limits is 90%.

CHAPTER 5: APPLICATIONS OF REGRESSION EQUATIONS

There are two sets of regression equations presented in this report, the temporal (equation 7 and table 9) and the spatial (equation 12 and table 11). In both sets, the values of the urbanization coefficients are positive, as expected, and the urbanization coefficients from the temporal analysis decrease substantially as the peak discharge quantiles increase; that is, with decreasing AEP. The changes in the urbanization coefficients from the spatial regression equations as a function of AEP are more modest and have a minimum at AEP = 0.1, with increases toward both smaller and larger AEP values; in fact, the largest urbanization coefficient occurs at AEP = 0.002. The increase of the urbanization coefficients from the spatial analysis for decreasing AEPs beyond AEP = 0.1 does not agree with the expectation that the effect of urbanization decreases with decreasing AEP and therefore is considered anomalous. Reasons for this anomaly and implications for applications of the spatial equations are discussed below.

Because the urbanization measures to which these coefficients apply are different but approximately commensurate (Figure 13), a direct comparison of their implications regarding the effect of urbanization can be considered as meaningful. Plots of the ratios of peak discharge quantiles for the different AEPs considered here are shown in Figure 14. These plots show that except for very small amounts of urbanization beginning with a completely rural basin, the larger coefficients from the temporal analysis imply larger effects of urbanization, especially for the larger AEPs (smaller floods). They also show the effect of the minimum value of the spatial coefficient occurring at AEP = 0.1; for example, the largest effect of urbanization in the spatial curves is seen for AEP = 0.002.

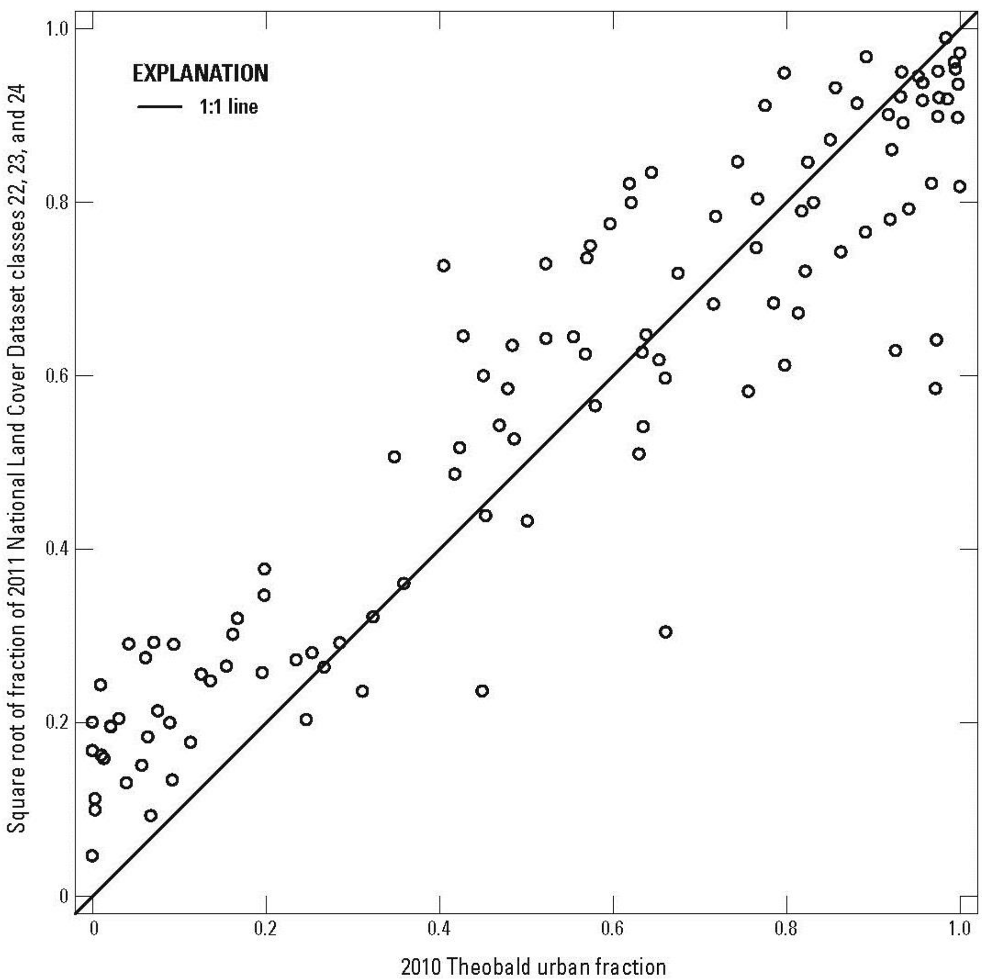


Figure 13. Comparison of square root of fraction of 2011 National Land Cover Dataset (NLCD, Jin et al. 2013) classes 22, 23, and 24 (*NLCD*_22_23_24$^{1/2}$) and 2010 Theobald urban fraction (Theobald 2005) for 117 basins used in this study in northeastern Illinois.

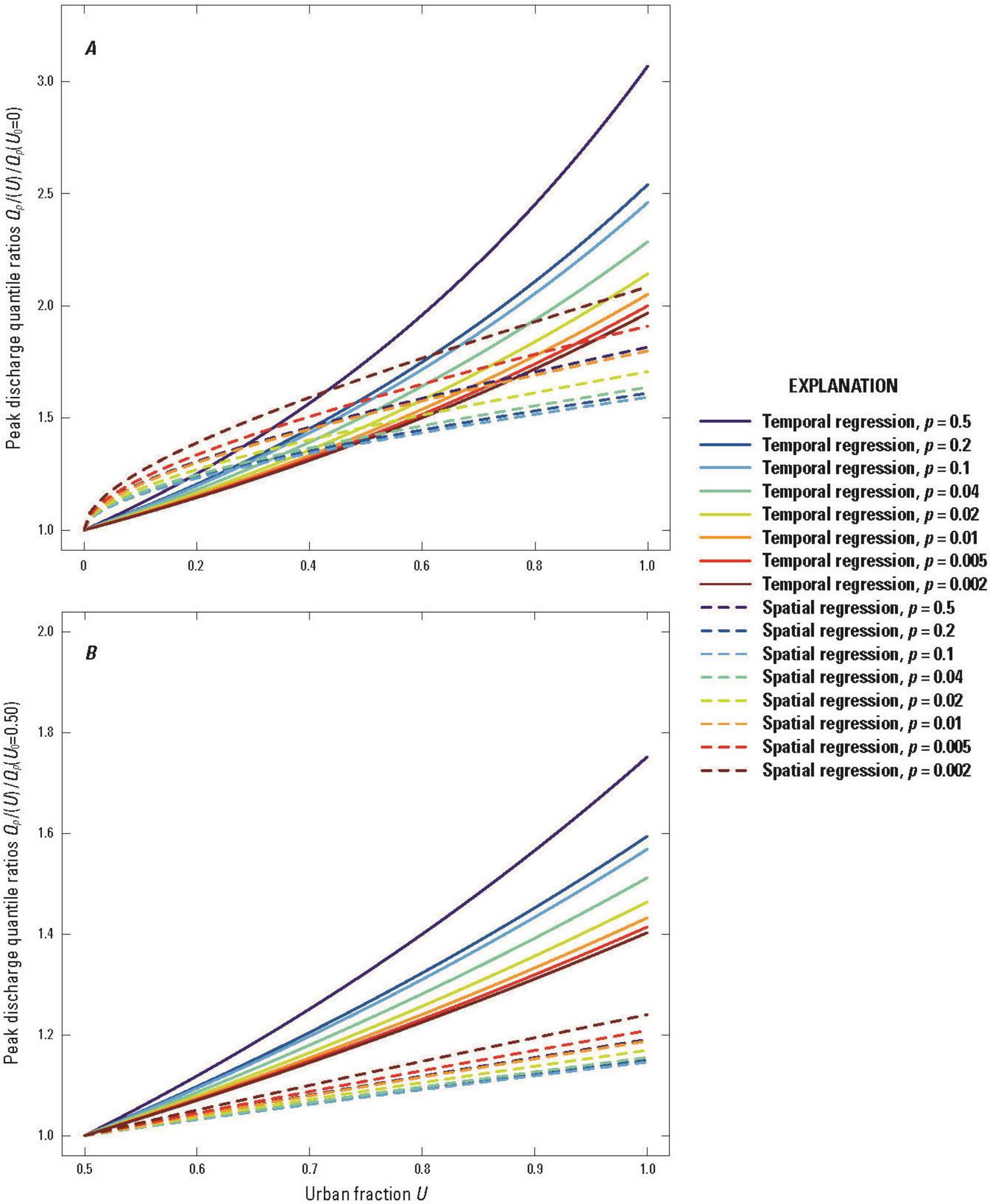


Figure 14. Ratios of peak discharge quantiles $Q_p(U)$ / $Q_p(U_0)$ as a function of urban fraction U for selected annual exceedance probabilities (AEPs) p as implied by the two sets of urbanization coefficients obtained in this study in northeastern Illinois: (a) basin initially having no urbanization (U_0 = 0); (b) basin initially 50% urbanized (U_0 = 0.5).

The urbanization coefficients in the temporal equations are estimated by a temporal analysis; that is, directly from the changes in the annual peak discharges as the basins urbanize. In the spatial equations, the urbanization coefficients are not computed from observed changes in the gaged basins, but indirectly, from the differences in flood-discharge quantiles among basins of different levels of urbanization. When applying flood-discharge regression equations, one is typically interested in the behavior at an ungaged location, and this spatial transfer of information is entirely appropriate. When it comes to urbanization, however, the primary interest is the temporal question: How did or how will the flood-discharge quantiles change when the basin is urbanized? Because they are based on a direct analysis of the results of this process, the temporal urbanization coefficients are more likely to reflect the effects of urbanization on a given basin.

Two general statistical issues, at least, that affect the values of regression coefficients in a multiple regression framework also need to be considered when the value of the coefficients is of interest, as in this study with respect to the urbanization coefficients. These issues are (1) omitted variable bias (OVB) and (2) measurement errors in the explanatory variables. The issue of OVB arises when an omitted variable is correlated with both the variable of interest and the dependent variable (Greene 1997). In this case, an omitted variable will cause a negative or positive bias in the coefficient of the variable of interest, though it does not bias the predictions of the equations. In the context of the present analysis, if there is some variable important in predicting the flood-discharge properties that is left out of the spatial or temporal analyses but is correlated with urbanization, the urbanization coefficient will not have its correct value. Measurement errors in an explanatory variable cause attenuation (reduction of the absolute value) of the variable, again without biasing the prediction of the equations (Fuller 1987).

It is possible that OVB is affecting either or both sets of coefficients, but because the urbanization coefficients from the spatial analysis are significantly smaller than those from the temporal analysis and measurement error always causes a reduction in positive coefficients, whereas OVB may cause an error in either direction: the first hypothesis that the results suggest is that the spatial urbanization coefficients are subject to a measurement error. In particular, if the relation between urbanization and its effects on peak discharges varies among basins because of different development practices related to stormwater and flood control, this variation would induce a measurement error relative to the hydrologically effective urbanization value. Such an error would, in addition, affect the spatial analyses more than the temporal ones because the temporal analyses depend only on the changes in time of the peak discharges with interbasin differences captured in the segment intercepts, whereas the spatial analyses depend directly on the values of the peak discharges.

Given this concern regarding the accuracy of the urbanization coefficients from the spatial models (which nevertheless does not bias the predictions) and the previous assertion that the basic question when it comes to the effect of urbanization is a temporal one, it seems clearly preferable to use temporal equations to predict the effect of urbanization where possible. It is not possible to use the temporal equations for adjustment of rural estimates in ungaged basins in region 2 because there are not enough truly rural basins to develop rural-only equations unaffected by urbanization (Figure 4). Therefore, to obtain flood-quantile estimates for ungaged basins in region 2, the spatial regression equations should be used. But for situations where peak discharge quantile estimates are being adjusted for the effects of urbanization, the temporal equations should be used. Such situations include ungaged basins outside region 2, assuming urbanization has proceeded similarly as for the gaged basins analyzed in this study. Such situations may also include the prediction of future effects of urbanization for basins in region 2, again assuming urbanization will proceed as it did for the basins analyzed in this study. These situations are discussed in more detail in the Applications of the Temporal Urbanization Coefficients section.

5.1 APPLICATIONS OF THE SPATIAL REGRESSION EQUATIONS

The details of application of the updated Illinois region 2 spatial regression equations depend on the nearness of the location of interest to a streamgage. If the location of interest is far from a streamgage, the spatial regression equations are used. If the location is at a streamgage, a weighted average of the quantiles from regional equations and those from the streamgage record itself is used. If the location is near a streamgage, a weighted average of the quantiles from regional equations and an adjusted version of those from the streamgage record itself is used. The details of the different applications are described in this section.

5.1.1 Ungaged Locations Far from a Streamgage

For a general ungaged location in Illinois flood-frequency region 2, the final, real-space regression equation 12 should be used. The USGS StreamStats application (http://streamstats.usgs.gov) could be used to select the location of interest, delineate the basin, and compute the basin characteristics and the peak discharge quantiles.

It is important to realize that the regression equations represented by equations 12 apply only within the ranges of the basin characteristics used to fit the equations. These ranges are given in Table 14. StreamStats will not enforce this limitation, though it does provide a warning.

Table 14. Ranges of basin characteristic values of streamgages used to fit selected spatial regression equations in this study in northeastern Illinois.

Basin characteristic	StreamStats name	Units	Minimum	Maximum	Median
Drainage area	DRNAREA	square miles	0.078	1,351	13.6
*NLCD*_22_23_24	FLC11DVLMH	decimal fraction	0.0022	0.979	0.391
Theobald_Urban	URBTHE2010	decimal fraction	0.000	1.00	0.580
DrainageClass1a	FSSURGDC78	decimal fraction	0.000	0.256	0.0511
DEM_1_0_P	RELRELF	feet per mile	0.821	37.2	4.79

*NLCD*_22_23_24, Fraction of 2011 National Land Cover Database (NLCD) classes 22, 23, and 24 (low, medium, and high intensity developed); Fraction of 2010 Theobald (2005) classes 7–10 (housing with no more than 10 acres per unit plus commercial/industrial/ transportation land use); DrainageClass1a: Soil Survey Geographic (SSURGO) Database fraction “very poorly drained” and “unknown (likely water)”; DEM_1_0_P: basin elevation range divided by basin perimeter in feet per mile.

5.1.2 At a Streamgage

Because of the finite length of streamgage records, the regional equations can improve the accuracy of the peak discharge quantile estimates at streamgages by incorporating regional information. The procedure recommended by Cohn et al. 2012 (see also Tasker 1975) is to compute this peak discharge quantile from the weighted average of the regression-equation estimate and the result of the frequency analysis of the streamgage record, where the weights are the inverses of the variance of each of the discharge estimates. The weighted discharges are computed with the following equation:

$$\log_{10}(Q_p)_{g,w} = \frac{(V_p)_{g,r}\log_{10}(Q_p)_{g,s} + (V_p)_{g,s}\log_{10}(Q_p)_{g,r}}{(V_p)_{g,r} + (V_p)_{g,s}}, \quad (17)$$

where

$(Q_p)_{g,w}$ is the weighted peak discharge quantile at the streamgage for an AEP of *p*,

$(Q_p)_{g,s}$ is the peak discharge quantile for an AEP of *p* computed from the streamgage record by using EMA with weighted skew as described in the Frequency Analysis section,

$(Q_p)_{g,r}$ is the peak discharge quantile for the selected AEP obtained from the regression equations 12 applied at the streamgage,

$(V_p)_{g,r}$ is the variance of prediction of $(Q_p)_{g,r}$ for the an AEP of *p* computed by using equation 13, and

$(V_p)_{g,s}$ is the variance of prediction of $(Q_p)_{g,s}$ for the selected AEP computed by PeakFQ as part of the frequency analysis.

The values of $(Q_p)_{g,s}$, $(Q_p)_{g,r}$, and $(Q_p)_{g,w}$ for both the redundant and nonredundant stations in this study are tabulated in Table 2, in the rows labeled “EMA (weighted skew”), “Regional regression,” and “Weighted EMA (weighted skew) and regional regression,” respectively.

The variance of prediction for the weighted discharge $(Q_p)_{g,w}$ is given by:

$$(V_p)_{g,w} = (V_p)_{g,s}(V_p)_{g,r} / \left[(V_p)_{g,s} + (V_p)_{g,r}\right], \quad (18)$$

(Tasker 1975). With this value of $(V_p)_{g,w}$, the standard error of prediction $(S_p)_{g,w}$ can be computed as $(S_p)_{g,w} = (V_p)_{g,w}^{1/2}$, and then equations 14–16 can be used to compute the standard error of prediction in percentage units and confidence intervals.

5.1.3 Ungaged Location Near a Streamgage

If the ungaged location of interest is near to and on the same stream as a streamgage, the accuracy of the flood-discharge quantile estimate at the ungaged location can be improved if the estimate from the regional equation is combined with the estimate at the streamgage (Ries 2007). There are a few different methods in the literature for this adjustment; the method used here follows that of Soong et al. (2004) (as corrected August 10, 2010), which is the same as the method presented in the IDOT Drainage Manual (Drainage Manual Committee 2011). According to this method, the near-gage adjustment has an effect only if the ratio A_u/A_g of the drainage area of the ungaged basin of interest A_u to that of a gaged basin A_g is between 0.5 and 1.5 (see equation 19); this constraint on the effect of the adjustment method defines being "near" a streamgage.

First define the adjustment weighting factor w_a, which is given by:

$$w_a = \begin{cases} 2\left|\left(A_u/A_g\right)-1\right| \; if \; 0.5 < \left(A_u/A_g\right) < 1.5 \\ 1 \; otherwise \end{cases}, \tag{19}$$

where

A_u is the drainage area at the ungaged location of interest, and

A_g is the drainage area at the streamgage.

The near-gage adjustment equation can then be written as follows:

$$\left(Q_p\right)_{u,w} = w_a\left(Q_p\right)_{u,r} + \left(1-w_a\right)\left(Q_p\right)_{g,w}\left(A_u/A_g\right), \tag{20}$$

where

$\left(Q_p\right)_{u,w}$ is the gage-adjusted flood-discharge quantile estimate for an AEP of *p* at the ungaged location of interest,

$\left(Q_p\right)_{u,r}$ is the flood-discharge quantile estimate for an AEP of *p* at the ungaged location of interest from the spatial regression equations (equation 12),

$\left(Q_p\right)_{g,w}$ is the flood-discharge quantile estimate for an AEP of *p* at the gage, weighted with the spatial regression equations (equation 17, Table 2), and

w_a, A_u, and A_g are as defined for equation 19.

According to equations 19 and 20, the near-gage adjustment has no effect when $A_u/A_g \leq 0.5$ or $A_u/A_g \geq 1.5$ because $w_a = 1$ (equation 19) and therefore (equation 20) the near-gage adjusted value

$(Q_p)_{u,w}$ is identical to the value $(Q_p)_{u,r}$ from the regional regression equations. At a streamgage, $A_u = A_g$ and the near-gage adjusted value reduces to the weighted flood-discharge at the gage $(Q_p)_{g,w}$ because $w_a = 0$. When $0.5 < A_u / A_g < 1.5$, then both $(Q_p)_{u,r}$ and $(Q_p)_{g,w}$ contribute to the value of $(Q_p)_{u,w}$ according to the values of the weights w_a and $1 - w_a$.

5.2 APPLICATIONS OF THE TEMPORAL URBANIZATION COEFFICIENTS

As discussed, there are two situations where the temporal urbanization coefficients may be appropriate for estimating the effects of urbanization, if it is the judgment of the analyst that the hydrologic effects of urbanization are or will be similar to those of the basins analyzed in this study: (1) to adjust the prediction of rural regression equations outside of Illinois flood-frequency region 2 for urbanization, and (2) to predict the future effects of urbanization for any basin in Illinois.

For either situation, the urbanization-adjusted flood-discharge quantile $Q_p(U)$ is given by:

$$Q_p(U) = Q_p(U_0) 10^{(b_U)_p (U - U_0)}, \tag{21}$$

or, in log-transformed form:

$$\log_{10} Q_p(U) = \log_{10} Q_p(U_0) + (b_U)_p (U - U_0), \tag{22}$$

where

$Q_p(U)$ is the peak discharge quantile at the location of interest with AEP *p* adjusted to correspond to Theobald (2005) urbanization fraction U,

$Q_p(U_0)$ is the peak discharge quantile with AEP p at the initial urbanization fraction U_0, and

$(b_U)_p$ is the temporal urbanization coefficient for AEP p from Table 9.

The urbanization-adjustment factors $10^{(b_U)_p (U - U_0)}$ in equation 21 are the same ratios $Q_p(U) / Q_p(U_0)$ as are plotted with solid lines in Figure14a and b for particular values of U_0 (0.0 and 0.5, respectively). Because of the functional form, the urbanization effect as indicated by this relation depends only on the coefficient $(b_U)_p$ and the urban fraction increase $U - U_0$; the effect is estimated to be the same for equivalent increases of $U - U_0$ regardless of the value of the initial urban fraction U_0.

For an application outside region 2 using StreamStats, the initial urbanization fraction U_0 would be zero, and the unadjusted flood-discharge quantile $Q_p(U_0)$ would come from the rural regional flood-frequency equation where the basin of interest is found. For an application inside region 2 using StreamStats, the initial urbanization fraction U_0 might be positive, and the unadjusted flood-discharge quantile $Q_p(U_0)$ would come from the spatial regression equations for region 2, such as the methods described in the Applications of the Updated Illinois Region 2 Spatial Regression Equations section. Whether inside or outside of region 2, the unadjusted flood-discharge quantile $Q_p(U_0)$ also could be a quantile estimate at or near a gage. The Theobald (2005) data for 2010 as adjusted has been installed in StreamStats so that fractions of urbanization appropriate for use with equations 21 and 22 can be computed within StreamStats.

The variance of prediction V_U of the urbanization-adjusted flood-discharge quantile in log units, $\log_{10} Q_p(U)$, can be derived from equation 22 by computing the variances of both sides as:

$$V_U = V_{U_0} + V_{b_U} (U - U_0)^2 , \qquad (23)$$

where

V_{U_0} is the variance of prediction of the unadjusted flood-discharge in log units, $\log_{10} Q(U_0)$, and

V_{b_U} is the variance of the urbanization coefficient $(b_U)_p$, which is the square of the standard error given in Table 9.

The standard error of prediction of $\log_{10} Q_p(U)$, S_U, can be computed from V_U as $S_U = V_U^{1/2}$, and then S_U can be used in equations 14–16 to obtain a standard error in percentage units and confidence intervals.

Near-gage adjustment of peak discharge quantiles outside region 2 would be applicable only if the peak discharge quantiles at the streamgage arose from the same urbanization conditions as for the basin upstream from the site of interest.

5.3 EXAMPLE COMPUTATIONS

To provide further clarification on the use of the results presented in this report, five example computations are provided in this section. Basic information about the examples is given in Table 15.

Table 15. Example peak discharge quantile computations in this study in northeastern Illinois.

Number	Description	Equation used to compute discharge values
1	Ungaged location in study region, far from a streamgage	12
2	Ungaged location in study region, near a streamgage[a]	20
3	At a streamgage in study region	17[b]
4	Locations outside study region	21
5	Adjusting for future effects of urbanization	21

[a]In this study, an ungaged location is considered to be near a streamgage if the ratio A_u/A_g of the drainage area at the ungaged location A_u to the drainage area at the gage A_g is between 0.5 and 1.5 and they are on the same stream.

[b]Values were computed with equation 17 and are tabulated in Table 2.

5.3.1 Example 1: Ungaged Location in the Study Region, Far from a Streamgage

Consider a hypothetical ungaged basin with a drainage area (*A*) of 50 mi^2, urbanized land use fractions (*U*) *NLCD*_22_23_24 of 20% and Theobald_Urban of 40%, water and wetland fraction (*W*) DrainageClass1a of 15%, and slope (*S*) DEM_1_0_P of 3.67 feet per mile. These values usually will be obtained by StreamStats after delineation of the basin. First, it can be seen that the basin characteristic values are well within their corresponding ranges (Table 14). If the basin is within region 2, the peak discharge quantiles should be computed by using the spatial regression equations, defined by equations 11 or 12, with coefficient values given in Table 11. Taking the peak discharge quantile with AEP = 0.01 as an example, using equation 12, this quantile is computed as:

$$Q_{0.01} = 10^{(b_0)_{0.01}} A^{(b_A)_{0.01}} 10^{(b_U)_{0.01} U^{1/2}} 10^{(b_W)_{0.01} W^{1/2}} S^{(b_S)_{0.01}}$$
$$Q_{0.01} = 10^{1.980} 50^{0.766} 10^{0.255 * 0.20^{1/2}} 10^{-1.038 * 0.15^{1/2}} 3.67^{0.500} \qquad (24)$$
$$Q_{0.01} = 1{,}890 \text{ ft}^3\text{/s},$$

where an *NLCD*_22_23_24 value of 20% is used for the urbanization measure U.

Notice the values of W and U enter the equation as decimal fractions, whereas S enters in feet per mile.

The uncertainty of this estimate is computed by using equations 13–16. The variance V_i of the estimate is computed from equation 13:

$$V_i = \gamma^2 + x_i \left(X^t \Lambda^{-1} X \right)^{-1} x_i^t ,$$

where

$\gamma^2 = 0.0527$ is the model error variance (Table 12),

$x_i = \left[1, \log_{10} A_i, U_i^{1/2}, W_i^{1/2}, \log_{10} S_i \right]$,

$x_i = [1, \log_{10} 50, 0.20^{1/2}, 0.15^{1/2}, \log_{10} 3.67]$,

$x_i = [1, 1.699, 0.4472, 0.3873, 0.5647]$, and

the matrix $\left(X^t \Lambda^{-1} X\right)^{-1} = 0.001 \begin{bmatrix} 29.362 & -7.9624 & -7.1505 & -4.3019 & -19.383 \\ -7.9624 & 3.1120 & 0.9538 & -2.5161 & 5.6390 \\ -7.1505 & 0.9538 & 1.0558 & -1.3442 & 1.9599 \\ -4.3019 & -2.5161 & -1.3442 & 3.8956 & -1.2652 \\ -19.383 & 5.6390 & 1.9599 & -1.2652 & 17.291 \end{bmatrix}$

(Table 13).

With these values, the second term of V_i, $x_i \left(X^t \Lambda^{-1} X\right)^{-1} x_i^t$, is computed as

$$x_i \left(X^t \Lambda^{-1} X\right)^{-1} x_i^t =$$

$$0.001 [1, 1.699, 0.4472, 0.3873, 0.5647] \begin{bmatrix} 29.362 & -7.9624 & -7.1505 & -4.3019 & -19.383 \\ -7.9624 & 3.1120 & 0.9538 & -2.5161 & 5.6390 \\ -7.1505 & 0.9538 & 1.0558 & -1.3442 & 1.9599 \\ -4.3019 & -2.5161 & -1.3442 & 3.8956 & -1.2652 \\ -19.383 & 5.6390 & 1.9599 & -1.2652 & 17.291 \end{bmatrix} \begin{bmatrix} 1 \\ 1.699 \\ 0.4472 \\ 0.3873 \\ 0.5647 \end{bmatrix}$$

$$= 0.00207.$$

Therefore, $V_i = 0.0527 + 0.00207 = 0.0548.$

Given the V_i value, the standard error of prediction in log units is $S_i = V_i^{1/2} = 0.236,$ and from equation 14, the standard error of prediction as a percentage is:

$$S_{pi} = 100\left\{\exp\left[\left(\ln 10\right)^2 0.0548\right] - 1\right\}^{1/2}$$

$$S_{pi} = 100\left\{\exp\left[\left(\ln 10\right)^2 0.0548\right] - 1\right\}^{1/2} \qquad (25)$$

$$S_{pi} = 58.0\%$$

The confidence intervals are $\log_{10} Q_i \pm t_{\alpha/2, n-p} S_i$ (equation 15), where $t_{\alpha/2, n-p}$ is the critical value of the *t* distribution at the alpha level α and $n - p$ degrees of freedom, where $n = 117$ is the number streamgages used in the spatial regressions and $p = 5$ is the number of basin characteristics plus 1. Here, for the 90% confidence intervals $t_{\alpha/2, n-p} = t_{0.95, 112} = 1.659$, so the confidence intervals in log units are:

$$\log_{10} Q_i \pm t_{\alpha/2,n-p} S_i = \log_{10}(1890) \pm 1.659 * 0.234$$
$$\log_{10} Q_i \pm t_{\alpha/2,n-p} S_i = [2.888,\ 3.664]. \tag{26}$$

After inverting the logarithmic transformation, the 90% confidence intervals are:

$$\left[Q_i 10^{-t_{\alpha/2,n-p} S_i}, Q_i 10^{t_{\alpha/2,n-p} S_i}\right] = \left[1890 * 10^{-1.659*0.234}, 1890 * 10^{1.659*0.234}\right]$$
$$\left[Q_i 10^{-t_{\alpha/2,n-p} S_i}, Q_i 10^{t_{\alpha/2,n-p} S_i}\right] = 10^{[2.888, 3.664]} \tag{27}$$
$$\left[Q_i 10^{-t_{\alpha/2,n-p} S_i}, Q_i 10^{t_{\alpha/2,n-p} S_i}\right] = [772,\ 4,610]\ \text{ft}^3/\text{s}.$$

Summing up, the estimated 1% AEP peak discharge quantile $Q_{0.01}$ for this hypothetical ungaged basin on a stream in region 2 far from a streamgage is 1,890 ft^3/s with a standard error of prediction of 58.0% and a 90% confidence interval of [772, 4,610] ft^3/s.

5.3.2 Example 2: Ungaged Location in the Study Region, Near a Streamgage

Next assume that this hypothetical ungaged basin is located, still in region 2, upstream from USGS streamgage 05527950, Mill Creek at Old Mill Creek, Illinois, which has a drainage area of 59.87 mi^2 (Table 1). In this case the value of the ratio A_u/A_g is 50/59.87 = 0.835, and the adjustment weighting factor w_a takes the value 2|50/59.87 – 1| = 0.330 (equation 19), so a near-gage adjustment (equation 20) is applicable (see discussion immediately following equation 20). From Table 2, the weighted AEP 0.01 at-gage flood-discharge quantile $(Q_{0.01})_{g,w}$ at streamgage 05527950 is 2,160 ft^3/s, and as previously computed the regional regression estimate at the ungaged site of interest $(Q_{0.01})_{u,r}$ is 1,890 ft^3/s. Therefore, the weighted estimate at the ungaged site of interest is:

$$(Q_{0.01})_{u,w} = w_a (Q_{0.01})_{u,r} + (1 - w_a)(Q_{0.01})_{g,w}(A_u/A_g)$$
$$(Q_{0.01})_{u,w} = (0.330 * 1,890) + (0.670 * 2,160 * 0.835) \tag{28}$$
$$(Q_{0.01})_{u,w} = 1,830\ \text{ft}^3/\text{s}.$$

Summing up, the estimated 1% AEP peak discharge quantile $Q_{0.01}$ for this hypothetical ungaged basin on a stream in region 2 near to streamgage 05527950 ($A_u/A_g = 0.835$) is 1,830 ft^3/s, compared to 1,890 ft^3/s without the near-gage adjustment.

5.3.3 Example 3: At a Streamgage in the Study Region

To obtain an estimate at an applicable streamgage in the study region, no computations are needed. Although the method of computation is presented in the At a Streamgage section (equation 17), the results of the computations have been tabulated (Table 2). The particular value from Table 2 to be used is the same weighted at-gage flood-discharge quantile $(Q_p)_{g,w}$ used in the previous near-gage adjustment computation. Following that example, for USGS streamgage 05527950, Mill Creek at Old Mill Creek, Illinois, the appropriate AEP 0.01 at-gage flood-discharge quantile $(Q_{0.01})_{g,w}$ is 2,160 ft^3/s.

5.3.4 Example 4: At a Location Outside the Study Region

If instead the hypothetical ungaged basin were outside region 2, then the adjustment of a rural estimate for urbanization described in the Applications of the Temporal Urbanization Coefficients section would be applicable (equation 21). For example, if the AEP = 0.01 quantile estimate from the rural regional regression equations from Soong et al. (2004) is 2,000 ft^3/s, then the urbanization-adjusted AEP = 0.01 quantile value at the location of interest is:

$$Q_{0.01}(U) = Q_{0.01}(U_0)10^{(b_U)_{0.01}(U-U_0)}, \qquad (29)$$

where the urban fraction of interest, *U*, is, by assumption, 40% or 0.4, and the current urban fraction, U_0, is 0 because the discharge quantile value being adjusted, $Q_{0.01}(U_0)$, is being estimated by using a rural regression equation.

Therefore,

$$Q_{0.01}(U) = 2{,}000 * 10^{0.312*(0.40-0.0)}$$

$$Q_{0.01}(U) = 2{,}000 * 1.333$$

$$Q_{0.01}(U) = 2{,}670 \text{ ft}^3\text{/s},$$

where $(b_U)_{0.01} = 0.312$ is taken from Table 9.

The variance of prediction of this estimate in log units can be computed from equation 23 as follows:

$$V_U = V_{U_0} + V_{b_U}(U - U_0)^2$$

$$V_U = 0.0548 + 0.134^2 (0.4 - 0.0)^2 \quad (30)$$

$$V_U = 0.05767,$$

where

V_{U_0}, the variance of prediction of the unadjusted flood-discharge in log units, $\log_{10} Q(U_0)$, is assumed, just for this example, to have the same value as V_i which was computed previously for region 2 [in an actual computation it would be necessary to compute this value by the relevant method, such as the method given in Soong et al. (2004), which is currently (2016) implemented in StreamStats], and

V_{b_U} is the square of the standard error of $(b_U)_{0.01}$, the value of which is given in Table 9.

Given this value of V_U, the standard error is $S_U = (V_U)^{1/2} = 0.242$, and the standard error in percentage units is:

$$S_{pU} = 100\left\{\exp\left[(\ln 10)^2 V_U\right] - 1\right\}^{1/2}$$

$$D_{ij} \quad (31)$$

$$S_{pU} = 59.8\%.$$

Confidence intervals for this estimate can be computed by using equation 16 as already shown; the resulting 90% confidence interval in $\log_{10}$ units is [3.0275,3.8241] and in cubic feet per second, [1,070,6,670].

Summing up, the estimated 1 % AEP peak discharge quantile $Q_{0.01}$ for this hypothetical ungaged basin on a stream outside region 2 increases from 2,000 to 2,670 ft^3/s as a result of adjusting for the effects of urbanization increasing from 0% to 40%. The estimated adjusted quantile has a standard error of prediction of 59.8% and a 90% confidence interval of [1,070,6,670] ft^3/s.

5.3.5 Example 5: Adjustment for Effects of Future Urbanization

Finally, assume the hypothetical basin is as originally assumed, with the same basin characteristics, but an estimate of the peak discharge quantile at “build-out” (100% urbanization) is desired. If the future urbanization is expected to have similar hydrologic effects as the basins used in this study, the temporal urbanization coefficients would again be applicable, and the estimate of the AEP = 0.01 peak discharge quantile would be obtained by equation 21 as follows:

$$Q_{0.01}(U) = Q_{0.01}(U_0)10^{(b_U)_{0.01}(U-U_0)}, \quad (32)$$

where the future urban fraction of interest, *U*, is taken to be 100% or 1.0, and the current urban fraction, U_0, is 40% or 0.40, according to the original assumptions on this hypothetical basin.

Therefore,

$$Q_{0.01}(U) = 1{,}890 * 10^{0.312*(1.0-0.4)}$$

$$Q_{0.01}(U) = 1{,}890 * 1.539$$

$$Q_{0.01}(U) = 2{,}910 \text{ ft}^3/\text{s},$$

where

$Q_{0.01}(U_0) = 1{,}890$ is taken from the first example calculation (equation 24), and

$(b_U)_{0.01} = 0.312$ is taken from Table 9.

The uncertainty of this estimate can be obtained from equation 23 as in the previous example; the resulting uncertainty S_{pU} is 61.9%, and the 90% confidence interval is [3.0275,3.8241] in $\log_{10}$ units and [1,130,7,480] in cubic feet per second.

Summing up, the estimated 1% AEP peak discharge quantile $Q_{0.01}$ for this hypothetical ungaged basin increases from 1,890 ft^3/s to 2,910 ft^3/s as a result of adjusting for the effects of urbanization increasing from 40% to 100%. The estimated adjusted quantile has a standard error of prediction of 61.9% and a 90% confidence interval of [1,130,7,480] ft^3/s.

A future increase in urbanization does not need to take the urban fraction to completed build-out; that is, *U* = 1.0. Any value of *U* greater than the current urban fraction (U_0 = 0.40, in the example) could be used to estimate the effects of future increases in urbanization.

CHAPTER 6: SUMMARY

This report provides two sets of equations for estimating peak discharge quantiles at annual exceedance probabilities (AEPs) of 0.50, 0.20, 0.10, 0.04, 0.02, 0.01, 0.005, and 0.002 (recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years, respectively) for urbanized and urbanizing watersheds in Illinois based on analysis of 117 streamgage records in and near Illinois flood-frequency region 2. One set of equations was developed through a temporal analysis by using a two-step least squares-quantile regression technique that measures the average effect of changes in the urbanization of the gaged watersheds used in the study and were used to adjust the annual maximum peak discharge records to 2010 urbanization conditions. The other set of equations was developed through a spatial analysis using generalized least-squares (GLS) regression applied to quantiles estimated from the urbanization-adjusted records.

The effect of urbanization indicated by the two sets of equations is substantially different, with the temporal analysis indicating a larger effect, especially for larger AEPs (smaller recurrence intervals). This difference in urbanization effect was attributed to coefficient biases in the spatial analysis, and as a result, the urbanization coefficients from spatial equations are recommended for use only at ungaged locations in the study region. Other applications discussed in the report, which are estimating the effect of urbanization in regions of Illinois outside flood-frequency region 2 in combination with rural regression equations and estimating the effect of future urbanization anywhere in Illinois, use the results of the temporal analysis.

The peak discharge quantiles for the spatial analysis were computed by using the Expected Moments Algorithm following removal of potentially influential low floods defined by a multiple Grubbs-Beck test. To improve the skew estimates used for the peak discharge quantile estimation, weighted skew coefficients were computed as the variance-weighted average of at-site and generalized skew coefficients. The generalized skew coefficients were obtained from a new regional skew model, which estimates skewness as an increasing linear function of the urbanized land use fraction, with values ranging from –0.39 to +0.58.

Several urbanization, water and wetland, and slope variables, in addition to drainage area, were considered for use as basin characteristics in the spatial equations in a preliminary weighted least-squares analysis. The combination of variables giving the best results—drainage area, the fraction of developed land, the fraction of land with poorly drained soils or likely water, and the basin slope estimated as the ratio of the basin relief to basin perimeter—were used in the GLS analysis to develop the final spatial regression equations.

In addition to this report, which details the development of the two sets of equations and provides guidance on their application, including numerical examples, the products of the study include the urbanization-adjusted annual maximum peak discharge records and peak discharge quantile estimates at 181 streamgages: the 117 streamgages used to develop the spatial regression equations and 64 additional streamgages in the region that originally were considered for use in the study but later deemed to be redundant. The equations and quantile estimates will be available in the web-based application StreamStats, and the urbanization-adjusted peak discharge records are provided in a table as part of this report and as a collection of tables and plots by streamgage at http://dx.doi.org/10.3133/sir20165050.

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APPENDIX 1: NORTHEASTERN ILLINOIS REGIONAL SKEW ANALYSIS

For the log-transformation of annual peak discharges, Bulletin 17B (U.S. Interagency Advisory Committee on Water Data 1982) recommends using a weighted average of the station skew coefficient and a regional skew coefficient to improve estimates of annual flood-probability discharges (AFPDs). Bulletin 17B supplies a national map but also encourages hydrologists to develop more specific local relations. From the publication of the national map based on data through 1973 through the end of this study in 2009, some 36 years of additional information has accumulated and improved spatial estimation procedures have been developed (Stedinger and Griffis 2008). Furthermore, prior national and Illinois analyses of regional skew such as that in Soong et al. (2004) did not consider urbanization. For these reasons, for this study in northeastern Illinois a regression analysis was done to develop a regional skew model.

Reis et al. (2005), Gruber et al. (2007), and Gruber and Stedinger (2008) developed a Bayesian generalized least-squares (GLS) regression model for regional skewness analyses. The method provides a more reasonable description of the model error variance than either the generalized least-squares method-of-moments or maximum likelihood point estimates (Veilleux 2011). However, because of complications introduced by the use of the Expected Moments Algorithm (EMA), with multiple Grubbs-Beck censoring of potentially influential low floods (Cohn et al. 2013) and large cross-correlations between annual peak discharges at pairs of streamgages, an alternate regression procedure was developed to provide stable and defensible results for regional skew regression (Veilleux et al. 2012; Veilleux 2011; Lamontagne et al. 2012). This alternate procedure is referred to as the Bayesian weighted least-squares/Bayesian generalized least-squares (B-WLS/B-GLS) regression framework (Veilleux et al. 2011; Veilleux 2011; Veilleux et al. 2012).

The B-WLS/B-GLS regression analysis uses an ordinary least-squares (OLS) analysis to fit an initial regional skewness model; the OLS model is then used to generate a regional skew-coefficient estimate for each streamgage. This regional estimate is the basis for computing the variance of each station skew-coefficient estimator used in the weighted least-squares (WLS) analysis. Then, B-WLS is used to generate estimators of the regional skew-coefficient model parameters. Finally, B-GLS is used to estimate the precision of those WLS parameter estimators, to estimate the model error variance and the precision of that variance estimator, and to compute various diagnostic statistics. The methodology for the regional skewness model is described in detail in Eash et al. (2013).

APPLICATION OF B-WLS/B-GLS METHOD IN NORTHEASTERN ILLINOIS

This regional skew study is based on the temporally adjusted annual peak discharge data from the 117 nonredundant streamgages in northeastern Illinois and the surrounding states that were included in the regional regression analyses described in the main report (Table 1). As stated in Bulletin 17B, the skew coefficient of the station is sensitive to extreme events, and more accurate estimates can be obtained from longer records. Thus, for regional skew studies it is preferred that each streamgage have a minimum of 30 to 35 years of record. However, because of the nature of the data available in northeastern Illinois, in particular at the urban stations, the minimum was reduced to 15 years to ensure that the entire study area was represented. Applying this minimum reduced the number of streamgages used in the regional skew study to 110 (Table 1-1).

Because the dataset includes censored data and historic information, the effective record length used to compute the precision of the skewness estimators is no longer simply the number of annual peak discharges at a streamgage. Instead, a more complex calculation is used to take into account the availability of historic information and censored values. Although historic information and censored peaks provide valuable information, they often provide less information than an equal number of years with systematically recorded peaks (Stedinger and Cohn 1986). The calculations made to compute the pseudo record length (PRL) are described in Eash et al. (2013). PRL equals the systematic record length if such a complete record is all that is available for a site.

The station logarithmic skew coefficient, $\hat{\gamma}_S$ (Table 1-1), and its mean square error, $MSE[\hat{\gamma}_S]$, were computed by using expected moments analysis (EMA) (Cohn et al. 1997; Griffis et al. 2004). The streamgage skewness estimates are ensured to be unbiased by using the correction factor developed by Tasker and Stedinger (1986) and used in Reis et al. (2005). In addition to the skew data, selected basin characteristics for each of the streamgages were available as explanatory variables for the regional skew study.

Table 1-1. Skew statistics at U.S. Geological Survey streamgages used in the development of the regional skew model in this study in northeastern Illinois.

[See Appendix 9.]

A model for the cross-correlation of the logarithms of the annual maximum peak discharges between streamgage pairs is needed for the analysis because sample cross-correlations commonly are unavailable and are subject to large uncertainty, usually including unphysical negative values. Such a model for the northeastern Illinois study area was developed by using the 39 streamgages with at least 45 years of concurrent systematic peaks. A logit model, termed the Fisher Z transformation (Kendall and Stuart, 1961), where $Z = \ln[1+r)/(1-r)]$, was used to transform the sample correlations r_{ij} from their $(-1,+1)$ range to a $(-\infty,+\infty)$ range that is appropriate for least-squares fitting. Various models relating the transformed cross-correlations to various basin characteristics were considered. The adopted model relates the cross-correlations to the distance D_{ij} between streamgage basin centroids according to the fitted equation $Z_{ij} = 0.32 + \exp\lfloor -0.40 - 0.042 D_{ij} \rfloor$ (0a). The fitted relation between Z and the distance between basin centroids together with sample data from the 567 streamgage pairs of data is shown in Figure 1-1a. The equivalent function relation between the cross-correlations and basin centroid distance, which is obtained by back-transforming from *Z* to *r* as $r = [\exp(2Z) - 1]/[\exp(2\mathrm{Z}) + 1]$, is shown in Figure 1-1b.

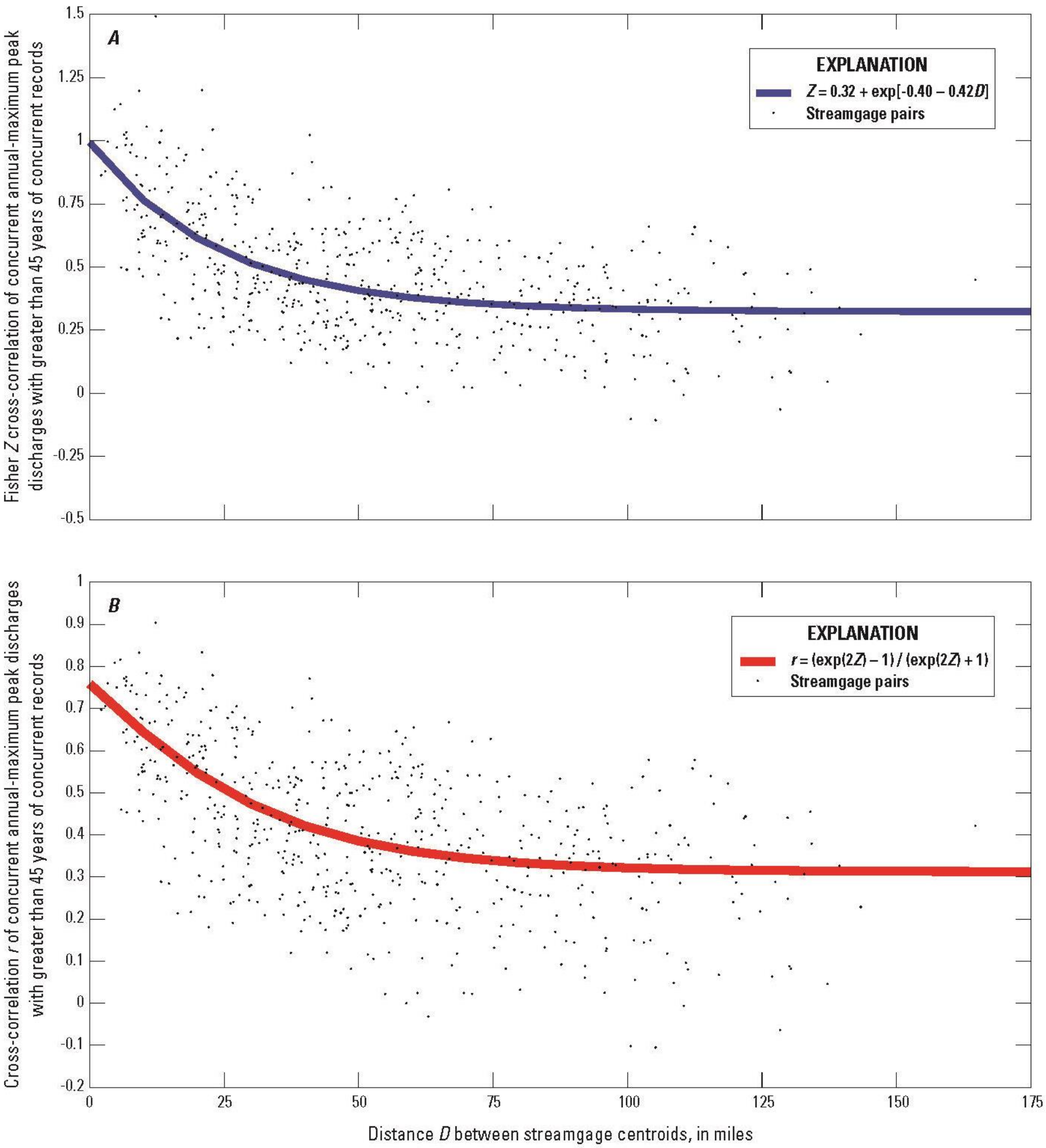

Figure 1-1. Fitting of cross-correlation model of the log-annual maximum peak discharges in this study in northeastern Illinois: (a) relation between Fisher Z transform of cross-correlation and distance; (b) relation between cross-correlation and distance.

RESULTS OF REGIONAL SKEW ANALYSIS IN NORTHEASTERN ILLINOIS

The more promising basin characteristics from a preliminary analysis of the regional spatial regressions were selected for testing as explanatory variables in the regression analysis for regional skew. These selected basin characteristics included drainage area, the urbanization measure *NLCD*_22_23_24, the DEM-based slope variable DEM_slope, and several water and wetness variables: NWI.total, NWI.emergent, DrainageClass1, DrainageClass1a, and NLCD_11_95 (see Table 3 for definitions). Of these, only *NLCD*_22_23_24 was statistically significant in explaining the site-to-site variability in skewness, with a square-root transformation providing the better result as compared to untransformed values. Thus, the best model, as classified by having the smallest model error variance, σ_δ^2, and largest pseudo R_δ^2 is the model using *NLCD*_22_23_24$^{1/2}$, denoted URBAN. Results for both the URBAN model, as well as the constant regional model, denoted CONSTANT, for comparison are provided in Table 1-2.

Table 1-2. Regional skewness models and corresponding metrics in this study in northeastern Illinois.

Model	β_1	β_2	σ_δ^2	ASEV	AVP$_{new}$	Pseudo R_δ^2
	0.16	—	0.19	0.022	0.21	0%
CONSTANT: $\hat{\gamma}_R = \beta_1$	(0.15)		(0.05)			
URBAN:	–0.39	0.97	0.16	0.032	0.19	14%
$\hat{\gamma}_R = \beta_1 + \beta_2\left[(NLCD\_22\_23\_24)^{0.5}\right]$	(0.19)	(0.34)	(0.05)			
		[0.4%]				

Standard deviations are in parentheses. Bayesian plausibility (as a percentage) is in square brackets. β_1, skew model intercept; β_2, skew model slope; σ_δ^2, model error variance; ASEV, average sampling error variance; AVP$_{new}$, average variance of prediction for a new site; pseudo R_δ^2 (%), fraction of the variability in the true skews explained by each model in as a percentage (Gruber et al. 2007); $\hat{\gamma}_R$, estimated regional skewness; *NLCD*_22_23_24, fraction of the basin that has 2011 National Land Cover Database land cover classes 22, 23, and 24 (low, medium, and high intensity development, respectively).

Table 1-2 includes the pseudo R_δ^2, which describes the estimated fraction of the variability in the true skewness from site-to-site explained by each model (Gruber et al. 2007; Parrett et al. 2011). A constant model does not explain any variability, so the pseudo R_δ^2 for the CONSTANT model is equal to 0%. The URBAN model has a pseudo R_δ^2 of 14% indicating that inclusion of the *NLCD*_22_23_24 basin characteristic in the model explains 14% of the variability in the true skews. Although the URBAN model accounts for a relatively small portion of the total variation in skews, it is important to note that the focus of the study is on the effects of urbanization. A statistically significant dependence of skewness on the *NLCD*_22_23_24 characteristic, a measure of urbanization, suggests that not including it in the skewness model could negatively affect the final spatial regression equations. Also, the posterior mean of the model error variance, σ_δ^2, for the URBAN model was 0.16, which is smaller than that of the CONSTANT model (σ_{δ}^{2} = 0.019). Thus, the URBAN model was chosen as the final regional skew model for the northeastern Illinois study area.

The average variance of prediction at a new site (AVP_{new}) describes the precision of the regional skew. In Table 1-2, the URBAN model has the lower AVP_{new}, equal to 0.19. This AVP_{new} is an average value computed by averaging the variance of prediction at a new site (VP_{new}) for all of the 110 streamgages in the analysis. Just as regional skew varies from streamgage to streamgage, depending on *NLCD*_22_23_24, so too do the values of VP_{new}. Values of the variance of prediction for the regional skew, VP_{new}, and effective record length (ERL) for the URBAN model for values of *NLCD*_22_23_24 between 0 and 1 are given in Table 1-3. Thus, the URBAN skew model for northeastern Illinois has VP_{new} values ranging from 0.18 to 0.22 and effective record lengths ranging from 39 to 43 years, depending on *NLCD*_22_23_24. It is important to note that for the purposes of this study, the AVP_{new} of 0.19 was used when weighting the at-site skew with the regional skew.

Table 1-3. Average regional skew, variance of prediction, and equivalent record length for URBAN regional skew model for various values of *NLCD*_22_23_24, in this study in northeastern Illinois.

***NLCD*_22_23_24 (fraction)**	**Average regional skew**	**VP_{new}**	**ERL (years)**
0.0	–0.39	0.196	42
0.1	–0.30	0.180	43
0.2	–0.20	0.180	42
0.3	–0.10	0.182	41
0.4	–0.01	0.186	40
0.5	0.09	0.191	39
0.6	0.19	0.196	39
0.7	0.28	0.203	39
0.8	0.38	0.208	40
0.9	0.48	0.215	40
1.0	0.57	0.222	41

VP_{new}, variance of prediction; ERL, equivalent record length; NLCD_22_23_24, the fraction of the basin that has 2011 National Land Cover Database land cover classes 22, 23, and 24 (low, medium, and high intensity development, respectively).

The URBAN model provides a reasonable fit for the northeastern Illinois regional skew data (Figure 1-2). As compared to the CONSTANT model, the URBAN model provides smaller values of regional skew for basins with less development (smaller *NCLD*_22_23_24 values) and larger values of regional skew for basins with more development (larger *NCLD*_22_23_24 values). The URBAN model indicates that skewness increases substantially with urbanization from a value of –0.39 for a basin with *NLCD*_22_23_24 equal to 0 to +0.58 for a basin where the *NLCD*_22_23_24 fraction is equal to one.

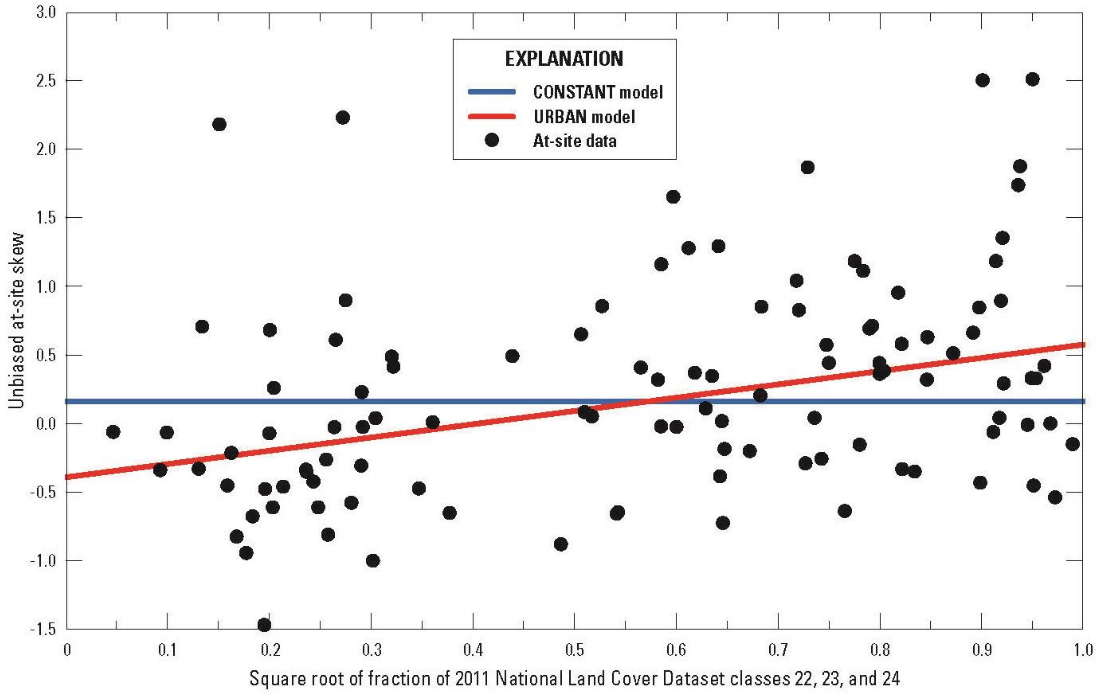

Figure 1-2. Relations between the unbiased at-site skew and urbanization measure for 110 streamgages in northeastern Illinois regional skew study area. The lines represent a model based on a constant skew (CONSTANT) and a model with a linear relation between skew and the square root of fraction of National Land Cover Dataset classes 22, 23, and 24 ($NLCD\_22\_23\_24^{1/2}$) urbanization measure (URBAN). The models were developed from B-WLS/B-GLS analyses.

Pseudo analysis of variance (Pseudo ANOVA) statistics for the northeastern Illinois regional skew analysis were determined as additional diagnostics for the selected model (Table 1-4). Explanations of how the statistics were computed can be found in Eash et al. (2013).

Table 1-4. Pseudo analysis of variance (ANOVA) statistics for the northeastern Illinois URBAN regional skew model.

Source	Degrees of freedom		Sum of squares	
	Equations	URBAN model	Equations	URBAN model
Model	*k*	1	$n\left[\delta_0^2(0)-\delta_0^2(k)\right]$	2.9
Model Error	*n-k-1*	108	$n\left[\delta_\delta^2(k)\right]$	18
Sampling Error	*n*	110	$\sum_{i=1}^{n} Var(\hat{\gamma}_i)$	37
Total	*2n-1*	219	$n\left[\delta_\delta^2(k)\right]+\sum_{i=1}^{n} Var(\hat{\gamma}_i)$	58
EVR				2.1
MBV*				5.7
$Pseudo-R_\delta^2$				14%

k, number of estimated regression parameters not including the constant; *n*, number of observations (streamgages) used in regression; $\delta_0^2(0)$, model error variance of a constant model; $\delta_0^2(k)$, model error variance of a model with *k* regression parameters and a constant; $Var(\hat{\gamma}_i)$, variance of the estimated sample skew at site *i*; EVR, error variance ratio; MBV*, misrepresentation of the beta variance; $Pseudo-R_\delta^2$, fraction of variability in the true skews explained by each model (Gruber et al. 2007).

APPENDIX 1 REFERENCES

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APPENDIX 2

Table 1. U.S. Geological Survey streamgages used in this study in northeastern Illinois and adjacent states.

[NAD 83, North American Datum of 1983; mi^2, square miles; POR, period-of-record; *N*, Number of peaks used in spatial regression modeling; N_s, Number of systematic peaks used in spatial regression modeling; U_f, urban fraction (Theobald, 2005) at first year of record used in spatial regression modeling; U_l, urban fraction (Theobald, 2005) at last year of record used in spatial regression modeling; U_{2010},urban fraction (Theobald, 2005) in 2010; *NLCD*_22_23_24, Urbanized fraction from 2011 National Land Cover Database (sum of classes 22, 23, 24); Drainage_Class1a, Sum of Soil Survey Geographic (SSURGO) drainage class fractions very poorly drained and unknown (likely water); DEM_1_0_P, Basin slope computed as (elevation range) / (basin perimeter) in feet per mile; WI, Wisconsin; IL, Illinois; IN, Indiana; NA, not applicable; shaded rows indicate streamgages not used in the regression analyses because they were deemed redundant but whose records were adjusted for urbanization in this study]

U.S. Geological Survey Streamgage number	Name	Latitude (NAD 83)	Longitude (NAD 83)	Hydrologic unit code	Drainage area (mi^2)	Used in regression analyses (non-redundant)	Crest-stage gage (CSG)	Spatial POR	Temporal POR	*N*	N_s	U_f	U_l	U_{2010}	*NLCD_22_23_24*:	Drainage_ Class1a	DEM_1_0_P: Basin slope computed as (elevation range) / (basin perimeter), in feet per mile
04087200	OAK CREEK NEAR SOUTH MILWAUKEE, WI	42.88279	–87.89203	04040002	13.70	No	Yes	1958–2009	1958–2009	52	52	0.3066	0.7977	0.7977	0.5757	0.0234	6.9977
04087204	OAK CREEK AT SOUTH MILWAUKEE, WI	42.925	–87.870	04040002	24.93	Yes	No	1964–2009	1964–2009	46	45	0.4340	0.7655	0.7655	0.5588	0.0475	6.5998
04087220	ROOT RIVER NEAR FRANKLIN, WI	42.87361	–87.99583	04040002	49.28	Yes	No	1964–2009	1960–2009	47	45	0.5170	0.8200	0.8220	0.5190	0.0394	7.2925
04087230	W BR ROOT R CANAL TRIB NEAR NORTH CAPE, WI	42.76224	–88.01786	04040002	4.01	Yes	Yes	1962–1993	1962–1993	32	32	0.0143	0.0653	0.1134	0.0315	0.0699	12.8273
04087233	ROOT RIVER CANAL NEAR FRANKLIN, WI	42.81556	–87.99472	04040002	55.20	Yes	No	1964–2009	1964–2009	46	44	0.0333	0.1343	0.1363	0.0616	0.0702	4.1730
04087240	ROOT RIVER AT RACINE, WI	42.75139	–87.82361	04040002	186.59	No	No	1964–2009	1964–2009	46	46	0.2146	0.4069	0.4094	0.2213	0.0490	4.2149
04087250	PIKE CREEK NEAR KENOSHA, WI	42.60335	–87.89480	04040002	7.24	Yes	Yes	1960–2009	1960–2009	50	50	0.0740	0.4229	0.4276	0.4169	0.0623	6.3059
04087257	PIKE RIVER NEAR RACINE, WI	42.64694	–87.86056	04040002	38.57	Yes	No	1972–2009	1972–2009	38	38	0.2146	0.4648	0.4693	0.2945	0.0247	4.4086
04087300	LAKE MICHIGAN TRIBUTARY AT WINTHROP HARBOR, IL	42.48583	–87.82222	04040002	1.50	Yes	Yes	1956–1972	1956–1972	17	17	0.1786	0.4046	0.9719	0.3425	0.0172	22.0903
04087400	KELLOGG RAVINE AT ZION, IL	42.46724	–87.82480	04040002	5.07	Yes	Yes	1962–1976	1962–1976	15	15	0.3060	0.4948	0.9733	0.4112	0.0174	19.2716
04093000	DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART, IN	41.53615	–87.25698	04040001	124.13	Yes	No	1947–2009	1947–2009	63	63	0.1180	0.4782	0.4791	0.3422	0.1565	2.7885
04094000	LITTLE CALUMET RIVER AT PORTER, IN	41.62170	–87.08698	04040001	66.01	Yes	No	1945–2009	1945–2009	65	65	0.0267	0.3155	0.3236	0.1036	0.1795	4.1226
04094500	SALT CREEK NEAR MCCOOL, IND.	41.59670	–87.14448	04040001	75.24	Yes	No	1945–1991	1945–1991	47	46	0.0733	0.4299	0.6303	0.2599	0.1802	4.1397

U.S. Geological Survey Streamgage number	Name	Latitude (NAD 83)	Longitude (NAD 83)	Hydrologic unit code	Drainage area (mi²)	Used in regression analyses (non-redundant)	Crest-stage gage (CSG)	Spatial POR	Temporal POR	*N*	N_s	U_f	U_l	U_{2010}	*NLCD_22_23_24:*	Drainage_ Class1a	DEM_1_0_P: Basin slope computed as (elevation range) / (basin perimeter), in feet per mile
05437950	KISHWAUKEE RIVER NEAR HUNTLEY, IL	42.22975	−88.42259	07090006	13.96	Yes	Yes	1965–1978	1965–1978	14	14	0.0768	0.1356	0.5015	0.1871	0.1852	4.2136
05438250	COON CREEK AT RILEY, IL	42.18250	−88.64139	07090006	85.12	Yes	No	1962–1991	1962–1991	30	30	0.0194	0.0471	0.1546	0.0704	0.0255	3.8994
05438283	PISCASAW CREEK NEAR WALWORTH, WI	42.52167	−88.66083	07090006	9.26	Yes	No	1993–2009	1993–2009	17	17	0.0319	0.0719	0.0755	0.0456	0.0066	7.9025
05438300	LAWRENCE CREEK TRIBUTARY NEAR HARVARD, IL	42.45835	−88.60288	07090006	0.81	Yes	Yes	1961–1980	1961–1980	20	19	0.0095	0.0095	0.0095	0.0593	0.0196	37.2431
05438390	PISCASAW CREEK BELOW MOKELER CREEK NR CAPRON, IL	42.38557	−88.69704	07090006	88.15	No	Yes	1970–1979	1970–1979	10	10	0.0427	0.0504	0.1304	0.0699	0.0302	5.4835
05438500	KISHWAUKEE RIVER AT BELVIDERE, IL	42.25613	−88.86316	07090006	536.74	Yes	No	1940–2009	1940–2009	70	70	0.0209	0.1545	0.1622	0.0910	0.0441	2.1308
05438850	MIDDLE BR OF S B KISHWAUKEE RIVER NEAR MALTA, IL	41.85558	−88.88620	07090006	1.52	Yes	Yes	1956–1980	1956–1980	25	24	0.0000	0.0000	0.0000	0.0282	0.0370	13.1427
05439000	SOUTH BRANCH KISHWAUKEE RIVER AT DEKALB, IL	41.93111	−88.75972	07090006	77.41	Yes	No	1980–2009	1980–2009	30	30	0.0470	0.0609	0.0615	0.0756	0.0170	2.2440
05439500	SOUTH BRANCH KISHWAUKEE RIVER NR FAIRDALE IL	42.11058	−88.90065	07090006	387.01	Yes	No	1940–2009	1940–2009	70	70	0.0245	0.0916	0.0939	0.0843	0.0149	1.9568
05439550	SOUTH BRANCH KISHWAUKEE RIVER TRIB NR IRENE, IL	42.17725	−88.94732	07090006	1.78	Yes	Yes	1959–1976	1959–1976	18	18	0.0044	0.0222	0.0675	0.0086	0.0010	15.7822
05440000	KISHWAUKEE RIVER NEAR PERRYVILLE, IL	42.19444	−88.99889	07090006	1098.23	No	No	1940–2009	1940–2009	70	70	0.0228	0.1385	0.1437	0.0949	0.0311	1.7133
05440500	KILLBUCK CREEK NEAR MONROE CENTER, IL	42.09889	−89.05194	07090006	117.64	Yes	Partial	1940–1980	1940–1980	41	41	0.0078	0.0161	0.0216	0.0381	0.0067	2.7263
05442000	KYTE RIVER NEAR FLAGG CENTER, IL	41.93750	−89.15639	07090005	118.78	Yes	No	1940–1951	1940–1951	12	12	0.0256	0.0330	0.0710	0.0856	0.0085	2.3363
05446950	GREEN RIVER TRIBUTARY NEAR AMBOY, IL	41.75837	−89.33621	07090007	0.66	Yes	Yes	1961–1976	1961–1976	16	16	0.0000	0.0000	0.0000	0.0403	0.0000	16.7906
05447000	GREEN RIVER AT AMBOY, IL	41.70976	−89.32454	07090007	198.69	Yes	Partial	1940–1982	1940–1982	42	41	0.0052	0.0078	0.0105	0.0265	0.0086	2.6497
05447050	GREEN RIVER TRIBUTARY NEAR OHIO, IL	41.65365	−89.45871	07090007	4.96	Yes	Yes	1959–1972	1959–1972	14	14	0.0031	0.0031	0.0031	0.0126	0.0274	9.6476
05447500	GREEN RIVER NEAR GENESEO, IL	41.48892	−90.15762	07090007	999.57	Yes	No	1940–2009	1940–2009	70	70	0.0077	0.0135	0.0135	0.0252	0.0399	1.1626

U.S. Geological Survey Streamgage number	Name	Latitude (NAD 83)	Longitude (NAD 83)	Hydrologic unit code	Drainage area (mi^2)	Used in regression analyses (non-redundant)	Crest-stage gage (CSG)	Spatial POR	Temporal POR	N	N_s	U_f	U_l	U_{2010}	*NLCD_22_23_24:*	Drainage_ Class1a	DEM_1_0_P: Basin slope computed as (elevation range) / (basin perimeter), in feet per mile
05517500	KANKAKEE RIVER AT DUNNS BRIDGE, IN	41.22004	−86.96836	07120001	1351.30	Yes	No	1949–2009	1949–2009	61	61	0.0238	0.0888	0.0894	0.0400	0.1721	0.8207
05517890	COBB DITCH NEAR KOUTS, IND.	41.33865	−87.07503	07120001	30.62	Yes	No	1968–2003	1968–2003	36	35	0.0216	0.1891	0.2466	0.0414	0.2562	4.2023
05518000	KANKAKEE RIVER AT SHELBY, IN	41.18281	−87.34031	07120001	1777.67	No	No	1940–2009	1940–2009	70	70	0.0164	0.1000	0.1012	0.0436	0.1859	0.6956
05519000	SINGLETON DITCH AT SCHNEIDER, IN	41.21226	−87.44837	07120001	122.84	Yes	No	1951–2001	1949–2001	53	50	0.0442	0.1604	0.1676	0.1026	0.1564	2.0038
05519500	WEST CREEK NEAR SCHNEIDER, IND.	41.21365	−87.49642	07120001	55.05	Yes	No	1949–1972	1949–1972	23	21	0.0312	0.0879	0.1986	0.1422	0.1478	2.1296
05520500	KANKAKEE RIVER AT MOMENCE, IL	41.16003	−87.66865	07120001	2296.66	No	No	1940–2009	1940–2009	70	70	0.0162	0.0991	0.1001	0.0501	0.1636	0.6007
05526150	KANKAKEE RIVER TRIBUTARY NEAR BOURBONNAIS, IL	41.19167	−87.94972	07120001	0.16	Yes	Yes	1956–1980	1956–1980	25	24	0.0000	0.0000	0.0000	0.0022	0.0000	24.1357
05526500	TERRY CREEK NEAR CUSTER PARK, IL	41.23333	−88.09833	07120001	13.00	Yes	No	1950–1975	1950–1975	26	26	0.0003	0.0034	0.0570	0.0228	0.0182	3.5253
05527050	PRAIRIE CREEK NEAR FRANKFORT, IL	41.43670	−87.84505	07120001	0.83	Yes	Yes	1956–1972	1956–1972	17	17	0.0046	0.0065	0.2350	0.0742	0.0006	11.5575
05527800	DES PLAINES RIVER AT RUSSELL, IL	42.48919	−87.92647	07120004	123.65	Yes	Partial	1960–2009	1960–2009	50	50	0.0499	0.1950	0.1982	0.1204	0.0878	2.4754
05527840	DES PLAINES RIVER AT WADSWORTH, IL	42.42919	−87.93035	07120004	145.52	No	Yes	1962–1976	1962–1976	15	15	0.0544	0.0921	0.2309	0.1255	0.0860	2.2110
05527870	MILL CREEK AT WEDGES CORNER, IL	42.38335	−88.00425	07120004	18.33	Yes	Yes	1962–1976	1960–1976	16	14	0.2181	0.3048	0.5683	0.3905	0.2273	3.5393
05527900	NORTH MILL CREEK AT HICKORY CORNERS, IL	42.46583	−88.00917	07120004	20.79	Yes	Yes	1962–1976	1960–2009	18	15	0.0428	0.2578	0.2674	0.0697	0.1902	4.7889
05527950	MILL CREEK AT OLD MILL CREEK, IL	42.41528	−87.96917	07120004	59.87	No	Partial	1962–2009	1960–2009	36	35	0.1317	0.4428	0.4565	0.2385	0.1744	3.0358
05528000	DES PLAINES RIVER NEAR GURNEE, IL	42.34389	−87.94111	07120004	232.00	No	No	1946–2009	1946–2009	63	62	0.0429	0.3374	0.3465	0.1885	0.1051	1.7730
05528150	INDIAN CREEK AT DIAMOND LAKE, IL	42.22419	−88.00480	07120004	10.92	Yes	Yes	1960–1976	1960–1976	17	17	0.1469	0.2169	0.9258	0.3955	0.0973	9.6960
05528170	DIAMOND LAKE DRAIN AT MUNDELEIN, IL	42.24891	−87.99369	07120004	2.58	Yes	Yes	1961–1976	1961–1976	16	16	0.4165	0.4548	0.7162	0.4660	0.1927	11.3353
05528200	HAWTHORN DRAINAGE DITCH NEAR MUNDELEIN, IL	42.24030	−87.96174	07120004	5.91	Yes	Yes	1963–1976	1961–1976	16	14	0.4517	0.6639	0.9217	0.7402	0.0779	10.9833
05528230	INDIAN CREEK AT PRAIRIE VIEW, IL	42.20944	−87.95500	07120004	35.51	No	Partial	1963–1996	1960–1996	21	18	0.2174	0.6281	0.9130	0.5174	0.0844	6.8325

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05528360	APTAKISIC CREEK AT APTAKISIC, IL	42.16808	−87.94952	07120004	2.83	Yes	Yes	1961–1976	1961–1976	16	16	0.0621	0.2616	1.0000	0.6690	0.0664	4.7725
05528400	DES PLAINES RIVER AT WHEELING, IL	42.13919	−87.90396	07120004	325.15	No	Yes	1962–1977	1962–1977	11	11	0.1360	0.2174	0.4823	0.2705	0.0952	1.7224
05528440	BUFFALO CREEK NEAR LAKE ZURICH, IL	42.18280	−88.05063	07120004	1.66	Yes	Yes	1961–1976	1961–1976	16	16	0.3332	0.6854	0.9974	0.8055	0.0746	15.7818
05528470	BUFFALO CREEK AT LONG GROVE, IL	42.17725	−87.99924	07120004	8.96	No	Yes	1961–1976	1961–1976	16	15	0.1920	0.5169	0.9862	0.4627	0.1001	6.8250
05528500	BUFFALO CREEK NEAR WHEELING, IL	42.15194	−87.95778	07120004	19.64	Yes	No	1953–2009	1953–2009	57	56	0.0952	0.8807	0.8914	0.5859	0.0835	6.5236
05529000	DES PLAINES RIVER NEAR DES PLAINES, IL	42.08167	−87.89056	07120004	364.30	No	No	1941–2009	1941–2009	69	69	0.0423	0.5052	0.5166	0.3087	0.0921	1.5720
05529300	MC DONALD CREEK NEAR WHEELING, IL	42.12058	−87.94646	07120004	4.50	No	Yes	1961–1979	1955–1979	21	19	0.3820	0.9468	0.9535	0.8819	0.0206	6.0650
05529500	MC DONALD CREEK NEAR MOUNT PROSPECT, IL	42.09530	−87.91285	07120004	7.83	Yes	No	1953–2009	1953–2009	57	56	0.3807	0.9571	0.9571	0.8413	0.0218	4.8367
05529900	WELLER CREEK AT MOUNT PROSPECT, IL	42.05892	−87.95646	07120004	8.96	No	Yes	1961–1977	1961–1979	18	16	0.9256	0.9617	0.9693	0.9005	0.0047	4.7531
05530000	WELLER CREEK AT DES PLAINES, IL	42.04947	−87.91812	07120004	12.73	Yes	No	1951–2009	1951–2009	59	59	0.6469	0.9751	0.9751	0.9043	0.0038	3.9615
05530400	HIGGINS CREEK NEAR MOUNT PROSPECT, IL	42.03447	−87.95979	07120004	2.05	Yes	Yes	1961–1979	1961–1979	19	19	0.2441	0.5259	0.6447	0.6959	0.0671	6.5743
05530480	WILLOW CREEK AT ORCHARD PLACE, IL	41.99697	−87.87979	07120004	17.92	Yes	Yes	1961–1979	1955–1979	21	19	0.1563	0.6599	0.7978	0.9006	0.0215	2.9481
05530600	DES PLAINES RIVER AT RIVER GROVE, IL	41.92948	−87.84451	07120004	463.01	No	Yes	1960–1977	1960–1977	18	18	0.2504	0.3769	0.5862	0.4259	0.0756	1.3236
05530700	SILVER CREEK AT MELROSE PARK, IL	41.90475	−87.84506	07120004	11.15	Yes	Yes	1961–1980	1955–1980	21	20	0.6507	0.8474	0.8922	0.9361	0.0107	4.1101
05530800	DES PLAINES RIVER AT FOREST PARK, IL	41.86809	−87.82756	07120004	481.08	No	Yes	1954–1976	1954–1976	23	23	0.2172	0.3919	0.5979	0.4445	0.0730	1.2716
05530940	SALT CREEK AT PALATINE, IL	42.11058	−88.06313	07120004	5.71	Yes	Yes	1961–1980	1961–1980	19	19	0.3773	0.8531	0.9413	0.6277	0.1429	8.7956
05530960	SALT CREEK NEAR PALATINE, IL	42.07392	−88.04396	07120004	15.83	No	Yes	1961–1979	1961–1979	19	19	0.3344	0.7149	0.7891	0.6453	0.1169	5.6670
05530990	SALT CREEK AT ROLLING MEADOWS, IL	42.06056	−88.01667	07120004	27.11	No	No	1974–2009	1974–2009	36	36	0.7261	0.8420	0.8420	0.7367	0.0920	5.1206
05531000	SALT CREEK NEAR ARLINGTON HEIGHTS, IL	42.05083	−88.01000	07120004	28.62	No	Partial	1951–1976	1951–1976	26	26	0.2428	0.7567	0.8465	0.7459	0.0875	4.6420
05531050	SALT CREEK NEAR WOOD DALE, IL	41.99281	−87.99562	07120004	50.40	No	Yes	1961–1976	1955–1979	22	16	0.2631	0.7281	0.7841	0.7183	0.0885	3.9700

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05531080	SPRING BROOK AT BLOOMINGDALE, IL	41.95864	−88.07063	07120004	6.17	Yes	Yes	1961–1979	1961–1979	19	17	0.4205	0.7656	0.9178	0.8118	0.0511	5.6661
05531100	MEACHAM CREEK AT MEDINAH, IL	41.97753	−88.04785	07120004	4.20	Yes	Yes	1956–1979	1956–1979	19	19	0.4144	0.8867	0.9761	0.8473	0.0703	8.4784
05531130	SPRING BROOK AT WALNUT AVE AT ITASCA, IL	41.97114	−88.01312	07120004	15.04	No	Yes	1961–1979	1961–1979	18	15	0.4560	0.7312	0.9211	0.7634	0.0540	5.0997
05531200	SALT CREEK AT ADDISON, IL	41.92892	−87.97784	07120004	82.56	No	Yes	1960–1976	1948–1976	21	17	0.1529	0.6894	0.8200	0.7409	0.0758	2.7069
05531300	SALT CREEK AT ELMHURST, IL	41.88614	−87.95923	07120004	91.25	No	Partial	1960–2009	1948–2009	46	33	0.2102	0.8308	0.8332	0.7585	0.0709	2.6206
05531380	SALT CREEK AT OAK BROOK, IL	41.86086	−87.94784	07120004	100.85	No	Yes	1960–1976	1948–1976	21	17	0.2468	0.7432	0.8475	0.7687	0.0659	2.3553
05531500	SALT CREEK AT WESTERN SPRINGS, IL	41.82583	−87.90028	07120004	116.25	Yes	No	1946–2009	1946–2009	64	57	0.2219	0.8474	0.8508	0.7602	0.0660	2.3509
05531800	ADDISON CREEK AT NORTHLAKE, IL	41.91031	−87.90284	07120004	6.89	No	Yes	1961–1976	1961–1980	19	15	0.6265	0.8094	0.9117	0.7853	0.0222	4.3848
05532000	ADDISON CREEK AT BELLWOOD, IL	41.88170	−87.86923	07120004	16.19	Yes	No	1951–2009	1951–2009	59	58	0.6007	0.9487	0.9523	0.8931	0.0118	3.4123
05532500	DES PLAINES RIVER AT RIVERSIDE, IL	41.82167	−87.82194	07120004	635.65	No	Partial	1940–2009	1940–2009	70	68	0.1452	0.6509	0.6582	0.5265	0.0680	1.2028
05533000	FLAG CREEK NEAR WILLOW SPRINGS, IL	41.73889	−87.89639	07120004	16.82	Yes	No	1951–2009	1951–2009	59	59	0.4949	0.9299	0.9318	0.8492	0.0395	6.1458
05533200	SAWMILL CREEK TRIBUTARY NEAR TIEDTVILLE, IL	41.73475	−87.96673	07120004	2.35	Yes	Yes	1961–1979	1961–1979	18	17	0.5995	0.9485	0.9889	0.9090	0.0051	12.3731
05533300	WARDS CREEK NEAR WOODRIDGE, IL	41.72559	−87.98867	07120004	3.11	Yes	Yes	1962–1976	1962–1976	15	15	0.3059	0.7006	0.9676	0.6753	0.0735	7.9840
05533400	SAWMILL CREEK NEAR LEMONT, IL	41.70778	−87.96278	07120004	12.16	No	Partial	1961–2009	1961–2009	43	40	0.3362	0.7845	0.7903	0.6504	0.0477	6.3108
05534300	NORTH BRANCH CHICAGO RIVER AT LAKE FOREST, IL	42.24002	−87.88063	07120003	11.18	No	Yes	1961–1976	1961–1976	16	16	0.0697	0.1907	0.7346	0.4606	0.0415	2.8830
05534400	NORTH BRANCH CHICAGO RIVER AT BANNOCKBURN, IL	42.20002	−87.85285	07120003	15.61	No	Yes	1960–1976	1960–1976	17	17	0.1129	0.2687	0.7748	0.4276	0.0386	2.5479
05534500	NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL	42.15278	−87.81861	07120003	19.70	Yes	No	1953–2009	1953–2009	57	56	0.1443	0.8000	0.8139	0.4517	0.0323	2.0827
05534600	NORTH BRANCH CHICAGO RIVER AT NORTHFIELD, IL	42.10142	−87.77395	07120003	23.70	No	Yes	1960–1980	1960–1980	20	19	0.3166	0.5076	0.7970	0.4686	0.0278	2.1406
05534900	SKOKIE RIVER AT LAKE BLUFF, IL	42.27947	−87.86285	07120003	7.87	No	Yes	1962–1976	1962–1976	15	15	0.3758	0.6002	0.8271	0.6611	0.0630	3.5010
05535000	SKOKIE RIVER AT LAKE FOREST, IL	42.23250	−87.84528	07120003	12.63	Yes	No	1952–2009	1952–2009	58	58	0.2110	0.8497	0.8629	0.5515	0.0443	2.8227

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05535070	SKOKIE RIVER NEAR HIGHLAND PARK, IL	42.15972	−87.79806	07120003	20.75	No	No	1967–2009	1967–2009	43	43	0.5727	0.8953	0.9076	0.5495	0.0385	2.4357
05535150	SKOKIE RIVER AT NORTHFIELD, IL	42.10142	−87.75923	07120003	27.93	No	Yes	1960–1979	1960–1979	19	18	0.4710	0.6553	0.8333	0.5591	0.0479	2.0473
05535200	NORTH BRANCH CHICAGO RIVER AT GLENVIEW, IL	42.06892	−87.77451	07120003	57.17	No	Yes	1960–1969	1960–1977	18	10	0.4420	0.6004	0.8159	0.5321	0.0357	1.8011
05535300	WF OF NB CHICAGO RIVER AT BANNOCKBURN, IL	42.20002	−87.89007	07120003	2.80	No	Yes	1961–1976	1961–1976	16	16	0.2424	0.4784	0.9025	0.3678	0.0185	4.2389
05535400	WF OF NB CHICAGO RIVER AT DEERFIELD, IL	42.16725	−87.85673	07120003	6.99	No	Yes	1961–1976	1961–1976	16	16	0.4225	0.6556	0.9354	0.4453	0.0277	2.9551
05535500	WF OF NB CHICAGO RIVER AT NORTHBROOK IL	42.13833	−87.83472	07120003	11.64	Yes	No	1953–2009	1953–2009	57	54	0.2507	0.9105	0.9198	0.6085	0.0236	2.8439
05535700	WF OF NB CHICAGO RIVER AT GLENVIEW, IL	42.08697	−87.80229	07120003	21.89	No	Yes	1960–1977	1960–1977	18	18	0.4549	0.7159	0.8565	0.7235	0.0224	2.3616
05535800	NORTH BRANCH CHICAGO RIVER AT MORTON GROVE, IL	42.05003	−87.78062	07120003	92.03	No	Yes	1960–1978	1960–1979	20	15	0.4996	0.6772	0.8297	0.6202	0.0281	1.7657
05536000	NORTH BRANCH CHICAGO RIVER AT NILES, IL	42.01222	−87.79583	07120003	99.34	Yes	No	1951–2009	1951–2009	59	53	0.3514	0.8249	0.8315	0.6393	0.0264	1.6934
05536105	NB CHICAGO RIVER AT ALBANY AVENUE AT CHICAGO, IL	41.97417	−87.70583	07120003	112.17	No	No	1990–2009	1990–2009	19	19	0.7463	0.8286	0.8344	0.6651	0.0241	1.5828
05536178	PLUM CREEK NEAR DYER, IN	41.47004	−87.53254	07120003	34.26	No	Yes	1966–1977	1955–1977	13	12	0.0278	0.1189	0.4707	0.1309	0.0402	3.4243
05536179	HART DITCH AT DYER, IN	41.50781	−87.51004	07120003	37.16	No	No	1990–2009	1990–2009	20	20	0.2181	0.4575	0.4753	0.1614	0.0669	3.0727
05536190	HART DITCH AT MUNSTER, IN	41.56115	−87.48060	07120003	69.28	Yes	No	1943–2009	1943–2009	67	63	0.1241	0.6290	0.6385	0.4190	0.1227	2.3585
05536201	THORN CREEK AT PARK FOREST, IL	41.47198	−87.67393	07120003	5.82	Yes	Yes	1962–1978	1955–1978	19	16	0.1982	0.3387	0.5798	0.3195	0.0205	7.0569
05536207	THORN CREEK TRIBUTARY AT CHICAGO HEIGHTS, IL	41.50615	−87.66004	07120003	3.93	Yes	Yes	1962–1977	1962–1977	16	16	0.8305	0.8509	0.8815	0.8355	0.1221	27.8415
05536210	THORN CREEK NEAR CHICAGO HEIGHTS, IL	41.51389	−87.63583	07120003	17.14	No	No	1965–1979	1965–1979	15	15	0.5225	0.5788	0.6843	0.5535	0.0443	5.6029
05536215	THORN CREEK AT GLENWOOD, IL	41.53031	−87.62227	07120003	25.03	No	No	1950–2009	1950–2009	60	60	0.3966	0.6942	0.7010	0.6298	0.0308	4.7866
05536235	DEER CREEK NEAR CHICAGO HEIGHTS, IL	41.52087	−87.59032	07120003	23.36	Yes	No	1948–2005	1948–2009	62	58	0.1420	0.6305	0.6534	0.3822	0.0269	4.1747
05536238	BUTTERFIELD CREEK NEAR LINCOLN ESTATES, IL	41.50615	−87.77616	07120003	1.76	Yes	Yes	1961–1979	1961–1979	19	18	0.0702	0.2289	0.4052	0.5282	0.0498	6.7099
05536255	BUTTERFIELD CREEK AT FLOSSMOOR, IL	41.54003	−87.64921	07120003	23.21	Yes	No	1948–2009	1948–2009	62	61	0.1243	0.6182	0.6193	0.6745	0.0487	4.4021

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05536265	LANSING DITCH NEAR LANSING, IL	41.52837	−87.52921	07120003	8.02	Yes	No	1948–2009	1948–2009	62	61	0.0402	0.5124	0.5231	0.4134	0.0356	5.5774
05536270	NORTH CREEK NEAR LANSING, IL	41.54556	−87.55889	07120003	16.83	Yes	No	1948–1979	1948–1979	32	32	0.1246	0.4413	0.5702	0.5412	0.1215	3.9938
05536275	THORN CREEK AT THORNTON, IL	41.56837	−87.60782	07120003	103.58	No	No	1947–2006	1947–2009	63	59	0.1852	0.5953	0.6031	0.5434	0.0441	2.7702
05536290	LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL	41.60698	−87.59782	07120003	206.58	No	No	1947–2009	1947–2009	63	63	0.2214	0.6311	0.6382	0.5308	0.0861	1.8084
05536310	CALUMET UNION DRAINAGE CANAL NEAR MARKHAM, IL	41.59670	−87.66644	07120003	12.64	Yes	Yes	1961–1974	1955–1976	18	14	0.5770	0.8209	0.8568	0.8684	0.0149	4.8727
05536335	MIDLOTHIAN CREEK NEAR TINLEY PARK, IL	41.58837	−87.74783	07120003	9.98	No	Yes	1954–1979	1954–1979	26	26	0.2697	0.7689	0.8621	0.9026	0.0737	4.4944
05536340	MIDLOTHIAN CREEK AT OAK FOREST, IL	41.61420	−87.72949	07120003	13.62	Yes	No	1951–2009	1951–2009	59	57	0.2094	0.7754	0.7755	0.8306	0.0798	4.0485
05536460	TINLEY CREEK NEAR OAK FOREST, IL	41.63031	−87.78477	07120003	8.00	No	Yes	1961–1979	1961–1979	19	18	0.2100	0.6544	0.7231	0.7102	0.0554	6.3055
05536500	TINLEY CREEK NEAR PALOS PARK, IL	41.64670	−87.76644	07120003	11.27	Yes	No	1951–2009	1951–2009	58	58	0.0462	0.6212	0.6212	0.6392	0.0514	5.4185
05536510	NAVAJO CREEK AT PALOS HEIGHTS, IL	41.66087	−87.79394	07120003	1.60	Yes	Yes	1961–1979	1961–1979	19	19	0.6310	0.7187	0.7440	0.7167	0.0160	13.3884
05536560	MELVINA DITCH NEAR OAK LAWN, IL	41.71920	−87.78533	07120003	5.54	Yes	Yes	1962–1980	1962–1980	19	16	0.9716	0.9840	0.9840	0.9787	0.0000	2.3942
05536570	STONY CREEK (WEST) AT WORTH, IL	41.70003	−87.79783	07120003	17.96	No	Yes	1962–1970	1962–1976	15	9	0.9502	0.9641	0.9652	0.9725	0.0085	1.7950
05536620	MILL CREEK NEAR PALOS PARK, IL	41.65253	−87.83978	07120003	5.69	No	Yes	1961–1977	1961–1977	17	17	0.2933	0.4812	0.5845	0.6473	0.1764	5.2094
05536630	MILL CREEK AT PALOS PARK, IL	41.67420	−87.84311	07120003	10.52	Yes	Yes	1961–1979	1955–1979	20	19	0.2327	0.5030	0.5969	0.6007	0.1362	7.1825
05537500	LONG RUN NEAR LEMONT, IL	41.64253	−87.99923	07120004	21.11	Yes	No	1951–2009	1951–2009	59	58	0.0399	0.7768	0.7855	0.4674	0.0694	4.5653
05538440	SPRING CREEK NEAR ORLAND PARK, IL	41.60059	−87.90061	07120004	1.54	Yes	Yes	1961–1977	1955–1977	18	17	0.1916	0.4732	0.8177	0.6238	0.2496	7.0869
05539000	HICKORY CREEK AT JOLIET, IL	41.51503	−88.07339	07120004	108.21	Yes	No	1945–2008	1942–2009	66	64	0.0789	0.6572	0.6752	0.5157	0.0264	2.7395
05539870	WEST BRANCH DU PAGE RIVER AT ONTARIOVILLE, IL	41.97836	−88.13313	07120004	10.10	No	Yes	1961–1976	1961–1979	19	16	0.3871	0.8953	0.9458	0.8979	0.0928	3.3021
05539890	WEST BRANCH DU PAGE RIVER NEAR WAYNE, IL	41.94364	−88.18091	07120004	23.34	No	Yes	1961–1976	1955–1979	20	16	0.1904	0.6889	0.8311	0.7341	0.1060	5.1838
05539900	WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL	41.91086	−88.17896	07120004	27.95	Yes	No	1961–2009	1961–2009	49	48	0.2582	0.8185	0.8249	0.7160	0.1009	5.6098

U.S. Geological Survey Streamgage number	Name	Latitude (NAD 83)	Longitude (NAD 83)	Hydrologic unit code	Drainage area (mi^2)	Used in regression analyses (non-redundant)	Crest-stage gage (CSG)	Spatial POR	Temporal POR	*N*	N_s	U_f	U_l	U_{2010}	*NLCD_22_23_24:*	Drainage_ Class1a	DEM_1_0_P: Basin slope computed as (elevation range) / (basin perimeter), in feet per mile
05539950	KLEIN CREEK AT CAROL STREAM, IL	41.90670	−88.14229	07120004	9.11	Yes	Yes	1961–1979	1961–1979	19	19	0.1967	0.6882	0.9331	0.9027	0.0716	8.6120
05540030	WEST BRANCH DU PAGE RIVER AT WEST CHICAGO, IL	41.86142	−88.19257	07120004	59.77	No	Yes	1961–1979	1955–1979	20	19	0.2321	0.6669	0.8465	0.7333	0.0807	4.1513
05540060	KRESS CREEK AT WEST CHICAGO, IL	41.85639	−88.20389	07120004	18.63	Yes	Partial	1961–2009	1961–2009	44	42	0.1894	0.5098	0.5229	0.5314	0.0667	3.7049
05540080	SPRING BROOK AT WHEATON, IL	41.85058	−88.11479	07120004	2.07	Yes	Yes	1961–1979	1961–1979	19	19	0.7411	0.9212	0.9949	0.8760	0.0425	6.4418
05540091	SPRING BK AT FOREST PRESERVE NR WARRENVILLE, IL	41.83528	−88.18278	07120004	6.83	No	No	1992–2009	1992–2009	18	18	0.7288	0.9033	0.9211	0.6509	0.0535	4.8716
05540095	WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL	41.81750	−88.17139	07120004	91.45	No	No	1969–2009	1969–2009	41	41	0.4112	0.7666	0.7766	0.6621	0.0763	3.4273
05540110	FERRY CREEK AT WARRENVILLE, IL	41.82031	−88.19313	07120004	3.69	Yes	Yes	1961–1979	1961–1979	19	19	0.1311	0.2398	0.4865	0.2778	0.0843	3.8298
05540130	WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL	41.72056	−88.13194	07120004	123.27	No	No	1989–2009	1989–2009	21	21	0.6589	0.7868	0.7965	0.6807	0.0678	3.0496
05540140	EAST BRANCH DU PAGE RIVER NEAR BLOOMINGDALE, IL	41.93503	−88.05812	07120004	2.42	Yes	Yes	1961–1979	1961–1979	19	19	0.3124	0.9225	0.9845	0.9245	0.0422	10.3462
05540150	EAST BR DU PAGE RIVER AT GLEN ELLYN, IL	41.89003	−88.05035	07120004	13.68	No	Yes	1961–1980	1961–1980	18	18	0.5464	0.8416	0.9141	0.7923	0.0468	4.6220
05540160	EAST BRANCH DU PAGE RIVER NEAR DOWNERS GROVE, IL	41.83167	−88.04778	07120004	25.21	Yes	Partial	1961–2009	1955–2009	36	35	0.4797	0.9291	0.9347	0.7946	0.0567	3.6796
05540190	ST. JOSEPH CREEK AT BELMONT, IL	41.79197	−88.03756	07120004	8.82	Yes	Yes	1961–1977	1961–1977	17	17	0.8906	0.9339	0.9683	0.8075	0.0219	4.6491
05540195	ST. JOSEPH CREEK AT ROUTE 34 AT LISLE, IL	41.80194	−88.06889	07120004	11.10	No	No	1989–2009	1989–2009	21	21	0.9195	0.9561	0.9601	0.8024	0.0272	5.0182
05540240	PRENTISS CREEK NEAR LISLE, IL	41.77142	−88.06979	07120004	6.57	Yes	Yes	1961–1980	1961–1980	20	20	0.5572	0.9316	0.9807	0.8442	0.0207	6.8289
05540250	EAST BRANCH DU PAGE RIVER AT BOLINGBROOK, IL	41.71806	−88.07056	07120004	73.34	No	No	1992–2009	1989–2009	21	18	0.7886	0.8658	0.8729	0.7146	0.0469	2.2427
05540275	SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL	41.72583	−88.16361	07120004	9.89	Yes	No	1988–2009	1988–2009	22	22	0.4807	0.7114	0.7186	0.6140	0.0220	3.1703
05540500	DU PAGE RIVER AT SHOREWOOD, IL	41.52225	−88.19256	07120004	323.19	Yes	No	1941–2009	1941–2009	69	68	0.1054	0.7540	0.7671	0.6462	0.0519	2.3473
05541750	MAZON RIVER TRIBUTARY NEAR GARDNER, IL	41.16003	−88.34312	07120005	4.74	Yes	Yes	1959–1980	1959–1980	22	22	0.0033	0.0033	0.0033	0.0099	0.0013	2.2336
05542000	MAZON RIVER NEAR COAL CITY, IL	41.28614	−88.35979	07120005	451.80	Yes	No	1940–2009	1940–2009	69	69	0.0094	0.0208	0.0211	0.0384	0.0189	1.8277
05543830	FOX RIVER AT WAUKESHA, WI	43.00472	−88.24361	07120006	127.74	Yes	No	1963–2009	1960–2009	48	47	0.2656	0.7412	0.7565	0.3386	0.1717	3.5814

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05544200	MUKWONAGO RIVER AT MUKWONAGO, WI	42.85667	−88.32778	07120006	72.09	Yes	No	1974–2009	1974–2009	34	34	0.0876	0.3057	0.3115	0.0558	0.1036	4.4455
05544300	MUKWONAGO RIVER TRIBUTARY NEAR MUKWONAGO, WI	42.84946	−88.31732	07120006	1.31	Yes	Yes	1960–1981	1960–1981	21	19	0.0534	0.1119	0.1958	0.0664	0.0973	14.3308
05545100	SUGAR CREEK AT ELKHORN, WI	42.69078	−88.51644	07120006	6.19	Yes	Yes	1962–2009	1962–2009	48	48	0.0214	0.0418	0.0422	0.0845	0.0000	3.3575
05545200	WHITE RIVER TRIBUTARY NEAR BURLINGTON, WI	42.68363	−88.36148	07120006	2.36	Yes	Yes	1960–2009	1958–2009	51	49	0.0049	0.0389	0.0393	0.0171	0.0012	16.0636
05545300	WHITE RIVER NEAR BURLINGTON, WI	42.66585	−88.31759	07120006	106.37	Yes	Partial	1960–1982	1959–1982	24	23	0.1305	0.1772	0.2855	0.0852	0.0765	4.0675
05545750	FOX RIVER NEAR NEW MUNSTER, WI	42.61085	−88.22592	07120006	804.31	Yes	Partial	1940–2009	1940–2009	70	69	0.0505	0.3523	0.3593	0.1300	0.1459	1.5424
05547755	SQUAW CREEK AT ROUND LAKE, IL	42.34972	−88.08833	07120006	16.37	Yes	No	1990–2005	1990–2005	16	16	0.0661	0.3061	0.4180	0.2367	0.1953	4.0509
05548150	NORTH BRANCH NIPPERSINK CREEK NEAR GENOA CITY, WI	42.50418	−88.38371	07120006	13.75	Yes	Yes	1962–2009	1962–2009	48	44	0.0335	0.0623	0.0641	0.0337	0.1177	6.2355
05548280	NIPPERSINK CREEK NEAR SPRING GROVE, IL	42.44333	−88.24750	07120006	195.14	Yes	No	1967–2009	1966–2009	43	42	0.0840	0.2435	0.2534	0.0787	0.0880	3.4186
05549000	BOONE CREEK NEAR MC HENRY, IL	42.32056	−88.31278	07120006	15.65	Yes	No	1949–1992	1949–1992	44	42	0.0007	0.1255	0.4496	0.0560	0.1473	7.3301
05549700	MUTTON CREEK AT ISLAND LAKE, IL	42.28475	−88.17980	07120006	10.24	Yes	Yes	1962–1976	1960–1976	16	15	0.0211	0.0453	0.4535	0.1925	0.2117	5.1296
05549850	FLINT CREEK NEAR FOX RIVER GROVE, IL	42.21111	−88.17361	07120006	35.57	Yes	Partial	1962–1996	1960–1996	23	22	0.2389	0.6163	0.7983	0.3746	0.1660	3.8487
05549900	FOX RIVER TRIBUTARY NEAR CARY, IL	42.19669	−88.26508	07120006	0.08	Yes	Yes	1956–1979	1956–1979	23	20	0.7700	0.9500	1.0000	0.9450	0.0000	28.4190
05550300	TYLER CREEK AT ELGIN, IL	42.05833	−88.30389	07120006	39.04	Yes	Partial	1962–2009	1962–2009	29	29	0.0684	0.3346	0.3483	0.2566	0.0600	6.3855
05550430	EAST BRANCH POPLAR CREEK NEAR PALATINE, IL	42.06725	−88.11146	07120006	2.57	Yes	Yes	1961–1977	1961–1977	17	17	0.1777	0.4210	0.4842	0.4032	0.1614	7.1875
05550450	POPLAR CREEK NEAR ONTARIOVILLE, IL	42.04669	−88.15563	07120006	16.70	No	Yes	1961–1977	1961–1977	17	16	0.1328	0.3878	0.5715	0.5244	0.1620	3.8626
05550470	POPLAR CREEK TRIBUTARY NEAR BARTLETT, IL	42.02447	−88.20285	07120006	5.15	Yes	Yes	1961–1979	1961–1979	19	17	0.3894	0.8991	0.9573	0.8794	0.1020	5.8190
05550500	POPLAR CREEK AT ELGIN, IL	42.02611	−88.25556	07120006	35.09	Yes	No	1952–2009	1952–2009	58	58	0.0753	0.5742	0.5742	0.5621	0.1179	3.7406
05551030	BREWSTER CREEK AT VALLEY VIEW, IL	41.97194	−88.27972	07120007	15.28	Yes	Partial	1962–1979	1962–2006	21	17	0.0701	0.5198	0.5549	0.4157	0.1129	5.9096
05551050	NORTON CREEK NEAR WAYNE, IL	41.94836	−88.27146	07120007	7.37	Yes	Yes	1962–1979	1957–1979	19	18	0.0815	0.1780	0.6605	0.3565	0.0988	3.9399

U.S. Geological Survey Streamgage number	Name	Latitude (NAD 83)	Longitude (NAD 83)	Hydrologic unit code	Drainage area (mi^2)	Used in regression analyses (non-redundant)	Crest-stage gage (CSG)	Spatial POR	Temporal POR	N	N_s	U_f	U_l	U_{2010}	*NLCD_22_23_24:*	Drainage_ Class1a	DEM_1_0_P: Basin slope computed as (elevation range) / (basin perimeter), in feet per mile
05551060	NORTON CREEK NEAR ST. CHARLES, IL	41.94503	−88.30619	07120007	11.53	No	Yes	1962–1979	1957–1979	19	18	0.1079	0.2621	0.7822	0.3743	0.0680	4.6437
05551200	FERSON CREEK NEAR ST. CHARLES, IL	41.93278	−88.34083	07120007	51.80	Yes	No	1961–2009	1961–2009	49	49	0.0421	0.6143	0.6351	0.2929	0.0443	5.7631
05551330	MILL CREEK NEAR BATAVIA, IL	41.84583	−88.34917	07120007	28.78	Yes	No	1998–2009	1998–2009	12	12	0.4268	0.6160	0.6339	0.3931	0.0237	7.7810
05551520	INDIAN CREEK NEAR NORTH AURORA, IL	41.81392	−88.27396	07120007	5.19	Yes	Yes	1961–1979	1961–1979	19	19	0.0912	0.1483	0.4510	0.3599	0.0552	4.2888
05551530	INDIAN CREEK AT AURORA, IL	41.76642	−88.30674	07120007	16.52	No	Yes	1961–1979	1961–1979	19	19	0.2226	0.3635	0.7498	0.6095	0.0394	5.3852
05551620	BLACKBERRY CREEK NEAR KANEVILLE, IL	41.80475	−88.45952	07120007	22.09	No	Yes	1961–1979	1961–1979	17	17	0.0412	0.0855	0.2827	0.1268	0.0372	8.0919
05551650	LAKE RUN AT BALD MOUND, IL	41.84611	−88.40889	07120007	1.95	Yes	Yes	1961–1976	1961–1976	16	15	0.0000	0.0012	0.0923	0.0180	0.0047	18.6516
05551675	BLACKBERRY CREEK NEAR MONTGOMERY, IL	41.74083	−88.38333	07120007	56.88	No	No	1998–2009	1998–2009	12	12	0.2191	0.4006	0.4194	0.2563	0.0588	6.0869
05551700	BLACKBERRY CREEK NEAR YORKVILLE, IL	41.67167	−88.44139	07120007	68.19	Yes	No	1961–2009	1961–2009	49	49	0.0694	0.4035	0.4237	0.2674	0.0570	5.0357
05551800	FOX RIVER TRIBUTARY NO 2 NEAR FOX, IL	41.60781	−88.47868	07120007	0.45	Yes	Yes	1961–1980	1961–1980	19	19	0.1297	0.1949	0.6610	0.0928	0.0000	30.6422
05551900	EAST BRANCH BIG ROCK CREEK NEAR BIG ROCK, IL	41.76781	−88.56980	07120007	32.72	Yes	Yes	1965–1979	1965–1979	15	15	0.0040	0.0141	0.0307	0.0419	0.0167	4.8644
05551930	WELCH CREEK NEAR BIG ROCK, IL	41.76003	−88.51063	07120007	22.75	Yes	Yes	1965–1980	1965–1980	16	16	0.0442	0.0546	0.1257	0.0655	0.0103	5.4502

APPENDIX 3

Table 2. Estimated peak discharge quantiles for 181 streamgages in northeastern Illinois and adjacent states, at selected annual exceedance probabilities.

[USGS, U.S. Geological Survey; EMA, Expected Probability Adjustment; ft^3/s, cubic feet per second; NA, not available; highlighting in column “Used in regression analyses (non-redundant)” indicates streamgages not used in the regression analyses because they were deemed redundant]

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
04087200	OAK CREEK NEAR SOUTH MILWAUKEE, WI	No	At-site, unadjusted for urbanization, EMA, at-site skew	334	564	727	940	1,100	1,260	1,420	1,640
			At-site, adjusted for urbanization, EMA, at-site skew	399	625	802	1,060	1,270	1,510	1,780	2,170
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	398	624	803	1,070	1,290	1,540	1,810	2,220
			Regional regression: $(Q_p)_{g,r}$	531	827	1,060	1,410	1,700	2,030	2,390	2,940
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	401	631	815	1,090	1,330	1,600	1,900	2,360
04087204	OAK CREEK AT SOUTH MILWAUKEE, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	597	852	1,060	1,370	1,630	1,940	2,290	2,820
			At-site, adjusted for urbanization, EMA, at-site skew	697	965	1,170	1,450	1,670	1,920	2,190	2,580
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	704	970	1,160	1,420	1,620	1,840	2,070	2,390
			Regional regression: $(Q_p)_{g,r}$	738	1,120	1,430	1,870	2,240	2,650	3,110	3,780
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	705	974	1,170	1,440	1,660	1,900	2,160	2,540
04087220	ROOT RIVER NEAR FRANKLIN, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	968	1,720	2,440	3,670	4,880	6,400	8,300	11,600
			At-site, adjusted for urbanization, EMA, at-site skew	1,090	1,930	2,730	4,090	5,420	7,080	9,150	12,700
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,140	1,980	2,700	3,800	4,780	5,910	7,210	9,230
			Regional regression: $(Q_p)_{g,r}$	1,330	2,040	2,590	3,410	4,080	4,850	5,680	6,900
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,150	1,990	2,690	3,750	4,660	5,680	6,810	8,470

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
04087230	W BR ROOT R CANAL TRIB NEAR NORTH CAPE, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	99.2	137	157	178	191	201	210	220
			At-site, adjusted for urbanization, EMA, at-site skew	107	146	166	188	201	212	222	233
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	104	143	168	199	221	242	262	289
			Regional regression: $(Q_p)_{g,r}$	141	242	317	420	500	584	671	790
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	105	146	172	206	231	257	284	322
04087233	ROOT RIVER CANAL NEAR FRANKLIN, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	793	1,080	1,260	1,460	1,610	1,740	1,870	2,030
			At-site, adjusted for urbanization, EMA, at-site skew	841	1,130	1,300	1,490	1,610	1,720	1,820	1,940
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	821	1,130	1,330	1,570	1,740	1,910	2,080	2,300
			Regional regression: $(Q_p)_{g,r}$	819	1,260	1,570	1,970	2,270	2,590	2,900	3,320
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	821	1,130	1,330	1,580	1,760	1,950	2,130	2,380
04087240	ROOT RIVER AT RACINE, WI	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,860	2,810	3,530	4,570	5,430	6,380	7,410	8,940
			At-site, adjusted for urbanization, EMA, at-site skew	2,070	3,080	3,830	4,860	5,690	6,580	7,530	8,900
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,100	3,100	3,810	4,760	5,500	6,280	7,080	8,210
			Regional regression: $(Q_p)_{g,r}$	2,640	3,960	4,910	6,240	7,250	8,360	9,490	11,100
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,110	3,120	3,850	4,840	5,620	6,450	7,340	8,590
04087250	PIKE CREEK NEAR KENOSHA, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	101	156	185	212	228	241	251	261
			At-site, adjusted for urbanization, EMA, at-site skew	125	183	217	256	281	303	324	348
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	116	181	230	301	360	424	493	596
			Regional regression: $(Q_p)_{g,r}$	245	378	479	626	746	879	1,020	1,230
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	119	186	239	319	388	466	554	688

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
04087257	PIKE RIVER NEAR RACINE, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	969	1,330	1,560	1,840	2,040	2,230	2,410	2,650
			At-site, unadjusted for urbanization, EMA, at-site skew	1,140	1,510	1,710	1,930	2,070	2,200	2,310	2,450
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,110	1,480	1,730	2,040	2,280	2,520	2,760	3,100
			Regional regression: $(Q_p)_{g,r}$	909	1,390	1,750	2,260	2,660	3,110	3,570	4,240
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,110	1,480	1,730	2,050	2,300	2,560	2,830	3,210
04087300	LAKE MICHIGAN TRIBUTARY AT WINTHROP HARBOR, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	75.4	143	208	321	433	575	752	1,060
			At-site, adjusted for urbanization, EMA, at-site skew	170	266	351	487	613	765	946	1,240
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	180	274	344	442	522	607	698	829
			Regional regression: $(Q_p)_{g,r}$	125	220	298	416	518	632	760	952
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	175	269	339	438	521	613	714	866
04087400	KELLOGG RAVINE AT ZION, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	218	398	568	859	1,140	1,500	1,940	2,690
			At-site, adjusted for urbanization, EMA, at-site skew	436	680	898	1,250	1,580	1,980	2,460	3,250
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	460	701	882	1,140	1,350	1,570	1,820	2,170
			Regional regression: $(Q_p)_{g,r}$	321	552	741	1,030	1,270	1,550	1,860	2,320
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	447	683	863	1,120	1,330	1,570	1,830	2,220
04093000	DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART, IN	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,660	2,580	3,220	4,050	4,670	5,300	5,930	6,780
			At-site, adjusted for urbanization, EMA, at-site skew	1,920	2,890	3,570	4,470	5,170	5,890	6,630	7,660
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,890	2,870	3,610	4,620	5,440	6,320	7,260	8,610
			Regional regression: $(Q_p)_{g,r}$	1,320	1,830	2,200	2,700	3,080	3,510	3,940	4,550
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,880	2,840	3,540	4,490	5,220	5,980	6,770	7,860

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
04094000	LITTLE CALUMET RIVER AT PORTER, IN	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,150	1,880	2,450	3,290	4,010	4,800	5,680	7,000
			At-site, adjusted for urbanization, EMA, at-site skew	1,440	2,240	2,880	3,830	4,630	5,520	6,520	8,030
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,490	2,270	2,820	3,550	4,100	4,670	5,260	6,060
			Regional regression: $(Q_p)_{g,r}$	737	1,080	1,320	1,630	1,860	2,110	2,350	2,670
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,470	2,230	2,760	3,430	3,920	4,410	4,890	5,530
04094500	SALT CREEK NEAR MCCOOL, IND.	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,030	1,650	2,110	2,720	3,200	3,700	4,220	4,950
			At-site, adjusted for urbanization, EMA, at-site skew	1,580	2,340	2,890	3,630	4,210	4,810	5,440	6,330
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,570	2,340	2,900	3,650	4,240	4,860	5,520	6,440
			Regional regression: $(Q_p)_{g,r}$	914	1,310	1,590	1,980	2,280	2,600	2,930	3,390
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,550	2,300	2,830	3,510	4,030	4,570	5,100	5,840
05437950	KISHWAUKEE RIVER NEAR HUNTLEY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	129	158	174	190	200	209	217	226
			At-site, adjusted for urbanization, EMA, at-site skew	203	242	261	280	292	301	310	320
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	198	241	267	298	320	342	362	390
			Regional regression: $(Q_p)_{g,r}$	231	339	415	518	596	680	765	884
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	198	243	270	305	331	357	384	421
05438250	COON CREEK AT RILEY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,210	1,940	2,540	3,460	4,260	5,190	6,260	7,920
			At-site, adjusted for urbanization, EMA, at-site skew	1,390	2,180	2,830	3,810	4,670	5,650	6,760	8,480
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,450	2,250	2,810	3,540	4,110	4,680	5,270	6,070
			Regional regression: $(Q_p)_{g,r}$	1,380	2,150	2,690	3,420	3,950	4,530	5,100	5,870
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,440	2,240	2,800	3,530	4,090	4,660	5,240	6,030

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05438283	PISCASAW CREEK NEAR WALWORTH, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	353	458	519	589	636	680	722	773
			At-site, adjusted for urbanization, EMA, at-site skew	362	472	536	610	660	707	751	806
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	360	470	537	617	673	727	779	845
			Regional regression: $(Q_p)_{g,r}$	333	569	746	989	1,180	1,380	1,580	1,870
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	359	473	545	633	699	766	834	928
05438300	LAWRENCE CREEK TRIBUTARY NEAR HARVARD, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	76.3	132	171	223	263	304	344	399
			At-site, adjusted for urbanization, EMA, at-site skew	76.3	132	171	223	263	304	344	399
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	75.0	131	173	232	279	328	380	454
			Regional regression: $(Q_p)_{g,r}$	72.3	138	193	272	338	411	490	604
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	74.7	132	175	238	290	347	409	500
05438390	PISCASAW CREEK BELOW MOKELER CREEK NEAR CAPRON, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,690	2,490	3,110	4,010	4,770	5,620	6,570	7,980
			At-site, adjusted for urbanization, EMA, at-site skew	1,860	2,710	3,370	4,320	5,120	6,000	6,990	8,450
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,930	2,770	3,330	4,030	4,550	5,070	5,590	6,280
			Regional regression: $(Q_p)_{g,r}$	1,530	2,440	3,080	3,970	4,630	5,330	6,040	7,000
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,890	2,740	3,300	4,020	4,570	5,120	5,690	6,460
05438500	KISHWAUKEE RIVER AT BELVIDERE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	4,060	7,010	8,650	10,300	11,300	12,000	12,700	13,300
			At-site, adjusted for urbanization, EMA, at-site skew	4,570	7,650	9,460	11,400	12,600	13,700	14,600	15,600
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,430	7,310	9,430	12,300	14,700	17,100	19,600	23,100
			Regional regression: $(Q_p)_{g,r}$	4,550	6,590	7,950	9,770	11,100	12,400	13,700	15,500
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,440	7,280	9,370	12,200	14,400	16,600	18,800	21,800

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05438850	MIDDLE BR OF S B KISHWAUKEE RIVER NEAR MALTA, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	142	239	301	374	424	470	512	564
			At-site, adjusted for urbanization, EMA, at-site skew	142	239	301	374	424	470	512	564
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	137	235	307	404	481	559	641	752
			Regional regression: $(Q_p)_{g,r}$	74.7	132	175	235	282	332	383	455
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	129	222	289	375	439	503	566	650
05439000	SOUTH BRANCH KISHWAUKEE RIVER AT DEKALB, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,030	1,600	2,100	2,870	3,560	4,380	5,340	6,880
			At-site, adjusted for urbanization, EMA, at-site skew	1,040	1,620	2,110	2,880	3,580	4,400	5,370	6,910
			At-site, justed for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,100	1,680	2,080	2,600	2,990	3,390	3,800	4,350
			Regional regression: $(Q_p)_{g,r}$	1,140	1,730	2,130	2,650	3,040	3,440	3,840	4,380
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,100	1,680	2,080	2,600	3,000	3,400	3,810	4,360
05439500	SOUTH BRANCH KISHWAUKEE RIVER NEAR FAIRDALE IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	4,010	6,820	8,850	11,500	13,600	15,700	17,900	20,800
			At-site, adjusted for urbanization, EMA, at-site skew	4,210	7,090	9,150	11,900	13,900	16,000	18,200	21,100
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,140	7,070	9,290	12,400	14,800	17,500	20,200	24,100
			Regional regression: $(Q_p)_{g,r}$	3,990	5,880	7,160	8,850	10,100	11,400	12,600	14,300
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,130	7,020	9,180	12,100	14,400	16,700	19,100	22,300
05439550	SOUTH BRANCH KISHWAUKEE RIVER TRIB NEAR IRENE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	79.7	190	292	451	590	747	922	1,180
			At-site, adjusted for urbanization, EMA, at-site skew	84.9	199	303	465	607	767	945	1,210
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	85.6	199	301	457	592	741	906	1,150
			Regional regression: $(Q_p)_{g,r}$	114	213	291	399	485	577	672	805
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	92.2	202	298	437	548	663	781	941

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05440000	KISHWAUKEE RIVER NEAR PERRYVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	8,450	12,700	15,300	18,600	20,900	23,100	25,200	27,900
			At-site, adjusted for urbanization, EMA, at-site skew	9,190	13,700	16,500	19,900	22,200	24,300	26,400	29,000
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	9,170	13,500	16,400	20,200	23,100	26,000	28,900	32,900
			Regional regression: $(Q_p)_{g,r}$	7,960	11,400	13,600	16,600	18,700	21,000	23,100	26,000
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	9,140	13,400	16,400	20,100	22,900	25,700	28,500	32,300
05440500	KILLBUCK CREEK NEAR MONROE CENTER, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	2,680	4,270	5,060	5,770	6,150	6,440	6,650	6,850
			At-site, adjusted for urbanization, EMA, at-site skew	2,710	4,310	5,110	5,830	6,210	6,490	6,700	6,900
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,560	4,100	5,200	6,630	7,730	8,840	9,980	11,500
			Regional regression: $(Q_p)_{g,r}$	1,760	2,730	3,400	4,290	4,930	5,610	6,260	7,140
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,520	4,020	5,070	6,420	7,410	8,390	9,350	10,600
05442000	KYTE RIVER NEAR FLAGG CENTER, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,220	1,720	2,090	2,580	2,980	3,400	3,850	4,500
			At-site, adjusted for urbanization, EMA, at-site skew	1,280	1,800	2,170	2,670	3,080	3,510	3,960	4,610
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,320	1,810	2,130	2,530	2,820	3,100	3,390	3,760
			Regional regression: $(Q_p)_{g,r}$	1,760	2,670	3,290	4,130	4,740	5,400	6,040	6,920
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,340	1,860	2,210	2,670	3,020	3,380	3,760	4,290
05446950	GREEN RIVER TRIBUTARY NEAR AMBOY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	81.2	194	320	566	836	1,200	1,700	2,630
			At-site, adjusted for urbanization, EMA, at-site skew	81.2	194	320	566	836	1,200	1,700	2,630
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	90.8	202	300	454	588	739	908	1,160
			Regional regression: $(Q_p)_{g,r}$	60.0	113	155	216	265	319	376	457
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	81.9	174	250	351	428	505	583	690

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05447000	GREEN RIVER AT AMBOY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	2,840	4,160	5,040	6,150	6,970	7,790	8,600	9,670
			At-site, adjusted for urbanization, EMA, at-site skew	2,850	4,180	5,060	6,170	6,990	7,800	8,610	9,690
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,860	4,190	5,060	6,140	6,940	7,720	8,490	9,500
			Regional regression: $(Q_p)_{g,r}$	2,530	3,920	4,860	6,090	6,970	7,890	8,780	9,950
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,850	4,180	5,050	6,140	6,940	7,730	8,510	9,550
05447050	GREEN RIVER TRIBUTARY NEAR OHIO, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	138	232	307	418	512	616	732	905
			At-site, adjusted for urbanization, EMA, at-site skew	138	232	307	418	512	616	732	905
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	144	236	302	386	450	515	580	668
			Regional regression: $(Q_p)_{g,r}$	175	303	398	526	625	728	831	974
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	148	244	314	409	484	562	644	757
05447500	GREEN RIVER NEAR GENESEO, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	6,580	8,680	9,850	11,100	12,000	12,700	13,400	14,200
			At-site, adjusted for urbanization, EMA, at-site skew	6,650	8,660	9,820	11,100	12,000	12,800	13,500	14,500
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	6,650	8,620	9,800	11,200	12,100	13,000	13,900	15,000
			Regional regression: $(Q_p)_{g,r}$	5,770	8,120	9,590	11,400	12,700	13,900	15,100	16,500
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	6,640	8,610	9,790	11,200	12,100	13,100	13,900	15,100
05517500	KANKAKEE RIVER AT DUNNS BRIDGE, IN	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	3,750	4,500	4,940	5,450	5,800	6,140	6,460	6,870
			At-site, adjusted for urbanization, EMA, at-site skew	3,900	4,650	5,090	5,600	5,950	6,280	6,600	7,010
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	3,920	4,660	5,080	5,550	5,870	6,170	6,450	6,800
			Regional regression: $(Q_p)_{g,r}$	4,580	5,950	6,750	7,740	8,370	9,030	9,590	10,300
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	3,920	4,660	5,080	5,560	5,890	6,200	6,490	6,860

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05517890	COBB DITCH NEAR KOUTS, IND.	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	615	866	988	1,100	1,160	1,210	1,250	1,290
			At-site, adjusted for urbanization, EMA, at-site skew	709	982	1,140	1,320	1,440	1,550	1,650	1,780
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	692	979	1,170	1,390	1,560	1,720	1,890	2,100
			Regional regression: $(Q_p)_{g,r}$	326	480	582	714	808	905	997	1,120
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	677	960	1,140	1,350	1,500	1,640	1,780	1,950
05518000	KANKAKEE RIVER AT SHELBY, IN	No	At-site, unadjusted for urbanization, EMA, at-site skew	4,590	5,450	5,920	6,440	6,790	7,100	7,390	7,750
			At-site, adjusted for urbanization, EMA, at-site skew	4,860	5,700	6,170	6,690	7,030	7,350	7,650	8,020
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,850	5,700	6,170	6,710	7,060	7,400	7,710	8,100
			Regional regression: $(Q_p)_{g,r}$	5,270	6,720	7,560	8,590	9,240	9,910	10,500	11,200
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,860	5,700	6,180	6,720	7,080	7,420	7,740	8,140
05519000	SINGLETON DITCH AT SCHNEIDER, IN	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,240	1,790	2,150	2,580	2,900	3,200	3,500	3,890
			At-site, adjusted for urbanization, EMA, at-site skew	1,330	1,820	2,190	2,680	3,080	3,510	3,970	4,630
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,360	1,850	2,170	2,570	2,860	3,140	3,430	3,810
			Regional regression: $(Q_p)_{g,r}$	1,010	1,420	1,680	2,030	2,270	2,530	2,770	3,100
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,350	1,840	2,160	2,550	2,830	3,110	3,380	3,740
05519500	WEST CREEK NEAR SCHNEIDER, IND.	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	952	1,380	1,640	1,950	2,160	2,360	2,550	2,790
			At-site, adjusted for urbanization, EMA, at-site skew	1,110	1,570	1,850	2,160	2,370	2,560	2,740	2,950
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,080	1,550	1,880	2,290	2,610	2,930	3,260	3,710
			Regional regression: $(Q_p)_{g,r}$	580	816	974	1,180	1,330	1,500	1,650	1,870
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,050	1,500	1,800	2,150	2,400	2,650	2,880	3,170

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05520500	KANKAKEE RIVER AT MOMENCE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	7,300	9,390	10,700	12,300	13,400	14,500	15,600	17,000
			At-site, adjusted for urbanization, EMA, at-site skew	7,740	9,800	11,100	12,600	13,600	14,700	15,700	16,900
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	7,770	9,810	11,000	12,500	13,500	14,400	15,300	16,500
			Regional regression: $(Q_p)_{g,r}$	6,530	8,260	9,250	10,500	11,200	12,100	12,700	13,600
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	7,760	9,800	11,000	12,400	13,400	14,400	15,300	16,400
05526150	KANKAKEE RIVER TRIBUTARY NEAR BOURBONNAIS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	30.8	82.3	137	235	332	452	599	841
			At-site, adjusted for urbanization, EMA, at-site skew	30.8	82.3	137	235	332	452	599	841
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	32.5	83.7	132	210	279	356	442	568
			Regional regression: $(Q_p)_{g,r}$	20.1	39.9	56	79.0	97.8	118	139	169
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	29.0	71.2	108	157	192	225	257	300
05526500	TERRY CREEK NEAR CUSTER PARK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	135	259	415	762	1,200	1,880	2,950	5,310
			At-site, adjusted for urbanization, EMA, at-site skew	144	273	435	794	1,250	1,950	3,040	5,450
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	176	316	422	567	683	802	927	1,100
			Regional regression: $(Q_p)_{g,r}$	297	477	602	765	886	1,010	1,130	1,300
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	186	330	440	594	717	845	978	1,160
05527050	PRAIRIE CREEK NEAR FRANKFORT, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	75.9	151	242	441	686	1,060	1,630	2,850
			At-site, adjusted for urbanization, EMA, at-site skew	98.7	187	293	522	802	1,230	1,870	3,240
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	117	213	288	396	485	580	682	829
			Regional regression: $(Q_p)_{g,r}$	64.6	116	157	215	262	312	366	444
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	107	194	258	344	409	476	544	638

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05527800	DES PLAINES RIVER AT RUSSELL, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	762	1,420	1,910	2,540	3,020	3,490	3,960	4,580
			At-site, adjusted for urbanization, EMA, at-site skew	838	1,520	2,010	2,660	3,150	3,640	4,130	4,780
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	800	1,500	2,090	2,950	3,680	4,480	5,370	6,680
			Regional regression: $(Q_p)_{g,r}$	1,320	1,910	2,310	2,840	3,220	3,630	4,030	4,580
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	827	1,530	2,110	2,930	3,590	4,290	5,000	5,960
05527840	DES PLAINES RIVER AT WADSWORTH, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	952	1,510	1,840	2,210	2,440	2,640	2,820	3,030
			At-site, adjusted for urbanization, EMA, at-site skew	1,130	1,750	2,110	2,480	2,710	2,910	3,070	3,260
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,070	1,690	2,140	2,740	3,220	3,710	4,230	4,950
			Regional regression: $(Q_p)_{g,r}$	1,460	2,100	2,520	3,090	3,500	3,940	4,360	4,940
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,110	1,740	2,190	2,810	3,280	3,770	4,270	4,950
05527870	MILL CREEK AT WEDGES CORNER, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	80.6	140	188	257	315	379	450	553
			At-site, adjusted for urbanization, EMA, at-site skew	112	183	241	329	405	491	589	739
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	114	185	240	321	389	464	547	670
			Regional regression: $(Q_p)_{g,r}$	280	392	472	585	673	770	869	1,010
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	126	204	267	364	447	539	641	789
05527900	NORTH MILL CREEK AT HICKORY CORNERS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	203	309	383	481	556	633	712	820
			At-site, adjusted for urbanization, EMA, at-site skew	256	378	462	574	659	746	836	960
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	258	379	461	565	644	722	801	907
			Regional regression: $(Q_p)_{g,r}$	294	442	544	678	776	879	980	1,120
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	260	384	468	577	661	747	834	953

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05527950	MILL CREEK AT OLD MILL CREEK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	629	952	1,160	1,400	1,570	1,720	1,880	2,060
			At-site, adjusted for urbanization, EMA, at-site skew	781	1,120	1,330	1,560	1,710	1,850	1,980	2,140
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	752	1,100	1,350	1,670	1,930	2,200	2,480	2,860
			Regional regression: $(Q_p)_{g,r}$	695	981	1,180	1,450	1,660	1,880	2,100	2,410
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	750	1,100	1,340	1,660	1,900	2,160	2,420	2,770
05528000	DES PLAINES RIVER NEAR GURNEE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,340	2,050	2,510	3,080	3,480	3,870	4,250	4,730
			At-site, adjusted for urbanization, EMA, at-site skew	1,650	2,450	2,960	3,580	4,020	4,430	4,840	5,350
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,610	2,410	2,980	3,730	4,330	4,940	5,580	6,470
			Regional regression: $(Q_p)_{g,r}$	1,960	2,710	3,210	3,880	4,370	4,900	5,420	6,130
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,620	2,420	2,980	3,740	4,330	4,940	5,560	6,420
05528150	INDIAN CREEK AT DIAMOND LAKE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	284	522	696	924	1,100	1,270	1,440	1,670
			At-site, adjusted for urbanization, EMA, at-site skew	655	1,010	1,270	1,620	1,900	2,200	2,520	2,970
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	647	1,000	1,270	1,660	1,970	2,320	2,690	3,230
			Regional regression: $(Q_p)_{g,r}$	341	534	683	899	1,080	1,270	1,490	1,800
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	614	940	1,180	1,490	1,730	1,990	2,260	2,640
05528170	DIAMOND LAKE DRAIN AT MUNDELEIN, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	52.8	75.4	90.9	111	127	142	158	181
			At-site, adjusted for urbanization, EMA, at-site skew	72.7	99.3	117	141	159	177	196	222
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	72.2	99.0	118	143	163	183	205	235
			Regional regression: $(Q_p)_{g,r}$	94.6	146	186	245	293	347	406	493
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	73.1	101	122	151	176	203	233	278

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05528200	HAWTHORN DRAINAGE DITCH NEAR MUNDELEIN, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	212	331	424	557	669	791	925	1,120
			At-site, adjusted for urbanization, EMA, at-site skew	329	483	597	756	884	1,020	1,170	1,380
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	325	480	601	773	918	1,080	1,250	1,510
			Regional regression: $(Q_p)_{g,r}$	266	414	534	715	870	1,050	1,250	1,550
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	320	473	591	762	907	1,070	1,250	1,530
05528230	INDIAN CREEK AT PRAIRIE VIEW, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	514	841	1,080	1,390	1,630	1,870	2,120	2,470
			At-site, adjusted for urbanization, EMA, at-site skew	917	1,310	1,600	1,980	2,290	2,610	2,940	3,420
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	911	1,310	1,600	2,000	2,330	2,670	3,040	3,580
			Regional regression: $(Q_p)_{g,r}$	851	1,280	1,610	2,090	2,480	2,930	3,410	4,110
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	908	1,310	1,600	2,010	2,350	2,720	3,120	3,710
05528360	APTAKISIC CREEK AT APTAKISIC, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	107	191	258	357	440	531	631	778
			At-site, adjusted for urbanization, EMA, at-site skew	294	426	533	691	827	981	1,150	1,420
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	300	431	529	667	781	903	1,040	1,230
			Regional regression: $(Q_p)_{g,r}$	118	175	220	286	341	404	473	576
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	283	401	484	590	671	757	845	973
05528400	DES PLAINES RIVER AT WHEELING, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,890	2,600	2,940	3,260	3,440	3,570	3,680	3,780
			At-site, adjusted for urbanization, EMA, at-site skew	2,570	3,530	4,000	4,450	4,710	4,910	5,080	5,250
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,360	3,500	4,330	5,440	6,320	7,250	8,220	9,590
			Regional regression: $(Q_p)_{g,r}$	2,740	3,740	4,430	5,380	6,070	6,830	7,590	8,640
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,400	3,530	4,340	5,430	6,260	7,140	8,030	9,260

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05528440	BUFFALO CREEK NEAR LAKE ZURICH, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	78.9	130	169	224	269	317	370	445
			At-site, adjusted for urbanization, EMA, at-site skew	147	205	250	314	367	425	489	584
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	148	206	249	309	358	411	467	550
			Regional regression: $(Q_p)_{g,r}$	113	182	239	326	403	492	593	750
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	147	205	248	311	365	425	494	600
05528470	BUFFALO CREEK AT LONG GROVE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	245	380	443	497	525	545	559	571
			At-site, adjusted for urbanization, EMA, at-site skew	499	665	757	858	922	980	1,030	1,090
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	477	651	773	935	1,060	1,190	1,330	1,520
			Regional regression: $(Q_p)_{g,r}$	269	408	514	669	795	937	1,090	1,310
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	464	633	749	902	1,020	1,150	1,280	1,470
05528500	BUFFALO CREEK NEAR WHEELING, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	407	585	698	833	929	1,020	1,110	1,220
			At-site, adjusted for urbanization, EMA, at-site skew	492	671	772	884	957	1,020	1,080	1,150
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	462	661	807	1,010	1,180	1,350	1,540	1,820
			Regional regression: $(Q_p)_{g,r}$	543	813	1,020	1,330	1,590	1,880	2,190	2,650
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	463	664	813	1,030	1,200	1,390	1,600	1,910
05529000	DES PLAINES RIVER NEAR DES PLAINES, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,320	3,130	3,650	4,280	4,740	5,180	5,620	6,190
			At-site, adjusted for urbanization, EMA, at-site skew	3,100	4,140	4,730	5,400	5,850	6,260	6,630	7,090
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,990	4,100	4,850	5,840	6,600	7,380	8,180	9,280
			Regional regression: $(Q_p)_{g,r}$	3,010	4,060	4,790	5,790	6,540	7,360	8,180	9,320
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,990	4,090	4,850	5,840	6,600	7,380	8,180	9,280

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
			At-site, unadjusted for urbanization, EMA, at-site skew	181	323	427	567	673	782	892	1,040
			At-site, adjusted for urbanization, EMA, at-site skew	210	369	499	691	854	1,040	1,240	1,540
05529300	MC DONALD CREEK NEAR WHEELING, IL	No	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	200	359	506	747	976	1,250	1,590	2,140
			Regional regression: $(Q_p)_{g,r}$	240	367	469	625	760	917	1,090	1,360
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	204	360	499	714	900	1,110	1,340	1,700
			At-site, unadjusted for urbanization, EMA, at-site skew	198	342	450	600	720	846	979	1,170
			At-site, adjusted for urbanization, EMA, at-site skew	178	288	370	485	578	677	783	934
05529500	MC DONALD CREEK NEAR MOUNT PROSPECT, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	171	282	378	527	661	817	998	1,280
			Regional regression: $(Q_p)_{g,r}$	339	508	644	847	1,020	1,220	1,450	1,790
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	175	290	391	554	703	879	1,080	1,410
			At-site, unadjusted for urbanization, EMA, at-site skew	492	814	1,040	1,350	1,580	1,810	2,050	2,370
			At-site, adjusted for urbanization, EMA, at-site skew	504	825	1,050	1,360	1,600	1,840	2,090	2,430
05529900	WELLER CREEK AT MOUNT PROSPECT, IL	No	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	473	798	1,080	1,530	1,950	2,430	3,010	3,920
			Regional regression: $(Q_p)_{g,r}$	441	668	852	1,130	1,370	1,650	1,970	2,450
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	469	777	1,030	1,410	1,730	2,090	2,490	3,090
			At-site, unadjusted for urbanization, EMA, at-site skew	815	1,060	1,210	1,410	1,550	1,690	1,820	2,010
			At-site, adjusted for urbanization, EMA, at-site skew	771	1,070	1,260	1,470	1,610	1,750	1,880	2,040
05530000	WELLER CREEK AT DES PLAINES, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	722	1,050	1,310	1,680	1,990	2,340	2,720	3,290
			Regional regression: $(Q_p)_{g,r}$	557	832	1,050	1,390	1,680	2,010	2,380	2,950
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	718	1,040	1,300	1,660	1,960	2,300	2,670	3,230

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05530400	HIGGINS CREEK NEAR MOUNT PROSPECT, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	134	250	340	464	563	666	773	921
			At-site, adjusted for urbanization, EMA, at-site skew	178	309	405	535	636	739	845	991
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	165	301	425	626	814	1,040	1,310	1,750
			Regional regression: $(Q_p)_{g,r}$	101	155	197	259	313	373	440	542
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	155	269	360	483	579	681	785	938
05530480	WILLOW CREEK AT ORCHARD PLACE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	547	1,000	1,360	1,880	2,300	2,750	3,240	3,940
			At-site, adjusted for urbanization, EMA, at-site skew	820	1,340	1,760	2,370	2,900	3,480	4,130	5,100
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	799	1,320	1,770	2,470	3,110	3,850	4,720	6,100
			Regional regression: $(Q_p)_{g,r}$	572	818	1,010	1,310	1,550	1,840	2,150	2,630
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	777	1,260	1,640	2,180	2,600	3,050	3,520	4,220
05530600	DES PLAINES RIVER AT RIVER GROVE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,750	3,380	3,670	3,930	4,080	4,190	4,280	4,370
			At-site, adjusted for urbanization, EMA, at-site skew	3,620	4,430	4,800	5,150	5,340	5,500	5,630	5,760
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	3,520	4,320	4,830	5,460	5,930	6,390	6,860	7,480
			Regional regression: $(Q_p)_{g,r}$	3,840	5,090	5,970	7,210	8,150	9,200	10,300	11,700
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	3,530	4,330	4,860	5,530	6,040	6,570	7,110	7,870
05530700	SILVER CREEK AT MELROSE PARK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	437	545	610	687	741	792	841	905
			At-site, adjusted for urbanization, EMA, at-site skew	477	594	667	754	816	876	936	1,010
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	465	586	671	784	872	963	1,060	1,190
			Regional regression: $(Q_p)_{g,r}$	476	705	891	1,170	1,410	1,690	2,000	2,480
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	465	589	677	800	901	1,010	1,140	1,320

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05530800	DES PLAINES RIVER AT FOREST PARK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,980	3,680	3,970	4,230	4,360	4,450	4,520	4,590
			At-site, adjusted for urbanization, EMA, at-site skew	3,830	4,810	5,330	5,870	6,200	6,490	6,740	7,030
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	3,650	4,770	5,530	6,500	7,250	8,010	8,790	9,870
			Regional regression: $(Q_p)_{g,r}$	3,980	5,250	6,150	7,430	8,390	9,470	10,600	12,100
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	3,660	4,780	5,550	6,560	7,330	8,140	8,980	10,200
05530940	SALT CREEK AT PALATINE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	191	281	357	476	583	709	857	1,090
			At-site, adjusted for urbanization, EMA, at-site skew	281	399	488	617	724	841	969	1,160
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	284	401	487	605	701	804	914	1,070
			Regional regression: $(Q_p)_{g,r}$	195	294	372	487	584	694	814	994
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	279	393	476	590	682	783	891	1,050
05530960	SALT CREEK NEAR PALATINE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	295	464	590	765	906	1,050	1,210	1,440
			At-site, adjusted for urbanization, EMA, at-site skew	376	546	679	871	1,030	1,210	1,410	1,710
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	380	549	677	856	1,000	1,160	1,340	1,590
			Regional regression: $(Q_p)_{g,r}$	408	596	742	956	1,130	1,330	1,550	1,880
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	381	552	683	869	1,020	1,200	1,390	1,670
05530990	SALT CREEK AT ROLLING MEADOWS, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	819	1,200	1,480	1,870	2,190	2,530	2,890	3,420
			At-site, adjusted for urbanization, EMA, at-site skew	841	1,210	1,490	1,870	2,170	2,500	2,850	3,340
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	832	1,210	1,490	1,900	2,240	2,610	3,010	3,610
			Regional regression: $(Q_p)_{g,r}$	669	968	1,200	1,550	1,840	2,170	2,530	3,070
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	827	1,200	1,480	1,870	2,190	2,530	2,910	3,470

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05531000	SALT CREEK NEAR ARLINGTON HEIGHTS, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	452	700	867	1,070	1,230	1,380	1,530	1,720
			At-site, adjusted for urbanization, EMA, at-site skew	645	896	1,060	1,270	1,420	1,570	1,710	1,910
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	622	884	1,080	1,360	1,580	1,830	2,100	2,490
			Regional regression: $(Q_p)_{g,r}$	689	991	1,230	1,580	1,870	2,200	2,560	3,100
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	625	889	1,090	1,380	1,620	1,890	2,180	2,630
05531050	SALT CREEK NEAR WOOD DALE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	NA	NA	NA	NA	NA	NA	NA	NA
			At-site, adjusted for urbanization, EMA, at-site skew	713	997	1,210	1,510	1,760	2,040	2,330	2,770
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	716	1,000	1,210	1,500	1,740	2,000	2,270	2,660
			Regional regression: $(Q_p)_{g,r}$	1,010	1,440	1,760	2,250	2,640	3,100	3,580	4,310
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	725	1,020	1,240	1,570	1,840	2,150	2,490	3,010
05531080	SPRING BROOK AT BLOOMINGDALE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	135	218	299	439	581	762	993	1,400
			At-site, adjusted for urbanization, EMA, at-site skew	197	287	378	545	717	942	1,240	1,770
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	209	309	388	502	599	706	825	1,000
			Regional regression: $(Q_p)_{g,r}$	254	379	480	630	758	906	1,070	1,320
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	211	314	397	521	629	753	894	1,110
05531100	MEACHAM CREEK AT MEDINAH, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	56.8	92.0	125	181	235	302	386	530
			At-site, adjusted for urbanization, EMA, at-site skew	86.2	129	166	226	281	347	426	555
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	89.4	132	165	213	253	298	348	423
			Regional regression: $(Q_p)_{g,r}$	200	305	391	520	632	761	905	1,130
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	93.7	141	180	244	303	373	457	590

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05531130	SPRING BROOK AT WALNUT AVE AT ITASCA, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	231	341	437	592	735	905	1,110	1,440
			At-site, adjusted for urbanization, EMA, at-site skew	348	467	577	758	928	1,130	1,390	1,800
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	362	491	585	713	816	925	1,040	1,210
			Regional regression: $(Q_p)_{g,r}$	482	711	891	1,160	1,390	1,650	1,930	2,360
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	366	501	603	750	877	1,020	1,180	1,430
05531200	SALT CREEK AT ADDISON, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	743	1,020	1,230	1,560	1,830	2,130	2,480	2,990
			At-site, adjusted for urbanization, EMA, at-site skew	1,120	1,490	1,750	2,090	2,370	2,660	2,960	3,390
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,120	1,490	1,750	2,100	2,380	2,670	2,980	3,420
			Regional regression: $(Q_p)_{g,r}$	1,390	1,920	2,330	2,920	3,410	3,960	4,560	5,440
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,130	1,500	1,770	2,140	2,450	2,790	3,160	3,710
05531300	SALT CREEK AT ELMHURST, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,030	1,360	1,570	1,820	2,010	2,190	2,380	2,610
			At-site, adjusted for urbanization, EMA, at-site skew	1,180	1,500	1,710	1,950	2,120	2,290	2,460	2,680
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,150	1,490	1,720	2,030	2,280	2,530	2,790	3,160
			Regional regression: $(Q_p)_{g,r}$	1,530	2,100	2,540	3,190	3,720	4,330	4,980	5,940
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,160	1,490	1,730	2,060	2,330	2,610	2,910	3,350
05531380	SALT CREEK AT OAK BROOK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	952	1,250	1,430	1,660	1,820	1,980	2,140	2,350
			At-site, adjusted for urbanization, EMA, at-site skew	1,290	1,680	1,950	2,300	2,570	2,850	3,130	3,520
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,280	1,680	1,960	2,330	2,620	2,930	3,260	3,710
			Regional regression: $(Q_p)_{g,r}$	1,630	2,230	2,690	3,360	3,920	4,550	5,220	6,230
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,290	1,690	1,980	2,380	2,710	3,070	3,460	4,040

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05531500	SALT CREEK AT WESTERN SPRINGS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,290	1,770	2,080	2,480	2,770	3,060	3,350	3,740
			At-site, adjusted for urbanization, EMA, at-site skew	1,430	1,860	2,160	2,570	2,890	3,230	3,580	4,070
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,430	1,860	2,160	2,570	2,880	3,220	3,560	4,050
			Regional regression: $(Q_p)_{g,r}$	1,820	2,480	2,990	3,740	4,350	5,050	5,800	6,900
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,430	1,870	2,180	2,590	2,930	3,290	3,680	4,240
05531800	ADDISON CREEK AT NORTHLAKE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	337	380	407	442	467	493	518	552
			At-site, adjusted for urbanization, EMA, at-site skew	418	470	502	539	566	591	616	648
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	417	469	502	543	572	601	629	667
			Regional regression: $(Q_p)_{g,r}$	292	436	550	721	866	1,030	1,220	1,500
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	416	469	503	546	579	613	649	700
05532000	ADDISON CREEK AT BELLWOOD, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	473	644	748	870	955	1,040	1,110	1,210
			At-site, adjusted for urbanization, EMA, at-site skew	447	597	694	815	904	992	1,080	1,200
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	435	589	703	861	989	1,130	1,270	1,490
			Regional regression: $(Q_p)_{g,r}$	590	861	1,080	1,400	1,680	2,000	2,350	2,890
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	436	593	710	878	1,020	1,180	1,350	1,620
05532500	DES PLAINES RIVER AT RIVERSIDE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	4,190	5,630	6,490	7,480	8,150	8,780	9,380	10,100
			At-site, adjusted for urbanization, EMA, at-site skew	4,890	6,320	7,200	8,260	9,010	9,730	10,400	11,300
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,780	6,270	7,300	8,640	9,680	10,700	11,900	13,400
			Regional regression: $(Q_p)_{g,r}$	5,130	6,700	7,820	9,440	10,700	12,100	13,500	15,500
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,780	6,280	7,310	8,660	9,710	10,800	11,900	13,500

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05533000	FLAG CREEK NEAR WILLOW SPRINGS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	799	1,270	1,620	2,090	2,470	2,860	3,280	3,860
			At-site, adjusted for urbanization, EMA, at-site skew	882	1,360	1,720	2,250	2,680	3,150	3,660	4,420
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	865	1,350	1,740	2,330	2,840	3,420	4,090	5,100
			Regional regression: $(Q_p)_{g,r}$	609	911	1,150	1,520	1,830	2,200	2,600	3,210
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	858	1,330	1,700	2,250	2,710	3,210	3,770	4,610
05533200	SAWMILL CREEK TRIBUTARY NEAR TIEDTVILLE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	230	281	307	333	350	363	375	389
			At-site, adjusted for urbanization, EMA, at-site skew	292	314	326	340	350	359	368	380
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	292	313	326	341	352	362	373	386
			Regional regression: $(Q_p)_{g,r}$	206	337	448	620	773	954	1,160	1,490
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	292	313	326	342	354	366	378	394
05533300	WARDS CREEK NEAR WOODRIDGE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	79.5	113	134	159	176	193	208	228
			At-site, adjusted for urbanization, EMA, at-site skew	119	158	182	211	231	250	268	292
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	114	156	186	227	260	295	332	385
			Regional regression: $(Q_p)_{g,r}$	145	223	285	377	456	546	645	795
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	116	160	193	241	283	330	384	465
05533400	SAWMILL CREEK NEAR LEMONT, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	639	1,030	1,340	1,820	2,240	2,710	3,250	4,070
			At-site, adjusted for urbanization, EMA, at-site skew	734	1,180	1,510	1,970	2,330	2,710	3,110	3,670
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	710	1,160	1,530	2,090	2,580	3,140	3,780	4,760
			Regional regression: $(Q_p)_{g,r}$	429	650	825	1,080	1,300	1,550	1,820	2,230
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	695	1,120	1,460	1,930	2,310	2,720	3,150	3,780

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05534300	NORTH BRANCH CHICAGO RIVER AT LAKE FOREST, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	193	262	301	344	373	399	422	450
			At-site, adjusted for urbanization, EMA, at-site skew	378	469	518	568	600	628	653	681
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	362	465	534	622	689	757	827	922
			Regional regression: $(Q_p)_{g,r}$	301	440	544	691	810	943	1,080	1,290
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	360	464	535	627	699	776	856	972
05534400	NORTH BRANCH CHICAGO RIVER AT BANNOCKBURN, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	270	315	340	366	383	398	412	429
			At-site, adjusted for urbanization, EMA, at-site skew	503	561	595	634	660	685	708	738
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	503	560	594	635	663	690	717	751
			Regional regression: $(Q_p)_{g,r}$	376	546	672	849	991	1,150	1,310	1,550
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	502	560	595	638	668	698	727	767
05534500	NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	361	538	652	792	892	989	1,080	1,210
			At-site, adjusted for urbanization, EMA, at-site skew	529	704	812	942	1,040	1,120	1,210	1,320
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	516	697	823	989	1,120	1,250	1,390	1,580
			Regional regression: $(Q_p)_{g,r}$	443	633	773	971	1,130	1,300	1,490	1,750
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	515	696	822	988	1,120	1,250	1,400	1,600
05534600	NORTH BRANCH CHICAGO RIVER AT NORTHFIELD, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	346	434	481	533	567	597	625	658
			At-site, adjusted for urbanization, EMA, at-site skew	537	634	684	735	766	793	817	844
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	520	630	701	789	853	918	982	1,070
			Regional regression: $(Q_p)_{g,r}$	532	763	933	1,180	1,370	1,580	1,810	2,140
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	520	632	706	800	873	947	1,030	1,140

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05534900	SKOKIE RIVER AT LAKE BLUFF, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	205	314	384	468	528	585	640	709
			At-site, adjusted for urbanization, EMA, at-site skew	287	401	472	555	614	670	723	791
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	273	395	487	617	723	839	965	1,150
			Regional regression: $(Q_p)_{g,r}$	241	349	432	553	654	768	891	1,070
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	271	391	481	606	709	822	943	1,120
05535000	SKOKIE RIVER AT LAKE FOREST, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	255	363	428	504	556	605	651	707
			At-site, adjusted for urbanization, EMA, at-site skew	348	455	520	596	649	700	748	810
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	339	449	525	626	704	785	869	986
			Regional regression: $(Q_p)_{g,r}$	338	488	602	765	898	1,050	1,210	1,440
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	339	450	527	630	711	798	890	1,020
05535070	SKOKIE RIVER NEAR HIGHLAND PARK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	501	713	856	1,040	1,180	1,320	1,460	1,650
			At-site, adjusted for urbanization, EMA, at-site skew	611	820	956	1,130	1,250	1,380	1,500	1,670
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	599	814	967	1,170	1,330	1,500	1,680	1,930
			Regional regression: $(Q_p)_{g,r}$	489	699	857	1,080	1,270	1,470	1,690	2,010
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	597	811	963	1,170	1,330	1,500	1,680	1,940
05535150	SKOKIE RIVER AT NORTHFIELD, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	374	447	492	544	580	615	650	694
			At-site, adjusted for urbanization, EMA, at-site skew	495	572	619	674	714	752	789	838
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	492	571	620	680	724	766	809	865
			Regional regression: $(Q_p)_{g,r}$	565	791	959	1,200	1,390	1,610	1,840	2,170
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	493	573	624	689	738	788	841	914

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05535200	NORTH BRANCH CHICAGO RIVER AT GLENVIEW, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	636	806	927	1,090	1,210	1,350	1,480	1,680
			At-site, adjusted for urbanization, EMA, at-site skew	932	1,130	1,270	1,440	1,560	1,690	1,820	1,990
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	934	1,140	1,270	1,430	1,550	1,670	1,800	1,960
			Regional regression: $(Q_p)_{g,r}$	996	1,390	1,670	2,080	2,410	2,780	3,160	3,720
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	936	1,140	1,280	1,470	1,610	1,760	1,920	2,140
05535300	WF OF NB CHICAGO RIVER AT BANNOCKBURN, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	208	285	334	395	438	481	523	578
			At-site, adjusted for urbanization, EMA, at-site skew	380	473	531	602	653	704	753	819
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	378	472	533	608	663	719	774	849
			Regional regression: $(Q_p)_{g,r}$	123	192	244	318	379	446	518	623
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	368	460	517	588	639	692	745	818
05535400	WF OF NB CHICAGO RIVER AT DEERFIELD, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	362	453	506	568	611	651	690	739
			At-site, adjusted for urbanization, EMA, at-site skew	555	655	715	787	837	885	932	993
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	552	654	718	796	852	908	963	1,040
			Regional regression: $(Q_p)_{g,r}$	223	330	411	526	619	723	833	994
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	545	646	708	785	841	897	954	1,030
05535500	WF OF NB CHICAGO RIVER AT NORTHBROOK IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	487	673	794	943	1,050	1,160	1,270	1,410
			At-site, adjusted for urbanization, EMA, at-site skew	470	619	711	822	901	977	1,050	1,150
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	459	611	719	862	974	1,090	1,210	1,390
			Regional regression: $(Q_p)_{g,r}$	360	525	651	834	985	1,160	1,340	1,610
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	457	610	717	861	975	1,100	1,220	1,410

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	**0.20**	**0.10**	**0.04**	**0.02**	**0.01**	**0.01**	**0.002**
05535700	WF OF NB CHICAGO RIVER AT GLENVIEW, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	629	856	985	1,130	1,220	1,310	1,390	1,480
			At-site, adjusted for urbanization, EMA, at-site skew	832	1,070	1,210	1,370	1,480	1,580	1,670	1,790
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	804	1,050	1,230	1,460	1,640	1,840	2,040	2,320
			Regional regression: $(Q_p)_{g,r}$	586	834	1,020	1,300	1,530	1,800	2,080	2,500
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	797	1,040	1,220	1,450	1,630	1,830	2,040	2,360
05535800	NORTH BRANCH CHICAGO RIVER AT MORTON GROVE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,010	1,340	1,570	1,860	2,090	2,320	2,550	2,880
			At-site, adjusted for urbanization, EMA, at-site skew	1,120	1,440	1,650	1,910	2,110	2,310	2,510	2,780
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,110	1,430	1,650	1,940	2,160	2,390	2,620	2,950
			Regional regression: $(Q_p)_{g,r}$	1,550	2,140	2,580	3,220	3,730	4,310	4,920	5,820
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,120	1,450	1,680	2,010	2,270	2,550	2,850	3,300
05536000	NORTH BRANCH CHICAGO RIVER AT NILES, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,220	1,660	1,960	2,350	2,660	2,960	3,280	3,730
			At-site, adjusted for urbanization, EMA, at-site skew	1,450	1,890	2,200	2,600	2,910	3,230	3,570	4,030
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,440	1,890	2,200	2,620	2,940	3,280	3,630	4,120
			Regional regression: $(Q_p)_{g,r}$	1,650	2,270	2,740	3,410	3,950	4,570	5,210	6,160
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,440	1,890	2,210	2,640	2,980	3,330	3,710	4,260
05536105	NB CHICAGO RIVER AT ALBANY AVENUE AT CHICAGO, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,400	1,960	2,410	3,070	3,640	4,290	5,020	6,130
			At-site, adjusted for urbanization, EMA, at-site skew	1,490	2,060	2,500	3,140	3,680	4,280	4,940	5,950
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,520	2,080	2,480	3,030	3,460	3,920	4,420	5,120
			Regional regression: $(Q_p)_{g,r}$	1,820	2,490	2,990	3,720	4,310	4,980	5,680	6,710
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,530	2,100	2,510	3,090	3,560	4,080	4,630	5,450

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05536178	PLUM CREEK NEAR DYER, IN	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,170	1,660	1,990	2,430	2,760	3,100	3,440	3,920
			At-site, adjusted for urbanization, EMA, at-site skew	1,780	2,430	2,870	3,460	3,910	4,370	4,840	5,500
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,800	2,460	2,880	3,420	3,820	4,220	4,620	5,150
			Regional regression: $(Q_p)_{g,r}$	637	971	1,210	1,530	1,770	2,030	2,290	2,650
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,690	2,320	2,720	3,200	3,540	3,870	4,190	4,600
05536179	HART DITCH AT DYER, IN	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,210	1,850	2,330	3,010	3,560	4,160	4,810	5,750
			At-site, adjusted for urbanization, EMA, at-site skew	1,450	2,130	2,620	3,290	3,820	4,380	4,980	5,820
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,470	2,140	2,600	3,200	3,660	4,140	4,620	5,290
			Regional regression: $(Q_p)_{g,r}$	606	900	1,110	1,380	1,600	1,820	2,050	2,360
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,400	2,020	2,420	2,920	3,260	3,600	3,930	4,360
05536190	HART DITCH AT MUNSTER, IN	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,640	2,350	2,800	3,340	3,730	4,090	4,450	4,900
			At-site, adjusted for urbanization, EMA, at-site skew	2,160	2,880	3,340	3,880	4,260	4,640	5,010	5,480
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,110	2,860	3,380	4,070	4,610	5,160	5,730	6,520
			Regional regression: $(Q_p)_{g,r}$	896	1,240	1,480	1,820	2,090	2,390	2,690	3,120
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,090	2,830	3,330	3,980	4,460	4,950	5,450	6,140
05536201	THORN CREEK AT PARK FOREST, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	293	598	864	1,280	1,640	2,050	2,520	3,230
			At-site, adjusted for urbanization, EMA, at-site skew	402	757	1,080	1,600	2,080	2,650	3,320	4,410
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	408	765	1,070	1,560	1,990	2,490	3,060	3,940
			Regional regression: $(Q_p)_{g,r}$	247	397	513	680	816	968	1,130	1,370
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	382	694	942	1,270	1,520	1,780	2,040	2,410

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05536207	THORN CREEK TRIBUTARY AT CHICAGO HEIGHTS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	247	431	607	909	1,210	1,580	2,060	2,870
			At-site, adjusted for urbanization, EMA, at-site skew	257	444	623	931	1,230	1,620	2,100	2,930
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	266	454	617	877	1,110	1,390	1,720	2,250
			Regional regression: $(Q_p)_{g,r}$	234	381	505	698	868	1,070	1,290	1,650
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	262	442	594	826	1,030	1,260	1,520	1,930
05536210	THORN CREEK NEAR CHICAGO HEIGHTS, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	968	1,420	1,750	2,210	2,590	2,990	3,420	4,040
			At-site, adjusted for urbanization, EMA, at-site skew	1,100	1,590	1,950	2,460	2,880	3,320	3,810	4,520
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,110	1,590	1,950	2,440	2,840	3,270	3,730	4,390
			Regional regression: $(Q_p)_{g,r}$	529	801	1,010	1,320	1,580	1,870	2,180	2,640
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,050	1,500	1,820	2,230	2,550	2,880	3,240	3,750
05536215	THORN CREEK AT GLENWOOD, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,120	1,640	2,020	2,530	2,950	3,390	3,860	4,530
			At-site, adjusted for urbanization, EMA, at-site skew	1,260	1,780	2,160	2,680	3,090	3,530	3,990	4,650
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,250	1,780	2,170	2,710	3,150	3,620	4,130	4,870
			Regional regression: $(Q_p)_{g,r}$	745	1,110	1,400	1,830	2,180	2,580	3,010	3,660
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,240	1,760	2,140	2,660	3,070	3,520	4,000	4,690
05536235	DEER CREEK NEAR CHICAGO HEIGHTS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	555	731	846	990	1,100	1,200	1,310	1,450
			At-site, adjusted for urbanization, EMA, at-site skew	778	989	1,130	1,320	1,460	1,600	1,740	1,950
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	781	992	1,130	1,310	1,440	1,570	1,700	1,880
			Regional regression: $(Q_p)_{g,r}$	623	945	1,190	1,530	1,810	2,120	2,440	2,920
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	780	992	1,130	1,310	1,450	1,580	1,730	1,930

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft^3/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
			At-site, unadjusted for urbanization, EMA, at-site skew	140	270	370	507	616	728	844	1,000
			At-site, adjusted for urbanization, EMA, at-site skew	194	341	452	604	724	849	979	1,160
05536238	BUTTERFIELD CREEK NEAR LINCOLN ESTATES, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	184	333	465	673	862	1,080	1,340	1,750
			Regional regression: $(Q_p)_{g,r}$	90.4	141	181	239	288	343	403	493
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	168	290	384	506	599	695	792	931
			At-site, unadjusted for urbanization, EMA, at-site skew	717	1,200	1,580	2,150	2,640	3,190	3,800	4,710
			At-site, adjusted for urbanization, EMA, at-site skew	841	1,330	1,740	2,370	2,920	3,560	4,290	5,420
05536255	BUTTERFIELD CREEK AT FLOSSMOOR, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	849	1,340	1,740	2,320	2,830	3,400	4,050	5,030
			Regional regression: $(Q_p)_{g,r}$	642	941	1,170	1,520	1,800	2,130	2,480	3,010
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	843	1,320	1,700	2,250	2,700	3,190	3,730	4,520
			At-site, unadjusted for urbanization, EMA, at-site skew	171	250	303	369	418	468	517	583
			At-site, adjusted for urbanization, EMA, at-site skew	136	194	230	274	304	333	361	397
05536265	LANSING DITCH NEAR LANSING, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	130	192	237	300	350	404	462	544
			Regional regression: $(Q_p)_{g,r}$	285	441	561	734	875	1,030	1,200	1,450
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	132	196	244	314	373	438	512	621
			At-site, unadjusted for urbanization, EMA, at-site skew	355	512	614	737	826	912	997	1,110
			At-site, adjusted for urbanization, EMA, at-site skew	479	699	853	1,060	1,210	1,370	1,540	1,770
05536270	NORTH CREEK NEAR LANSING, IL	Yes	At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	469	694	864	1,100	1,300	1,510	1,740	2,080
			Regional regression: $(Q_p)_{g,r}$	365	524	643	815	954	1,110	1,280	1,520
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	464	684	847	1,070	1,250	1,440	1,640	1,930

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05536275	THORN CREEK AT THORNTON, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,100	3,080	3,760	4,640	5,310	5,990	6,680	7,630
			At-site, adjusted for urbanization, EMA, at-site skew	2,460	3,560	4,330	5,350	6,150	6,980	7,830	9,020
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,420	3,530	4,370	5,540	6,490	7,520	8,620	10,200
			Regional regression: $(Q_p)_{g,r}$	1,750	2,490	3,040	3,830	4,470	5,190	5,940	7,050
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,400	3,500	4,320	5,430	6,320	7,260	8,260	9,690
05536290	LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,520	3,310	3,780	4,330	4,710	5,070	5,410	5,840
			At-site, adjusted for urbanization, EMA, at-site skew	2,960	3,920	4,560	5,380	5,990	6,620	7,250	8,110
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,930	3,910	4,590	5,480	6,180	6,900	7,650	8,700
			Regional regression: $(Q_p)_{g,r}$	2,270	3,050	3,620	4,440	5,080	5,800	6,540	7,610
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,920	3,890	4,560	5,450	6,130	6,830	7,570	8,600
05536310	CALUMET UNION DRAINAGE CANAL NEAR MARKHAM, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	321	411	458	505	533	557	578	601
			At-site, adjusted for urbanization, EMA, at-site skew	361	464	522	584	625	662	695	735
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	341	453	534	645	733	827	927	1,070
			Regional regression: $(Q_p)_{g,r}$	524	785	995	1,310	1,580	1,900	2,250	2,790
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	347	465	554	687	802	935	1,090	1,330
05536335	MIDLOTHIAN CREEK NEAR TINLEY PARK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	218	308	383	496	597	713	846	1,050
			At-site, adjusted for urbanization, EMA, at-site skew	323	450	547	685	800	925	1,060	1,270
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	324	451	547	681	792	912	1,040	1,230
			Regional regression: $(Q_p)_{g,r}$	328	472	587	760	907	1,080	1,260	1,550
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	324	452	549	689	806	937	1,080	1,300

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05536340	MIDLOTHIAN CREEK AT OAK FOREST, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	237	320	378	454	514	576	641	732
			At-site, adjusted for urbanization, EMA, at-site skew	198	265	307	360	398	436	474	523
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	192	261	312	383	440	501	566	661
			Regional regression: $(Q_p)_{g,r}$	389	555	686	882	1,050	1,230	1,440	1,750
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	194	265	319	396	462	536	619	744
05536460	TINLEY CREEK NEAR OAK FOREST, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	432	667	796	928	1,010	1,070	1,130	1,190
			At-site, adjusted for urbanization, EMA, at-site skew	595	879	1,050	1,260	1,400	1,540	1,670	1,820
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	557	853	1,090	1,430	1,720	2,050	2,410	2,960
			Regional regression: $(Q_p)_{g,r}$	306	461	585	769	924	1,100	1,300	1,590
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	534	804	1,010	1,280	1,500	1,740	1,990	2,350
05536500	TINLEY CREEK NEAR PALOS PARK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	609	974	1,260	1,660	1,990	2,350	2,740	3,310
			At-site, adjusted for urbanization, EMA, at-site skew	712	1,100	1,420	1,870	2,260	2,690	3,180	3,910
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	713	1,100	1,410	1,870	2,250	2,680	3,160	3,880
			Regional regression: $(Q_p)_{g,r}$	378	567	715	933	1,110	1,320	1,550	1,880
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	702	1,080	1,370	1,770	2,100	2,450	2,820	3,360
05536510	NAVAJO CREEK AT PALOS HEIGHTS, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	230	310	368	446	508	574	644	743
			At-site, adjusted for urbanization, EMA, at-site skew	254	336	395	474	537	604	674	775
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	255	337	395	472	534	598	665	761
			Regional regression: $(Q_p)_{g,r}$	132	219	291	401	497	610	736	932
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	250	330	388	466	530	599	676	792

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05536560	MELVINA DITCH NEAR OAK LAWN, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	139	234	303	395	467	541	616	720
			At-site, adjusted for urbanization, EMA, at-site skew	241	341	406	488	549	609	670	750
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	230	334	416	535	636	748	873	1,060
			Regional regression: $(Q_p)_{g,r}$	284	416	522	682	820	980	1,160	1,430
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	233	340	425	554	666	795	942	1,170
05536570	STONY CREEK (WEST) AT WORTH, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	406	622	732	838	897	943	980	1,020
			At-site, adjusted for urbanization, EMA, at-site skew	410	625	736	842	902	948	985	1,020
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	343	608	849	1,250	1,620	2,080	2,640	3,550
			Regional regression: $(Q_p)_{g,r}$	555	773	945	1,200	1,420	1,670	1,950	2,370
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	380	650	880	1,230	1,530	1,860	2,220	2,750
05536620	MILL CREEK NEAR PALOS PARK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	120	184	228	283	324	364	404	458
			At-site, adjusted for urbanization, EMA, at-site skew	148	223	275	342	394	447	501	574
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	142	219	281	370	446	531	625	766
			Regional regression: $(Q_p)_{g,r}$	155	223	275	351	414	485	562	676
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	143	220	280	367	438	518	604	731
05536630	MILL CREEK AT PALOS PARK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	197	442	712	1,240	1,820	2,610	3,690	5,710
			At-site, adjusted for urbanization, EMA, at-site skew	239	512	821	1,440	2,140	3,140	4,530	7,260
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	258	540	817	1,300	1,780	2,370	3,120	4,380
			Regional regression: $(Q_p)_{g,r}$	298	443	556	721	857	1,010	1,180	1,430
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	265	516	737	1,060	1,310	1,580	1,860	2,260

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05537500	LONG RUN NEAR LEMONT, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	624	1,150	1,620	2,390	3,120	3,980	5,010	6,670
			At-site, adjusted for urbanization, EMA, at-site skew	840	1,400	1,910	2,760	3,570	4,550	5,750	7,740
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	879	1,440	1,880	2,550	3,110	3,740	4,450	5,510
			Regional regression: $(Q_p)_{g,r}$	514	762	949	1,220	1,440	1,680	1,940	2,320
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	864	1,400	1,810	2,390	2,850	3,340	3,850	4,570
05538440	SPRING CREEK NEAR ORLAND PARK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	41.2	61.2	75.1	93.3	107	122	136	156
			At-site, adjusted for urbanization, EMA, at-site skew	65.8	93.4	115	145	169	197	226	270
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	66.4	94	114	143	165	190	216	254
			Regional regression: $(Q_p)_{g,r}$	52.2	76.3	95	122	145	170	198	239
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	65.6	92.8	113	140	162	186	212	250
05539000	HICKORY CREEK AT JOLIET, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	2,930	5,080	7,020	10,200	13,100	16,600	20,900	27,800
			At-site, adjusted for urbanization, EMA, at-site skew	4,350	7,070	9,580	13,800	17,900	22,900	29,100	39,600
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,600	7,310	9,450	12,600	15,200	18,200	21,500	26,400
			Regional regression: $(Q_p)_{g,r}$	1,950	2,800	3,430	4,350	5,080	5,910	6,780	8,050
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,500	7,070	9,030	11,700	13,800	15,900	18,100	21,200
05539870	WEST BRANCH DU PAGE RIVER AT ONTARIOVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	310	490	599	721	801	873	937	1,010
			At-site, adjusted for urbanization, EMA, at-site skew	425	579	670	774	845	911	973	1,050
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	399	567	696	879	1,030	1,200	1,380	1,650
			Regional regression: $(Q_p)_{g,r}$	284	397	486	618	730	859	999	1,210
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	391	552	671	834	967	1,110	1,260	1,490

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05539890	WEST BRANCH DU PAGE RIVER NEAR WAYNE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	453	745	981	1,330	1,640	1,980	2,360	2,940
			At-site, adjusted for urbanization, EMA, at-site skew	649	997	1,330	1,890	2,440	3,130	4,000	5,490
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	692	1,050	1,340	1,750	2,100	2,500	2,930	3,590
			Regional regression: $(Q_p)_{g,r}$	573	827	1,030	1,320	1,560	1,840	2,150	2,600
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	682	1,030	1,290	1,670	1,970	2,310	2,670	3,200
05539900	WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	547	795	956	1,150	1,300	1,430	1,570	1,750
			At-site, adjusted for urbanization, EMA, at-site skew	631	861	1,020	1,240	1,410	1,580	1,760	2,020
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	626	857	1,020	1,260	1,440	1,640	1,850	2,150
			Regional regression: $(Q_p)_{g,r}$	682	991	1,230	1,590	1,890	2,230	2,600	3,150
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	627	860	1,030	1,270	1,470	1,680	1,920	2,270
05539950	KLEIN CREEK AT CAROL STREAM, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	168	283	402	623	859	1,180	1,600	2,390
			At-site, adjusted for urbanization, EMA, at-site skew	307	455	609	892	1,190	1,580	2,110	3,080
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	336	491	612	789	938	1,100	1,290	1,560
			Regional regression: $(Q_p)_{g,r}$	375	566	722	960	1,160	1,400	1,670	2,080
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	338	496	623	813	978	1,170	1,390	1,720
05540030	WEST BRANCH DU PAGE RIVER AT WEST CHICAGO, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	720	1,010	1,200	1,430	1,590	1,750	1,900	2,090
			At-site, adjusted for urbanization, EMA, at-site skew	1,070	1,430	1,690	2,050	2,350	2,660	2,990	3,480
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,080	1,440	1,690	2,040	2,310	2,600	2,910	3,340
			Regional regression: $(Q_p)_{g,r}$	1,210	1,720	2,120	2,700	3,190	3,740	4,340	5,230
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,080	1,450	1,710	2,080	2,390	2,730	3,110	3,670

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05540060	KRESS CREEK AT WEST CHICAGO, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	257	447	653	1,060	1,500	2,120	2,990	4,670
			At-site, adjusted for urbanization, EMA, at-site skew	293	491	708	1,130	1,600	2,260	3,170	4,950
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	329	535	702	950	1,160	1,400	1,670	2,080
			Regional regression: $(Q_p)_{g,r}$	453	660	816	1,040	1,220	1,430	1,650	1,970
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	334	541	710	959	1,170	1,410	1,670	2,050
05540080	SPRING BROOK AT WHEATON, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	143	213	274	373	465	575	707	921
			At-site, adjusted for urbanization, EMA, at-site skew	171	245	312	422	525	650	801	1,050
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	179	254	310	391	457	530	609	726
			Regional regression: $(Q_p)_{g,r}$	119	180	230	306	372	448	533	664
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	176	248	303	379	442	512	590	707
05540091	SPRING BK AT FOREST PRESERVE NR WARRENVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	241	323	376	442	491	538	586	648
			At-site, adjusted for urbanization, EMA, at-site skew	275	360	414	481	530	578	626	690
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	270	357	419	501	565	632	702	801
			Regional regression: $(Q_p)_{g,r}$	246	367	462	600	716	849	992	1,210
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	269	358	421	509	580	658	744	871
05540095	WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,320	2,020	2,560	3,340	3,990	4,710	5,490	6,660
			At-site, adjusted for urbanization, EMA, at-site skew	1,570	2,280	2,820	3,590	4,220	4,910	5,670	6,780
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,570	2,280	2,820	3,580	4,210	4,890	5,630	6,710
			Regional regression: $(Q_p)_{g,r}$	1,570	2,220	2,710	3,430	4,020	4,680	5,390	6,440
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,570	2,280	2,810	3,570	4,190	4,860	5,590	6,660

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05540110	FERRY CREEK AT WARRENVILLE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	83.5	126	160	210	252	300	353	433
			At-site, adjusted for urbanization, EMA, at-site skew	118	169	209	269	319	376	439	535
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	122	172	206	252	287	323	361	413
			Regional regression: $(Q_p)_{g,r}$	107	161	201	255	299	346	395	465
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	121	171	206	252	288	327	367	424
05540130	WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	2,060	3,060	3,860	5,070	6,110	7,280	8,620	10,700
			At-site, adjusted for urbanization, EMA, at-site skew	2,250	3,310	4,170	5,440	6,550	7,810	9,240	11,400
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	2,300	3,340	4,140	5,270	6,200	7,210	8,320	9,950
			Regional regression: $(Q_p)_{g,r}$	1,990	2,780	3,380	4,270	4,990	5,810	6,680	7,960
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	2,280	3,300	4,070	5,120	5,980	6,900	7,880	9,320
05540140	EAST BRANCH DU PAGE RIVER NEAR BLOOMINGDALE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	58.3	102	134	176	209	243	277	323
			At-site, adjusted for urbanization, EMA, at-site skew	89.2	131	161	204	240	277	318	378
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	87.8	129	162	211	252	297	348	425
			Regional regression: $(Q_p)_{g,r}$	157	246	320	434	534	650	782	988
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	90.8	136	175	236	293	360	441	570
05540150	EAST BR DU PAGE RIVER AT GLEN ELLYN, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	240	398	511	661	776	894	1,010	1,180
			At-site, adjusted for urbanization, EMA, at-site skew	291	454	585	777	943	1,130	1,340	1,650
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	290	453	586	784	955	1,150	1,370	1,710
			Regional regression: $(Q_p)_{g,r}$	451	663	830	1,080	1,290	1,530	1,800	2,200
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	301	472	615	836	1,030	1,250	1,510	1,890

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05540160	EAST BRANCH DU PAGE RIVER NEAR DOWNERS GROVE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	611	906	1,120	1,390	1,610	1,830	2,070	2,390
			At-site, adjusted for urbanization, EMA, at-site skew	670	989	1,240	1,620	1,940	2,290	2,700	3,300
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	674	993	1,240	1,600	1,900	2,230	2,600	3,150
			Regional regression: $(Q_p)_{g,r}$	656	937	1,160	1,490	1,760	2,070	2,410	2,930
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	673	991	1,240	1,590	1,880	2,210	2,570	3,100
05540190	ST. JOSEPH CREEK AT BELMONT, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	345	517	627	759	853	942	1,030	1,140
			At-site, adjusted for urbanization, EMA, at-site skew	363	539	653	794	895	993	1,090	1,210
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	339	527	679	907	1,100	1,330	1,580	1,960
			Regional regression: $(Q_p)_{g,r}$	364	544	688	903	1,090	1,300	1,530	1,890
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	341	529	681	906	1,100	1,320	1,560	1,930
05540195	ST. JOSEPH CREEK AT ROUTE 34 AT LISLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	580	808	972	1,190	1,370	1,550	1,750	2,020
			At-site, adjusted for urbanization, EMA, at-site skew	599	830	995	1,220	1,390	1,580	1,770	2,050
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	590	827	1,000	1,250	1,460	1,670	1,910	2,260
			Regional regression: $(Q_p)_{g,r}$	432	646	817	1,070	1,290	1,540	1,820	2,240
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	583	816	989	1,230	1,430	1,650	1,890	2,250
05540240	PRENTISS CREEK NEAR LISLE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	181	295	396	558	708	888	1,100	1,450
			At-site, adjusted for urbanization, EMA, at-site skew	225	368	494	697	885	1,110	1,380	1,810
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	228	371	492	677	843	1,030	1,260	1,600
			Regional regression: $(Q_p)_{g,r}$	331	509	654	873	1,060	1,280	1,530	1,910
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	236	385	513	716	897	1,110	1,350	1,730

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05540250	EAST BRANCH DU PAGE RIVER AT BOLINGBROOK, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	1,160	1,820	2,380	3,240	4,020	4,910	5,960	7,610
			At-site, adjusted for urbanization, EMA, at-site skew	1,230	1,910	2,470	3,350	4,130	5,030	6,080	7,730
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,250	1,920	2,460	3,240	3,910	4,660	5,500	6,760
			Regional regression: $(Q_p)_{g,r}$	1,320	1,830	2,210	2,770	3,230	3,760	4,310	5,140
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,260	1,910	2,420	3,150	3,740	4,390	5,080	6,090
05540275	SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	204	421	651	1,090	1,550	2,160	2,990	4,500
			At-site, adjusted for urbanization, EMA, at-site skew	226	452	693	1,150	1,650	2,320	3,240	4,940
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	241	469	681	1,040	1,380	1,790	2,290	3,120
			Regional regression: $(Q_p)_{g,r}$	331	488	608	783	929	1,090	1,270	1,530
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	252	472	664	952	1,190	1,450	1,720	2,120
05540500	DU PAGE RIVER AT SHOREWOOD, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	3,750	5,950	7,650	10,100	12,100	14,300	16,700	20,200
			At-site, adjusted for urbanization, EMA, at-site skew	4,890	7,330	9,200	11,900	14,100	16,500	19,200	23,100
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	4,870	7,320	9,210	11,900	14,200	16,700	19,500	23,600
			Regional regression: $(Q_p)_{g,r}$	4,110	5,640	6,800	8,490	9,830	11,400	13,000	15,400
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	4,860	7,270	9,120	11,700	13,800	16,100	18,500	22,100
05541750	MAZON RIVER TRIBUTARY NEAR GARDNER, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	113	139	155	174	187	200	212	228
			At-site, adjusted for urbanization, EMA, at-site skew	113	139	155	174	187	200	212	228
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	113	140	156	173	184	195	205	218
			Regional regression: $(Q_p)_{g,r}$	136	219	276	349	403	458	511	583
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	114	141	157	176	189	201	213	228

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05542000	MAZON RIVER NEAR COAL CITY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	9,580	13,900	16,600	19,800	22,000	24,000	26,000	28,400
			At-site, adjusted for urbanization, EMA, at-site skew	9,650	14,000	16,700	19,900	22,100	24,200	26,100	28,600
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	9,570	13,900	16,700	20,300	22,900	25,500	28,000	31,400
			Regional regression: $(Q_p)_{g,r}$	4,050	5,990	7,260	8,920	10,100	11,300	12,400	13,900
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	9,410	13,700	16,400	19,800	22,200	24,500	26,700	29,500
05543830	FOX RIVER AT WAUKESHA, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	929	1,370	1,680	2,110	2,440	2,800	3,170	3,690
			At-site, adjusted for urbanization, EMA, at-site skew	1,230	1,740	2,110	2,610	3,010	3,430	3,880	4,520
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,240	1,740	2,100	2,570	2,940	3,330	3,730	4,290
			Regional regression: $(Q_p)_{g,r}$	1,410	1,980	2,390	2,960	3,400	3,880	4,370	5,070
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,240	1,750	2,110	2,590	2,970	3,370	3,790	4,380
05544200	MUKWONAGO RIVER AT MUKWONAGO, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	219	265	291	321	342	361	379	402
			At-site, adjusted for urbanization, EMA, at-site skew	251	299	326	355	375	393	410	430
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	250	299	327	359	381	401	420	445
			Regional regression: $(Q_p)_{g,r}$	923	1,410	1,740	2,180	2,500	2,840	3,170	3,610
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	253	303	332	369	394	420	446	481
05544300	MUKWONAGO RIVER TRIBUTARY NEAR MUKWONAGO, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	31.5	50.4	62.3	76	85.4	94	102	112
			At-site, adjusted for urbanization, EMA, at-site skew	36.5	56.3	68.4	82.3	91.6	100	108	117
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	36.0	55.0	68.2	85.3	98.3	112	125	143
			Regional regression: $(Q_p)_{g,r}$	58.2	99.5	131	174	209	245	283	337
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	37.3	57.2	72.1	92.7	109	127	145	171

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05545100	SUGAR CREEK AT ELKHORN, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	134	231	311	431	534	651	782	979
			At-site, adjusted for urbanization, EMA, at-site skew	136	234	314	435	539	656	787	986
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	140	236	308	407	485	568	656	778
			Regional regression: $(Q_p)_{g,r}$	227	369	473	614	723	839	957	1,120
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	144	241	316	420	506	598	695	834
05545200	WHITE RIVER TRIBUTARY NEAR BURLINGTON, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	94.6	166	218	288	343	399	457	536
			At-site, adjusted for urbanization, EMA, at-site skew	96.3	168	221	291	345	400	457	534
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	95.9	168	221	293	349	407	467	549
			Regional regression: $(Q_p)_{g,r}$	146	271	369	507	617	735	858	1,030
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	98.1	172	228	306	370	439	513	619
05545300	WHITE RIVER NEAR BURLINGTON, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	797	1,300	1,670	2,180	2,580	3,010	3,460	4,080
			At-site, adjusted for urbanization, EMA, at-site skew	929	1,480	1,880	2,430	2,870	3,340	3,820	4,500
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	937	1,480	1,870	2,390	2,800	3,220	3,650	4,250
			Regional regression: $(Q_p)_{g,r}$	1,370	2,070	2,560	3,220	3,700	4,210	4,720	5,400
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	962	1,520	1,930	2,480	2,920	3,380	3,860	4,520
05545750	FOX RIVER NEAR NEW MUNSTER, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	2,760	3,960	4,780	5,830	6,630	7,440	8,260	9,370
			At-site, adjusted for urbanization, EMA, at-site skew	3,150	4,380	5,200	6,260	7,050	7,850	8,660	9,760
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	3,150	4,380	5,190	6,210	6,980	7,740	8,510	9,540
			Regional regression: $(Q_p)_{g,r}$	4,300	5,810	6,770	8,050	8,940	9,890	10,800	12,000
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	3,170	4,400	5,220	6,260	7,040	7,830	8,630	9,710

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05547755	SQUAW CREEK AT ROUND LAKE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	184	250	288	330	359	384	408	436
			At-site, adjusted for urbanization, EMA, at-site skew	244	325	369	417	447	474	498	526
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	233	322	383	461	521	582	644	729
			Regional regression: $(Q_p)_{g,r}$	262	379	462	576	663	757	852	987
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	234	325	388	472	537	605	676	777
05548150	NORTH BRANCH NIPPERSINK CREEK NEAR GENOA CITY, WI	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	191	303	373	455	512	564	613	673
			At-site, adjusted for urbanization, EMA, at-site skew	196	309	379	461	517	569	617	675
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	190	305	386	491	572	654	737	849
			Regional regression: $(Q_p)_{g,r}$	259	411	518	658	763	871	978	1,120
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	193	309	391	501	586	674	764	889
05548280	NIPPERSINK CREEK NEAR SPRING GROVE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	1,250	1,990	2,430	2,950	3,290	3,610	3,890	4,230
			At-site, adjusted for urbanization, EMA, at-site skew	1,420	2,200	2,700	3,300	3,710	4,110	4,480	4,940
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,370	2,180	2,750	3,520	4,120	4,730	5,360	6,230
			Regional regression: $(Q_p)_{g,r}$	2,000	2,970	3,640	4,520	5,150	5,820	6,470	7,360
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,400	2,210	2,800	3,590	4,200	4,850	5,510	6,430
05549000	BOONE CREEK NEAR MC HENRY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	129	202	246	296	329	358	385	416
			At-site, adjusted for urbanization, EMA, at-site skew	203	300	362	439	494	547	599	667
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	201	299	365	450	513	577	640	726
			Regional regression: $(Q_p)_{g,r}$	289	456	575	733	851	976	1,100	1,270
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	203	303	372	462	532	603	678	782

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05549700	MUTTON CREEK AT ISLAND LAKE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	75.8	159	238	371	498	651	835	1,130
			At-site, adjusted for urbanization, EMA, at-site skew	122	231	330	491	642	823	1,040	1,390
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	127	234	324	458	573	701	845	1,060
			Regional regression: $(Q_p)_{g,r}$	183	271	333	418	483	554	624	724
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	135	241	326	446	542	642	744	884
05549850	FLINT CREEK NEAR FOX RIVER GROVE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	271	386	472	595	696	806	927	1,100
			At-site, adjusted for urbanization, EMA, at-site skew	420	535	624	753	860	979	1,110	1,310
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	435	548	621	713	781	849	918	1,010
			Regional regression: $(Q_p)_{g,r}$	544	774	941	1,180	1,360	1,560	1,770	2,070
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	437	552	628	729	806	888	976	1,100
05549900	FOX RIVER TRIBUTARY NEAR CARY, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	10.7	26.3	40.0	60.4	77.4	95.7	115	142
			At-site, adjusted for urbanization, EMA, at-site skew	11.8	27.8	41.6	62.0	78.9	97.0	116	143
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	10.3	25.6	43.4	79.6	121	178	259	413
			Regional regression: $(Q_p)_{g,r}$	20.9	37.9	53.1	77.5	100	128	160	212
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	11.9	28.4	46.4	78.7	110	147	190	259
05550300	TYLER CREEK AT ELGIN, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	436	737	1,010	1,430	1,830	2,310	2,870	3,790
			At-site, adjusted for urbanization, EMA, at-site skew	542	844	1,090	1,470	1,810	2,190	2,630	3,320
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	562	861	1,080	1,380	1,620	1,880	2,150	2,540
			Regional regression: $(Q_p)_{g,r}$	858	1,330	1,680	2,180	2,570	3,000	3,440	4,090
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	574	883	1,120	1,450	1,730	2,040	2,370	2,870

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05550430	EAST BRANCH POPLAR CREEK NEAR PALATINE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	79.8	121	157	212	262	320	388	495
			At-site, adjusted for urbanization, EMA, at-site skew	98.6	148	185	236	279	324	374	445
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	98.8	148	185	235	277	321	369	437
			Regional regression: $(Q_p)_{g,r}$	85.3	129	163	211	250	293	339	407
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	97.8	146	182	232	272	315	361	428
05550450	POPLAR CREEK NEAR ONTARIOVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	207	289	344	414	467	520	574	647
			At-site, adjusted for urbanization, EMA, at-site skew	285	380	439	509	559	608	655	716
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	277	376	446	539	612	688	768	881
			Regional regression: $(Q_p)_{g,r}$	324	459	559	703	819	948	1,080	1,280
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	279	380	453	554	635	723	819	958
05550470	POPLAR CREEK TRIBUTARY NEAR BARTLETT, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	157	247	321	434	534	648	779	983
			At-site, adjusted for urbanization, EMA, at-site skew	170	242	309	418	522	649	804	1,060
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	180	252	307	385	449	519	595	707
			Regional regression: $(Q_p)_{g,r}$	192	281	351	458	549	654	769	946
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	180	254	311	393	464	543	633	769
05550500	POPLAR CREEK AT ELGIN, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	457	706	884	1,120	1,310	1,500	1,690	1,960
			At-site, adjusted for urbanization, EMA, at-site skew	546	766	927	1,150	1,330	1,520	1,730	2,030
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	548	767	926	1,140	1,320	1,500	1,700	1,980
			Regional regression: $(Q_p)_{g,r}$	650	921	1,130	1,420	1,660	1,930	2,210	2,630
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	549	770	931	1,150	1,340	1,530	1,740	2,050

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05551030	BREWSTER CREEK AT VALLEY VIEW, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	233	410	541	716	852	990	1,130	1,320
			At-site, adjusted for urbanization, EMA, at-site skew	373	594	758	983	1,160	1,350	1,560	1,840
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	366	590	767	1,020	1,240	1,480	1,750	2,140
			Regional regression: $(Q_p)_{g,r}$	370	553	691	889	1,050	1,230	1,410	1,690
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	366	585	755	995	1,190	1,400	1,620	1,950
05551050	NORTON CREEK NEAR WAYNE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	88.0	200	330	598	908	1,350	1,980	3,230
			At-site, adjusted for urbanization, EMA, at-site skew	158	313	492	860	1,290	1,910	2,800	4,600
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	180	344	489	720	929	1,170	1,460	1,900
			Regional regression: $(Q_p)_{g,r}$	186	275	341	432	506	586	670	792
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	181	330	452	623	757	896	1,040	1,230
05551060	NORTON CREEK NEAR ST. CHARLES, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	109	202	300	482	678	941	1,290	1,950
			At-site, adjusted for urbanization, EMA, at-site skew	218	351	494	770	1,070	1,480	2,050	3,150
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	245	387	496	652	782	922	1,080	1,300
			Regional regression: $(Q_p)_{g,r}$	309	465	582	747	881	1,030	1,180	1,410
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	250	393	505	666	800	946	1,100	1,340
05551200	FERSON CREEK NEAR ST. CHARLES, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	959	1,610	2,040	2,550	2,910	3,250	3,570	3,960
			At-site, adjusted for urbanization, EMA, at-site skew	1,430	2,210	2,680	3,230	3,610	3,960	4,280	4,670
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	1,340	2,180	2,830	3,750	4,520	5,350	6,260	7,590
			Regional regression: $(Q_p)_{g,r}$	1,130	1,740	2,190	2,840	3,350	3,920	4,510	5,360
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	1,330	2,150	2,780	3,660	4,370	5,120	5,920	7,060

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05551330	MILL CREEK NEAR BATAVIA, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	410	1,000	1,740	3,370	5,360	8,350	12,800	22,200
			At-site, adjusted for urbanization, EMA, at-site skew	474	1,110	1,880	3,520	5,460	8,300	12,400	20,900
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	523	1,170	1,820	2,960	4,090	5,500	7,240	10,200
			Regional regression: $(Q_p)_{g,r}$	908	1,440	1,850	2,450	2,940	3,490	4,090	4,960
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	617	1,260	1,830	2,700	3,420	4,200	5,020	6,190
05551520	INDIAN CREEK NEAR NORTH AURORA, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	131	216	279	367	437	510	587	695
			At-site, adjusted for urbanization, EMA, at-site skew	184	288	362	463	543	625	712	833
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	181	286	366	481	576	679	791	955
			Regional regression: $(Q_p)_{g,r}$	168	254	319	411	485	566	652	778
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	180	282	360	468	555	649	748	890
05551530	INDIAN CREEK AT AURORA, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	530	659	727	798	842	880	914	953
			At-site, adjusted for urbanization, EMA, at-site skew	848	998	1,070	1,150	1,190	1,230	1,260	1,300
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	815	990	1,110	1,250	1,360	1,470	1,570	1,720
			Regional regression: $(Q_p)_{g,r}$	531	800	1,010	1,320	1,580	1,870	2,190	2,660
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	809	986	1,100	1,250	1,370	1,490	1,620	1,800
05551620	BLACKBERRY CREEK NEAR KANEVILLE, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	423	529	593	667	719	768	816	877
			At-site, adjusted for urbanization, EMA, at-site skew	546	669	741	824	881	935	985	1,050
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	543	668	743	832	895	955	1,010	1,090
			Regional regression: $(Q_p)_{g,r}$	592	965	1,240	1,630	1,930	2,260	2,600	3,080
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	544	674	755	856	933	1,010	1,100	1,210

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05551650	LAKE RUN AT BALD MOUND, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	44.9	112	191	348	523	767	1,100	1,730
			At-site, adjusted for urbanization, EMA, at-site skew	50.3	122	205	369	552	804	1,150	1,800
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	56.3	130	196	299	389	489	600	764
			Regional regression: $(Q_p)_{g,r}$	124	231	315	434	529	631	737	888
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	70.0	152	226	342	442	551	668	833
05551675	BLACKBERRY CREEK NEAR MONTGOMERY, IL	No	At-site, unadjusted for urbanization, EMA, at-site skew	520	914	1,220	1,640	1,980	2,340	2,730	3,280
			At-site, adjusted for urbanization, EMA, at-site skew	606	1,020	1,320	1,710	2,010	2,320	2,630	3,050
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	582	1,010	1,360	1,870	2,300	2,780	3,310	4,100
			Regional regression: $(Q_p)_{g,r}$	1,140	1,760	2,220	2,860	3,370	3,930	4,510	5,330
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	653	1,130	1,520	2,120	2,620	3,180	3,790	4,660
05551700	BLACKBERRY CREEK NEAR YORKVILLE, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	666	1,250	1,730	2,450	3,080	3,780	4,550	5,710
			At-site, adjusted for urbanization, EMA, at-site skew	889	1,560	2,100	2,900	3,560	4,300	5,110	6,300
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	883	1,560	2,110	2,940	3,650	4,440	5,320	6,640
			Regional regression: $(Q_p)_{g,r}$	1,260	1,910	2,390	3,060	3,590	4,170	4,760	5,620
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	900	1,580	2,130	2,950	3,640	4,390	5,190	6,360
05551800	FOX RIVER TRIBUTARY NO 2 NEAR FOX, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	64.9	164	262	429	586	775	997	1,350
			At-site, adjusted for urbanization, EMA, at-site skew	118	248	367	556	729	930	1,160	1,530
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	121	250	362	535	687	858	1,050	1,340
			Regional regression: $(Q_p)_{g,r}$	56.9	110	155	222	279	342	411	513
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	105	213	301	418	509	603	701	838

USGS streamgage number	Streamgage name	Used in regression analyses (non-redundant)	Frequency analysis method	Discharge for given annual exceedance probability, ft³/s							
				0.50	0.20	0.10	0.04	0.02	0.01	0.01	0.002
05551900	EAST BRANCH BIG ROCK CREEK NEAR BIG ROCK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	620	941	1,180	1,510	1,780	2,060	2,370	2,810
			At-site, adjusted for urbanization, EMA, at-site skew	637	963	1,210	1,540	1,810	2,110	2,420	2,860
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	656	971	1,180	1,450	1,650	1,840	2,040	2,300
			Regional regression: $(Q_p)_{g,r}$	707	1,150	1,460	1,880	2,190	2,520	2,850	3,300
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	660	985	1,210	1,500	1,720	1,950	2,190	2,520
05551930	WELCH CREEK NEAR BIG ROCK, IL	Yes	At-site, unadjusted for urbanization, EMA, at-site skew	316	459	552	669	755	840	924	1,040
			At-site, adjusted for urbanization, EMA, at-site skew	346	496	594	716	805	893	980	1,090
			At-site, adjusted for urbanization, EMA, weighted skew: $(Q_p)_{g,s}$	345	496	596	722	815	908	1,000	1,120
			Regional regression: $(Q_p)_{g,r}$	596	977	1,250	1,630	1,920	2,230	2,540	2,970
			$(Q_p)_{g,w}$: Weighted at-site $(Q_p)_{g,s}$ and regional $(Q_p)_{g,r}$	358	520	633	788	914	1,050	1,190	1,400

APPENDIX 4

Table 3. Spatially averaged basin characteristics considered for developing spatial regression equations in this study in northeastern Illinois.

[NLCD, National Land Cover Database; SSURGO, Soil Survey Geographic; NED, National Elevation Dataset; NWI, National Wetlands Inventory; WWI, Wisconsin Wetlands Inventory]

Category	Variable name	Variable description	Units	Selected transformation	Data source	Reference
Drainage Area						
	Drainage Area	Drainage area of basin upstream from streamgage.	square miles	$\log_{10}$	As the area of the streamgage drainage basins delineated as described in the report.	
Urbanization						
	NLCD_21_22_23_24	Sum of fractions of NLCD 2011 classes 21 (developed, open space), 22 (developed, low intensity), 23 (developed, medium intensity), 24 (developed, high intensity)	decimal fraction	none	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_22_23_24	Sum of fractions of NLCD 2011 classes 22 (developed, low intensity), 23 (developed, medium intensity), 24 (developed, high intensity)	decimal fraction	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_23_24	Sum of fractions of NLCD 2011 classes 23 (developed, medium intensity), 24 (developed, high intensity)	decimal fraction	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_24	Fraction of NLCD 2011 class 24 (developed, high intensity)	decimal fraction	$\log_{10}(X+0.001)$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NCLD_Imperv	mean NLCD 2011 percent developed imperviousness	percent	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Xian et al. (2011)
	Theobald_Urban	Sum of fractions of Theobald housing density classes 7 (urban/exurban: 1.7 - 10 acres per lot), 8 (urban/exurban 0.6 - 1.7 acres per lot), 9 (urban/exurban, less than 0.6 acres per lot), and 10 (commercial/industrial/ transportation)	decimal fraction	none	file bhcs_fote20080612.zip downloaded from www.nrel.colostate.edu/ftp/theobald on 5/12/2009; now at https://pubs.er.usgs.gov/publication/sir20165049	Theobald (2005)

Category	Variable name	Variable description	Units	Selected transformation	Data source	Reference
Water and wetlands						
	NLCD_11	Fraction of NLCD 2011 class 11 (open water)	decimal fraction	$\log_{10}(X+0.0001)$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_11_90	Sum of fractions of NLCD 2011 classes 11 (open water) and 90 (woody wetlands)	decimal fraction	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_11_95	Sum of fractions of NLCD 2011 classes 11 (open water) and 95 (emergent herbaceous wetlands)	decimal fraction	$\log_{10}(X+0.0001)$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_11_90_95	Sum of fractions of NLCD 2011 classes 11 (open water), 90 (woody wetlands), and 95 (emergent herbaceous wetlands)	decimal fraction	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NLCD_90_95	Sum of fractions of NLCD 2011 classes 90 (woody wetlands) and 95 (emergent herbaceous wetlands)	decimal fraction	$X^{(1/2)}$	NLCD 2011 (http://www.mrlc.gov/nlcd2011.php)	Jin et al. (2013)
	NWI.total	Sum of fractions of emergent wetland, farmed wetland, filled/drained wetland, forested wetland, non-wetland, open-water wetland, shallow lake, and undefined.	decimal fraction	$X^{(1/2)}$	NWI: http://www.fws.gov/wetlands/); WWI: http://dnr.wi.gov/topic/wetlands/inventory.html	NWI: Cowardin et al. (1979); WWI: Wisconsin Department of Natural Resources(1992)
	NWI.emergent	Fraction of NWI/WWI emergent wetlands	decimal fraction	$X^{(1/2)}$	NWI: http://www.fws.gov/wetlands/); WWI: http://dnr.wi.gov/topic/wetlands/inventory.html	NWI: Cowardin et al. (1979); WWI: Wisconsin Department of Natural Resources (1992)
	NWI.forested	Fraction of NWI/WWI forested wetlands	decimal fraction	$\log_{10}(X+0.001)$	NWI: http://www.fws.gov/wetlands/); WWI: http://dnr.wi.gov/topic/wetlands/inventory.html	NWI: Cowardin et al. (1979); WWI: Wisconsin Department of Natural Resources (1992)
	NWI.emergent_forested	Sum of fractions of NWI/WWI emergent and forested wetlands	decimal fraction	$X^{(1/2)}$	NWI: http://www.fws.gov/wetlands/); WWI: http://dnr.wi.gov/topic/wetlands/inventory.html	NWI: Cowardin et al. (1979); WWI: Wisconsin Department of Natural Resources (1992)
	DrainageClass0	Fraction "unknown (likely water)"	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	DrainageClass1	Fraction "very poorly drained"	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)

Category	Variable name	Variable description	Units	Selected transformation	Data source	Reference
	DrainageClass2	Sum of fractions "poorly" and "very poorly drained"	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	DrainageClass3	Sum of fractions "somewhat poorly", "poorly", and "very poorly drained"	decimal fraction	none	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	DrainageClass1a	Sum of fractions "very poorly drained" and "unknown (likely water)"	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	DrainageClass2a	Sum of fractions "poorly" and "very poorly drained" and "unknown (likely water)"	decimal fraction	none	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	DrainageClass3a	Sum of fractions "somewhat poorly", "poorly", and "very poorly drained" and "unknown (likely water")	decimal fraction	none	SSURGO Database; table: muaggatt; column: drclassdcd (Drainage Class - Dominant Condition)	Soil Survey Staff (2013)
	HydricClass1	Fraction "all hydric" soils	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: hydclprs (Hydric Classication - Presence)	Soil Survey Staff (2013)
	HydricClass1a	Sum of fractions "all hydric" soils and "likely water"	decimal fraction	none	SSURGO Database; table: muaggatt; column: hydclprs (Hydric Classication - Presence)	Soil Survey Staff (2013)
	HydricClass2	Sum of fractions "all hydric" and "partially hydric" soils	decimal fraction	none	SSURGO Database; table: muaggatt; column: hydclprs (Hydric Classication - Presence)	Soil Survey Staff (2013)
	HydricClass2a	Sum of fractions "all hydric" and "partially hydric" soils and "likely water"	decimal fraction	none	SSURGO Database; table: muaggatt; column: hydclprs (Hydric Classication - Presence)	Soil Survey Staff (2013)
	WaterTableDepth	Mean water table depth	cm	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: wtdepannmin (Water Table Depth - Annual - Minimum)	Soil Survey Staff (2013)
	Ponding1	Fraction 75-100% ponding	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: wtdepannmin (Water Table Depth - Annual - Minimum)	Soil Survey Staff (2013)

Category	Variable name	Variable description	Units	Selected transformation	Data source	Reference
	Ponding2	Sum of fractions 50-74% and 75-100% ponding	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: wtdepannmin (Water Table Depth - Annual - Minimum)	Soil Survey Staff (2013)
	Ponding3	Sum of fractions 15-49%, 50-74%, and 75-100% ponding	decimal fraction	none	SSURGO Database; table: muaggatt; column: wtdepannmin (Water Table Depth - Annual - Minimum)	Soil Survey Staff (2013)
	FloodFreq1	Sum of fractions frequent and very frequent flooding	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: flodfreqcd (Flooding Frequency - Dominant Condition)	Soil Survey Staff (2013)
	FloodFreq1a	Sum of fractions frequent and very frequent flooding and likely water	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: flodfreqcd (Flooding Frequency - Dominant Condition)	Soil Survey Staff (2013)
	FloodFreq2	Sum of fractions occasional, frequent, and very frequent flooding	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: flodfreqcd (Flooding Frequency - Dominant Condition)	Soil Survey Staff (2013)
	FloodFreq2a	Sum of fractions occasional, frequent, and very frequent flooding and likely water	decimal fraction	$X^{(1/2)}$	SSURGO Database; table: muaggatt; column: flodfreqcd (Flooding Frequency - Dominant Condition)	Soil Survey Staff (2013)

Category	Variable name	Variable description	Units	Selected transformation	Data source	Reference
Slope						
	DEM_slope	Average of slope grid derived from the NED by using the ArcHydro Tools Terrain Preprocessing Slope tool.	percent	none	1/3 arc-second National Elevation Dataset (NED), U.S. Geological Survey, 2013. Downloaded from http://nationalmap.usgs.gov/viewer.html, Feb. 12, 2014.	Gesch et al. (2002)
	SSURGO_slope	Area-weighted average SSURGO soil slopes	percent	$\log_{10}(X)$	SSURGO Database; table: muaggatt; column: slopegraddcp (Slope Gradient - Dominant Component)	Soil Survey Staff (2013)
	DEM_X_Y (DEM_1_0)	Differences of elevation quantiles at probabilities Y = 1 (the maximum), 0.999, 0.99, 0.90, 0.75 and their complementary values X = 0 (the minimum), 0.001, 0.01, 0.10, and 0.25, respectively.	feet	$\log_{10}(X)$	1/3 arc-second National Elevation Dataset (NED), U.S. Geological Survey, 2013. Downloaded from http://nationalmap.usgs.gov/viewer.html, Feb. 12, 2014.	Gesch et al. (2002)
	DEM_X_Y_P (DEM_1_0_P)	Differences of elevation quantiles at probabilities Y = 1 (the maximum), 0.999, 0.99, 0.90, 0.75 and their complementary values X = 0 (the minimum), 0.001, 0.01, 0.10, and 0.25, respectively, divided by basin perimeter.	feet per mile	$\log_{10}(X)$	1/3 arc-second National Elevation Dataset (NED), U.S. Geological Survey, 2013. Downloaded from http://nationalmap.usgs.gov/viewer.html, Feb. 12, 2014.	Gesch et al. (2002)

APPENDIX 5

Table 4. Segment information for U.S. Geological Survey streamgages used in this study, northeastern Illinois and adjacent states.

[NA, not available; shaded rows indicate streamgages not used in the regression analyses because they were deemed redundant but whose records were adjusted for urbanization in this study]

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $\log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $\log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $\log_{10}(ft^3/s)$
04087200	1	No	1958	2009	0	2.042	0.039	NA
04087204	1	Yes	1964	2009	0	2.275	0.042	NA
04087220	1	Yes	1964	2009	0	2.509	0.044	NA
04087230	1	Yes	1962	1993	0	1.795	0.042	NA
04087233	1	Yes	1964	2009	115	2.651	0.036	NA
04087240	1	No	1964	2009	465	3.000	0.037	NA
04087250	1	Yes	1960	2009	0	1.739	0.034	NA
04087257	1	Yes	1972	2009	0	2.662	0.040	NA
04087300	1	Yes	1956	1972	0	1.646	0.058	NA
04087400	1	Yes	1962	1976	0	2.065	0.062	NA
04093000	1	Yes	1947	2009	4390	2.882	0.032	NA
04094000	1	Yes	1945	2009	447	2.873	0.030	NA
04094500	1	Yes	1945	1991	1120	2.712	0.036	NA
05437950	1	Yes	1965	1978	0	1.942	0.063	NA
05438250	1	Yes	1962	1991	0	2.918	0.043	NA
05438283	1	Yes	1993	2009	0	2.290	0.057	NA
05438300	1	Yes	1961	1980	0	1.792	0.054	NA
05438390	1	No	1970	1979	0	3.086	0.074	NA
05438500	1	Yes	1940	2009	939	3.425	0.028	NA
05438850	1	Yes	1956	1980	0	2.033	0.048	NA
05439000	1	Yes	1980	2009	0	2.800	0.043	NA
05439500	1	Yes	1940	2009	1130	3.445	0.028	NA
05439550	1	Yes	1959	1976	0	1.749	0.056	NA
05440000	1	No	1940	2009	5740	3.720	0.028	NA
05440500	1	Yes	1940	1980	0	3.214	0.037	NA
05442000	1	Yes	1940	1951	440	2.970	0.068	NA
05446950	1	Yes	1961	1976	0	1.848	0.059	NA
05447000	1	Yes	1940	1982	31.8	3.297	0.037	NA
05447050	1	Yes	1959	1972	0	2.009	0.063	NA
05447500	1	Yes	1940	2009	1440	3.621	0.029	NA

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $\log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $\log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $\log_{10}(ft^3/s)$
05517500	1	Yes	1949	2009	12700	3.513	0.030	NA
05517890	1	Yes	1968	2003	29.1	2.585	0.040	NA
05518000	1	No	1940	2009	12100	3.582	0.028	NA
05519000	1	Yes	1951	2001	6260	2.888	0.034	NA
05519500	1	Yes	1949	1972	0	2.782	0.052	NA
05520500	1	No	1940	2009	18200	3.753	0.028	NA
05526150	1	Yes	1956	1980	0	1.403	0.048	NA
05526500	1	Yes	1950	1975	0	2.066	0.046	NA
05527050	1	Yes	1956	1972	0	1.794	0.057	NA
05527800	1	Yes	1960	2009	684	2.699	0.034	NA
05527840	1	No	1962	1976	300	2.754	0.061	NA
05527870	1	Yes	1962	1976	0	1.657	0.064	NA
05527900	1	Yes	1962	1976	1200	2.111	0.061	NA
05527950	1	No	1962	2009	1960	2.486	0.041	NA
05528000	1	No	1946	2009	2410	2.933	0.030	NA
05528150	1	Yes	1960	1976	2070	2.227	0.057	NA
05528170	1	Yes	1961	1976	0	1.391	0.061	NA
05528200	1	Yes	1963	1976	1400	1.941	0.066	NA
05528230	1	No	1963	1996	3490	2.405	0.057	NA
05528360	1	Yes	1961	1976	0	1.869	0.059	NA
05528400	1	No	1962	1977	7930	3.033	0.071	NA
05528440	1	Yes	1961	1976	0	1.562	0.061	NA
05528470	1	No	1961	1976	0	2.103	0.062	NA
05528500	1	Yes	1953	1982	0	2.216	0.045	–0.126
05528500	2	Yes	1984	2009	605	2.090	0.054	NA
05529000	1	No	1941	2009	7930	3.112	0.030	NA
05529300	1	No	1961	1979	0	1.669	0.061	NA
05529500	1	Yes	1953	1989	0	1.751	0.048	–0.132
05529500	2	Yes	1991	2009	540	1.619	0.064	NA
05529900	1	No	1961	1977	53.8	2.120	0.068	NA
05530000	1	Yes	1951	2009	251	2.212	0.045	NA
05530400	1	Yes	1961	1979	0	1.792	0.056	NA
05530480	1	Yes	1961	1979	0	2.344	0.056	NA
05530600	1	No	1960	1977	7790	3.132	0.057	NA
05530700	1	Yes	1961	1980	0	2.080	0.060	NA
05530800	1	No	1954	1976	7400	3.150	0.050	NA
05530940	1	Yes	1961	1980	0	1.832	0.058	NA

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $\log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $\log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $\log_{10}(ft^3/s)$
05530960	1	No	1961	1979	0	2.042	0.057	NA
05530990	1	No	1974	2009	1570	2.332	0.049	NA
05531000	1	No	1951	1976	0	2.239	0.050	NA
05531050	1	No	1961	1976	0	2.378	0.062	NA
05531080	1	Yes	1961	1979	0	1.754	0.061	NA
05531100	1	Yes	1956	1979	0	1.361	0.058	NA
05531130	1	No	1961	1979	359	2.031	0.064	NA
05531200	1	No	1960	1976	462	2.524	0.060	NA
05531300	1	No	1960	1976	462	2.567	0.061	–0.052
05531300	2	No	1989	1997	7720	2.519	0.083	–0.004
05531300	3	No	2003	2009	18300	2.515	0.094	NA
05531380	1	No	1960	1976	462	2.556	0.061	NA
05531500	1	Yes	1946	1976	518	2.649	0.046	–0.045
05531500	2	Yes	1978	1985	5190	2.661	0.088	–0.057
05531500	3	Yes	1987	1997	7630	2.655	0.076	–0.051
05531500	4	Yes	2003	2009	18400	2.604	0.094	NA
05531800	1	No	1961	1976	0	2.002	0.066	NA
05532000	1	Yes	1951	1991	311	2.068	0.048	–0.077
05532000	2	Yes	1993	2009	1370	1.992	0.066	NA
05532500	1	No	1940	1976	7490	3.294	0.040	–0.062
05532500	2	No	1978	1997	17800	3.251	0.056	–0.019
05532500	3	No	1999	2009	32400	3.232	0.074	NA
05533000	1	Yes	1951	2009	0	2.320	0.043	NA
05533200	1	Yes	1961	1979	0	1.757	0.064	NA
05533300	1	Yes	1962	1976	0	1.375	0.064	NA
05533400	1	No	1961	2009	0	2.256	0.044	NA
05534300	1	No	1961	1976	0	2.058	0.059	NA
05534400	1	No	1960	1976	0	2.154	0.057	NA
05534500	1	Yes	1953	1991	0	2.148	0.040	0.013
05534500	2	Yes	1993	2009	500	2.160	0.062	NA
05534600	1	No	1960	1972	0	2.193	0.067	0.005
05534600	2	No	1974	1980	600	2.198	0.097	NA
05534900	1	No	1962	1976	0	1.850	0.064	NA
05535000	1	Yes	1952	2009	0	1.934	0.037	NA
05535070	1	No	1967	2009	0	2.159	0.044	NA
05535150	1	No	1960	1969	0	2.160	0.077	–0.003
05535150	2	No	1971	1979	961	2.158	0.086	NA

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $\log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $\log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $\log_{10}(ft^3/s)$
05535200	1	No	1960	1969	0	2.464	0.076	NA
05535300	1	No	1961	1976	0	2.020	0.060	NA
05535400	1	No	1961	1976	0	2.157	0.062	NA
05535500	1	Yes	1953	1989	0	2.233	0.044	–0.182
05535500	2	Yes	1993	2009	1100	2.051	0.065	NA
05535700	1	No	1960	1977	0	2.347	0.059	NA
05535800	1	No	1960	1969	0	2.630	0.077	–0.113
05535800	2	No	1974	1978	1560	2.517	0.108	NA
05536000	1	Yes	1951	1969	0	2.627	0.057	–0.032
05536000	2	Yes	1974	1978	1560	2.585	0.108	0.010
05536000	3	Yes	1980	1991	3110	2.581	0.073	0.014
05536000	4	Yes	1993	2009	4920	2.595	0.064	NA
05536105	1	No	1990	2009	4810	2.590	0.061	NA
05536178	1	No	1966	1977	0	2.840	0.068	NA
05536179	1	No	1990	2009	0	2.742	0.054	NA
05536190	1	Yes	1943	2009	0	2.858	0.033	NA
05536201	1	Yes	1962	1978	0	2.183	0.060	NA
05536207	1	Yes	1962	1977	0	1.766	0.066	NA
05536210	1	No	1965	1979	376	2.510	0.064	NA
05536215	1	No	1950	2009	376	2.555	0.037	NA
05536235	1	Yes	1948	2005	600	2.410	0.033	NA
05536238	1	Yes	1961	1979	0	1.977	0.056	NA
05536255	1	Yes	1948	1968	0	2.409	0.053	0.031
05536255	2	Yes	1970	2009	584	2.440	0.043	NA
05536265	1	Yes	1948	1987	0	2.018	0.038	–0.324
05536265	2	Yes	1989	2009	1090	1.695	0.054	NA
05536270	1	Yes	1948	1979	0	2.264	0.043	NA
05536275	1	No	1947	1987	1240	2.934	0.039	–0.014
05536275	2	No	1989	2006	2670	2.920	0.059	NA
05536290	1	No	1947	2009	1750	2.992	0.034	NA
05536310	1	Yes	1961	1974	0	1.979	0.068	NA
05536335	1	No	1954	1979	0	1.962	0.050	NA
05536340	1	Yes	1951	1973	0	2.087	0.051	–0.347
05536340	2	Yes	1975	1987	950	1.870	0.070	–0.129
05536340	3	Yes	1989	2009	1570	1.740	0.059	NA
05536460	1	No	1961	1979	0	2.304	0.057	NA
05536500	1	Yes	1951	2009	0	2.400	0.035	NA

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $log_{10}(ft^3/s)$
05536510	1	Yes	1961	1979	0	1.921	0.059	NA
05536560	1	Yes	1962	1970	0	1.345	0.086	0.440
05536560	2	Yes	1974	1980	165	1.785	0.095	NA
05536570	1	No	1962	1970	2.67	1.910	0.085	NA
05536620	1	No	1961	1977	0	1.756	0.059	NA
05536630	1	Yes	1961	1979	143	1.959	0.056	NA
05537500	1	Yes	1951	1963	0	2.595	0.065	–0.195
05537500	2	Yes	1965	2009	859	2.400	0.040	NA
05538440	1	Yes	1961	1977	0	1.284	0.059	NA
05539000	1	Yes	1945	2008	1020	3.170	0.032	NA
05539870	1	No	1961	1976	0	2.038	0.063	NA
05539890	1	No	1961	1976	0	2.285	0.061	NA
05539900	1	Yes	1961	1976	0	2.298	0.061	–0.061
05539900	2	Yes	1978	2009	230	2.237	0.049	NA
05539950	1	Yes	1961	1979	0	1.945	0.056	NA
05540030	1	No	1961	1979	594	2.473	0.057	NA
05540060	1	Yes	1961	1991	0	2.176	0.047	–0.055
05540060	2	Yes	1994	2009	540	2.121	0.061	NA
05540080	1	Yes	1961	1979	0	1.569	0.062	NA
05540091	1	No	1992	2009	0	1.735	0.062	NA
05540095	1	No	1969	2009	1040	2.659	0.043	NA
05540110	1	Yes	1961	1979	711	1.716	0.054	NA
05540130	1	No	1989	2009	9560	2.770	0.057	NA
05540140	1	Yes	1961	1979	0	1.339	0.058	NA
05540150	1	No	1961	1980	0	1.886	0.061	NA
05540160	1	Yes	1961	2009	478	2.187	0.050	NA
05540190	1	Yes	1961	1977	0	1.917	0.066	NA
05540195	1	No	1989	2009	0	2.086	0.061	NA
05540240	1	Yes	1961	1980	0	1.714	0.060	NA
05540250	1	No	1992	2009	2190	2.463	0.063	NA
05540275	1	Yes	1988	2009	117	1.860	0.055	NA
05540500	1	Yes	1941	1971	2030	3.265	0.043	–0.106
05540500	2	Yes	1973	2009	11600	3.160	0.044	NA
05541750	1	Yes	1959	1980	0	1.888	0.050	NA
05542000	1	Yes	1940	2009	35000	3.778	0.029	NA
05543830	1	Yes	1963	2009	37200	2.545	0.039	NA
05544200	1	Yes	1974	2009	11500	2.124	0.041	NA

U.S. Geological Survey streamgage number	Segment number	Used in regression analyses (non-redundant)	Beginning water year	Ending water year	Segment-average maximum dam storage, acre-feet	Segment intercept estimate, $\log_{10}(ft^3/s)$	Standard error of segment intercept effect estimate, $\log_{10}(ft^3/s)$	Intra-streamgage segment intercept differences, $\log_{10}(ft^3/s)$
05544300	1	Yes	1960	1981	0	1.330	0.054	NA
05545100	1	Yes	1962	2009	0	1.998	0.034	NA
05545200	1	Yes	1960	2009	0	1.798	0.034	NA
05545300	1	Yes	1960	1982	40100	2.708	0.049	NA
05545750	1	Yes	1940	1976	109000	3.284	0.039	–0.066
05545750	2	Yes	1978	2009	122000	3.218	0.043	NA
05547755	1	Yes	1990	2005	62	2.046	0.059	NA
05548150	1	Yes	1962	2009	0	2.160	0.036	NA
05548280	1	Yes	1967	2009	10300	2.877	0.037	NA
05549000	1	Yes	1949	1964	0	1.954	0.059	0.020
05549000	2	Yes	1966	1992	400	1.974	0.046	NA
05549700	1	Yes	1962	1976	0	1.724	0.061	NA
05549850	1	Yes	1962	1996	282	2.082	0.052	NA
05549900	1	Yes	1956	1979	0	0.548	0.062	NA
05550300	1	Yes	1962	2009	97.9	2.415	0.044	NA
05550430	1	Yes	1961	1977	633	1.569	0.058	NA
05550450	1	No	1961	1968	633	2.075	0.083	–0.046
05550450	2	No	1970	1977	1150	2.030	0.084	NA
05550470	1	Yes	1961	1972	0	1.772	0.071	–0.111
05550470	2	Yes	1975	1979	154	1.661	0.110	NA
05550500	1	Yes	1952	2009	1170	2.306	0.034	NA
05551030	1	Yes	1962	1979	0	2.187	0.057	NA
05551050	1	Yes	1962	1979	0	1.777	0.056	NA
05551060	1	No	1962	1979	0	1.901	0.056	NA
05551200	1	Yes	1961	2009	297	2.677	0.035	NA
05551330	1	Yes	1998	2009	302	2.226	0.070	NA
05551520	1	Yes	1961	1979	0	1.843	0.055	NA
05551530	1	No	1961	1979	0	2.352	0.055	NA
05551620	1	No	1961	1979	0	2.477	0.057	NA
05551650	1	Yes	1961	1976	0	1.641	0.061	NA
05551675	1	No	1998	2009	532	2.415	0.069	NA
05551700	1	Yes	1961	2009	331	2.603	0.034	NA
05551800	1	Yes	1961	1980	0	1.610	0.054	NA
05551900	1	Yes	1965	1979	0	2.702	0.061	NA
05551930	1	Yes	1965	1980	0	2.372	0.059	NA

APPENDIX 6

Table 6. Observed and urban-adjusted annual maximum peak discharges and associated urbanization and precipitation values at 181 streamgages in northeastern Illinois and adjacent states.

[NWIS, National Water Information System; ft^3/s, cubic feet per second, --, no data; NA, not available]

[NWIS peak codes: 1, Discharge is a maximum daily average; 2, Discharge is an estimate; 4, Discharge less than indicated value, which is the minimum recordable discharge at this site; 5, Discharge affected to an unknown degree by regulation or diversion; 6, Discharge affected by regulation or diversion; 7, Discharge is an historic peak; 8, Discharge actually greater than indicated value, 9, Discharge due to snowmelt, hurricane, ice-jam or debris dam breakup; B, Month or day of occurrence is unknown or not exact; C, All or part of the record affected by urbanization, mining, agricultural changes, channelization, or other; D, Base discharge changed during this year; E, Only maximum peak available for this year.]

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft^3/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft^3/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft^3/s)
04087200	1	No	No	1958	57	--	127	0.937	0.307	0.966	146
04087200	1	No	No	1959	170	--	378	0.708	0.322	0.672	303
04087200	1	No	No	1960	1100	--	2443	1.54	0.338	0.00502	1510
04087200	1	No	No	1961	85	--	189	2.11	0.35	0.936	183
04087200	1	No	No	1962	185	--	411	0.000352	0.362	0.648	312
04087200	1	No	No	1963	75	--	167	0.0369	0.374	0.955	163
04087200	1	No	No	1964	130	--	289	2.38	0.386	0.846	234
04087200	1	No	No	1965	165	--	366	1.1	0.398	0.748	277
04087200	1	No	No	1966	235	--	522	0.713	0.41	0.507	363
04087200	1	No	No	1967	165	--	366	1.95	0.422	0.764	270
04087200	1	No	No	1968	255	--	566	1.93	0.434	0.463	382
04087200	1	No	No	1969	630	--	1399	2.16	0.446	0.0363	839
04087200	1	No	No	1970	180	--	400	1.16	0.458	0.742	279
04087200	1	No	No	1971	210	--	466	0.698	0.471	0.651	311
04087200	1	No	No	1972	740	--	1643	1.69	0.483	0.0227	944
04087200	1	No	No	1973	260	--	577	2.71	0.496	0.504	365
04087200	1	No	No	1974	255	--	566	0.76	0.509	0.533	354
04087200	1	No	No	1975	195	--	433	1.65	0.522	0.743	278
04087200	1	No	No	1976	580	--	1288	2.17	0.534	0.0595	728
04087200	1	No	No	1977	145	--	322	1.81	0.547	0.892	213
04087200	1	No	No	1978	600	--	1332	1.67	0.56	0.0569	736
04087200	1	No	No	1979	600	--	1332	0.899	0.573	0.0592	729
04087200	1	No	No	1980	240	--	533	1.7	0.585	0.655	310
04087200	1	No	No	1981	265	--	588	0.95	0.591	0.58	336
04087200	1	No	No	1982	390	--	866	0.922	0.597	0.251	473

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft^3/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft^3/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft^3/s)
04087200	1	No	No	1983	570	--	1266	2.12	0.603	0.0761	677
04087200	1	No	No	1984	270	--	600	1.44	0.609	0.581	336
04087200	1	No	No	1985	225	--	500	0.166	0.615	0.728	284
04087200	1	No	No	1986	410	--	910	0.012	0.621	0.233	485
04087200	1	No	No	1987	280	--	622	1.38	0.627	0.567	341
04087200	1	No	No	1988	380	--	844	0.18	0.632	0.298	448
04087200	1	No	No	1989	295	--	655	0.583	0.638	0.534	354
04087200	1	No	No	1990	520	--	1155	1.77	0.644	0.125	598
04087200	1	No	No	1991	315	--	700	0.787	0.659	0.498	368
04087200	1	No	No	1992	370	--	822	2.13	0.675	0.365	421
04087200	1	No	No	1993	660	--	1466	1.89	0.69	0.0599	724
04087200	1	No	No	1994	350	2	777	0.878	0.706	0.449	387
04087200	1	No	No	1995	340	--	755	2.38	0.721	0.492	370
04087200	1	No	No	1996	440	--	977	2.02	0.736	0.262	467
04087200	1	No	No	1997	560	2	1244	3.85	0.752	0.136	584
04087200	1	No	No	1998	300	2	666	0.644	0.767	0.651	311
04087200	1	No	No	1999	910	--	2021	1.48	0.782	0.0258	921
04087200	1	No	No	2000	1360	--	3020	3.89	0.798	0.00826	1360
04087200	1	No	No	2001	450	--	999	1.14	0.798	0.293	450
04087200	1	No	No	2002	247	--	549	1.12	0.798	0.817	247
04087200	1	No	No	2003	144	--	320	0.668	0.798	0.967	144
04087200	1	No	No	2004	446	--	990	1.4	0.798	0.301	446
04087200	1	No	No	2005	446	--	990	2.04	0.798	0.301	446
04087200	1	No	No	2006	628	--	1395	0.969	0.798	0.103	628
04087200	1	No	No	2007	511	--	1135	1.53	0.798	0.2	511
04087200	1	No	No	2008	628	--	1395	4.38	0.798	0.103	628
04087200	1	No	No	2009	420	--	933	2.32	0.798	0.368	420
04087204	1	Yes	Yes	1964	398	--	517	2.4	0.434	0.538	580
04087204	1	Yes	Yes	1965	480	--	624	1.13	0.446	0.395	676
04087204	1	Yes	Yes	1966	526	--	683	0.73	0.458	0.33	721
04087204	1	Yes	Yes	1967	612	--	795	1.98	0.47	0.227	811
04087204	1	Yes	Yes	1968	606	--	787	1.97	0.481	0.241	796
04087204	1	Yes	Yes	1969	704	--	915	2.24	0.493	0.167	905
04087204	1	Yes	Yes	1970	399	--	518	1.14	0.505	0.603	541
04087204	1	Yes	Yes	1971	441	--	573	0.717	0.516	0.53	585

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft³/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft³/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft³/s)
04087204	1	Yes	Yes	1972	916	--	1190	1.71	0.527	0.0746	1130
04087204	1	Yes	Yes	1973	774	--	1005	2.74	0.537	0.143	954
04087204	1	Yes	Yes	1974	839	--	1090	0.769	0.548	0.111	1020
04087204	1	Yes	Yes	1975	581	--	755	1.68	0.559	0.333	719
04087204	1	Yes	Yes	1976	935	--	1215	2.23	0.57	0.0799	1110
04087204	1	Yes	Yes	1977	378	--	491	1.84	0.58	0.712	477
04087204	1	Yes	Yes	1978	1020	--	1325	1.7	0.591	0.0637	1190
04087204	1	Yes	Yes	1979	660	--	857	1.48	0.602	0.262	774
04087204	1	Yes	Yes	1980	541	--	703	1.77	0.613	0.448	640
04087204	1	Yes	Yes	1981	472	--	613	1.5	0.616	0.569	560
04087204	1	Yes	Yes	1982	492	--	639	1.2	0.62	0.538	580
04087204	1	Yes	Yes	1983	670	--	870	2.01	0.624	0.267	769
04087204	1	Yes	Yes	1984	450	--	585	1.49	0.628	0.621	529
04087204	1	Yes	Yes	1985	403	--	524	0.723	0.632	0.712	477
04087204	1	Yes	Yes	1986	1140	--	1481	6.46	0.635	0.0485	1270
04087204	1	Yes	Yes	1987	457	--	594	1.63	0.639	0.619	530
04087204	1	Yes	Yes	1988	568	--	738	1.47	0.643	0.434	650
04087204	1	Yes	Yes	1989	422	--	548	1.26	0.647	0.693	489
04087204	1	Yes	Yes	1990	817	--	1061	2.38	0.65	0.166	908
04087204	1	Yes	Yes	1991	451	--	586	0.925	0.662	0.653	511
04087204	1	Yes	Yes	1992	508	--	660	2.22	0.673	0.562	565
04087204	1	Yes	Yes	1993	887	--	1152	1.96	0.685	0.143	955
04087204	1	Yes	No	1994	600	1, 8	779	0.893	0.696	0.438	647
04087204	1	Yes	Yes	1995	438	--	569	0.71	0.708	0.721	471
04087204	1	Yes	Yes	1996	573	--	744	2.07	0.719	0.503	603
04087204	1	Yes	Yes	1997	1110	--	1442	4.02	0.731	0.0716	1140
04087204	1	Yes	Yes	1998	542	--	704	0.669	0.742	0.575	557
04087204	1	Yes	Yes	1999	1060	--	1377	1.5	0.754	0.0926	1070
04087204	1	Yes	Yes	2000	1120	--	1455	4.13	0.766	0.0773	1120
04087204	1	Yes	Yes	2001	798	--	1037	1.17	0.766	0.239	798
04087204	1	Yes	Yes	2002	511	--	664	1.15	0.766	0.653	511
04087204	1	Yes	Yes	2003	267	--	347	0.651	0.766	0.953	267
04087204	1	Yes	Yes	2004	732	--	951	1.46	0.766	0.311	732
04087204	1	Yes	Yes	2005	611	--	794	2.16	0.766	0.492	611
04087204	1	Yes	Yes	2006	772	--	1003	1.03	0.766	0.264	772

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft^3/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft^3/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft^3/s)
04087204	1	Yes	Yes	2007	590	--	766	1.52	0.766	0.523	590
04087204	1	Yes	Yes	2008	2370	--	3079	4.63	0.766	0.00697	2370
04087204	1	Yes	Yes	2009	774	--	1005	2.29	0.766	0.262	774
04087220	1	Yes	No	1960	5130	7	3889	0.892	0.517	0	6290
04087220	1	Yes	Yes	1964	792	--	600	2.11	0.555	0.528	1070
04087220	1	Yes	Yes	1965	1600	--	1213	0.713	0.565	0.079	2010
04087220	1	Yes	Yes	1966	1300	--	986	0.483	0.575	0.168	1630
04087220	1	Yes	Yes	1967	808	--	613	1.48	0.584	0.539	1060
04087220	1	Yes	Yes	1968	910	--	690	1.23	0.594	0.446	1170
04087220	1	Yes	Yes	1969	2650	--	2009	0.976	0.603	0.0173	3120
04087220	1	Yes	Yes	1970	1220	--	925	1.48	0.613	0.218	1490
04087220	1	Yes	Yes	1971	1020	--	773	0.207	0.621	0.37	1260
04087220	1	Yes	Yes	1972	2270	--	1721	1.47	0.63	0.0294	2640
04087220	1	Yes	Yes	1973	3700	--	2805	2.29	0.638	0.007	4210
04087220	1	Yes	Yes	1974	1680	--	1274	0.644	0.647	0.0865	1960
04087220	1	Yes	Yes	1975	1420	--	1077	1.21	0.655	0.162	1660
04087220	1	Yes	Yes	1976	2160	--	1638	1.21	0.663	0.0386	2460
04087220	1	Yes	Yes	1977	534	--	405	1.28	0.672	0.878	669
04087220	1	Yes	Yes	1978	980	--	743	1.24	0.68	0.465	1150
04087220	1	Yes	Yes	1979	1300	--	986	0.272	0.689	0.224	1480
04087220	1	Yes	Yes	1980	860	--	652	0.668	0.697	0.596	995
04087220	1	Yes	Yes	1981	474	--	359	0.576	0.702	0.93	579
04087220	1	Yes	Yes	1982	556	--	422	0.184	0.708	0.884	661
04087220	1	Yes	Yes	1983	1080	--	819	1.55	0.714	0.41	1210
04087220	1	Yes	Yes	1984	550	2	417	0.41	0.719	0.894	645
04087220	1	Yes	Yes	1985	698	--	529	0.478	0.725	0.781	794
04087220	1	Yes	Yes	1986	708	--	537	0.345	0.73	0.776	800
04087220	1	Yes	Yes	1987	579	--	439	1.36	0.736	0.884	660
04087220	1	Yes	Yes	1988	530	9	402	0.535	0.741	0.919	605
04087220	1	Yes	Yes	1989	442	--	335	1.23	0.747	0.953	507
04087220	1	Yes	Yes	1990	880	--	667	1.16	0.752	0.634	956
04087220	1	Yes	Yes	1991	587	--	445	0.861	0.757	0.892	648
04087220	1	Yes	Yes	1992	641	--	486	0.757	0.762	0.855	699
04087220	1	Yes	Yes	1993	1180	--	895	0.893	0.767	0.378	1250
04087220	1	Yes	No	1994	600	1, 8	455	0.653	0.772	0.892	648

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft^3/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft^3/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft^3/s)
04087220	1	Yes	Yes	1995	430	--	326	0.799	0.777	0.961	468
04087220	1	Yes	Yes	1996	1020	--	773	1.17	0.782	0.532	1070
04087220	1	Yes	Yes	1997	1750	--	1327	1.24	0.787	0.121	1810
04087220	1	Yes	Yes	1998	558	--	423	1.09	0.792	0.927	587
04087220	1	Yes	Yes	1999	2050	--	1554	1.32	0.797	0.0673	2100
04087220	1	Yes	Yes	2000	2420	--	1835	4.33	0.802	0.0384	2460
04087220	1	Yes	Yes	2001	917	--	695	1.98	0.804	0.653	937
04087220	1	Yes	Yes	2002	780	--	591	1.35	0.806	0.779	797
04087220	1	Yes	Yes	2003	449	--	340	0.921	0.808	0.963	461
04087220	1	Yes	Yes	2004	1190	--	902	2.15	0.81	0.417	1210
04087220	1	Yes	Yes	2005	618	--	469	0.431	0.812	0.905	628
04087220	1	Yes	Yes	2006	1160	--	879	1.18	0.814	0.446	1170
04087220	1	Yes	Yes	2007	1070	--	811	1.72	0.816	0.524	1080
04087220	1	Yes	Yes	2008	5350	--	4056	4.82	0.818	0	5360
04087220	1	Yes	Yes	2009	2260	--	1713	2.88	0.82	0.0491	2260
04087230	1	Yes	Yes	1962	108	--	424	0.02	0.0143	0.346	120
04087230	1	Yes	Yes	1963	30	--	118	0.05	0.0172	0.925	35.2
04087230	1	Yes	Yes	1964	70	--	275	4	0.02	0.644	78.3
04087230	1	Yes	Yes	1965	47	--	184	0.13	0.0229	0.825	53.3
04087230	1	Yes	Yes	1966	150	--	588	0.83	0.0257	0.168	163
04087230	1	Yes	Yes	1967	65	--	255	2.03	0.0286	0.691	72.2
04087230	1	Yes	Yes	1968	60	--	235	1.25	0.0315	0.734	66.6
04087230	1	Yes	Yes	1969	107	--	420	2.3	0.0343	0.365	116
04087230	1	Yes	Yes	1970	98	--	384	0.51	0.0372	0.425	106
04087230	1	Yes	Yes	1971	100	--	392	0.95	0.0386	0.412	108
04087230	1	Yes	Yes	1972	85	--	333	1.66	0.04	0.53	92.4
04087230	1	Yes	Yes	1973	48	--	188	1.15	0.0415	0.827	53.1
04087230	1	Yes	Yes	1974	105	--	412	0.55	0.0429	0.383	113
04087230	1	Yes	Yes	1975	32	--	126	0.02	0.0443	0.922	35.9
04087230	1	Yes	Yes	1976	90	--	353	1.23	0.0458	0.492	97.1
04087230	1	Yes	Yes	1977	25	--	98	0.62	0.0472	0.95	28.2
04087230	1	Yes	Yes	1978	82	--	322	1.91	0.0486	0.565	88.3
04087230	1	Yes	Yes	1979	72	--	282	0.49	0.05	0.648	77.7
04087230	1	Yes	Yes	1980	100	--	392	2.7	0.0515	0.422	107
04087230	1	Yes	Yes	1981	80	--	314	0.69	0.0519	0.587	85.9

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04087230	1	Yes	Yes	1982	96	--	377	0.6	0.0522	0.451	103
04087230	1	Yes	Yes	1983	155	--	608	1.15	0.0526	0.165	164
04087230	1	Yes	Yes	1984	140	--	549	1.29	0.053	0.21	148
04087230	1	Yes	Yes	1985	128	--	502	0.78	0.0534	0.265	136
04087230	1	Yes	Yes	1986	168	--	659	1.08	0.0538	0.133	177
04087230	1	Yes	Yes	1987	182	--	714	2.35	0.0541	0.0999	192
04087230	1	Yes	Yes	1988	152	--	596	0.02	0.0545	0.174	161
04087230	1	Yes	Yes	1989	142	--	557	4.33	0.0549	0.203	150
04087230	1	Yes	Yes	1990	132	--	518	1.52	0.0553	0.247	140
04087230	1	Yes	Yes	1991	123	--	482	1.27	0.0586	0.293	130
04087230	1	Yes	Yes	1992	95	--	373	0.95	0.062	0.466	101
04087230	1	Yes	Yes	1993	148	--	581	2.05	0.0653	0.189	155
04087233	1	Yes	Yes	1964	309	--	169	3.97	0.0333	0.856	359
04087233	1	Yes	No	1965	500	1, 8	273	0.556	0.0363	0.658	564
04087233	1	Yes	Yes	1966	774	--	422	0.823	0.0394	0.365	857
04087233	1	Yes	Yes	1967	574	--	313	2.02	0.0424	0.58	640
04087233	1	Yes	Yes	1968	470	--	256	1.25	0.0454	0.699	526
04087233	1	Yes	Yes	1969	461	--	252	2.27	0.0484	0.711	515
04087233	1	Yes	Yes	1970	696	--	380	2.01	0.0514	0.445	764
04087233	1	Yes	Yes	1971	760	--	415	0.0303	0.0544	0.386	829
04087233	1	Yes	Yes	1972	704	--	384	1.59	0.0575	0.441	768
04087233	1	Yes	Yes	1973	740	--	404	0.36	0.0605	0.408	803
04087233	1	Yes	Yes	1974	1440	D	786	0.551	0.0635	0.0769	1540
04087233	1	Yes	Yes	1975	482	--	263	0.000498	0.0666	0.7	526
04087233	1	Yes	Yes	1976	1200	--	655	1.23	0.0696	0.141	1280
04087233	1	Yes	Yes	1977	108	--	59	0.621	0.0726	0.984	123
04087233	1	Yes	Yes	1978	990	--	540	5.29	0.0757	0.233	1050
04087233	1	Yes	Yes	1979	1060	--	578	0.251	0.0787	0.196	1120
04087233	1	Yes	Yes	1980	437	--	238	2.66	0.0817	0.758	469
04087233	1	Yes	Yes	1981	673	--	367	2.3	0.0823	0.493	715
04087233	1	Yes	Yes	1982	552	--	301	2.31	0.0828	0.634	588
04087233	1	Yes	Yes	1983	1140	--	622	1.16	0.0833	0.168	1200
04087233	1	Yes	Yes	1984	583	--	318	1.06	0.0839	0.604	620
04087233	1	Yes	Yes	1985	942	--	514	0.451	0.0844	0.269	991
04087233	1	Yes	Yes	1986	1120	--	611	0.159	0.085	0.175	1170

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04087233	1	Yes	Yes	1987	901	--	492	1.19	0.0855	0.298	948
04087233	1	Yes	Yes	1988	788	--	430	1.51	0.086	0.384	831
04087233	1	Yes	Yes	1989	760	--	415	4.28	0.0866	0.409	802
04087233	1	Yes	Yes	1990	1080	--	589	1.51	0.0871	0.191	1130
04087233	1	Yes	Yes	1991	1050	--	573	1.26	0.0901	0.206	1100
04087233	1	Yes	Yes	1992	635	--	347	0.939	0.0931	0.547	667
04087233	1	Yes	Yes	1993	1260	--	688	2.03	0.096	0.131	1310
04087233	1	Yes	No	1994	1000	1, 8	546	1.47	0.099	0.241	1040
04087233	1	Yes	Yes	1995	750	--	409	1.98	0.102	0.431	779
04087233	1	Yes	Yes	1996	721	--	393	2.37	0.105	0.462	746
04087233	1	Yes	Yes	1997	704	--	384	1.23	0.108	0.481	727
04087233	1	Yes	Yes	1998	659	--	360	1.19	0.111	0.534	678
04087233	1	Yes	Yes	1999	830	--	453	1.59	0.114	0.37	850
04087233	1	Yes	Yes	2000	1300	--	709	1.48	0.117	0.126	1320
04087233	1	Yes	Yes	2001	1100	9	600	1.83	0.119	0.196	1120
04087233	1	Yes	Yes	2002	768	--	419	1.97	0.121	0.429	781
04087233	1	Yes	Yes	2003	356	--	194	0.723	0.123	0.852	363
04087233	1	Yes	Yes	2004	1430	--	780	2.82	0.125	0.0932	1440
04087233	1	Yes	Yes	2005	599	--	327	0.551	0.127	0.617	606
04087233	1	Yes	Yes	2006	792	--	432	2.02	0.129	0.412	799
04087233	1	Yes	Yes	2007	1280	--	698	3.89	0.13	0.138	1290
04087233	1	Yes	Yes	2008	1560	--	851	2.53	0.132	0.0729	1570
04087233	1	Yes	Yes	2009	988	--	539	2.2	0.134	0.27	990
04087240	1	No	No	1964	997	--	244	2.71	0.215	0.82	1310
04087240	1	No	No	1965	1610	--	394	0.634	0.221	0.562	2000
04087240	1	No	No	1966	2500	--	611	0.532	0.227	0.247	2980
04087240	1	No	No	1967	2250	--	550	1.65	0.234	0.322	2690
04087240	1	No	No	1968	1470	--	359	0.455	0.24	0.64	1800
04087240	1	No	No	1969	2150	--	526	1.27	0.246	0.363	2550
04087240	1	No	No	1970	1280	--	313	1.65	0.252	0.732	1560
04087240	1	No	No	1971	1560	--	381	0.0569	0.257	0.616	1860
04087240	1	No	No	1972	2740	--	670	1.45	0.262	0.211	3150
04087240	1	No	No	1973	3790	--	927	1.78	0.267	0.081	4300
04087240	1	No	No	1974	4500	--	1100	0.595	0.272	0.0487	5050
04087240	1	No	No	1975	1930	--	472	0.0185	0.277	0.469	2240

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04087240	1	No	No	1976	2930	--	716	1.11	0.282	0.187	3300
04087240	1	No	No	1977	340	--	83	0.646	0.287	0.988	440
04087240	1	No	No	1978	1490	--	364	1.47	0.292	0.672	1720
04087240	1	No	No	1979	3460	--	846	0.268	0.297	0.122	3830
04087240	1	No	No	1980	1000	--	244	1.05	0.302	0.862	1170
04087240	1	No	No	1981	1320	--	323	1.2	0.304	0.752	1510
04087240	1	No	No	1982	1940	--	474	0.409	0.307	0.491	2180
04087240	1	No	No	1983	3480	--	851	1.4	0.309	0.124	3810
04087240	1	No	No	1984	1580	--	386	0.518	0.312	0.649	1780
04087240	1	No	No	1985	1810	--	442	0.471	0.314	0.553	2020
04087240	1	No	No	1986	2140	--	523	0.204	0.317	0.423	2370
04087240	1	No	No	1987	1450	--	354	0.863	0.319	0.71	1620
04087240	1	No	No	1988	2090	--	511	0.122	0.322	0.446	2300
04087240	1	No	No	1989	847	--	207	0.408	0.324	0.914	971
04087240	1	No	No	1990	2530	--	618	1.25	0.327	0.305	2750
04087240	1	No	No	1991	2000	--	489	1.01	0.333	0.49	2180
04087240	1	No	No	1992	1220	--	298	0.742	0.338	0.808	1340
04087240	1	No	No	1993	3010	--	736	1.27	0.344	0.201	3200
04087240	1	No	No	1994	1940	--	474	0.947	0.35	0.53	2080
04087240	1	No	No	1995	1240	--	303	1.29	0.356	0.811	1330
04087240	1	No	No	1996	1900	--	464	0.986	0.361	0.558	2010
04087240	1	No	No	1997	1800	--	440	1.13	0.367	0.606	1890
04087240	1	No	No	1998	1370	--	335	0.828	0.373	0.776	1440
04087240	1	No	No	1999	2690	--	658	1.1	0.379	0.297	2770
04087240	1	No	No	2000	2550	--	623	1.81	0.384	0.343	2620
04087240	1	No	No	2001	2270	--	555	1.16	0.387	0.437	2330
04087240	1	No	No	2002	1400	--	342	0.915	0.389	0.776	1440
04087240	1	No	No	2003	789	--	193	0.523	0.392	0.943	814
04087240	1	No	No	2004	2940	--	719	1.86	0.394	0.246	2980
04087240	1	No	No	2005	1330	--	325	0.344	0.397	0.805	1350
04087240	1	No	No	2006	2050	--	501	1.01	0.399	0.531	2070
04087240	1	No	No	2007	2350	--	574	1.04	0.402	0.422	2370
04087240	1	No	No	2008	8050	--	1968	3.07	0.404	0.0125	8080
04087240	1	No	No	2009	2140	--	523	1.7	0.407	0.503	2150
04087250	1	Yes	Yes	1960	170	--	758	0.67	0.074	0.0889	233

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04087250	1	Yes	Yes	1961	65	--	290	0.411	0.0764	0.652	99
04087250	1	Yes	Yes	1962	85	--	379	0.00336	0.0787	0.468	125
04087250	1	Yes	Yes	1963	43	--	192	1.54	0.081	0.838	70.2
04087250	1	Yes	Yes	1964	20	--	89	1.89	0.0834	0.961	38.1
04087250	1	Yes	Yes	1965	55	--	245	0.101	0.0857	0.749	85.5
04087250	1	Yes	Yes	1966	210	--	936	1.2	0.0881	0.0501	280
04087250	1	Yes	Yes	1967	42	--	187	1.36	0.0904	0.849	68.1
04087250	1	Yes	Yes	1968	40	--	178	1.34	0.0928	0.865	65.4
04087250	1	Yes	Yes	1969	85	--	379	1.05	0.0951	0.481	123
04087250	1	Yes	Yes	1970	75	--	334	1.52	0.0974	0.579	110
04087250	1	Yes	Yes	1971	85	--	379	0.497	0.101	0.486	122
04087250	1	Yes	Yes	1972	110	--	490	1.1	0.104	0.312	153
04087250	1	Yes	Yes	1973	90	--	401	1.55	0.108	0.45	128
04087250	1	Yes	Yes	1974	95	--	423	0.536	0.111	0.413	134
04087250	1	Yes	Yes	1975	40	--	178	0.855	0.114	0.875	63.8
04087250	1	Yes	Yes	1976	180	--	802	1.2	0.118	0.0841	237
04087250	1	Yes	Yes	1977	30	--	134	0.93	0.121	0.93	50.3
04087250	1	Yes	Yes	1978	220	--	981	0.949	0.124	0.048	284
04087250	1	Yes	Yes	1979	145	--	646	0.319	0.128	0.169	191
04087250	1	Yes	Yes	1980	50	--	223	0.601	0.131	0.811	75.1
04087250	1	Yes	Yes	1981	40	--	178	0.749	0.137	0.882	62
04087250	1	Yes	Yes	1982	120	--	535	0.112	0.143	0.28	159
04087250	1	Yes	Yes	1983	140	--	624	1.44	0.149	0.192	181
04087250	1	Yes	Yes	1984	65	--	290	0.474	0.155	0.707	91.3
04087250	1	Yes	Yes	1985	100	--	446	0.715	0.162	0.416	133
04087250	1	Yes	Yes	1986	170	--	758	0.869	0.168	0.118	215
04087250	1	Yes	Yes	1987	85	--	379	0.794	0.174	0.549	114
04087250	1	Yes	Yes	1988	90	--	401	0.00985	0.18	0.51	119
04087250	1	Yes	Yes	1989	20	--	89	0.619	0.186	0.975	32.3
04087250	1	Yes	Yes	1990	100	--	446	1.24	0.192	0.441	129
04087250	1	Yes	Yes	1991	100	--	446	0.985	0.211	0.457	127
04087250	1	Yes	Yes	1992	60	--	267	0.702	0.23	0.791	78.2
04087250	1	Yes	Yes	1993	140	--	624	0.84	0.249	0.247	166
04087250	1	Yes	Yes	1994	100	2	446	0.647	0.268	0.505	120
04087250	1	Yes	Yes	1995	128	--	571	0.996	0.287	0.334	148

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04087250	1	Yes	Yes	1996	174	--	776	0.795	0.306	0.162	195
04087250	1	Yes	Yes	1997	129	--	575	1.73	0.325	0.357	144
04087250	1	Yes	Yes	1998	121	--	539	1.37	0.343	0.422	133
04087250	1	Yes	Yes	1999	174	--	776	1.14	0.362	0.185	185
04087250	1	Yes	Yes	2000	235	--	1047	3.84	0.381	0.0747	245
04087250	1	Yes	Yes	2001	118	--	526	0.62	0.386	0.479	124
04087250	1	Yes	Yes	2002	111	--	495	2	0.391	0.533	116
04087250	1	Yes	Yes	2003	33	--	147	0.33	0.395	0.968	35.1
04087250	1	Yes	Yes	2004	127	2	566	1.99	0.4	0.433	131
04087250	1	Yes	Yes	2005	78	--	348	0.56	0.404	0.778	80.4
04087250	1	Yes	Yes	2006	104	--	464	1.05	0.409	0.603	106
04087250	1	Yes	Yes	2007	190	--	847	2.73	0.414	0.168	192
04087250	1	Yes	Yes	2008	156	--	695	2.31	0.418	0.285	157
04087250	1	Yes	Yes	2009	179	--	798	0.95	0.423	0.198	180
04087257	1	Yes	Yes	1972	1200	--	639	1.27	0.215	0.212	1520
04087257	1	Yes	Yes	1973	824	--	439	1.55	0.221	0.477	1090
04087257	1	Yes	Yes	1974	1240	--	661	0.554	0.228	0.2	1550
04087257	1	Yes	Yes	1975	862	--	459	1.04	0.235	0.454	1120
04087257	1	Yes	Yes	1976	1480	--	789	1.34	0.242	0.13	1820
04087257	1	Yes	Yes	1977	200	--	107	0.983	0.249	0.971	307
04087257	1	Yes	Yes	1978	1340	--	714	1.25	0.256	0.178	1630
04087257	1	Yes	Yes	1979	1100	--	586	1.24	0.263	0.298	1350
04087257	1	Yes	Yes	1980	443	--	236	0.789	0.27	0.858	592
04087257	1	Yes	Yes	1981	820	--	437	0.846	0.274	0.527	1020
04087257	1	Yes	Yes	1982	674	--	359	1.75	0.278	0.67	850
04087257	1	Yes	Yes	1983	959	--	511	1.39	0.282	0.412	1170
04087257	1	Yes	Yes	1984	695	--	370	0.505	0.286	0.656	866
04087257	1	Yes	Yes	1985	588	--	313	1.02	0.29	0.757	742
04087257	1	Yes	Yes	1986	1090	--	581	0.163	0.294	0.327	1300
04087257	1	Yes	Yes	1987	836	--	445	0.765	0.298	0.533	1020
04087257	1	Yes	Yes	1988	915	--	488	0.93	0.302	0.465	1100
04087257	1	Yes	Yes	1989	601	--	320	1.71	0.306	0.756	743
04087257	1	Yes	Yes	1990	1040	--	554	1.23	0.31	0.374	1230
04087257	1	Yes	Yes	1991	801	--	427	0.974	0.321	0.589	951
04087257	1	Yes	Yes	1992	791	--	421	0.714	0.333	0.608	928

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04087257	1	Yes	Yes	1993	1140	--	607	0.947	0.344	0.331	1300
04087257	1	Yes	Yes	1994	940	9	501	0.705	0.356	0.491	1070
04087257	1	Yes	Yes	1995	878	--	468	1.11	0.367	0.557	987
04087257	1	Yes	Yes	1996	1360	--	725	0.912	0.378	0.231	1480
04087257	1	Yes	Yes	1997	944	--	503	1.71	0.39	0.519	1030
04087257	1	Yes	Yes	1998	959	--	511	1.26	0.401	0.517	1040
04087257	1	Yes	Yes	1999	1230	--	655	1.3	0.412	0.326	1300
04087257	1	Yes	Yes	2000	1580	--	842	2.8	0.424	0.175	1650
04087257	1	Yes	Yes	2001	1360	--	725	1.37	0.428	0.263	1420
04087257	1	Yes	Yes	2002	1010	--	538	1.85	0.433	0.504	1050
04087257	1	Yes	Yes	2003	321	--	171	0.443	0.437	0.962	341
04087257	1	Yes	Yes	2004	1650	--	879	1.83	0.442	0.163	1690
04087257	1	Yes	Yes	2005	614	--	327	0.518	0.447	0.831	634
04087257	1	Yes	Yes	2006	555	--	296	1.01	0.451	0.873	570
04087257	1	Yes	Yes	2007	1720	--	916	3.08	0.456	0.151	1740
04087257	1	Yes	Yes	2008	1960	--	1044	2.26	0.46	0.0964	1980
04087257	1	Yes	Yes	2009	1860	--	991	0.842	0.465	0.12	1870
04087300	1	Yes	Yes	1956	78	--	431	0.0783	0.179	0.454	187
04087300	1	Yes	Yes	1957	51	--	282	0.661	0.195	0.749	139
04087300	1	Yes	Yes	1958	55	--	304	0.00428	0.212	0.719	143
04087300	1	Yes	Yes	1959	76	--	420	1.29	0.228	0.516	176
04087300	1	Yes	Yes	1960	145	--	802	0.93	0.245	0.124	281
04087300	1	Yes	Yes	1961	42	--	232	0.877	0.257	0.857	118
04087300	1	Yes	Yes	1962	94	--	520	0.263	0.27	0.389	199
04087300	1	Yes	Yes	1963	30	--	166	2.39	0.282	0.937	98.3
04087300	1	Yes	Yes	1964	33	--	182	2.01	0.295	0.928	103
04087300	1	Yes	Yes	1965	80	--	442	0.498	0.307	0.547	171
04087300	1	Yes	Yes	1966	95	--	525	0.867	0.32	0.422	193
04087300	1	Yes	Yes	1967	51	--	282	0.675	0.332	0.827	124
04087300	1	Yes	Yes	1968	39	--	216	1.33	0.345	0.913	107
04087300	1	Yes	Yes	1969	355	--	1963	1.63	0.357	0.0113	554
04087300	1	Yes	Yes	1970	145	--	802	1.25	0.37	0.174	253
04087300	1	Yes	Yes	1971	134	--	741	1.23	0.387	0.222	233
04087300	1	Yes	Yes	1972	282	--	1560	1.67	0.405	0.0218	436
04087400	1	Yes	Yes	1962	121	--	254	0.628	0.306	0.85	315

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04087400	1	Yes	Yes	1963	125	--	263	0.36	0.319	0.845	318
04087400	1	Yes	Yes	1964	122	--	257	1.83	0.332	0.861	310
04087400	1	Yes	Yes	1965	206	--	433	0.555	0.346	0.599	428
04087400	1	Yes	Yes	1966	288	--	606	0.468	0.359	0.345	545
04087400	1	Yes	Yes	1967	265	--	557	1.29	0.372	0.42	510
04087400	1	Yes	Yes	1968	119	--	250	0.991	0.385	0.892	294
04087400	1	Yes	Yes	1969	937	--	1971	1.08	0.398	0.0122	1430
04087400	1	Yes	Yes	1970	224	--	471	1.04	0.411	0.593	430
04087400	1	Yes	Yes	1971	388	--	816	0.428	0.425	0.189	646
04087400	1	Yes	Yes	1972	601	--	1264	1.16	0.439	0.0483	943
04087400	1	Yes	Yes	1973	114	--	240	1.41	0.453	0.927	272
04087400	1	Yes	Yes	1974	285	--	599	1.07	0.467	0.446	497
04087400	1	Yes	Yes	1975	136	--	286	0.319	0.481	0.897	292
04087400	1	Yes	Yes	1976	471	--	991	1.26	0.495	0.132	729
04093000	1	Yes	Yes	1947	2410	--	773	2.51	0.118	0.0942	3330
04093000	1	Yes	Yes	1948	2740	--	879	1.48	0.124	0.0662	3730
04093000	1	Yes	Yes	1949	620	--	199	0.975	0.131	0.849	1020
04093000	1	Yes	Yes	1950	2390	--	766	1.47	0.137	0.102	3250
04093000	1	Yes	Yes	1951	1440	--	462	1.91	0.145	0.379	2050
04093000	1	Yes	Yes	1952	1340	--	430	1.78	0.154	0.437	1910
04093000	1	Yes	Yes	1953	912	--	292	0.47	0.162	0.707	1350
04093000	1	Yes	Yes	1954	1440	--	462	1.79	0.17	0.397	2010
04093000	1	Yes	Yes	1955	3880	--	1244	3.65	0.178	0.0258	4910
04093000	1	Yes	Yes	1956	1320	--	423	1.03	0.186	0.475	1830
04093000	1	Yes	Yes	1957	1650	--	529	3.16	0.195	0.322	2210
04093000	1	Yes	Yes	1958	720	--	231	1.17	0.203	0.834	1060
04093000	1	Yes	Yes	1959	1970	--	632	2.15	0.211	0.217	2540
04093000	1	Yes	Yes	1960	1260	--	404	1.22	0.219	0.539	1690
04093000	1	Yes	Yes	1961	1200	--	385	1.73	0.227	0.585	1610
04093000	1	Yes	Yes	1962	900	--	289	0.31	0.234	0.761	1240
04093000	1	Yes	Yes	1963	560	2	180	0.45	0.242	0.916	823
04093000	1	Yes	Yes	1964	393	--	126	0.588	0.249	0.959	602
04093000	1	Yes	Yes	1965	1080	--	346	0.958	0.257	0.676	1420
04093000	1	Yes	Yes	1966	2400	--	770	2.13	0.264	0.149	2920
04093000	1	Yes	Yes	1967	1120	--	359	1	0.272	0.665	1440

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04093000	1	Yes	Yes	1968	1990	--	638	0.949	0.279	0.251	2410
04093000	1	Yes	Yes	1969	1050	--	337	0.593	0.287	0.716	1340
04093000	1	Yes	Yes	1970	2900	2	930	1.61	0.294	0.0867	3420
04093000	1	Yes	Yes	1971	742	--	238	0.495	0.302	0.872	964
04093000	1	Yes	Yes	1972	973	--	312	0.745	0.311	0.771	1210
04093000	1	Yes	Yes	1973	1840	--	590	0.831	0.319	0.334	2170
04093000	1	Yes	Yes	1974	1100	--	353	0.72	0.327	0.719	1330
04093000	1	Yes	Yes	1975	1900	--	609	1.38	0.336	0.323	2200
04093000	1	Yes	Yes	1976	2020	--	648	0.978	0.344	0.284	2310
04093000	1	Yes	Yes	1977	575	--	184	1.13	0.352	0.939	716
04093000	1	Yes	Yes	1978	1320	--	423	0.88	0.361	0.627	1520
04093000	1	Yes	Yes	1979	2540	--	814	0.561	0.369	0.167	2810
04093000	1	Yes	Yes	1980	1060	--	340	0.283	0.377	0.772	1210
04093000	1	Yes	Yes	1981	4000	--	1283	2.29	0.381	0.0405	4340
04093000	1	Yes	Yes	1982	2600	--	834	0.458	0.385	0.163	2840
04093000	1	Yes	Yes	1983	3710	--	1190	2.81	0.388	0.0512	4010
04093000	1	Yes	Yes	1984	1090	--	349	0.968	0.392	0.768	1220
04093000	1	Yes	Yes	1985	2870	--	920	1.13	0.396	0.124	3100
04093000	1	Yes	Yes	1986	2780	--	891	1.41	0.399	0.14	2990
04093000	1	Yes	Yes	1987	1360	--	436	1.41	0.403	0.641	1490
04093000	1	Yes	Yes	1988	944	--	303	0.861	0.407	0.839	1050
04093000	1	Yes	Yes	1989	3530	--	1132	2.66	0.41	0.0645	3750
04093000	1	Yes	Yes	1990	2450	--	786	2.04	0.414	0.201	2600
04093000	1	Yes	Yes	1991	4230	--	1356	2.32	0.419	0.0375	4440
04093000	1	Yes	Yes	1992	919	--	295	0.532	0.425	0.859	994
04093000	1	Yes	Yes	1993	2070	--	664	2.09	0.431	0.331	2180
04093000	1	Yes	Yes	1994	1630	--	523	2.68	0.436	0.531	1710
04093000	1	Yes	Yes	1995	1230	--	394	0.883	0.442	0.738	1290
04093000	1	Yes	Yes	1996	2080	--	667	4.01	0.447	0.341	2150
04093000	1	Yes	Yes	1997	2060	--	660	1.82	0.453	0.354	2120
04093000	1	Yes	Yes	1998	1850	--	593	0.552	0.459	0.447	1890
04093000	1	Yes	Yes	1999	1690	--	542	0.709	0.464	0.527	1720
04093000	1	Yes	Yes	2000	1260	--	404	1.29	0.47	0.745	1280
04093000	1	Yes	Yes	2001	1460	--	468	0.48	0.471	0.648	1470
04093000	1	Yes	Yes	2002	2310	--	741	1.71	0.472	0.277	2330

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04093000	1	Yes	Yes	2003	1700	--	545	2.43	0.473	0.53	1710
04093000	1	Yes	Yes	2004	1160	--	372	1.2	0.474	0.79	1170
04093000	1	Yes	Yes	2005	2210	--	709	1.17	0.474	0.313	2220
04093000	1	Yes	Yes	2006	2240	--	718	1.34	0.475	0.303	2250
04093000	1	Yes	Yes	2007	3390	--	1087	2.71	0.476	0.0886	3400
04093000	1	Yes	Yes	2008	5280	--	1693	3.72	0.477	0.0198	5290
04093000	1	Yes	Yes	2009	2060	--	660	1.17	0.478	0.375	2060
04094000	1	Yes	Yes	1945	2440	--	798	1.04	0.0267	0.0682	3160
04094000	1	Yes	Yes	1946	715	--	234	1.22	0.0275	0.734	1040
04094000	1	Yes	Yes	1947	2140	--	700	2.05	0.0282	0.0988	2790
04094000	1	Yes	Yes	1948	1960	--	641	1.59	0.029	0.134	2560
04094000	1	Yes	Yes	1949	690	--	226	0.869	0.0298	0.753	1010
04094000	1	Yes	Yes	1950	1720	--	563	1.38	0.0305	0.188	2260
04094000	1	Yes	Yes	1951	1360	--	445	1.96	0.0323	0.327	1830
04094000	1	Yes	Yes	1952	1060	--	347	0.821	0.0341	0.495	1470
04094000	1	Yes	Yes	1953	521	--	170	0.731	0.036	0.854	789
04094000	1	Yes	Yes	1954	1170	--	383	1.25	0.0378	0.428	1600
04094000	1	Yes	Yes	1955	3110	--	1018	3.44	0.0396	0.035	3920
04094000	1	Yes	Yes	1956	1370	--	448	1.75	0.0414	0.328	1830
04094000	1	Yes	Yes	1957	848	--	277	0.651	0.0432	0.654	1190
04094000	1	Yes	Yes	1958	490	--	160	0.318	0.045	0.876	742
04094000	1	Yes	Yes	1959	1420	--	465	1.56	0.0468	0.309	1880
04094000	1	Yes	Yes	1960	1120	--	366	1	0.0486	0.468	1520
04094000	1	Yes	Yes	1961	1020	--	334	1.12	0.0508	0.539	1390
04094000	1	Yes	Yes	1962	710	--	232	0.256	0.0529	0.753	1010
04094000	1	Yes	Yes	1963	460	--	151	1.21	0.0551	0.892	695
04094000	1	Yes	Yes	1964	282	--	92	0.607	0.0572	0.956	459
04094000	1	Yes	Yes	1965	680	--	223	0.806	0.0593	0.774	964
04094000	1	Yes	Yes	1966	1990	--	651	1.78	0.0615	0.14	2530
04094000	1	Yes	Yes	1967	890	--	291	1.06	0.0636	0.64	1210
04094000	1	Yes	Yes	1968	1290	--	422	1.15	0.0658	0.383	1700
04094000	1	Yes	Yes	1969	616	--	202	0.72	0.0679	0.816	876
04094000	1	Yes	Yes	1970	965	--	316	1.37	0.0701	0.598	1300
04094000	1	Yes	Yes	1971	708	--	232	0.57	0.075	0.766	981
04094000	1	Yes	Yes	1972	1300	--	425	1.68	0.08	0.387	1690

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04094000	1	Yes	Yes	1973	1400	--	458	1.33	0.085	0.343	1790
04094000	1	Yes	Yes	1974	752	--	246	0.767	0.09	0.749	1020
04094000	1	Yes	Yes	1975	1080	--	353	1.34	0.095	0.533	1400
04094000	1	Yes	Yes	1976	1250	--	409	0.953	0.0999	0.43	1600
04094000	1	Yes	Yes	1977	453	--	148	0.773	0.105	0.91	642
04094000	1	Yes	Yes	1978	986	--	323	0.369	0.11	0.613	1270
04094000	1	Yes	Yes	1979	1680	--	550	0.821	0.115	0.246	2050
04094000	1	Yes	Yes	1980	707	--	231	0.361	0.12	0.79	929
04094000	1	Yes	Yes	1981	2410	--	789	2.06	0.123	0.0901	2880
04094000	1	Yes	Yes	1982	2030	--	664	0.341	0.127	0.157	2430
04094000	1	Yes	Yes	1983	1300	--	425	0.714	0.13	0.425	1600
04094000	1	Yes	Yes	1984	1000	--	327	0.621	0.134	0.621	1250
04094000	1	Yes	Yes	1985	1840	--	602	0.833	0.137	0.203	2190
04094000	1	Yes	Yes	1986	1800	--	589	1.13	0.141	0.219	2140
04094000	1	Yes	Yes	1987	900	--	294	1.34	0.145	0.691	1120
04094000	1	Yes	Yes	1988	883	--	289	0.775	0.148	0.704	1100
04094000	1	Yes	Yes	1989	2270	--	743	1.82	0.152	0.12	2650
04094000	1	Yes	Yes	1990	3220	--	1054	2.8	0.155	0.0421	3700
04094000	1	Yes	Yes	1991	3880	--	1270	1.79	0.164	0.0229	4390
04094000	1	Yes	Yes	1992	631	E	206	1.54	0.173	0.856	785
04094000	1	Yes	Yes	1993	2220	--	726	1.9	0.181	0.141	2530
04094000	1	Yes	Yes	1994	1120	--	366	1.97	0.19	0.59	1310
04094000	1	Yes	Yes	1995	773	--	253	0.855	0.199	0.797	915
04094000	1	Yes	Yes	1996	3400	--	1113	1.73	0.208	0.0407	3740
04094000	1	Yes	Yes	1997	1300	--	425	1.6	0.217	0.496	1470
04094000	1	Yes	Yes	1998	928	--	304	0.625	0.225	0.73	1050
04094000	1	Yes	Yes	1999	896	--	293	0.922	0.234	0.754	1010
04094000	1	Yes	Yes	2000	1310	--	429	0.965	0.243	0.514	1430
04094000	1	Yes	Yes	2001	1200	--	393	0.556	0.251	0.591	1310
04094000	1	Yes	Yes	2002	1130	--	370	1.22	0.259	0.637	1220
04094000	1	Yes	Yes	2003	793	--	259	0.927	0.267	0.824	858
04094000	1	Yes	Yes	2004	740	--	242	1.42	0.275	0.852	793
04094000	1	Yes	Yes	2005	1690	--	553	1.21	0.283	0.355	1760
04094000	1	Yes	Yes	2006	881	--	288	1.15	0.291	0.795	920
04094000	1	Yes	Yes	2007	1370	--	448	2.36	0.299	0.529	1410

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04094000	1	Yes	Yes	2008	5320	--	1741	3.76	0.307	0.0141	5380
04094000	1	Yes	Yes	2009	1620	--	530	0.632	0.316	0.412	1630
04094500	1	Yes	Yes	1945	990	--	470	1.52	0.0733	0.319	1750
04094500	1	Yes	Yes	1946	1280	--	608	1.98	0.0762	0.174	2140
04094500	1	Yes	Yes	1947	1580	--	750	1.94	0.0792	0.0928	2590
04094500	1	Yes	Yes	1948	1910	--	907	2.3	0.0822	0.0547	3050
04094500	1	Yes	Yes	1949	525	--	249	0.761	0.0851	0.74	1060
04094500	1	Yes	Yes	1950	1700	--	807	1.68	0.0881	0.0756	2740
04094500	1	Yes	Yes	1951	970	--	460	2.39	0.0939	0.346	1690
04094500	1	Yes	Yes	1952	912	--	433	0.642	0.0998	0.39	1610
04094500	1	Yes	Yes	1953	454	--	216	0.469	0.106	0.81	931
04094500	1	Yes	Yes	1954	910	--	432	1.72	0.111	0.399	1590
04094500	1	Yes	Yes	1955	3180	--	1510	4.64	0.117	0.0139	4640
04094500	1	Yes	Yes	1956	1280	--	608	2.2	0.123	0.193	2050
04094500	1	Yes	Yes	1957	725	--	344	0.821	0.129	0.584	1290
04094500	1	Yes	Yes	1958	456	--	216	1.3	0.135	0.824	908
04094500	1	Yes	Yes	1959	1200	--	570	2.21	0.141	0.239	1920
04094500	1	Yes	Yes	1960	980	2	465	0.826	0.146	0.375	1640
04094500	1	Yes	Yes	1961	780	--	370	1.32	0.153	0.548	1340
04094500	1	Yes	Yes	1962	578	--	274	0.333	0.159	0.739	1060
04094500	1	Yes	Yes	1963	290	--	138	1.26	0.166	0.936	642
04094500	1	Yes	Yes	1964	290	--	138	0.665	0.172	0.937	637
04094500	1	Yes	Yes	1965	700	--	332	1.04	0.178	0.643	1200
04094500	1	Yes	Yes	1966	1610	--	764	2.41	0.185	0.121	2410
04094500	1	Yes	Yes	1967	805	--	382	1.23	0.191	0.558	1330
04094500	1	Yes	Yes	1968	1780	--	845	1.53	0.197	0.0893	2620
04094500	1	Yes	Yes	1969	578	--	274	0.583	0.204	0.765	1010
04094500	1	Yes	Yes	1970	900	--	427	1.9	0.21	0.488	1440
04094500	1	Yes	No	1971	780	1, 8	370	0.538	0.225	0.611	1250
04094500	1	Yes	Yes	1972	894	--	424	2.67	0.24	0.519	1390
04094500	1	Yes	Yes	1973	1490	--	707	1.67	0.254	0.181	2110
04094500	1	Yes	Yes	1974	989	--	470	0.874	0.269	0.466	1480
04094500	1	Yes	Yes	1975	1240	--	589	1.75	0.284	0.309	1760
04094500	1	Yes	Yes	1976	1590	--	755	1.06	0.298	0.171	2160
04094500	1	Yes	Yes	1977	398	--	189	1.12	0.313	0.928	676

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04094500	1	Yes	Yes	1978	606	--	288	0.233	0.328	0.817	920
04094500	1	Yes	Yes	1979	1600	--	760	0.836	0.342	0.186	2090
04094500	1	Yes	Yes	1980	716	--	340	0.495	0.357	0.759	1020
04094500	1	Yes	Yes	1981	2950	--	1400	3.82	0.364	0.0286	3640
04094500	1	Yes	Yes	1982	1200	2	570	0.452	0.37	0.402	1590
04094500	1	Yes	Yes	1983	3120	--	1481	4.78	0.377	0.0244	3800
04094500	1	Yes	Yes	1984	692	--	329	1.51	0.383	0.791	965
04094500	1	Yes	Yes	1985	1500	--	712	1.31	0.39	0.249	1890
04094500	1	Yes	Yes	1986	1370	--	650	2.03	0.396	0.319	1740
04094500	1	Yes	Yes	1987	681	--	323	1.39	0.403	0.811	930
04094500	1	Yes	Yes	1988	815	--	387	1.24	0.409	0.725	1080
04094500	1	Yes	Yes	1989	2000	--	949	2.97	0.416	0.119	2430
04094500	1	Yes	Yes	1990	1630	--	774	3.63	0.422	0.216	1980
04094500	1	Yes	Yes	1991	2320	--	1101	2.86	0.43	0.0732	2770
05437950	1	Yes	Yes	1965	105	--	293	0.0605	0.0768	0.645	174
05437950	1	Yes	Yes	1966	150	--	419	0.512	0.0796	0.397	236
05437950	1	Yes	Yes	1967	154	--	430	0.92	0.0824	0.382	241
05437950	1	Yes	Yes	1968	89	--	248	1.3	0.0853	0.741	152
05437950	1	Yes	Yes	1969	125	--	349	1.37	0.0881	0.537	200
05437950	1	Yes	Yes	1970	124	--	346	1.56	0.0909	0.546	198
05437950	1	Yes	Yes	1971	139	--	388	0.427	0.0965	0.465	218
05437950	1	Yes	Yes	1972	192	--	536	0.696	0.102	0.254	283
05437950	1	Yes	Yes	1973	136	--	380	1.56	0.108	0.49	211
05437950	1	Yes	Yes	1974	120	--	335	1.14	0.113	0.591	188
05437950	1	Yes	Yes	1975	91	--	254	0.0334	0.119	0.752	149
05437950	1	Yes	Yes	1976	172	--	480	1.3	0.124	0.339	254
05437950	1	Yes	Yes	1977	70	--	195	0.821	0.13	0.854	120
05437950	1	Yes	Yes	1978	144	--	402	1.46	0.136	0.471	216
05438250	1	Yes	Yes	1962	1150	--	339	0.361	0.0194	0.499	1340
05438250	1	Yes	Yes	1963	220	2, E	65	0.247	0.0197	0.975	287
05438250	1	Yes	Yes	1964	220	E	65	0.817	0.02	0.975	287
05438250	1	Yes	Yes	1965	985	--	291	0.105	0.0203	0.613	1150
05438250	1	Yes	Yes	1966	1390	--	410	0.642	0.0206	0.371	1600
05438250	1	Yes	Yes	1967	1250	--	369	1.89	0.0209	0.441	1450
05438250	1	Yes	Yes	1968	1220	E	360	1.81	0.0211	0.459	1410

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05438250	1	Yes	Yes	1969	1670	--	493	0.127	0.0214	0.258	1900
05438250	1	Yes	Yes	1970	1940	--	572	1.97	0.0217	0.178	2190
05438250	1	Yes	Yes	1971	1670	--	493	0.381	0.0231	0.259	1900
05438250	1	Yes	Yes	1972	1770	--	522	1.05	0.0245	0.224	2000
05438250	1	Yes	Yes	1973	3020	--	891	1.51	0.0258	0.0499	3370
05438250	1	Yes	Yes	1974	1150	--	339	0.594	0.0272	0.506	1330
05438250	1	Yes	Yes	1975	797	--	235	0.794	0.0286	0.732	936
05438250	1	Yes	Yes	1976	1480	--	437	1.28	0.03	0.338	1680
05438250	1	Yes	Yes	1977	134	--	40	1.26	0.0314	1	177
05438250	1	Yes	Yes	1978	5090	--	1502	2.26	0.0327	0.0119	5560
05438250	1	Yes	Yes	1979	2140	--	631	0.289	0.0341	0.143	2390
05438250	1	Yes	Yes	1980	811	--	239	0.388	0.0355	0.728	943
05438250	1	Yes	Yes	1981	479	E	141	1.89	0.0364	0.899	576
05438250	1	Yes	Yes	1982	1360	--	401	0.34	0.0373	0.395	1540
05438250	1	Yes	Yes	1983	2520	--	744	1.87	0.0382	0.0855	2800
05438250	1	Yes	Yes	1984	738	--	218	0.766	0.0391	0.772	859
05438250	1	Yes	Yes	1985	2020	--	596	0.532	0.0401	0.168	2250
05438250	1	Yes	Yes	1986	1490	--	440	1.09	0.041	0.34	1680
05438250	1	Yes	Yes	1987	2110	--	623	2.26	0.0419	0.151	2340
05438250	1	Yes	Yes	1988	779	--	230	1	0.0428	0.753	900
05438250	1	Yes	Yes	1989	850	--	251	1.18	0.0437	0.709	976
05438250	1	Yes	Yes	1990	1130	--	333	1.59	0.0446	0.534	1280
05438250	1	Yes	Yes	1991	970	--	286	1.23	0.0471	0.639	1100
05438283	1	Yes	Yes	1993	322	--	404	1.28	0.0319	0.387	337
05438283	1	Yes	Yes	1994	371	--	466	0.733	0.033	0.299	387
05438283	1	Yes	Yes	1995	7.3	--	9.2	0.994	0.034	1	8.0
05438283	1	Yes	Yes	1996	544	--	683	0.894	0.035	0.111	564
05438283	1	Yes	Yes	1997	484	--	608	1.8	0.0361	0.159	502
05438283	1	Yes	Yes	1998	433	--	544	0.817	0.0371	0.207	449
05438283	1	Yes	Yes	1999	571	--	717	1.21	0.0382	0.0951	590
05438283	1	Yes	Yes	2000	478	--	600	0.977	0.0392	0.165	494
05438283	1	Yes	Yes	2001	283	--	355	0.84	0.0428	0.485	294
05438283	1	Yes	Yes	2002	90	--	113	1.48	0.0465	0.935	94.6
05438283	1	Yes	Yes	2003	152	--	191	0.913	0.0501	0.826	157
05438283	1	Yes	Yes	2004	345	--	433	1.11	0.0537	0.358	353

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05438283	1	Yes	Yes	2005	332	--	417	0.485	0.0574	0.385	338
05438283	1	Yes	Yes	2006	259	--	325	1.02	0.061	0.568	263
05438283	1	Yes	Yes	2007	330	--	414	1.36	0.0646	0.394	334
05438283	1	Yes	Yes	2008	397	--	498	0.894	0.0683	0.279	400
05438283	1	Yes	Yes	2009	397	--	498	0.338	0.0719	0.281	398
05438300	1	Yes	Yes	1961	45	--	177	0.758	0.00952	0.831	45
05438300	1	Yes	Yes	1962	70	--	276	1.28	0.00952	0.634	70
05438300	1	Yes	Yes	1963	39	--	154	1.34	0.00952	0.872	39
05438300	1	Yes	No	1964	26	4, B	103	0.0318	0.00952	0.938	26
05438300	1	Yes	Yes	1965	48	--	189	0.787	0.00952	0.809	48
05438300	1	Yes	Yes	1966	85	--	335	1.46	0.00952	0.5	85
05438300	1	Yes	Yes	1967	92	--	363	1.41	0.00952	0.444	92
05438300	1	Yes	Yes	1968	35	--	138	0.744	0.00952	0.895	35
05438300	1	Yes	Yes	1969	159	--	627	0.779	0.00952	0.136	159
05438300	1	Yes	Yes	1970	139	--	548	0.971	0.00952	0.191	139
05438300	1	Yes	Yes	1971	103	--	406	0.467	0.00952	0.369	103
05438300	1	Yes	Yes	1972	180	--	710	0.56	0.00952	0.0908	180
05438300	1	Yes	Yes	1973	144	--	568	0.622	0.00952	0.176	144
05438300	1	Yes	Yes	1974	63	--	248	1.07	0.00952	0.692	63
05438300	1	Yes	Yes	1975	55	--	217	0.0318	0.00952	0.758	55
05438300	1	Yes	Yes	1976	155	--	611	1.03	0.00952	0.146	155
05438300	1	Yes	Yes	1977	35	--	138	0.727	0.00952	0.895	35
05438300	1	Yes	Yes	1978	31	--	122	1.45	0.00952	0.917	31
05438300	1	Yes	Yes	1979	123	--	485	1.57	0.00952	0.26	123
05438300	1	Yes	Yes	1980	175	--	690	0.545	0.00952	0.0981	175
05438390	1	No	No	1970	1750	--	351	0.988	0.0427	0.493	1930
05438390	1	No	No	1971	2750	--	552	0.477	0.0436	0.202	2980
05438390	1	No	No	1972	2020	--	405	1.2	0.0444	0.394	2210
05438390	1	No	No	1973	4000	--	803	1.8	0.0453	0.07	4310
05438390	1	No	No	1974	1760	--	353	0.587	0.0461	0.492	1930
05438390	1	No	No	1975	1530	--	307	0.0316	0.047	0.599	1690
05438390	1	No	No	1976	2020	--	405	1.22	0.0479	0.396	2210
05438390	1	No	No	1977	370	--	74	0.791	0.0487	0.969	433
05438390	1	No	No	1978	1380	--	277	1.4	0.0496	0.659	1520
05438390	1	No	No	1979	1060	--	213	0.302	0.0504	0.787	1180

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05438500	1	Yes	Yes	1940	1330	--	122	0.653	0.0209	0.92	1680
05438500	1	Yes	Yes	1941	2240	--	206	0.0391	0.0212	0.784	2700
05438500	1	Yes	Yes	1942	3230	--	297	0.789	0.0216	0.602	3810
05438500	1	Yes	Yes	1943	10300	--	947	1.18	0.0219	0.042	11600
05438500	1	Yes	Yes	1944	9200	--	845	1.33	0.0222	0.0581	10400
05438500	1	Yes	Yes	1945	1850	--	170	0.428	0.0225	0.849	2260
05438500	1	Yes	Yes	1946	9830	--	903	0.625	0.0229	0.0479	11100
05438500	1	Yes	Yes	1947	2170	--	199	1.51	0.0232	0.797	2620
05438500	1	Yes	Yes	1948	8000	--	735	1.88	0.0235	0.085	9050
05438500	1	Yes	Yes	1949	5750	--	528	0.349	0.0238	0.217	6550
05438500	1	Yes	Yes	1950	5240	--	482	1.35	0.0242	0.273	6000
05438500	1	Yes	Yes	1951	6410	--	589	0.188	0.0247	0.167	7280
05438500	1	Yes	Yes	1952	6690	--	615	0.569	0.0253	0.15	7580
05438500	1	Yes	Yes	1953	1850	E	170	1.46	0.0258	0.85	2250
05438500	1	Yes	Yes	1954	3290	--	302	1.55	0.0264	0.593	3850
05438500	1	Yes	Yes	1955	2140	E	197	0.284	0.027	0.804	2570
05438500	1	Yes	Yes	1956	935	E	86	1.15	0.0275	0.957	1200
05438500	1	Yes	Yes	1957	1070	E	98	0.916	0.0281	0.946	1360
05438500	1	Yes	Yes	1958	1270	E	117	0.193	0.0286	0.928	1590
05438500	1	Yes	Yes	1959	3330	--	306	0.02	0.0292	0.586	3880
05438500	1	Yes	Yes	1960	8230	--	756	0.664	0.0298	0.0791	9250
05438500	1	Yes	Yes	1961	1420	E	131	0.797	0.0305	0.911	1750
05438500	1	Yes	Yes	1962	4600	--	423	0.312	0.0312	0.359	5280
05438500	1	Yes	Yes	1963	955	E	88	0.152	0.0319	0.956	1210
05438500	1	Yes	Yes	1964	1090	E	100	0.729	0.0326	0.945	1370
05438500	1	Yes	Yes	1965	3300	2	303	0.167	0.0333	0.597	3830
05438500	1	Yes	Yes	1966	5450	E	501	0.649	0.034	0.255	6170
05438500	1	Yes	Yes	1967	3550	E	326	1.93	0.0347	0.542	4100
05438500	1	Yes	Yes	1968	2150	E	198	1.64	0.0354	0.807	2560
05438500	1	Yes	Yes	1969	3640	--	335	1.74	0.0361	0.524	4200
05438500	1	Yes	Yes	1970	2790	--	256	1.89	0.0369	0.693	3260
05438500	1	Yes	Yes	1971	8350	E	767	0.412	0.0383	0.0773	9320
05438500	1	Yes	Yes	1972	6700	--	616	0.941	0.0396	0.155	7500
05438500	1	Yes	Yes	1973	6270	--	576	1.6	0.041	0.183	7020
05438500	1	Yes	Yes	1974	6620	--	608	1.11	0.0424	0.161	7390

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05438500	1	Yes	Yes	1975	3840	E	353	0.0233	0.0438	0.491	4380
05438500	1	Yes	Yes	1976	6130	--	563	1.32	0.0452	0.194	6840
05438500	1	Yes	Yes	1977	1980	E	182	0.527	0.0466	0.839	2330
05438500	1	Yes	Yes	1978	8340	--	766	2.16	0.048	0.0799	9230
05438500	1	Yes	Yes	1979	9040	--	831	0.282	0.0494	0.0648	9970
05438500	1	Yes	Yes	1980	2090	E	192	0.692	0.0508	0.825	2440
05438500	1	Yes	Yes	1981	1480	E	136	1.8	0.0519	0.91	1770
05438500	1	Yes	Yes	1982	4670	--	429	0.336	0.053	0.363	5240
05438500	1	Yes	Yes	1983	6470	--	595	1.74	0.054	0.175	7150
05438500	1	Yes	Yes	1984	5070	E	466	0.726	0.0551	0.313	5650
05438500	1	Yes	Yes	1985	3900	--	358	0.5	0.0562	0.49	4390
05438500	1	Yes	Yes	1986	4660	--	428	0.121	0.0573	0.368	5210
05438500	1	Yes	Yes	1987	4590	--	422	2.17	0.0584	0.378	5120
05438500	1	Yes	Yes	1988	3960	--	364	0.192	0.0595	0.481	4440
05438500	1	Yes	Yes	1989	1830	E	168	2.06	0.0605	0.868	2130
05438500	1	Yes	Yes	1990	2580	--	237	0.439	0.0616	0.75	2940
05438500	1	Yes	Yes	1991	4240	E	390	1.23	0.064	0.436	4720
05438500	1	Yes	Yes	1992	1710	E	157	1.11	0.0663	0.887	1980
05438500	1	Yes	Yes	1993	7870	--	723	2.06	0.0687	0.0999	8560
05438500	1	Yes	Yes	1994	11900	--	1094	1.18	0.0711	0.0296	12800
05438500	1	Yes	Yes	1995	2360	E	217	1.48	0.0734	0.791	2660
05438500	1	Yes	Yes	1996	5860	--	539	1.61	0.0758	0.235	6360
05438500	1	Yes	Yes	1997	7620	--	700	1.69	0.0781	0.117	8220
05438500	1	Yes	Yes	1998	3570	C	328	1.69	0.0805	0.578	3920
05438500	1	Yes	Yes	1999	11400	C	1048	2.01	0.0828	0.0357	12200
05438500	1	Yes	Yes	2000	5730	C	527	2.17	0.0852	0.255	6170
05438500	1	Yes	Yes	2001	4040	C	371	0.658	0.0929	0.494	4370
05438500	1	Yes	Yes	2002	5040	C	463	2.29	0.101	0.346	5370
05438500	1	Yes	Yes	2003	896	C, E	82	1.73	0.108	0.97	995
05438500	1	Yes	Yes	2004	3960	C	364	1.66	0.116	0.529	4170
05438500	1	Yes	Yes	2005	2610	C, E	240	0.716	0.124	0.778	2750
05438500	1	Yes	Yes	2006	1290	C, E	119	1.6	0.131	0.946	1360
05438500	1	Yes	Yes	2007	7420	C	682	1.62	0.139	0.151	7580
05438500	1	Yes	Yes	2008	4810	C	442	0.596	0.147	0.41	4890
05438500	1	Yes	Yes	2009	4510	C	414	1.02	0.154	0.464	4550

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05438850	1	Yes	Yes	1956	18	--	41	0.929	0	1	18
05438850	1	Yes	Yes	1957	200	--	454	0.241	0	0.295	200
05438850	1	Yes	Yes	1958	310	--	703	0.963	0	0.0911	310
05438850	1	Yes	Yes	1959	393	--	892	1.38	0	0.0472	393
05438850	1	Yes	Yes	1960	257	--	583	1.23	0	0.162	257
05438850	1	Yes	Yes	1961	31	--	70	0.761	0	0.967	31
05438850	1	Yes	Yes	1962	100	--	227	0.796	0	0.732	100
05438850	1	Yes	Yes	1963	92	--	209	0.422	0	0.768	92
05438850	1	Yes	Yes	1964	59	--	134	0.861	0	0.899	59
05438850	1	Yes	Yes	1965	231	--	524	0.85	0	0.208	231
05438850	1	Yes	Yes	1966	85	--	193	0.537	0	0.798	85
05438850	1	Yes	Yes	1967	72	--	163	0.0108	0	0.851	72
05438850	1	Yes	No	1968	28	4, B	64	0.00236	0	0.973	28
05438850	1	Yes	Yes	1969	101	--	229	1.39	0	0.727	101
05438850	1	Yes	Yes	1970	150	--	340	1.59	0	0.482	150
05438850	1	Yes	Yes	1971	96	--	218	0.236	0	0.752	96
05438850	1	Yes	Yes	1972	228	--	517	1.32	0	0.216	228
05438850	1	Yes	Yes	1973	185	--	420	0.408	0	0.343	185
05438850	1	Yes	Yes	1974	233	--	529	1.5	0	0.203	233
05438850	1	Yes	Yes	1975	274	--	622	0.893	0	0.136	274
05438850	1	Yes	Yes	1976	131	--	297	0.00236	0	0.583	131
05438850	1	Yes	Yes	1977	112	--	254	0.757	0	0.673	112
05438850	1	Yes	Yes	1978	234	--	531	1.11	0	0.2	234
05438850	1	Yes	Yes	1979	136	--	309	1.61	0	0.555	136
05438850	1	Yes	Yes	1980	219	--	497	0.731	0	0.24	219
05439000	1	Yes	Yes	1980	1510	--	585	1.08	0.047	0.179	1530
05439000	1	Yes	Yes	1981	1050	--	407	2.17	0.0474	0.393	1070
05439000	1	Yes	Yes	1982	718	--	278	3.38	0.0477	0.655	730
05439000	1	Yes	Yes	1983	3500	--	1356	1.91	0.0481	0.0157	3540
05439000	1	Yes	Yes	1984	787	--	305	0.692	0.0484	0.604	799
05439000	1	Yes	Yes	1985	1130	--	438	1.35	0.0488	0.348	1150
05439000	1	Yes	Yes	1986	910	--	353	1.23	0.0491	0.495	923
05439000	1	Yes	Yes	1987	1600	--	620	2.13	0.0495	0.156	1620
05439000	1	Yes	Yes	1988	694	--	269	0.27	0.0498	0.675	704
05439000	1	Yes	Yes	1989	697	--	270	1.24	0.0502	0.673	707

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05439000	1	Yes	Yes	1990	671	--	260	0.6	0.0505	0.695	680
05439000	1	Yes	Yes	1991	1170	--	453	0.708	0.051	0.327	1180
05439000	1	Yes	Yes	1992	323	E	125	0.655	0.0514	0.925	328
05439000	1	Yes	Yes	1993	1310	--	508	1.02	0.0519	0.257	1320
05439000	1	Yes	Yes	1994	1260	--	488	0.917	0.0524	0.282	1270
05439000	1	Yes	Yes	1995	806	C	312	1.08	0.0528	0.591	814
05439000	1	Yes	Yes	1996	2280	C, D	884	4.56	0.0533	0.055	2300
05439000	1	Yes	Yes	1997	2170	C	841	2.24	0.0538	0.0634	2180
05439000	1	Yes	Yes	1998	750	C	291	0.984	0.0542	0.635	756
05439000	1	Yes	Yes	1999	1080	C	419	1.08	0.0547	0.38	1090
05439000	1	Yes	Yes	2000	818	C, E	317	1.02	0.0552	0.582	824
05439000	1	Yes	Yes	2001	1080	C	419	0.703	0.0558	0.381	1090
05439000	1	Yes	Yes	2002	1090	C	422	1.76	0.0564	0.376	1100
05439000	1	Yes	Yes	2003	760	C, E	295	0.92	0.0571	0.629	764
05439000	1	Yes	Yes	2004	1270	C	492	1.54	0.0577	0.28	1270
05439000	1	Yes	Yes	2005	273	C	106	0.458	0.0583	0.944	275
05439000	1	Yes	Yes	2006	136	C, E	53	0.743	0.059	0.987	137
05439000	1	Yes	Yes	2007	3020	C	1170	3.86	0.0596	0.0227	3020
05439000	1	Yes	Yes	2008	2030	C	787	5.44	0.0602	0.0759	2030
05439000	1	Yes	Yes	2009	1370	C	531	1.54	0.0609	0.235	1370
05439500	1	Yes	Yes	1940	1350	--	119	0.00345	0.0245	0.926	1520
05439500	1	Yes	Yes	1941	2380	--	209	0.0426	0.0249	0.78	2610
05439500	1	Yes	Yes	1942	4530	--	398	0.693	0.0252	0.392	4880
05439500	1	Yes	Yes	1943	5680	--	499	0.709	0.0255	0.252	6070
05439500	1	Yes	Yes	1944	5850	--	514	1.17	0.0259	0.235	6240
05439500	1	Yes	Yes	1945	2510	--	220	1.52	0.0262	0.76	2740
05439500	1	Yes	Yes	1946	6840	--	601	0.569	0.0265	0.16	7280
05439500	1	Yes	Yes	1947	2210	--	194	0.68	0.0269	0.809	2420
05439500	1	Yes	Yes	1948	5680	--	499	1.76	0.0272	0.253	6060
05439500	1	Yes	Yes	1949	6000	2	527	0.299	0.0275	0.221	6390
05439500	1	Yes	Yes	1950	4530	--	398	1.45	0.0279	0.394	4860
05439500	1	Yes	Yes	1951	6670	--	586	2.43	0.0288	0.171	7080
05439500	1	Yes	Yes	1952	4690	--	412	0.486	0.0298	0.374	5020
05439500	1	Yes	Yes	1953	1290	E	113	0.735	0.0307	0.932	1440
05439500	1	Yes	Yes	1954	2340	E	206	1.09	0.0317	0.79	2540

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05439500	1	Yes	Yes	1955	5910	--	519	3.47	0.0326	0.233	6270
05439500	1	Yes	Yes	1956	1740	E	153	0.709	0.0335	0.882	1910
05439500	1	Yes	Yes	1957	2000	E	176	0.566	0.0345	0.844	2180
05439500	1	Yes	Yes	1958	4290	--	377	1.83	0.0354	0.438	4570
05439500	1	Yes	Yes	1959	2900	2	255	0.459	0.0364	0.696	3110
05439500	1	Yes	Yes	1960	5240	--	460	0.576	0.0373	0.309	5550
05439500	1	Yes	Yes	1961	1010	E	89	1.29	0.0382	0.956	1120
05439500	1	Yes	Yes	1962	4760	--	418	0.319	0.0392	0.371	5040
05439500	1	Yes	Yes	1963	1510	E	133	0.872	0.0401	0.911	1650
05439500	1	Yes	Yes	1964	1090	E	96	0.734	0.041	0.951	1200
05439500	1	Yes	Yes	1965	4000	2	351	0.112	0.0419	0.492	4240
05439500	1	Yes	Yes	1966	5060	--	445	0.519	0.0428	0.335	5330
05439500	1	Yes	Yes	1967	2850	--	250	0.998	0.0438	0.71	3030
05439500	1	Yes	Yes	1968	4460	E	392	1.51	0.0447	0.417	4700
05439500	1	Yes	Yes	1969	5030	--	442	0.126	0.0456	0.34	5290
05439500	1	Yes	Yes	1970	3910	--	343	1.93	0.0465	0.513	4120
05439500	1	Yes	Yes	1971	3930	--	345	0.492	0.0474	0.51	4140
05439500	1	Yes	Yes	1972	6020	--	529	1.65	0.0484	0.231	6290
05439500	1	Yes	Yes	1973	8460	--	743	1.7	0.0493	0.0882	8800
05439500	1	Yes	Yes	1974	6780	--	596	1.37	0.0502	0.173	7060
05439500	1	Yes	Yes	1975	3740	--	329	0.0251	0.0511	0.551	3930
05439500	1	Yes	Yes	1976	6690	--	588	1.13	0.052	0.179	6950
05439500	1	Yes	Yes	1977	799	--	70	1.42	0.0529	0.974	866
05439500	1	Yes	Yes	1978	5470	--	481	1.18	0.0538	0.293	5690
05439500	1	Yes	Yes	1979	7600	--	668	0.343	0.0547	0.128	7880
05439500	1	Yes	Yes	1980	3390	--	298	0.454	0.0556	0.622	3550
05439500	1	Yes	Yes	1981	2840	--	249	2.08	0.0561	0.72	2980
05439500	1	Yes	Yes	1982	3460	--	304	0.27	0.0565	0.611	3610
05439500	1	Yes	Yes	1983	7220	--	634	1.73	0.057	0.149	7470
05439500	1	Yes	Yes	1984	4400	--	387	0.67	0.0574	0.437	4580
05439500	1	Yes	Yes	1985	5200	--	457	1.31	0.0578	0.327	5400
05439500	1	Yes	Yes	1986	3120	--	274	1.13	0.0583	0.671	3260
05439500	1	Yes	Yes	1987	5300	--	466	2.95	0.0587	0.316	5490
05439500	1	Yes	Yes	1988	3680	--	323	0.26	0.0592	0.571	3830
05439500	1	Yes	Yes	1989	5370	--	472	1.42	0.0596	0.308	5560

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05439500	1	Yes	Yes	1990	2880	--	253	0.55	0.06	0.715	3010
05439500	1	Yes	Yes	1991	3070	--	270	0.74	0.0612	0.682	3200
05439500	1	Yes	Yes	1992	1250	E	110	0.631	0.0623	0.941	1320
05439500	1	Yes	Yes	1993	8190	--	719	1.7	0.0634	0.1	8420
05439500	1	Yes	Yes	1994	8790	--	772	0.839	0.0646	0.0818	9020
05439500	1	Yes	Yes	1995	2610	--	229	0.898	0.0657	0.765	2710
05439500	1	Yes	Yes	1996	25400	--	2231	4.01	0.0669	0.00336	25900
05439500	1	Yes	Yes	1997	9940	--	873	2.17	0.068	0.0591	10200
05439500	1	Yes	Yes	1998	3160	--	278	0.794	0.0691	0.671	3260
05439500	1	Yes	Yes	1999	12200	--	1072	1.1	0.0703	0.0318	12400
05439500	1	Yes	Yes	2000	2650	--	233	0.874	0.0714	0.762	2730
05439500	1	Yes	Yes	2001	3900	--	343	0.707	0.0737	0.539	3990
05439500	1	Yes	Yes	2002	11000	--	966	2.26	0.0759	0.0449	11200
05439500	1	Yes	Yes	2003	1820	E	160	0.712	0.0782	0.887	1860
05439500	1	Yes	Yes	2004	5110	--	449	1.38	0.0804	0.353	5180
05439500	1	Yes	Yes	2005	1700	--	149	0.607	0.0826	0.902	1730
05439500	1	Yes	Yes	2006	882	E	77	1.18	0.0849	0.971	898
05439500	1	Yes	Yes	2007	7980	--	701	2.54	0.0871	0.12	8030
05439500	1	Yes	Yes	2008	4850	--	426	0.294	0.0894	0.393	4870
05439500	1	Yes	Yes	2009	5010	--	440	0.832	0.0916	0.373	5020
05439550	1	Yes	Yes	1959	19	--	83	0.99	0.00436	0.956	21.3
05439550	1	Yes	Yes	1960	154	--	672	0.517	0.00436	0.106	163
05439550	1	Yes	Yes	1961	16	--	70	0.97	0.00523	0.968	18
05439550	1	Yes	Yes	1962	71	--	310	1.31	0.0061	0.557	76.2
05439550	1	Yes	Yes	1963	43	--	188	1.54	0.00697	0.811	46.7
05439550	1	Yes	Yes	1964	9	--	39	0.827	0.00784	1	10.3
05439550	1	Yes	Yes	1965	67	--	292	0.865	0.00871	0.602	71.8
05439550	1	Yes	Yes	1966	23	--	100	1.2	0.00959	0.941	25.4
05439550	1	Yes	Yes	1967	56	--	244	1.24	0.0105	0.701	60.1
05439550	1	Yes	Yes	1968	73	--	318	1.26	0.0113	0.54	77.8
05439550	1	Yes	Yes	1969	89	--	388	1.5	0.0122	0.399	94.5
05439550	1	Yes	Yes	1970	152	--	663	1.55	0.0131	0.115	160
05439550	1	Yes	Yes	1971	452	--	1972	0.34	0.0146	0.00485	469
05439550	1	Yes	Yes	1972	219	--	955	1.18	0.0161	0.0403	228
05439550	1	Yes	Yes	1973	278	--	1213	1.92	0.0176	0.0187	289

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05439550	1	Yes	Yes	1974	314	--	1370	1.17	0.0192	0.0146	325
05439550	1	Yes	Yes	1975	97	--	423	0.893	0.0207	0.351	102
05439550	1	Yes	Yes	1976	74	--	323	1.28	0.0222	0.539	77.9
05440000	1	No	No	1940	3240	--	151	0.665	0.0228	0.881	3890
05440000	1	No	No	1941	4220	--	197	0.0363	0.0231	0.802	4970
05440000	1	No	No	1942	5840	--	272	0.65	0.0235	0.651	6740
05440000	1	No	No	1943	12600	--	587	1.02	0.0239	0.168	14100
05440000	1	No	No	1944	14800	--	690	1.25	0.0242	0.103	16500
05440000	1	No	No	1945	4360	--	203	0.471	0.0246	0.791	5120
05440000	1	No	No	1946	16400	--	765	0.624	0.025	0.0752	18200
05440000	1	No	No	1947	3990	--	186	1.4	0.0253	0.824	4700
05440000	1	No	No	1948	15200	--	709	1.84	0.0257	0.0951	16900
05440000	1	No	No	1949	9500	2	443	0.317	0.026	0.326	10700
05440000	1	No	No	1950	8670	--	404	1.35	0.0264	0.383	9820
05440000	1	No	No	1951	11900	--	555	0.206	0.0273	0.193	13300
05440000	1	No	No	1952	10900	--	508	0.538	0.0282	0.243	12200
05440000	1	No	No	1953	2620	E	122	1.13	0.029	0.922	3160
05440000	1	No	No	1954	4680	--	218	1.46	0.0299	0.766	5430
05440000	1	No	No	1955	8190	--	382	3.11	0.0308	0.425	9260
05440000	1	No	No	1956	2340	--	109	0.643	0.0317	0.936	2830
05440000	1	No	No	1957	2360	E	110	0.508	0.0325	0.935	2850
05440000	1	No	No	1958	4650	--	217	1.45	0.0334	0.77	5380
05440000	1	No	No	1959	5890	--	275	0.023	0.0343	0.653	6720
05440000	1	No	No	1960	14100	--	657	0.611	0.0352	0.127	15600
05440000	1	No	No	1961	2690	E	125	0.763	0.0363	0.92	3210
05440000	1	No	No	1962	10500	--	490	0.319	0.0373	0.271	11700
05440000	1	No	No	1963	2020	E	94	0.215	0.0384	0.952	2440
05440000	1	No	No	1964	2080	E	97	0.716	0.0395	0.95	2510
05440000	1	No	No	1965	8000	2	373	0.143	0.0406	0.449	8960
05440000	1	No	No	1966	11300	--	527	0.593	0.0416	0.229	12500
05440000	1	No	No	1967	4550	--	212	1.51	0.0427	0.784	5210
05440000	1	No	No	1968	5940	E	277	1.55	0.0438	0.655	6700
05440000	1	No	No	1969	11100	--	517	0.113	0.0449	0.242	12200
05440000	1	No	No	1970	5870	--	274	1.85	0.0459	0.663	6610
05440000	1	No	No	1971	14200	--	662	0.462	0.0475	0.128	15500

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05440000	1	No	No	1972	9080	--	423	1.58	0.049	0.369	10000
05440000	1	No	No	1973	14800	--	690	1.78	0.0505	0.112	16100
05440000	1	No	No	1974	13000	--	606	1.18	0.052	0.166	14100
05440000	1	No	No	1975	8060	--	376	0.0239	0.0535	0.454	8900
05440000	1	No	No	1976	9520	--	444	1.26	0.055	0.344	10400
05440000	1	No	No	1977	1340	E	62	0.485	0.0565	0.981	1600
05440000	1	No	No	1978	13000	--	606	1.8	0.0581	0.169	14100
05440000	1	No	No	1979	16700	--	779	0.305	0.0596	0.0784	18000
05440000	1	No	No	1980	5040	--	235	0.374	0.0611	0.753	5610
05440000	1	No	No	1981	3760	E	175	1.97	0.0621	0.857	4230
05440000	1	No	No	1982	7990	--	372	0.296	0.0631	0.468	8740
05440000	1	No	No	1983	11300	--	527	1.62	0.0642	0.242	12200
05440000	1	No	No	1984	8820	--	411	0.683	0.0652	0.399	9600
05440000	1	No	No	1985	7970	--	372	1.27	0.0662	0.472	8690
05440000	1	No	No	1986	7890	--	368	0.135	0.0672	0.48	8590
05440000	1	No	No	1987	8720	--	407	2.47	0.0683	0.409	9460
05440000	1	No	No	1988	7580	--	353	0.221	0.0693	0.511	8240
05440000	1	No	No	1989	5570	--	260	1.03	0.0703	0.709	6100
05440000	1	No	No	1990	5240	--	244	0.932	0.0713	0.741	5750
05440000	1	No	No	1991	6170	--	288	1.07	0.0734	0.654	6710
05440000	1	No	No	1992	2710	E	126	0.626	0.0755	0.928	3040
05440000	1	No	No	1993	11400	--	531	0.814	0.0775	0.244	12100
05440000	1	No	No	1994	17100	--	797	0.997	0.0796	0.0768	18100
05440000	1	No	No	1995	4260	--	199	1.23	0.0817	0.828	4650
05440000	1	No	No	1996	24200	--	1128	2.88	0.0838	0.0278	25400
05440000	1	No	No	1997	17400	--	811	1.85	0.0858	0.0742	18300
05440000	1	No	No	1998	5480	--	255	0.922	0.0879	0.729	5880
05440000	1	No	No	1999	16300	--	760	1.46	0.09	0.092	17100
05440000	1	No	No	2000	11300	--	527	1.67	0.092	0.259	11900
05440000	1	No	No	2001	8810	--	411	0.683	0.0972	0.424	9270
05440000	1	No	No	2002	15600	--	727	2.43	0.102	0.11	16200
05440000	1	No	No	2003	2360	E	110	0.368	0.108	0.95	2520
05440000	1	No	No	2004	8420	--	393	1.44	0.113	0.47	8710
05440000	1	No	No	2005	4630	--	216	0.653	0.118	0.816	4800
05440000	1	No	No	2006	2970	E	138	0.798	0.123	0.927	3070

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05440000	1	No	No	2007	14000	--	653	1.51	0.128	0.165	14200
05440000	1	No	No	2008	10300	--	480	0.465	0.133	0.345	10400
05440000	1	No	No	2009	14400	--	671	1.02	0.139	0.157	14500
05440500	1	Yes	Yes	1940	640	2	96	0.687	0.00779	0.945	656
05440500	1	Yes	Yes	1941	2360	--	353	0.583	0.00782	0.463	2400
05440500	1	Yes	Yes	1942	1100	--	164	0.615	0.00786	0.852	1120
05440500	1	Yes	Yes	1943	3450	--	516	1.08	0.00789	0.222	3490
05440500	1	Yes	Yes	1944	2370	--	354	1.6	0.00792	0.46	2410
05440500	1	Yes	Yes	1945	2520	--	377	1.26	0.00795	0.417	2560
05440500	1	Yes	Yes	1946	4750	--	710	0.654	0.00799	0.0905	4810
05440500	1	Yes	Yes	1947	795	--	119	1.36	0.00802	0.921	813
05440500	1	Yes	Yes	1948	4390	--	656	1.81	0.00805	0.117	4440
05440500	1	Yes	Yes	1949	2620	--	392	0.289	0.00809	0.391	2660
05440500	1	Yes	Yes	1950	2820	--	421	0.0146	0.00812	0.346	2860
05440500	1	Yes	Yes	1951	6100	D	912	3.34	0.00831	0.0453	6170
05440500	1	Yes	Yes	1952	4030	--	602	2.57	0.0085	0.152	4080
05440500	1	Yes	Yes	1953	770	E	115	0.342	0.00869	0.926	787
05440500	1	Yes	Yes	1954	620	E	93	1.74	0.00888	0.949	634
05440500	1	Yes	Yes	1955	6100	--	912	4.73	0.00907	0.0454	6160
05440500	1	Yes	Yes	1956	3050	--	456	0.667	0.00925	0.298	3090
05440500	1	Yes	Yes	1957	1450	--	217	0.352	0.00944	0.759	1470
05440500	1	Yes	Yes	1958	2490	--	372	1.71	0.00963	0.427	2520
05440500	1	Yes	Yes	1959	3610	2	540	0.352	0.00982	0.197	3650
05440500	1	Yes	Yes	1960	2630	--	393	0.705	0.01	0.39	2660
05440500	1	Yes	Yes	1961	267	E	40	0.999	0.0102	1	274
05440500	1	Yes	Yes	1962	3370	--	504	0.471	0.0104	0.238	3410
05440500	1	Yes	Yes	1963	978	E	146	0.147	0.0105	0.884	994
05440500	1	Yes	Yes	1964	298	E	45	1.09	0.0107	0.989	305
05440500	1	Yes	Yes	1965	1800	2	269	0.0448	0.0109	0.649	1820
05440500	1	Yes	Yes	1966	4040	E	604	0.699	0.011	0.152	4080
05440500	1	Yes	Yes	1967	612	E	91	1.11	0.0112	0.951	623
05440500	1	Yes	Yes	1968	1650	E	247	1.14	0.0114	0.697	1670
05440500	1	Yes	Yes	1969	3550	--	531	0.152	0.0116	0.207	3580
05440500	1	Yes	Yes	1970	1870	--	279	1.86	0.0117	0.629	1890
05440500	1	Yes	Yes	1971	3720	--	556	0.465	0.0122	0.186	3750

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05440500	1	Yes	Yes	1972	4700	--	702	1.56	0.0126	0.0943	4740
05440500	1	Yes	Yes	1973	5570	--	832	2.3	0.013	0.0594	5610
05440500	1	Yes	Yes	1974	5400	--	807	1.74	0.0135	0.0646	5440
05440500	1	Yes	Yes	1975	3200	--	478	0.00847	0.0139	0.272	3220
05440500	1	Yes	Yes	1976	2670	--	399	1.43	0.0143	0.383	2690
05440500	1	Yes	Yes	1977	1330	--	199	0.691	0.0148	0.794	1340
05440500	1	Yes	Yes	1978	3190	--	477	1.19	0.0152	0.274	3210
05440500	1	Yes	Yes	1979	3900	--	583	0.402	0.0156	0.168	3920
05440500	1	Yes	Yes	1980	2830	--	423	1.12	0.016	0.349	2850
05442000	1	Yes	Yes	1940	800	2	209	0.796	0.0256	0.78	850
05442000	1	Yes	Yes	1941	1100	--	288	0.755	0.0263	0.622	1160
05442000	1	Yes	Yes	1942	692	--	181	1.31	0.027	0.832	736
05442000	1	Yes	Yes	1943	1380	--	361	1.12	0.0277	0.461	1450
05442000	1	Yes	Yes	1944	1280	--	335	1.72	0.0284	0.516	1340
05442000	1	Yes	Yes	1945	889	--	233	1.98	0.0291	0.738	938
05442000	1	Yes	Yes	1946	2030	--	532	0.652	0.0298	0.217	2110
05442000	1	Yes	Yes	1947	889	--	233	1.28	0.0305	0.739	936
05442000	1	Yes	Yes	1948	1480	--	388	1.83	0.0311	0.414	1550
05442000	1	Yes	Yes	1949	1600	--	419	0.00166	0.0318	0.365	1670
05442000	1	Yes	Yes	1950	1330	--	348	0.143	0.0325	0.491	1390
05442000	1	Yes	Yes	1951	2630	D	689	0.575	0.033	0.107	2720
05446950	1	Yes	Yes	1961	33	--	115	0.59	0	0.925	33
05446950	1	Yes	Yes	1962	31	--	108	1.03	0	0.932	31
05446950	1	Yes	Yes	1963	113	--	392	0.44	0	0.384	113
05446950	1	Yes	Yes	1964	34	--	118	1.09	0	0.92	34
05446950	1	Yes	Yes	1965	47	--	163	0.863	0	0.851	47
05446950	1	Yes	Yes	1966	36	--	125	1.47	0	0.91	36
05446950	1	Yes	Yes	1967	493	--	1712	0.808	0	0.00774	493
05446950	1	Yes	Yes	1968	37	--	129	0.284	0	0.906	37
05446950	1	Yes	Yes	1969	39	--	135	0.166	0	0.896	39
05446950	1	Yes	Yes	1970	348	--	1209	1.53	0	0.0183	348
05446950	1	Yes	Yes	1971	135	--	469	0.335	0	0.275	135
05446950	1	Yes	Yes	1972	280	--	972	1.17	0	0.0366	280
05446950	1	Yes	Yes	1973	244	--	847	1.69	0	0.0547	244
05446950	1	Yes	Yes	1974	227	--	788	1.8	0	0.0665	227

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05446950	1	Yes	Yes	1975	73	--	254	0.854	0	0.674	73
05446950	1	Yes	Yes	1976	51	--	177	0.00212	0	0.828	51
05447000	1	Yes	Yes	1940	2030	--	250	0.532	0.0052	0.685	2040
05447000	1	Yes	Yes	1941	2490	--	307	0.577	0.00522	0.563	2510
05447000	1	Yes	Yes	1942	2230	--	275	1.61	0.00525	0.634	2240
05447000	1	Yes	Yes	1943	2680	--	330	0.678	0.00527	0.507	2700
05447000	1	Yes	Yes	1944	2820	--	348	1.38	0.00529	0.471	2840
05447000	1	Yes	Yes	1945	2100	--	259	1.02	0.00531	0.666	2110
05447000	1	Yes	Yes	1946	3960	--	488	0.634	0.00533	0.254	3980
05447000	1	Yes	Yes	1947	2020	--	249	0.966	0.00535	0.688	2030
05447000	1	Yes	Yes	1948	3030	--	374	1.83	0.00537	0.421	3050
05447000	1	Yes	Yes	1949	2890	--	356	0.17	0.00539	0.454	2910
05447000	1	Yes	Yes	1950	2890	--	356	1.39	0.00542	0.454	2910
05447000	1	Yes	Yes	1951	2770	--	342	0.35	0.00545	0.483	2790
05447000	1	Yes	Yes	1952	2560	--	316	0.487	0.00547	0.542	2570
05447000	1	Yes	Yes	1953	615	--	76	0.89	0.0055	0.962	621
05447000	1	Yes	Yes	1954	1350	--	166	1.58	0.00553	0.848	1360
05447000	1	Yes	Yes	1955	6120	--	755	3.2	0.00556	0.0745	6150
05447000	1	Yes	Yes	1956	1790	--	221	0.478	0.00559	0.75	1800
05447000	1	Yes	Yes	1957	593	--	73	0.417	0.00562	0.965	598
05447000	1	Yes	Yes	1958	1910	--	235	1.31	0.00565	0.717	1920
05447000	1	Yes	Yes	1959	3740	--	461	1.71	0.00568	0.289	3760
05447000	1	Yes	Yes	1960	4240	--	523	0.526	0.00571	0.213	4260
05447000	1	Yes	Yes	1961	480	--	59	2.41	0.00573	0.979	485
05447000	1	Yes	Yes	1962	3280	--	404	0.344	0.00575	0.37	3300
05447000	1	Yes	Yes	1963	2220	--	274	0.398	0.00577	0.636	2230
05447000	1	Yes	Yes	1964	1030	--	127	1.12	0.00579	0.909	1040
05447000	1	Yes	Yes	1965	3290	--	406	0.9	0.00581	0.368	3310
05447000	1	Yes	Yes	1966	4600	--	567	1.85	0.00583	0.176	4620
05447000	1	Yes	Yes	1967	2530	--	312	1.35	0.00585	0.551	2540
05447000	1	Yes	No	1968	502	4, B	62	0.00387	0.00588	0.976	507
05447000	1	Yes	Yes	1969	4110	--	507	0.184	0.0059	0.232	4130
05447000	1	Yes	Yes	1970	4130	--	509	1.67	0.00592	0.229	4150
05447000	1	Yes	Yes	1971	3600	--	444	0.374	0.00609	0.312	3620
05447000	1	Yes	Yes	1972	4260	--	525	1.45	0.00626	0.21	4280

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05447000	1	Yes	Yes	1973	4460	--	550	1.4	0.00643	0.188	4480
05447000	1	Yes	Yes	1974	5010	--	618	1.87	0.00659	0.141	5030
05447000	1	Yes	Yes	1975	2740	--	338	0.00387	0.00676	0.492	2750
05447000	1	Yes	Yes	1976	2410	--	297	1.27	0.00693	0.589	2420
05447000	1	Yes	Yes	1978	4740	--	584	2	0.00727	0.164	4750
05447000	1	Yes	Yes	1979	5750	--	709	0.323	0.00744	0.0907	5770
05447000	1	Yes	Yes	1980	950	2	117	0.321	0.00761	0.923	955
05447000	1	Yes	Yes	1981	7600	--	937	1.91	0.00772	0.0418	7620
05447000	1	Yes	Yes	1982	3530	--	435	1.59	0.00782	0.326	3540
05447050	1	Yes	Yes	1959	148	--	354	0.738	0.00312	0.456	148
05447050	1	Yes	Yes	1960	135	--	323	1.22	0.00312	0.522	135
05447050	1	Yes	Yes	1961	23	--	55	2.26	0.00312	0.982	23
05447050	1	Yes	Yes	1962	121	--	290	1.02	0.00312	0.604	121
05447050	1	Yes	Yes	1963	61	--	146	0.467	0.00312	0.882	61
05447050	1	Yes	Yes	1964	150	--	359	1.09	0.00312	0.447	150
05447050	1	Yes	Yes	1965	120	--	287	0.807	0.00312	0.608	120
05447050	1	Yes	Yes	1966	228	--	546	1.47	0.00312	0.19	228
05447050	1	Yes	Yes	1967	115	--	275	0.573	0.00312	0.632	115
05447050	1	Yes	Yes	1968	90	--	215	1.52	0.00312	0.758	90
05447050	1	Yes	Yes	1969	431	--	1032	1.39	0.00312	0.0299	431
05447050	1	Yes	Yes	1970	115	--	275	1.67	0.00312	0.632	115
05447050	1	Yes	Yes	1971	278	--	665	0.388	0.00312	0.11	278
05447050	1	Yes	Yes	1972	296	--	709	0.136	0.00312	0.0899	296
05447500	1	Yes	Yes	1940	3750	--	219	0.531	0.0077	0.753	3780
05447500	1	Yes	Yes	1941	4350	--	254	1.3	0.00779	0.678	4380
05447500	1	Yes	Yes	1942	5240	--	306	1.08	0.00789	0.567	5270
05447500	1	Yes	Yes	1943	5890	--	344	1.71	0.00799	0.48	5930
05447500	1	Yes	Yes	1944	6730	--	393	1.55	0.00808	0.388	6770
05447500	1	Yes	Yes	1945	4930	--	288	1.53	0.00818	0.61	4960
05447500	1	Yes	Yes	1946	8050	--	471	0.704	0.00828	0.278	8090
05447500	1	Yes	Yes	1947	6400	--	374	2.23	0.00837	0.422	6440
05447500	1	Yes	Yes	1948	6670	--	390	1.19	0.00847	0.394	6710
05447500	1	Yes	Yes	1949	6310	--	369	0.0608	0.00857	0.432	6340
05447500	1	Yes	Yes	1950	5590	--	327	1.69	0.00866	0.518	5620
05447500	1	Yes	Yes	1951	6940	--	406	2.12	0.00875	0.369	6970

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05447500	1	Yes	Yes	1952	5230	--	306	0.587	0.00884	0.569	5260
05447500	1	Yes	Yes	1953	3970	--	232	1.52	0.00894	0.726	3990
05447500	1	Yes	Yes	1954	2630	--	154	1.89	0.00903	0.872	2650
05447500	1	Yes	Yes	1955	8900	--	520	3.1	0.00912	0.218	8940
05447500	1	Yes	Yes	1956	3790	--	222	0.489	0.00921	0.75	3810
05447500	1	Yes	Yes	1957	1340	--	78	0.656	0.0093	0.961	1350
05447500	1	Yes	Yes	1958	3320	--	194	1.15	0.00939	0.801	3340
05447500	1	Yes	Yes	1959	7100	--	415	0.373	0.00948	0.356	7130
05447500	1	Yes	Yes	1960	8500	--	497	0.383	0.00957	0.246	8530
05447500	1	Yes	Yes	1961	4690	--	274	2.43	0.00967	0.638	4710
05447500	1	Yes	Yes	1962	7100	--	415	0.324	0.00978	0.356	7130
05447500	1	Yes	Yes	1963	3600	2	210	0.539	0.00988	0.77	3620
05447500	1	Yes	Yes	1964	2380	--	139	1.47	0.00998	0.894	2390
05447500	1	Yes	Yes	1965	5910	--	346	1.06	0.0101	0.479	5930
05447500	1	Yes	Yes	1966	5240	--	306	1.54	0.0102	0.569	5260
05447500	1	Yes	Yes	1967	4500	--	263	0.824	0.0103	0.661	4520
05447500	1	Yes	Yes	1968	1690	--	99	0.689	0.0104	0.942	1700
05447500	1	Yes	Yes	1969	8000	2	468	0.292	0.0105	0.283	8020
05447500	1	Yes	Yes	1970	9820	--	574	1.81	0.0106	0.172	9850
05447500	1	Yes	Yes	1971	9000	2	526	0.525	0.0107	0.212	9020
05447500	1	Yes	Yes	1972	7600	--	444	1.38	0.0109	0.315	7620
05447500	1	Yes	Yes	1973	10900	--	637	1.91	0.011	0.13	10900
05447500	1	Yes	Yes	1974	12100	--	707	1.65	0.0112	0.0921	12100
05447500	1	Yes	Yes	1975	6160	--	360	0.00186	0.0113	0.451	6170
05447500	1	Yes	Yes	1976	6740	--	394	1.31	0.0114	0.389	6750
05447500	1	Yes	Yes	1977	2300	--	134	1.04	0.0116	0.901	2310
05447500	1	Yes	Yes	1978	8100	--	474	1.57	0.0117	0.276	8110
05447500	1	Yes	Yes	1979	12000	--	702	0.372	0.0119	0.0945	12000
05447500	1	Yes	Yes	1980	2500	--	146	0.921	0.012	0.884	2510
05447500	1	Yes	Yes	1981	7870	--	460	2.19	0.0121	0.294	7880
05447500	1	Yes	Yes	1982	7910	--	462	1.2	0.0121	0.291	7920
05447500	1	Yes	Yes	1983	7870	--	460	1.36	0.0122	0.294	7880
05447500	1	Yes	Yes	1984	4450	--	260	0.678	0.0122	0.668	4460
05447500	1	Yes	Yes	1985	8060	--	471	1.07	0.0123	0.28	8070
05447500	1	Yes	Yes	1986	8560	--	500	1.51	0.0123	0.243	8570

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05447500	1	Yes	Yes	1987	10100	--	591	2.1	0.0124	0.162	10100
05447500	1	Yes	Yes	1988	6430	--	376	0.625	0.0124	0.422	6440
05447500	1	Yes	Yes	1989	3380	--	198	1.17	0.0125	0.795	3380
05447500	1	Yes	Yes	1990	10100	--	591	2.05	0.0126	0.162	10100
05447500	1	Yes	Yes	1991	6710	--	392	0.848	0.0126	0.393	6720
05447500	1	Yes	Yes	1992	5550	--	324	1.97	0.0127	0.527	5550
05447500	1	Yes	Yes	1993	9600	--	561	1.89	0.0128	0.183	9610
05447500	1	Yes	Yes	1994	7370	--	431	0.775	0.0129	0.335	7370
05447500	1	Yes	Yes	1995	7050	--	412	1.34	0.013	0.362	7050
05447500	1	Yes	Yes	1996	8180	--	478	0.98	0.0131	0.271	8180
05447500	1	Yes	Yes	1997	10300	--	602	2.23	0.0132	0.154	10300
05447500	1	Yes	Yes	1998	4800	--	281	0.926	0.0133	0.628	4800
05447500	1	Yes	Yes	1999	10300	--	602	2.49	0.0133	0.154	10300
05447500	1	Yes	Yes	2000	4480	--	262	0.788	0.0134	0.665	4480
05447500	1	Yes	Yes	2001	6520	--	381	0.744	0.0134	0.413	6520
05447500	1	Yes	Yes	2002	9520	--	557	2.22	0.0134	0.186	9520
05447500	1	Yes	Yes	2003	5340	--	312	1.08	0.0135	0.557	5340
05447500	1	Yes	Yes	2004	5840	--	341	1.14	0.0135	0.49	5840
05447500	1	Yes	Yes	2005	2490	E	146	0.562	0.0135	0.886	2490
05447500	1	Yes	Yes	2006	996	E	58	0.783	0.0135	0.98	996
05447500	1	Yes	Yes	2007	7610	--	445	0.519	0.0135	0.316	7610
05447500	1	Yes	Yes	2008	9110	--	533	3.89	0.0135	0.206	9110
05447500	1	Yes	Yes	2009	9930	--	581	0.765	0.0135	0.169	9930
05517500	1	Yes	Yes	1949	2980	--	224	0.195	0.0238	0.754	3240
05517500	1	Yes	Yes	1950	5200	--	390	0.499	0.0244	0.404	5580
05517500	1	Yes	Yes	1951	3230	--	242	0.0326	0.0254	0.715	3500
05517500	1	Yes	Yes	1952	3380	--	254	0.178	0.0264	0.692	3650
05517500	1	Yes	Yes	1953	2190	--	164	0.159	0.0273	0.861	2400
05517500	1	Yes	Yes	1954	3100	--	233	0.402	0.0283	0.738	3350
05517500	1	Yes	Yes	1955	5300	--	398	0.00239	0.0293	0.395	5650
05517500	1	Yes	Yes	1956	3800	--	285	0.18	0.0303	0.63	4080
05517500	1	Yes	Yes	1957	3100	--	233	0.633	0.0312	0.74	3340
05517500	1	Yes	Yes	1958	2730	--	205	0.361	0.0322	0.792	2950
05517500	1	Yes	Yes	1959	3850	--	289	0.0818	0.0332	0.624	4110
05517500	1	Yes	Yes	1960	3660	--	275	0.0277	0.0341	0.653	3910

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05517500	1	Yes	Yes	1961	3950	--	296	0.192	0.0349	0.611	4210
05517500	1	Yes	Yes	1962	3900	--	293	0.0101	0.0357	0.619	4150
05517500	1	Yes	Yes	1963	2910	--	218	0.259	0.0365	0.769	3120
05517500	1	Yes	Yes	1964	1700	--	128	0.288	0.0373	0.917	1850
05517500	1	Yes	Yes	1965	3000	--	225	0.0389	0.0382	0.758	3210
05517500	1	Yes	Yes	1966	3360	--	252	0.059	0.039	0.703	3580
05517500	1	Yes	Yes	1967	3610	--	271	0.0817	0.0398	0.664	3830
05517500	1	Yes	Yes	1968	4120	--	309	0.0457	0.0406	0.588	4360
05517500	1	Yes	Yes	1969	3800	--	285	0.224	0.0414	0.637	4020
05517500	1	Yes	Yes	1970	3450	--	259	0.0942	0.0422	0.691	3660
05517500	1	Yes	Yes	1971	2590	--	194	0.38	0.0437	0.817	2760
05517500	1	Yes	Yes	1972	3140	--	236	0.344	0.0452	0.742	3320
05517500	1	Yes	Yes	1973	3720	--	279	0.439	0.0467	0.652	3920
05517500	1	Yes	Yes	1974	3530	--	265	0.121	0.0482	0.683	3710
05517500	1	Yes	Yes	1975	3510	--	263	0.301	0.0497	0.687	3690
05517500	1	Yes	Yes	1976	4310	--	323	0.741	0.0512	0.563	4500
05517500	1	Yes	Yes	1977	3670	--	275	0.484	0.0527	0.664	3840
05517500	1	Yes	Yes	1978	4540	--	341	0.296	0.0542	0.526	4720
05517500	1	Yes	Yes	1979	4550	--	341	0.149	0.0557	0.525	4730
05517500	1	Yes	Yes	1980	3170	--	238	0.119	0.0572	0.745	3300
05517500	1	Yes	Yes	1981	4890	--	367	0.205	0.0581	0.474	5060
05517500	1	Yes	Yes	1982	5870	--	441	0.54	0.059	0.351	6060
05517500	1	Yes	Yes	1983	4480	--	336	0.205	0.0599	0.541	4630
05517500	1	Yes	Yes	1984	3320	--	249	0.251	0.0608	0.724	3440
05517500	1	Yes	Yes	1985	5370	--	403	0.485	0.0617	0.41	5530
05517500	1	Yes	Yes	1986	3190	--	239	0.223	0.0626	0.745	3300
05517500	1	Yes	Yes	1987	3530	--	265	0.169	0.0636	0.693	3640
05517500	1	Yes	Yes	1988	3390	--	254	0.0698	0.0645	0.715	3500
05517500	1	Yes	Yes	1989	3450	--	259	0.0599	0.0654	0.707	3560
05517500	1	Yes	Yes	1990	4250	--	319	0.391	0.0663	0.587	4370
05517500	1	Yes	Yes	1991	4930	--	370	0.179	0.068	0.476	5050
05517500	1	Yes	Yes	1992	2270	--	170	0.134	0.0696	0.869	2340
05517500	1	Yes	Yes	1993	4820	--	362	0.411	0.0713	0.495	4920
05517500	1	Yes	Yes	1994	4310	--	323	0.0611	0.073	0.582	4390
05517500	1	Yes	Yes	1995	3550	--	266	0.103	0.0747	0.698	3620

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05517500	1	Yes	Yes	1996	4650	--	349	0.0794	0.0764	0.527	4720
05517500	1	Yes	Yes	1997	4500	--	338	0.375	0.0781	0.554	4560
05517500	1	Yes	Yes	1998	4360	--	327	0.266	0.0797	0.579	4410
05517500	1	Yes	Yes	1999	4140	--	311	0.196	0.0814	0.615	4180
05517500	1	Yes	Yes	2000	3310	--	248	0.815	0.0831	0.74	3340
05517500	1	Yes	Yes	2001	3920	--	294	1.53	0.0837	0.648	3950
05517500	1	Yes	Yes	2002	4180	--	314	0.362	0.0844	0.612	4200
05517500	1	Yes	Yes	2003	2950	--	221	0.336	0.085	0.789	2970
05517500	1	Yes	Yes	2004	2960	--	222	0.037	0.0856	0.788	2980
05517500	1	Yes	Yes	2005	4520	--	339	0.0176	0.0863	0.557	4540
05517500	1	Yes	Yes	2006	2980	--	224	0.106	0.0869	0.786	2990
05517500	1	Yes	Yes	2007	4170	--	313	0.28	0.0875	0.615	4180
05517500	1	Yes	Yes	2008	5420	--	407	0.0747	0.0881	0.424	5430
05517500	1	Yes	Yes	2009	5510	--	414	0.102	0.0888	0.413	5510
05517890	1	Yes	Yes	1968	194	--	123	1.86	0.0216	0.919	280
05517890	1	Yes	Yes	1969	300	2	191	0.507	0.0224	0.813	408
05517890	1	Yes	Yes	1970	444	--	282	0.645	0.0233	0.631	578
05517890	1	Yes	No	1971	290	1, 8	184	0.528	0.027	0.827	394
05517890	1	Yes	Yes	1972	466	--	296	0.742	0.0307	0.609	600
05517890	1	Yes	Yes	1973	744	--	473	1.4	0.0344	0.291	919
05517890	1	Yes	Yes	1974	347	--	220	0.9	0.0382	0.766	456
05517890	1	Yes	Yes	1975	576	--	366	1.38	0.0419	0.464	723
05517890	1	Yes	Yes	1976	777	--	494	1.02	0.0456	0.271	946
05517890	1	Yes	Yes	1977	220	--	140	0.791	0.0493	0.905	300
05517890	1	Yes	Yes	1978	498	--	316	0.35	0.053	0.582	623
05517890	1	Yes	Yes	1979	650	--	413	0.837	0.0567	0.39	796
05517890	1	Yes	Yes	1980	252	--	160	0.339	0.0604	0.881	333
05517890	1	Yes	Yes	1981	761	--	483	2.34	0.0622	0.294	915
05517890	1	Yes	Yes	1982	751	--	477	0.354	0.0639	0.303	902
05517890	1	Yes	Yes	1983	763	--	485	2.73	0.0657	0.295	914
05517890	1	Yes	Yes	1984	531	--	337	0.91	0.0674	0.545	651
05517890	1	Yes	Yes	1985	795	--	505	0.765	0.0692	0.271	946
05517890	1	Yes	Yes	1986	1070	--	680	1.33	0.0709	0.126	1260
05517890	1	Yes	Yes	1987	661	--	420	1.03	0.0727	0.391	796
05517890	1	Yes	Yes	1988	424	--	269	0.855	0.0744	0.692	524

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05517890	1	Yes	Yes	1989	916	--	582	1.98	0.0762	0.192	1070
05517890	1	Yes	Yes	1990	1070	--	680	2.03	0.0779	0.129	1250
05517890	1	Yes	Yes	1991	1160	--	737	2.13	0.0866	0.0993	1340
05517890	1	Yes	Yes	1992	236	E	150	0.677	0.0952	0.905	300
05517890	1	Yes	Yes	1993	779	--	495	1.18	0.104	0.305	899
05517890	1	Yes	Yes	1994	481	--	306	1.32	0.113	0.646	565
05517890	1	Yes	Yes	1995	426	--	271	0.866	0.121	0.721	499
05517890	1	Yes	Yes	1996	991	--	630	3.53	0.13	0.181	1100
05517890	1	Yes	Yes	1997	1030	--	654	1.04	0.139	0.168	1140
05517890	1	Yes	Yes	1998	593	--	377	0.705	0.147	0.53	664
05517890	1	Yes	Yes	1999	643	--	408	0.846	0.156	0.476	711
05517890	1	Yes	Yes	2000	700	--	445	1.37	0.165	0.42	765
05517890	1	Yes	Yes	2001	548	--	348	0.866	0.173	0.611	598
05517890	1	Yes	Yes	2002	585	--	372	1.23	0.181	0.571	631
05517890	1	Yes	Yes	2003	808	--	513	1.3	0.189	0.339	857
05518000	1	No	No	1940	3600	--	231	0.447	0.0164	0.735	4010
05518000	1	No	No	1941	2150	--	138	0.27	0.017	0.898	2450
05518000	1	No	No	1942	4260	--	273	0.161	0.0176	0.646	4710
05518000	1	No	No	1943	6350	--	407	0.533	0.0182	0.374	6930
05518000	1	No	No	1944	4820	--	309	0.685	0.0188	0.571	5300
05518000	1	No	No	1945	3550	--	227	0.0551	0.0194	0.744	3940
05518000	1	No	No	1946	3200	--	205	0.68	0.02	0.785	3570
05518000	1	No	No	1947	3970	--	254	0.592	0.0206	0.687	4380
05518000	1	No	No	1948	4420	--	283	0.31	0.0212	0.628	4860
05518000	1	No	No	1949	3500	--	224	0.214	0.0218	0.752	3880
05518000	1	No	No	1950	5910	--	378	0.0193	0.0224	0.425	6440
05518000	1	No	No	1951	3890	--	249	0.341	0.0233	0.7	4280
05518000	1	No	No	1952	4200	--	269	0.923	0.0242	0.658	4610
05518000	1	No	No	1953	2650	--	170	0.179	0.0251	0.851	2960
05518000	1	No	No	1954	3620	--	232	0.379	0.026	0.738	3990
05518000	1	No	No	1955	5040	--	323	0.0565	0.0269	0.544	5480
05518000	1	No	No	1956	4540	--	291	0.702	0.0278	0.618	4950
05518000	1	No	No	1957	4240	--	271	0.762	0.0287	0.656	4630
05518000	1	No	No	1958	3480	--	223	1.23	0.0296	0.758	3820
05518000	1	No	No	1959	5100	--	327	0.0816	0.0305	0.538	5530

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05518000	1	No	No	1960	4160	--	266	0.0252	0.0314	0.668	4530
05518000	1	No	No	1961	4640	--	297	0.179	0.0322	0.608	5030
05518000	1	No	No	1962	4840	--	310	0.439	0.033	0.58	5240
05518000	1	No	No	1963	3410	--	218	0.139	0.0338	0.768	3730
05518000	1	No	No	1964	2200	2	141	0.286	0.0345	0.899	2440
05518000	1	No	No	1965	3760	--	241	0.741	0.0353	0.725	4090
05518000	1	No	No	1966	4270	--	273	0.257	0.0361	0.657	4620
05518000	1	No	No	1967	4770	--	305	0.431	0.0369	0.595	5140
05518000	1	No	No	1968	5020	--	321	0.0527	0.0376	0.556	5400
05518000	1	No	No	1969	4770	--	305	0.238	0.0384	0.596	5130
05518000	1	No	No	1970	4030	--	258	1.57	0.0392	0.691	4350
05518000	1	No	No	1971	3590	--	230	0.398	0.0411	0.752	3880
05518000	1	No	No	1972	4220	--	270	0.37	0.0429	0.668	4530
05518000	1	No	No	1973	5060	--	324	0.382	0.0448	0.556	5400
05518000	1	No	No	1974	4700	--	301	0.865	0.0467	0.611	5010
05518000	1	No	No	1975	4720	--	302	0.525	0.0486	0.609	5020
05518000	1	No	No	1976	5200	--	333	0.823	0.0504	0.54	5510
05518000	1	No	No	1977	4250	--	272	0.47	0.0523	0.671	4510
05518000	1	No	No	1978	5490	--	352	0.97	0.0542	0.502	5790
05518000	1	No	No	1979	5420	--	347	0.834	0.056	0.513	5700
05518000	1	No	No	1980	4030	--	258	0.134	0.0579	0.704	4250
05518000	1	No	No	1981	6200	--	397	0.192	0.0589	0.419	6490
05518000	1	No	No	1982	7650	--	490	0.225	0.06	0.285	7970
05518000	1	No	No	1983	5120	--	328	0.414	0.061	0.561	5360
05518000	1	No	No	1984	4290	--	275	0.226	0.0621	0.672	4500
05518000	1	No	No	1985	6340	--	406	0.0167	0.0631	0.406	6610
05518000	1	No	No	1986	4700	--	301	0.51	0.0642	0.622	4910
05518000	1	No	No	1987	4450	--	285	0.203	0.0652	0.654	4650
05518000	1	No	No	1988	4300	--	275	0.381	0.0662	0.674	4490
05518000	1	No	No	1989	4830	--	309	0.726	0.0673	0.609	5030
05518000	1	No	No	1990	5150	--	330	0.44	0.0683	0.563	5350
05518000	1	No	No	1991	5660	--	362	0.229	0.0705	0.493	5860
05518000	1	No	No	1992	2820	--	181	0.385	0.0726	0.852	2940
05518000	1	No	No	1993	5580	--	357	0.346	0.0748	0.507	5750
05518000	1	No	No	1994	5480	--	351	0.143	0.0769	0.523	5630

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05518000	1	No	No	1995	4430	--	284	0.197	0.0791	0.666	4550
05518000	1	No	No	1996	5480	--	351	0.242	0.0812	0.527	5600
05518000	1	No	No	1997	5850	--	375	0.334	0.0834	0.48	5970
05518000	1	No	No	1998	5220	--	334	0.351	0.0855	0.568	5310
05518000	1	No	No	1999	5160	--	330	0.215	0.0877	0.579	5240
05518000	1	No	No	2000	4480	--	287	0.624	0.0898	0.667	4540
05518000	1	No	No	2001	4600	--	295	1.28	0.091	0.652	4660
05518000	1	No	No	2002	5110	--	327	0.282	0.0921	0.59	5160
05518000	1	No	No	2003	4510	--	289	0.532	0.0932	0.665	4550
05518000	1	No	No	2004	3570	--	229	0.027	0.0944	0.781	3600
05518000	1	No	No	2005	5570	--	357	0.411	0.0955	0.527	5610
05518000	1	No	No	2006	3500	--	224	0.0985	0.0966	0.79	3520
05518000	1	No	No	2007	5500	--	352	0.399	0.0978	0.539	5520
05518000	1	No	No	2008	6230	--	399	0.0294	0.0989	0.447	6250
05518000	1	No	No	2009	6460	--	414	0.455	0.1	0.422	6470
05519000	1	Yes	No	1949	550	1, 8	174	0.668	0.0442	0.851	657
05519000	1	Yes	No	1950	1100	1, 8	348	0.606	0.0453	0.502	1260
05519000	1	Yes	Yes	1951	841	--	266	0.345	0.047	0.68	975
05519000	1	Yes	Yes	1952	1010	--	319	1.2	0.0487	0.571	1160
05519000	1	Yes	Yes	1953	812	--	257	0.538	0.0504	0.702	939
05519000	1	Yes	Yes	1954	810	--	256	1.66	0.052	0.704	935
05519000	1	Yes	Yes	1955	953	--	301	2.81	0.0537	0.614	1090
05519000	1	Yes	Yes	1956	1000	--	316	0.42	0.0554	0.584	1140
05519000	1	Yes	Yes	1957	1110	--	351	0.623	0.0571	0.506	1260
05519000	1	Yes	Yes	1958	799	--	253	1.31	0.0588	0.715	916
05519000	1	Yes	Yes	1959	1120	--	354	0.082	0.0604	0.502	1260
05519000	1	Yes	Yes	1960	1100	--	348	1.05	0.0621	0.517	1240
05519000	1	Yes	Yes	1961	1050	--	332	0.656	0.0648	0.555	1180
05519000	1	Yes	Yes	1962	1020	--	323	0.448	0.0675	0.58	1140
05519000	1	Yes	No	1963	1000	1, 8	316	0.517	0.0702	0.597	1120
05519000	1	Yes	Yes	1964	200	--	63	0.93	0.0729	0.982	243
05519000	1	Yes	Yes	1965	978	--	309	1.24	0.0756	0.614	1090
05519000	1	Yes	Yes	1966	1100	--	348	2.62	0.0783	0.531	1220
05519000	1	Yes	Yes	1967	1030	--	326	1.2	0.081	0.584	1140
05519000	1	Yes	Yes	1968	1140	--	361	1.69	0.0837	0.508	1250

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05519000	1	Yes	Yes	1969	952	--	301	0.506	0.0863	0.637	1050
05519000	1	Yes	Yes	1970	1160	--	367	1.93	0.089	0.499	1270
05519000	1	Yes	Yes	1971	615	--	194	0.764	0.0914	0.838	685
05519000	1	Yes	Yes	1972	969	--	306	3.36	0.0938	0.632	1060
05519000	1	Yes	Yes	1973	1230	--	389	1.61	0.0962	0.463	1330
05519000	1	Yes	Yes	1974	1380	--	436	1.7	0.0986	0.384	1490
05519000	1	Yes	Yes	1975	1350	--	427	0.625	0.101	0.4	1450
05519000	1	Yes	Yes	1976	3550	--	1123	1.33	0.103	0.0296	3740
05519000	1	Yes	Yes	1977	370	2	117	0.2	0.106	0.942	412
05519000	1	Yes	Yes	1978	1630	--	515	0.766	0.108	0.282	1730
05519000	1	Yes	Yes	1979	1700	2	538	1.03	0.11	0.257	1800
05519000	1	Yes	Yes	1980	525	--	166	1.48	0.113	0.89	571
05519000	1	Yes	Yes	1981	2000	--	632	1.7	0.114	0.173	2100
05519000	1	Yes	Yes	1982	1910	--	604	0.556	0.115	0.192	2010
05519000	1	Yes	Yes	1983	2150	--	680	1.2	0.116	0.143	2250
05519000	1	Yes	Yes	1984	1350	--	427	1.43	0.117	0.412	1430
05519000	1	Yes	Yes	1985	2120	--	670	1.22	0.118	0.15	2220
05519000	1	Yes	Yes	1986	2070	--	655	1.46	0.12	0.16	2160
05519000	1	Yes	Yes	1987	1300	--	411	1.4	0.121	0.442	1370
05519000	1	Yes	Yes	1988	947	--	299	0.743	0.122	0.664	1000
05519000	1	Yes	Yes	1989	2260	--	715	2.48	0.123	0.125	2350
05519000	1	Yes	Yes	1990	1300	--	411	1.18	0.124	0.445	1360
05519000	1	Yes	Yes	1991	2460	--	778	3.39	0.128	0.0947	2550
05519000	1	Yes	Yes	1992	547	E	173	0.529	0.131	0.887	578
05519000	1	Yes	Yes	1993	1940	--	614	1.39	0.135	0.193	2000
05519000	1	Yes	Yes	1994	1750	--	553	1.73	0.138	0.256	1800
05519000	1	Yes	Yes	1995	1340	--	424	1.24	0.142	0.437	1380
05519000	1	Yes	Yes	1996	1870	--	591	3.78	0.145	0.219	1910
05519000	1	Yes	Yes	1997	2270	--	718	1.91	0.149	0.133	2310
05519000	1	Yes	Yes	1998	1950	--	617	0.586	0.152	0.198	1980
05519000	1	Yes	Yes	1999	1590	--	503	1.35	0.156	0.33	1610
05519000	1	Yes	Yes	2000	1900	--	601	2.2	0.16	0.217	1910
05519000	1	Yes	Yes	2001	1400	--	443	0.564	0.16	0.42	1410
05519500	1	Yes	Yes	1949	504	--	203	0.685	0.0312	0.794	631
05519500	1	Yes	Yes	1950	1050	--	424	1.52	0.0335	0.359	1250

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05519500	1	Yes	Yes	1951	738	--	298	0.342	0.0364	0.61	892
05519500	1	Yes	Yes	1952	584	--	236	0.918	0.0394	0.738	716
05519500	1	Yes	Yes	1954	1000	--	404	1.64	0.0453	0.397	1180
05519500	1	Yes	Yes	1955	1840	--	743	2.89	0.0482	0.0882	2100
05519500	1	Yes	Yes	1956	710	--	287	0.426	0.0512	0.641	846
05519500	1	Yes	Yes	1957	1250	--	505	2.52	0.0541	0.263	1440
05519500	1	Yes	Yes	1958	794	--	320	1.2	0.0571	0.575	935
05519500	1	Yes	Yes	1959	1200	--	484	1.24	0.06	0.292	1380
05519500	1	Yes	Yes	1960	940	--	379	1.03	0.063	0.454	1090
05519500	1	Yes	Yes	1961	880	--	355	0.894	0.0648	0.503	1020
05519500	1	Yes	Yes	1962	950	--	383	0.253	0.0666	0.45	1100
05519500	1	Yes	No	1963	360	1, 8	145	0.508	0.0684	0.903	442
05519500	1	Yes	Yes	1964	159	--	64	0.943	0.0701	0.981	207
05519500	1	Yes	Yes	1965	1000	--	404	1.23	0.0719	0.417	1150
05519500	1	Yes	Yes	1966	1510	--	609	2.67	0.0737	0.172	1690
05519500	1	Yes	Yes	1967	1480	--	597	1.2	0.0755	0.181	1660
05519500	1	Yes	Yes	1968	1760	--	710	3.61	0.0773	0.111	1960
05519500	1	Yes	Yes	1969	750	2	303	0.514	0.0791	0.629	864
05519500	1	Yes	Yes	1970	1460	--	589	1.95	0.0809	0.189	1630
05519500	1	Yes	No	1971	500	1, 8	202	0.765	0.0844	0.824	586
05519500	1	Yes	Yes	1972	1670	--	674	3.62	0.0879	0.136	1850
05520500	1	No	No	1940	4860	--	210	0.0464	0.0162	0.774	5430
05520500	1	No	No	1941	2910	--	126	0.773	0.0168	0.914	3330
05520500	1	No	No	1942	6310	--	272	0.154	0.0174	0.647	6970
05520500	1	No	No	1943	8450	--	365	0.609	0.018	0.447	9250
05520500	1	No	No	1944	6950	--	300	0.82	0.0186	0.592	7640
05520500	1	No	No	1945	4940	--	213	0.504	0.0193	0.77	5490
05520500	1	No	No	1946	5460	--	236	0.283	0.0199	0.726	6040
05520500	1	No	No	1947	6260	--	270	0.587	0.0205	0.653	6890
05520500	1	No	No	1948	6260	--	270	0.345	0.0211	0.653	6880
05520500	1	No	No	1949	5060	--	218	0.215	0.0217	0.762	5610
05520500	1	No	No	1950	10100	--	436	1.01	0.0223	0.334	10900
05520500	1	No	No	1951	8400	2	363	0.317	0.0232	0.455	9140
05520500	1	No	No	1952	6960	--	300	1.23	0.0242	0.596	7600
05520500	1	No	No	1953	4560	--	197	0.436	0.0251	0.803	5050

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05520500	1	No	No	1954	4960	--	214	1.7	0.0261	0.772	5470
05520500	1	No	No	1955	5880	--	254	0.809	0.027	0.692	6430
05520500	1	No	No	1956	5460	--	236	0.683	0.028	0.731	5980
05520500	1	No	No	1957	6960	--	300	1.96	0.0289	0.6	7560
05520500	1	No	No	1958	5670	--	245	1.26	0.0299	0.713	6190
05520500	1	No	No	1959	7100	2	306	0.0729	0.0308	0.587	7690
05520500	1	No	No	1960	6520	--	281	1.12	0.0318	0.638	7070
05520500	1	No	No	1961	6740	--	291	1.13	0.0326	0.62	7300
05520500	1	No	No	1962	7180	--	310	0.446	0.0335	0.58	7750
05520500	1	No	No	1963	6500	2	281	0.219	0.0344	0.641	7030
05520500	1	No	No	1964	2410	--	104	0.0981	0.0352	0.942	2700
05520500	1	No	No	1965	5670	--	245	0.911	0.0361	0.717	6150
05520500	1	No	No	1966	7310	--	316	1.25	0.037	0.57	7860
05520500	1	No	No	1967	7540	--	325	1.06	0.0378	0.547	8090
05520500	1	No	No	1968	8240	--	356	1.18	0.0387	0.481	8820
05520500	1	No	No	1969	6300	2	272	0.254	0.0396	0.662	6780
05520500	1	No	No	1970	9480	--	409	1.64	0.0404	0.385	10100
05520500	1	No	No	1971	5200	2	224	0.218	0.0422	0.761	5610
05520500	1	No	No	1972	6490	--	280	1.14	0.044	0.649	6940
05520500	1	No	No	1973	8380	--	362	0.998	0.0458	0.475	8900
05520500	1	No	No	1974	10000	--	432	0.905	0.0476	0.356	10600
05520500	1	No	No	1975	8440	--	364	0.765	0.0494	0.473	8930
05520500	1	No	No	1976	11900	--	514	0.903	0.0512	0.25	12500
05520500	1	No	No	1977	4780	--	206	0.467	0.053	0.8	5100
05520500	1	No	No	1978	7760	--	335	0.931	0.0548	0.539	8170
05520500	1	No	No	1979	16000	2	691	0.867	0.0566	0.114	16600
05520500	1	No	No	1980	4800	--	207	0.147	0.0584	0.801	5080
05520500	1	No	No	1981	9760	--	421	0.946	0.0594	0.379	10200
05520500	1	No	No	1982	11000	--	475	0.573	0.0604	0.304	11400
05520500	1	No	No	1983	9840	--	425	0.341	0.0614	0.376	10300
05520500	1	No	No	1984	7200	2	311	0.216	0.0623	0.603	7520
05520500	1	No	No	1985	9450	--	408	0.612	0.0633	0.403	9830
05520500	1	No	No	1986	9080	--	392	0.609	0.0643	0.432	9440
05520500	1	No	No	1987	5780	--	250	1.03	0.0653	0.726	6040
05520500	1	No	No	1988	6400	--	276	0.456	0.0663	0.672	6670

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05520500	1	No	No	1989	8080	--	349	0.981	0.0673	0.519	8380
05520500	1	No	No	1990	7050	--	304	0.396	0.0683	0.618	7320
05520500	1	No	No	1991	10600	--	458	0.899	0.0705	0.334	10900
05520500	1	No	No	1992	4620	--	199	0.0647	0.0726	0.822	4800
05520500	1	No	No	1993	9160	--	395	0.711	0.0747	0.434	9420
05520500	1	No	No	1994	8050	--	347	0.879	0.0769	0.531	8260
05520500	1	No	No	1995	7470	--	322	0.597	0.079	0.59	7660
05520500	1	No	No	1996	10000	--	432	0.592	0.0811	0.379	10200
05520500	1	No	No	1997	10100	--	436	0.453	0.0833	0.374	10300
05520500	1	No	No	1998	9990	--	431	0.683	0.0854	0.382	10100
05520500	1	No	No	1999	8510	--	367	0.437	0.0876	0.497	8630
05520500	1	No	No	2000	6380	--	275	0.919	0.0897	0.69	6460
05520500	1	No	No	2001	8310	--	359	0.622	0.0907	0.518	8400
05520500	1	No	No	2002	10300	--	445	0.746	0.0918	0.367	10400
05520500	1	No	No	2003	7110	--	307	0.846	0.0928	0.63	7170
05520500	1	No	No	2004	7250	--	313	0.837	0.0939	0.62	7300
05520500	1	No	No	2005	10100	--	436	0.566	0.0949	0.382	10200
05520500	1	No	No	2006	3780	--	163	0.395	0.096	0.888	3800
05520500	1	No	No	2007	9720	--	420	0.513	0.097	0.409	9750
05520500	1	No	No	2008	11800	--	509	1.19	0.098	0.283	11800
05520500	1	No	No	2009	12000	--	518	0.833	0.0991	0.273	12000
05526150	1	Yes	Yes	1956	44	--	426	0.438	0	0.334	44
05526150	1	Yes	Yes	1957	233	--	2254	3.66	0	0.00246	233
05526150	1	Yes	Yes	1958	153	--	1480	1.2	0	0.0115	153
05526150	1	Yes	Yes	1959	92	--	890	1.28	0	0.0474	92
05526150	1	Yes	Yes	1960	32	--	310	0.959	0	0.552	32
05526150	1	Yes	Yes	1961	13	--	126	1.82	0	0.909	13
05526150	1	Yes	Yes	1962	10	--	97	0.291	0	0.943	10
05526150	1	Yes	Yes	1963	62	--	600	0.56	0	0.151	62
05526150	1	Yes	Yes	1964	5	--	48	1.04	0	0.985	5
05526150	1	Yes	Yes	1965	46	--	445	0.981	0	0.307	46
05526150	1	Yes	Yes	1966	23	--	223	1.49	0	0.742	23
05526150	1	Yes	Yes	1967	65	--	629	0.72	0	0.131	65
05526150	1	Yes	Yes	1968	39	--	377	2.15	0	0.409	39
05526150	1	Yes	Yes	1969	6	--	58	1.25	0	0.979	6

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05526150	1	Yes	Yes	1970	200	--	1935	1.88	0	0.005	200
05526150	1	Yes	Yes	1971	13	--	126	0.293	0	0.909	13
05526150	1	Yes	Yes	1972	22	--	213	0.893	0	0.761	22
05526150	1	Yes	Yes	1973	19	--	184	1.59	0	0.815	19
05526150	1	Yes	Yes	1974	8	--	77	0.65	0	0.96	8
05526150	1	Yes	Yes	1975	22	--	213	0.569	0	0.761	22
05526150	1	Yes	Yes	1976	17	--	164	0.72	0	0.849	17
05526150	1	Yes	No	1977	5	4	48	0.303	0	0.985	5
05526150	1	Yes	Yes	1978	32	--	310	0.845	0	0.552	32
05526150	1	Yes	Yes	1979	129	--	1248	0.329	0	0.0173	129
05526150	1	Yes	Yes	1980	105	--	1016	1.42	0	0.0314	105
05526500	1	Yes	Yes	1950	162	--	340	1.11	0.000297	0.483	173
05526500	1	Yes	Yes	1951	152	--	319	0.407	0.000327	0.53	162
05526500	1	Yes	Yes	1952	125	--	262	1.24	0.000356	0.656	134
05526500	1	Yes	Yes	1953	150	--	315	1.2	0.000386	0.54	160
05526500	1	Yes	Yes	1954	112	--	235	1.87	0.000416	0.715	120
05526500	1	Yes	Yes	1955	71	--	149	2.25	0.000446	0.877	77.3
05526500	1	Yes	Yes	1956	154	--	323	0.436	0.000475	0.52	164
05526500	1	Yes	Yes	1957	545	--	1144	3.64	0.000505	0.0206	569
05526500	1	Yes	Yes	1958	285	--	598	1.2	0.000535	0.152	300
05526500	1	Yes	Yes	1959	140	2	294	0.883	0.000564	0.592	149
05526500	1	Yes	Yes	1960	155	--	325	0.974	0.000594	0.515	165
05526500	1	Yes	Yes	1961	101	--	212	1.18	0.000683	0.763	109
05526500	1	Yes	Yes	1962	81	--	170	0.268	0.000772	0.84	87.7
05526500	1	Yes	Yes	1963	110	2	231	0.22	0.000861	0.724	118
05526500	1	Yes	Yes	1964	20	--	42	1.18	0.00095	0.99	22.5
05526500	1	Yes	Yes	1965	90	--	189	1.04	0.00104	0.806	97.1
05526500	1	Yes	Yes	1966	162	--	340	1.48	0.00113	0.483	172
05526500	1	Yes	Yes	1967	140	--	294	0.529	0.00122	0.593	149
05526500	1	Yes	Yes	1968	230	--	483	2.14	0.00131	0.258	243
05526500	1	Yes	Yes	1969	93	--	195	0.435	0.0014	0.794	100
05526500	1	Yes	Yes	1970	1710	--	3589	1.87	0.00148	0	1770
05526500	1	Yes	Yes	1971	97	--	204	0.371	0.00187	0.779	104
05526500	1	Yes	Yes	1972	132	--	277	0.888	0.00226	0.628	141
05526500	1	Yes	Yes	1973	269	--	565	0.822	0.00264	0.176	283

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05526500	1	Yes	Yes	1974	469	--	984	0.61	0.00303	0.0355	490
05526500	1	Yes	Yes	1975	237	--	497	1.43	0.00342	0.242	250
05527050	1	Yes	Yes	1956	171	--	672	0.634	0.00461	0.106	211
05527050	1	Yes	Yes	1957	786	--	3087	3.14	0.00461	0	917
05527050	1	Yes	Yes	1958	63	--	247	0.606	0.00461	0.691	83.7
05527050	1	Yes	Yes	1959	100	2	393	1.36	0.00461	0.387	128
05527050	1	Yes	Yes	1960	55	--	216	0.412	0.00461	0.757	74.2
05527050	1	Yes	Yes	1961	140	--	550	1.46	0.00461	0.188	173
05527050	1	Yes	Yes	1962	44	--	173	0.302	0.00461	0.837	60.9
05527050	1	Yes	Yes	1963	65	2	255	1.44	0.00461	0.674	86
05527050	1	Yes	Yes	1964	10	2	39	1.02	0.00461	1	16.8
05527050	1	Yes	Yes	1965	80	--	314	0.979	0.00461	0.545	104
05527050	1	Yes	Yes	1966	92	--	361	1.58	0.00461	0.443	118
05527050	1	Yes	Yes	1967	64	--	251	1.18	0.00461	0.682	84.9
05527050	1	Yes	Yes	1968	96	--	377	1.68	0.00461	0.413	123
05527050	1	Yes	Yes	1969	105	--	412	0.713	0.00461	0.357	134
05527050	1	Yes	Yes	1970	105	--	412	1.72	0.00461	0.357	134
05527050	1	Yes	Yes	1971	35	--	137	0.289	0.00553	0.895	49.9
05527050	1	Yes	Yes	1972	170	--	668	1.56	0.00645	0.109	209
05527800	1	Yes	Yes	1960	1320	--	645	0.776	0.0499	0.14	1510
05527800	1	Yes	Yes	1961	425	2	208	0.273	0.0518	0.797	518
05527800	1	Yes	Yes	1962	820	--	401	0.281	0.0536	0.408	959
05527800	1	Yes	Yes	1963	104	--	51	1.57	0.0554	0.988	141
05527800	1	Yes	Yes	1964	157	--	77	0.692	0.0573	0.968	206
05527800	1	Yes	Yes	1965	600	--	293	0.527	0.0591	0.633	708
05527800	1	Yes	Yes	1966	740	--	362	0.536	0.0609	0.487	863
05527800	1	Yes	Yes	1967	720	--	352	1.52	0.0628	0.509	838
05527800	1	Yes	Yes	1968	235	--	115	0.349	0.0646	0.936	296
05527800	1	Yes	Yes	1969	273	--	133	0.88	0.0664	0.918	338
05527800	1	Yes	Yes	1970	508	--	248	1.63	0.0683	0.731	599
05527800	1	Yes	Yes	1971	898	--	439	0.276	0.0715	0.362	1030
05527800	1	Yes	Yes	1972	816	--	399	1.28	0.0748	0.428	934
05527800	1	Yes	Yes	1973	940	--	459	1.47	0.078	0.337	1060
05527800	1	Yes	Yes	1974	1690	--	826	0.53	0.0812	0.0704	1870
05527800	1	Yes	Yes	1975	407	--	199	0.327	0.0845	0.828	477

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05527800	1	Yes	Yes	1976	1990	--	973	1.21	0.0877	0.0453	2180
05527800	1	Yes	Yes	1977	105	--	51	0.732	0.0909	0.99	132
05527800	1	Yes	Yes	1978	1380	--	674	1.68	0.0942	0.138	1520
05527800	1	Yes	Yes	1979	2120	--	1036	0.286	0.0974	0.0385	2300
05527800	1	Yes	Yes	1980	484	--	237	0.773	0.101	0.771	550
05527800	1	Yes	Yes	1981	378	--	185	0.195	0.103	0.859	434
05527800	1	Yes	Yes	1982	873	--	427	0.427	0.104	0.403	966
05527800	1	Yes	Yes	1983	1630	--	797	1.4	0.106	0.0833	1770
05527800	1	Yes	Yes	1984	597	--	292	0.203	0.108	0.67	666
05527800	1	Yes	Yes	1985	950	--	464	1.03	0.11	0.351	1040
05527800	1	Yes	Yes	1986	1640	--	802	1.19	0.112	0.083	1770
05527800	1	Yes	Yes	1987	435	--	213	0.786	0.114	0.82	489
05527800	1	Yes	Yes	1988	442	--	216	0.948	0.116	0.815	495
05527800	1	Yes	Yes	1989	155	--	76	0.617	0.118	0.977	182
05527800	1	Yes	Yes	1990	852	--	416	0.248	0.12	0.433	928
05527800	1	Yes	Yes	1991	587	--	287	1.09	0.124	0.691	643
05527800	1	Yes	Yes	1992	428	--	209	0.36	0.129	0.832	472
05527800	1	Yes	Yes	1993	1750	--	855	1.06	0.134	0.0722	1850
05527800	1	Yes	Yes	1994	870	2	425	0.815	0.138	0.432	929
05527800	1	Yes	Yes	1995	805	--	393	1.19	0.143	0.493	856
05527800	1	Yes	Yes	1996	1200	--	586	1.02	0.147	0.225	1260
05527800	1	Yes	Yes	1997	853	--	417	1.44	0.152	0.458	898
05527800	1	Yes	Yes	1998	794	--	388	0.966	0.157	0.515	832
05527800	1	Yes	Yes	1999	1250	--	611	1.11	0.161	0.208	1290
05527800	1	Yes	Yes	2000	2130	--	1041	2.38	0.166	0.0448	2190
05527800	1	Yes	Yes	2001	501	--	245	0.141	0.169	0.794	521
05527800	1	Yes	Yes	2002	527	--	258	0.0144	0.172	0.775	545
05527800	1	Yes	Yes	2003	241	--	118	0.395	0.176	0.954	251
05527800	1	Yes	Yes	2004	3500	--	1711	1.71	0.179	0.0113	3550
05527800	1	Yes	Yes	2005	672	--	328	0.289	0.182	0.653	685
05527800	1	Yes	Yes	2006	509	--	249	0.754	0.185	0.797	518
05527800	1	Yes	Yes	2007	1610	--	787	1.11	0.189	0.11	1620
05527800	1	Yes	Yes	2008	1910	--	933	1.9	0.192	0.0657	1920
05527800	1	Yes	Yes	2009	2470	--	1207	2.02	0.195	0.0297	2480
05527840	1	No	No	1962	1370	--	591	0.153	0.0544	0.178	1610

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05527840	1	No	No	1963	110	--	47	1.53	0.0565	0.99	160
05527840	1	No	No	1964	173	--	75	0.695	0.0586	0.97	242
05527840	1	No	No	1965	940	--	405	0.532	0.0607	0.405	1130
05527840	1	No	No	1966	1190	--	513	0.526	0.0628	0.257	1400
05527840	1	No	No	1967	1040	--	448	1.48	0.0648	0.343	1240
05527840	1	No	No	1968	240	--	103	0.473	0.0669	0.948	322
05527840	1	No	No	1969	795	--	343	1.21	0.069	0.534	955
05527840	1	No	No	1970	630	--	272	1.62	0.0711	0.685	766
05527840	1	No	No	1971	1470	--	634	0.271	0.0746	0.156	1700
05527840	1	No	No	1972	1320	--	569	0.584	0.0781	0.203	1520
05527840	1	No	No	1973	1180	--	509	1.46	0.0816	0.274	1370
05527840	1	No	No	1974	1730	--	746	0.523	0.0851	0.0957	1970
05527840	1	No	No	1975	535	--	231	0.307	0.0886	0.775	646
05527840	1	No	No	1976	2170	--	936	1.22	0.0921	0.0507	2440
05527870	1	Yes	No	1960	326	7	1757	0.548	0.218	0.0114	420
05527870	1	Yes	Yes	1962	118	--	636	0.251	0.229	0.223	163
05527870	1	Yes	Yes	1963	32	--	172	1.54	0.234	0.921	55.4
05527870	1	Yes	No	1964	39	4, B	210	0.251	0.239	0.88	64
05527870	1	Yes	Yes	1965	93	--	501	0.769	0.244	0.396	132
05527870	1	Yes	Yes	1966	44	--	237	0.482	0.25	0.847	69.4
05527870	1	Yes	Yes	1967	69	--	372	1.32	0.255	0.63	100
05527870	1	Yes	Yes	1968	31	--	167	0.544	0.26	0.932	52.2
05527870	1	Yes	Yes	1969	92	--	496	1.39	0.266	0.421	128
05527870	1	Yes	Yes	1970	95	--	512	1.61	0.271	0.401	131
05527870	1	Yes	Yes	1971	163	--	878	0.454	0.276	0.0984	212
05527870	1	Yes	Yes	1972	76	--	410	0.468	0.282	0.586	106
05527870	1	Yes	Yes	1973	85	--	458	1.42	0.288	0.501	116
05527870	1	Yes	Yes	1974	138	--	744	1.14	0.293	0.175	178
05527870	1	Yes	Yes	1975	74	--	399	0.841	0.299	0.619	102
05527870	1	Yes	Yes	1976	125	--	674	1.35	0.305	0.233	161
05527900	1	Yes	No	1960	510	7	966	0.689	0.0428	0.0417	614
05527900	1	Yes	Yes	1962	203	--	384	0.207	0.0439	0.43	259
05527900	1	Yes	Yes	1963	50	--	95	2.02	0.0444	0.952	74.8
05527900	1	Yes	Yes	1964	142	--	269	1.44	0.045	0.672	186
05527900	1	Yes	Yes	1965	236	--	447	0.555	0.0455	0.333	297

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05527900	1	Yes	Yes	1966	231	--	437	0.516	0.046	0.347	291
05527900	1	Yes	Yes	1967	181	--	343	1.55	0.0466	0.515	232
05527900	1	Yes	Yes	1968	95	--	180	0.478	0.0471	0.843	130
05527900	1	Yes	Yes	1969	306	--	579	1.13	0.0476	0.183	375
05527900	1	Yes	Yes	1970	217	--	411	2.43	0.0482	0.388	274
05527900	1	Yes	Yes	1971	212	--	401	0.697	0.0534	0.407	267
05527900	1	Yes	Yes	1972	166	--	314	0.532	0.0587	0.592	211
05527900	1	Yes	Yes	1973	180	--	341	1.24	0.064	0.534	227
05527900	1	Yes	Yes	1974	401	--	759	1.58	0.0692	0.0873	479
05527900	1	Yes	Yes	1975	120	2	227	1.04	0.0745	0.773	155
05527900	1	Yes	Yes	1976	357	--	676	2.01	0.0798	0.132	424
05527900	0	Yes	No	2008	183	--	NA	0.699	0.248	NA	NA
05527900	0	Yes	No	2009	283	--	NA	1.29	0.258	NA	NA
05527950	1	No	No	1960	778	7	621	0.606	0.132	0.187	1050
05527950	1	No	No	1962	439	--	350	0.234	0.141	0.581	632
05527950	1	No	No	1963	70	2	56	1.42	0.146	1	141
05527950	1	No	No	1964	120	2, B	96	1.16	0.151	0.965	215
05527950	1	No	No	1965	423	--	338	0.558	0.156	0.618	602
05527950	1	No	No	1966	500	2	399	0.495	0.161	0.497	697
05527950	1	No	No	1967	395	--	315	1.41	0.165	0.665	562
05527950	1	No	No	1968	146	2	117	0.518	0.17	0.954	246
05527950	1	No	No	1969	720	--	575	1.46	0.175	0.254	945
05527950	1	No	No	1970	744	--	594	1.92	0.18	0.236	969
05527950	1	No	No	1971	583	--	465	0.548	0.185	0.403	781
05527950	1	No	No	1972	921	--	735	0.89	0.189	0.139	1180
05527950	1	No	No	1973	510	--	407	1.36	0.194	0.511	685
05527950	1	No	No	1974	840	--	671	1.3	0.199	0.182	1070
05527950	1	No	No	1975	319	--	255	0.919	0.204	0.797	449
05527950	1	No	No	1976	1050	--	838	1.59	0.209	0.0943	1310
05527950	1	No	No	1990	486	--	388	0.651	0.257	0.605	614
05527950	1	No	No	1991	931	--	743	1.58	0.263	0.163	1110
05527950	1	No	No	1992	336	E	268	0.969	0.269	0.812	434
05527950	1	No	No	1993	1090	--	870	2.58	0.275	0.101	1280
05527950	1	No	No	1994	988	--	789	0.604	0.282	0.146	1160
05527950	1	No	No	1995	696	--	556	1.37	0.288	0.355	830

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05527950	1	No	No	1996	1020	--	814	1.32	0.294	0.137	1180
05527950	1	No	No	1997	1000	--	798	1.82	0.3	0.148	1150
05527950	1	No	No	1998	609	--	486	0.689	0.307	0.472	719
05527950	1	No	No	1999	1160	--	926	1.34	0.313	0.0927	1320
05527950	1	No	No	2000	1060	--	846	1.22	0.319	0.13	1200
05527950	1	No	No	2001	405	E	323	0.535	0.333	0.768	476
05527950	1	No	No	2002	581	--	464	1.26	0.347	0.545	658
05527950	1	No	No	2003	138	E	110	0.679	0.36	0.983	168
05527950	1	No	No	2004	831	--	663	1.47	0.374	0.288	902
05527950	1	No	No	2005	436	--	348	0.617	0.388	0.767	477
05527950	1	No	No	2006	465	--	371	1.2	0.402	0.744	499
05527950	1	No	No	2007	770	--	615	1.57	0.415	0.38	804
05527950	1	No	No	2008	1070	--	854	1.33	0.429	0.171	1100
05527950	1	No	No	2009	1730	--	1381	1.27	0.443	0.0376	1750
05528000	1	No	No	1946	1580	--	451	0.683	0.0429	0.326	2160
05528000	1	No	No	1947	931	--	266	1.18	0.0451	0.679	1350
05528000	1	No	No	1948	2620	--	747	1.8	0.0474	0.0863	3420
05528000	1	No	No	1949	1300	2	371	0.315	0.0496	0.46	1810
05528000	1	No	No	1950	1780	--	508	1.5	0.0519	0.257	2370
05528000	1	No	No	1951	1600	--	456	0.162	0.0554	0.326	2160
05528000	1	No	No	1952	1830	--	522	0.95	0.0589	0.244	2410
05528000	1	No	No	1953	391	--	112	0.399	0.0625	0.939	639
05528000	1	No	No	1954	960	--	274	1.44	0.066	0.676	1350
05528000	1	No	No	1955	1100	--	314	0.1	0.0695	0.602	1520
05528000	1	No	No	1956	420	--	120	1.01	0.0731	0.933	669
05528000	1	No	No	1957	745	--	213	0.725	0.0766	0.801	1070
05528000	1	No	No	1958	845	--	241	0.168	0.0801	0.753	1190
05528000	1	No	No	1960	3070	--	876	0.0787	0.0872	0.0613	3840
05528000	1	No	No	1961	960	--	274	0.425	0.0904	0.694	1320
05528000	1	No	No	1962	2140	--	610	0.161	0.0936	0.179	2700
05528000	1	No	No	1963	190	--	54	1.48	0.0969	0.988	322
05528000	1	No	No	1964	700	4, B	200	0.0168	0.1	0.834	990
05528000	1	No	No	1965	1520	--	434	0.541	0.103	0.391	1970
05528000	1	No	No	1966	1580	--	451	0.515	0.107	0.368	2040
05528000	1	No	No	1967	1520	--	434	1.44	0.11	0.396	1960

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05528000	1	No	No	1968	394	--	112	0.488	0.113	0.948	598
05528000	1	No	No	1969	980	--	280	1.32	0.116	0.7	1300
05528000	1	No	No	1970	1160	--	331	1.7	0.119	0.605	1510
05528000	1	No	No	1971	1610	2	459	0.242	0.124	0.368	2040
05528000	1	No	No	1972	1750	--	499	0.595	0.128	0.316	2180
05528000	1	No	No	1973	1500	--	428	1.41	0.133	0.423	1890
05528000	1	No	No	1974	2140	--	610	0.48	0.137	0.196	2600
05528000	1	No	No	1975	661	--	189	0.899	0.141	0.87	895
05528000	1	No	No	1976	2590	--	739	1.34	0.146	0.12	3110
05528000	1	No	No	1977	173	--	49	0.816	0.15	1	269
05528000	1	No	No	1978	1700	--	485	0.259	0.154	0.353	2080
05528000	1	No	No	1979	2860	--	816	0.295	0.159	0.0894	3380
05528000	1	No	No	1980	955	--	272	0.307	0.163	0.745	1210
05528000	1	No	No	1981	651	--	186	0.172	0.166	0.883	855
05528000	1	No	No	1982	1590	--	454	0.496	0.169	0.409	1930
05528000	1	No	No	1983	2370	--	676	0.512	0.172	0.168	2780
05528000	1	No	No	1984	1050	--	300	0.2	0.176	0.703	1300
05528000	1	No	No	1985	1800	--	513	1.05	0.179	0.331	2140
05528000	1	No	No	1986	3530	--	1007	1.13	0.182	0.0508	4060
05528000	1	No	No	1987	1260	--	359	0.0168	0.185	0.601	1520
05528000	1	No	No	1988	1390	--	397	0.173	0.188	0.526	1660
05528000	1	No	No	1989	279	--	80	0.443	0.191	0.982	384
05528000	1	No	No	1990	1400	--	399	0.287	0.194	0.526	1660
05528000	1	No	No	1991	1260	--	359	0.256	0.2	0.611	1500
05528000	1	No	No	1992	820	--	234	0.0696	0.207	0.831	998
05528000	1	No	No	1993	2370	--	676	0.898	0.213	0.184	2680
05528000	1	No	No	1994	1370	--	391	0.768	0.219	0.565	1590
05528000	1	No	No	1995	1220	C	348	0.106	0.225	0.649	1410
05528000	1	No	No	1996	1640	C	468	0.963	0.231	0.437	1860
05528000	1	No	No	1997	1320	C	377	1.66	0.237	0.609	1500
05528000	1	No	No	1998	1180	C	337	0.732	0.243	0.683	1340
05528000	1	No	No	1999	1470	C	419	1.14	0.249	0.537	1640
05528000	1	No	No	2000	2690	C, E	767	0.925	0.255	0.147	2920
05528000	1	No	No	2001	1140	C	325	0.122	0.264	0.719	1260
05528000	1	No	No	2002	989	C	282	0.881	0.273	0.794	1090

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05528000	1	No	No	2003	516	C, E	147	0.483	0.283	0.951	579
05528000	1	No	No	2004	3890	C	1110	1.6	0.292	0.0496	4070
05528000	1	No	No	2005	1090	C	311	0.284	0.301	0.766	1160
05528000	1	No	No	2006	838	C	239	0.0897	0.31	0.874	885
05528000	1	No	No	2007	2390	C	682	0.807	0.319	0.234	2450
05528000	1	No	No	2008	1900	C	542	0.888	0.328	0.405	1940
05528000	1	No	No	2009	2120	C	605	1.92	0.337	0.329	2140
05528150	1	Yes	Yes	1960	1150	--	1668	0.5	0.147	0.0113	2020
05528150	1	Yes	Yes	1961	111	--	161	1.22	0.15	0.908	381
05528150	1	Yes	Yes	1962	466	--	676	0.261	0.152	0.16	949
05528150	1	Yes	Yes	1963	67	2	97	1.26	0.155	0.965	290
05528150	1	Yes	Yes	1964	80	--	116	1.73	0.158	0.952	321
05528150	1	Yes	Yes	1965	306	--	444	0.565	0.16	0.418	703
05528150	1	Yes	Yes	1966	280	--	406	0.476	0.163	0.486	656
05528150	1	Yes	Yes	1967	284	--	412	0.924	0.166	0.478	662
05528150	1	Yes	Yes	1968	80	--	116	1.25	0.168	0.954	317
05528150	1	Yes	Yes	1969	406	--	589	1.34	0.171	0.237	835
05528150	1	Yes	Yes	1970	590	--	856	1.51	0.174	0.0801	1150
05528150	1	Yes	Yes	1971	375	--	544	0.415	0.181	0.294	789
05528150	1	Yes	Yes	1972	417	--	605	1.2	0.188	0.23	841
05528150	1	Yes	Yes	1973	386	--	560	1.44	0.195	0.284	796
05528150	1	Yes	Yes	1974	306	--	444	1.11	0.202	0.453	679
05528150	1	Yes	Yes	1975	174	--	252	1.12	0.21	0.804	461
05528150	1	Yes	Yes	1976	403	--	584	1.26	0.217	0.27	807
05528170	1	Yes	Yes	1961	64	--	637	1.21	0.416	0.353	87.5
05528170	1	Yes	Yes	1962	56	--	557	0.261	0.419	0.463	77.8
05528170	1	Yes	Yes	1963	35	--	348	1.26	0.421	0.788	52
05528170	1	Yes	Yes	1964	67	--	666	0.685	0.423	0.322	90.3
05528170	1	Yes	Yes	1965	36	--	358	0.565	0.426	0.777	52.9
05528170	1	Yes	Yes	1966	78	--	776	1.16	0.428	0.218	102
05528170	1	Yes	Yes	1967	49	--	487	0.922	0.43	0.583	68.2
05528170	1	Yes	Yes	1968	40	--	398	1.25	0.433	0.726	57.3
05528170	1	Yes	Yes	1969	23	--	229	1.34	0.435	0.93	36.9
05528170	1	Yes	Yes	1970	36	--	358	1.51	0.437	0.785	52.2
05528170	1	Yes	Yes	1971	110	--	1094	0.415	0.44	0.077	140

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05528170	1	Yes	Yes	1972	68	--	676	1.2	0.443	0.326	89.9
05528170	1	Yes	Yes	1973	56	--	557	1.43	0.446	0.488	75.7
05528170	1	Yes	Yes	1974	54	--	537	1.11	0.449	0.52	73
05528170	1	Yes	Yes	1975	107	--	1064	0.819	0.452	0.0884	136
05528170	1	Yes	Yes	1976	41	--	408	1.26	0.455	0.728	57.1
05528200	0	Yes	No	1961	206	--	NA	1.97	0.452	NA	NA
05528200	0	Yes	No	1962	125	--	NA	0.258	0.46	NA	NA
05528200	1	Yes	Yes	1963	106	--	297	1.26	0.468	0.88	209
05528200	1	Yes	Yes	1964	148	--	414	1.76	0.477	0.735	261
05528200	1	Yes	Yes	1965	197	--	551	0.563	0.485	0.532	323
05528200	1	Yes	Yes	1966	230	--	644	0.476	0.493	0.411	366
05528200	1	Yes	Yes	1967	273	--	764	1.28	0.502	0.276	413
05528200	1	Yes	Yes	1968	277	--	775	1.2	0.51	0.271	415
05528200	1	Yes	Yes	1969	416	--	1164	1.36	0.518	0.0789	595
05528200	1	Yes	Yes	1970	543	--	1520	1.52	0.527	0.0342	748
05528200	1	Yes	Yes	1971	214	--	599	0.417	0.55	0.524	326
05528200	1	Yes	Yes	1972	433	--	1212	1.2	0.572	0.0813	590
05528200	1	Yes	Yes	1973	146	--	409	1.42	0.595	0.825	230
05528200	1	Yes	Yes	1974	152	--	425	0.641	0.618	0.821	231
05528200	1	Yes	Yes	1975	206	2	577	0.784	0.641	0.645	288
05528200	1	Yes	Yes	1976	100	--	280	1.27	0.664	0.956	160
05528230	0	No	No	1960	1410	--	NA	0.494	0.217	NA	NA
05528230	0	No	No	1961	393	--	NA	1.22	0.224	NA	NA
05528230	1	No	No	1963	162	--	156	1.25	0.236	0.935	515
05528230	1	No	No	1964	222	--	213	1.74	0.243	0.878	605
05528230	1	No	No	1965	656	--	631	0.561	0.249	0.24	1240
05528230	1	No	No	1967	945	--	908	0.924	0.262	0.0851	1690
05528230	1	No	No	1968	354	--	340	1.23	0.268	0.696	786
05528230	1	No	No	1969	625	--	601	1.34	0.274	0.288	1180
05528230	1	No	No	1970	852	--	819	1.5	0.281	0.129	1520
05528230	1	No	No	1971	364	4B	350	0.249	0.293	0.699	784
05528230	1	No	No	1973	617	--	593	1.43	0.319	0.33	1140
05528230	1	No	No	1974	526	--	506	0.62	0.332	0.463	1000
05528230	1	No	No	1975	235	--	226	0.823	0.345	0.902	573
05528230	1	No	No	1976	537	--	516	1.24	0.358	0.469	994

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05528230	1	No	No	1990	586	--	563	0.535	0.578	0.604	866
05528230	1	No	No	1991	646	--	621	0.861	0.586	0.529	935
05528230	1	No	No	1992	268	E	258	0.599	0.595	0.952	476
05528230	1	No	No	1993	576	--	554	0.872	0.603	0.641	833
05528230	1	No	No	1994	815	C, E	784	0.624	0.611	0.348	1120
05528230	1	No	No	1995	623	C	599	1.05	0.62	0.593	876
05528230	1	No	No	1996	1800	C	1730	0.249	0.628	0.0287	2260
05528360	1	Yes	Yes	1961	34	--	112	1.38	0.0621	0.938	172
05528360	1	Yes	Yes	1962	100	2	331	0.249	0.0643	0.558	292
05528360	1	Yes	Yes	1963	38	--	126	1.13	0.0665	0.927	180
05528360	1	Yes	Yes	1964	47	--	155	1.77	0.0687	0.89	195
05528360	1	Yes	Yes	1965	78	2	258	0.0906	0.0708	0.713	250
05528360	1	Yes	Yes	1966	79	2	261	0.416	0.073	0.708	251
05528360	1	Yes	Yes	1967	147	--	486	1.47	0.0752	0.299	371
05528360	1	Yes	Yes	1968	62	--	205	1.14	0.0774	0.814	221
05528360	1	Yes	Yes	1969	123	2	407	1.28	0.0796	0.418	334
05528360	1	Yes	Yes	1970	300	2	992	1.33	0.0817	0.0423	643
05528360	1	Yes	Yes	1971	157	2	519	0.385	0.112	0.28	377
05528360	1	Yes	Yes	1972	390	--	1289	0.692	0.142	0.02	750
05528360	1	Yes	Yes	1973	173	--	572	1.38	0.172	0.255	386
05528360	1	Yes	Yes	1974	126	2	416	0.523	0.202	0.5	308
05528360	1	Yes	Yes	1975	114	--	377	0.951	0.232	0.605	280
05528360	1	Yes	Yes	1976	166	--	549	0.974	0.262	0.344	357
05528400	1	No	No	1962	2300	--	521	0.00304	0.136	0.293	3250
05528400	1	No	No	1963	660	--	149	1.41	0.14	0.919	1150
05528400	1	No	No	1967	1730	--	392	0.774	0.158	0.509	2490
05528400	1	No	No	1969	1940	--	439	1.36	0.166	0.431	2740
05528400	1	No	No	1970	3240	--	734	1.66	0.171	0.133	4310
05528400	1	No	No	1972	1870	--	423	1.07	0.184	0.472	2600
05528400	1	No	No	1973	2450	--	555	1.39	0.191	0.287	3270
05528400	1	No	No	1974	2100	--	475	0.285	0.197	0.397	2850
05528400	1	No	No	1975	1160	--	263	0.873	0.204	0.784	1680
05528400	1	No	No	1976	2400	--	543	0.0211	0.211	0.314	3160
05528400	1	No	No	1977	610	--	138	0.825	0.217	0.946	975
05528440	1	Yes	Yes	1961	44	2	295	1.21	0.333	0.809	109

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05528440	1	Yes	Yes	1962	53	2	355	0.261	0.342	0.724	122
05528440	1	Yes	Yes	1963	34	--	228	1.26	0.35	0.902	93.9
05528440	1	Yes	Yes	1964	30	--	201	1.73	0.358	0.929	87.8
05528440	1	Yes	Yes	1965	72	--	483	0.0937	0.367	0.531	147
05528440	1	Yes	Yes	1966	64	--	429	0.475	0.375	0.629	134
05528440	1	Yes	Yes	1967	64	--	429	0.923	0.384	0.636	133
05528440	1	Yes	Yes	1968	52	2	349	1.25	0.392	0.769	115
05528440	1	Yes	Yes	1969	76	--	510	1.34	0.4	0.518	149
05528440	1	Yes	Yes	1970	193	--	1294	1.51	0.409	0.0422	315
05528440	1	Yes	Yes	1971	83	--	557	0.415	0.455	0.496	152
05528440	1	Yes	Yes	1972	203	--	1361	1.2	0.501	0.0453	308
05528440	1	Yes	Yes	1973	121	--	811	1.43	0.547	0.264	188
05528440	1	Yes	Yes	1974	125	--	838	1.11	0.593	0.273	186
05528440	1	Yes	Yes	1975	155	--	1039	0.82	0.639	0.171	216
05528440	1	Yes	Yes	1976	118	--	791	1.26	0.685	0.413	165
05528470	1	No	No	1961	102	--	197	1.22	0.192	0.879	335
05528470	1	No	No	1962	204	--	394	0.262	0.207	0.548	496
05528470	1	No	No	1963	55	4, B	106	0.0872	0.222	0.967	239
05528470	1	No	No	1964	118	2	228	0.672	0.237	0.854	348
05528470	1	No	No	1965	152	--	293	0.0872	0.252	0.764	397
05528470	1	No	No	1966	204	--	394	0.483	0.267	0.603	472
05528470	1	No	No	1967	340	--	656	1.28	0.282	0.235	666
05528470	1	No	No	1968	126	--	243	1.48	0.297	0.861	344
05528470	1	No	No	1969	221	--	427	1.43	0.312	0.581	481
05528470	1	No	No	1970	403	--	778	1.62	0.327	0.17	740
05528470	1	No	No	1971	227	--	438	0.413	0.359	0.602	472
05528470	1	No	No	1972	539	--	1041	1.24	0.39	0.0788	914
05528470	1	No	No	1973	387	--	747	1.38	0.422	0.238	664
05528470	1	No	No	1974	264	--	510	0.664	0.454	0.568	487
05528470	1	No	No	1975	296	--	571	0.901	0.485	0.503	519
05528470	1	No	No	1976	426	--	822	1.31	0.517	0.235	667
05528500	1	Yes	Yes	1953	55	E	82	0.598	0.0952	0.969	192
05528500	1	Yes	Yes	1954	268	--	399	1.36	0.107	0.454	476
05528500	1	Yes	Yes	1955	161	--	240	2.92	0.118	0.775	335
05528500	1	Yes	Yes	1956	110	E	164	1.18	0.13	0.899	270

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05528500	1	Yes	Yes	1957	430	--	640	1.87	0.141	0.179	644
05528500	1	Yes	Yes	1958	130	E	193	0.209	0.153	0.867	288
05528500	1	Yes	Yes	1959	320	2	476	0.392	0.165	0.372	516
05528500	1	Yes	Yes	1960	457	--	680	0.456	0.176	0.167	660
05528500	1	Yes	Yes	1961	370	--	551	1.3	0.197	0.296	554
05528500	1	Yes	Yes	1962	318	--	473	0.254	0.218	0.417	494
05528500	1	Yes	Yes	1963	76	E	113	1.24	0.239	0.965	197
05528500	1	Yes	Yes	1964	264	--	393	0.877	0.26	0.599	412
05528500	1	Yes	Yes	1965	274	--	408	0.089	0.281	0.588	416
05528500	1	Yes	Yes	1966	343	--	510	0.455	0.302	0.43	488
05528500	1	Yes	Yes	1967	758	--	1128	1.35	0.323	0.0511	918
05528500	1	Yes	Yes	1968	617	--	918	1.33	0.344	0.105	756
05528500	1	Yes	Yes	1969	335	--	498	1.37	0.365	0.503	453
05528500	1	Yes	Yes	1970	600	D	893	1.5	0.386	0.134	712
05528500	1	Yes	Yes	1971	350	E	521	0.402	0.414	0.513	448
05528500	1	Yes	Yes	1972	802	--	1193	1.16	0.442	0.0593	884
05528500	1	Yes	Yes	1973	454	--	675	1.38	0.47	0.349	527
05528500	1	Yes	Yes	1974	424	--	631	0.605	0.498	0.432	487
05528500	1	Yes	Yes	1975	388	--	577	0.918	0.526	0.533	439
05528500	1	Yes	Yes	1976	458	--	681	1.17	0.554	0.419	494
05528500	1	Yes	Yes	1977	116	E	173	0.814	0.582	0.983	164
05528500	1	Yes	Yes	1978	372	--	553	1.32	0.61	0.648	389
05528500	1	Yes	Yes	1979	409	--	609	1.01	0.638	0.598	411
05528500	1	Yes	Yes	1980	571	--	850	0.675	0.666	0.324	537
05528500	1	Yes	Yes	1981	597	--	888	1.14	0.675	0.291	554
05528500	1	Yes	Yes	1982	887	--	1320	1.87	0.684	0.0857	798
05528500	0	Yes	No	1983	610	--	1050	1.6	0.692	0.189	635
05528500	2	Yes	Yes	1984	382	--	760	1.2	0.701	0.465	472
05528500	2	Yes	Yes	1985	455	--	905	1.24	0.709	0.303	547
05528500	2	Yes	Yes	1986	596	--	1186	0.74	0.718	0.144	699
05528500	2	Yes	Yes	1987	717	--	1427	2.44	0.726	0.0731	829
05528500	2	Yes	Yes	1988	308	--	613	0.434	0.735	0.691	374
05528500	2	Yes	Yes	1989	352	--	700	1.37	0.743	0.58	418
05528500	2	Yes	Yes	1990	613	--	1220	1.56	0.752	0.146	697
05528500	2	Yes	Yes	1991	374	--	744	1.76	0.755	0.539	437

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05528500	2	Yes	Yes	1992	213	E	424	0.551	0.758	0.91	264
05528500	2	Yes	Yes	1993	287	C, E	571	0.929	0.761	0.763	340
05528500	2	Yes	Yes	1994	437	C	869	1.41	0.765	0.405	501
05528500	2	Yes	Yes	1995	337	C	671	1.03	0.768	0.646	391
05528500	2	Yes	Yes	1996	670	C	1333	0.286	0.771	0.112	747
05528500	2	Yes	Yes	1997	541	C, E	1076	2.25	0.774	0.22	604
05528500	2	Yes	Yes	1998	272	C, E	541	0.777	0.778	0.81	318
05528500	2	Yes	Yes	1999	621	C	1236	1.05	0.781	0.152	687
05528500	2	Yes	Yes	2000	272	C	541	1.74	0.784	0.814	315
05528500	2	Yes	Yes	2001	680	C	1353	2.45	0.795	0.116	742
05528500	2	Yes	Yes	2002	742	C	1476	1.52	0.805	0.0845	801
05528500	2	Yes	Yes	2003	193	C, E	384	1.19	0.816	0.952	221
05528500	2	Yes	Yes	2004	495	C	985	1.23	0.827	0.341	529
05528500	2	Yes	Yes	2005	247	C, E	491	0.574	0.838	0.903	269
05528500	2	Yes	Yes	2006	338	C	673	1.26	0.848	0.728	357
05528500	2	Yes	Yes	2007	830	C	1651	1.67	0.859	0.0655	854
05528500	2	Yes	Yes	2008	664	C	1321	3.3	0.87	0.16	677
05528500	2	Yes	Yes	2009	444	C	883	0.596	0.881	0.513	449
05529000	1	No	No	1941	1430	--	270	0.19	0.0423	0.668	2540
05529000	1	No	No	1942	2060	--	389	0.439	0.0453	0.422	3440
05529000	1	No	No	1943	2470	--	467	0.102	0.0484	0.307	3960
05529000	1	No	No	1944	2470	--	467	1.2	0.0514	0.309	3950
05529000	1	No	No	1945	1830	--	346	1.32	0.0545	0.515	3080
05529000	1	No	No	1946	2510	--	474	0.706	0.0576	0.303	3980
05529000	1	No	No	1947	1920	--	363	1.2	0.0606	0.484	3190
05529000	1	No	No	1948	3490	--	660	1.8	0.0637	0.136	5280
05529000	1	No	No	1949	1700	--	321	0.31	0.0667	0.582	2860
05529000	1	No	No	1950	4040	--	763	1.46	0.0698	0.0859	6020
05529000	1	No	No	1951	2410	--	455	0.133	0.077	0.341	3800
05529000	1	No	No	1952	2690	--	508	1.29	0.0842	0.276	4120
05529000	1	No	No	1953	669	E	126	0.565	0.0914	0.931	1370
05529000	1	No	No	1954	1770	--	334	1.33	0.0986	0.579	2870
05529000	1	No	No	1955	1800	--	340	2.4	0.106	0.573	2890
05529000	1	No	No	1956	880	E	166	1.23	0.113	0.89	1630
05529000	1	No	No	1957	2610	--	493	1.31	0.12	0.318	3910

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05529000	1	No	No	1958	1220	--	231	0.146	0.128	0.796	2060
05529000	1	No	No	1959	1190	E	225	1.27	0.135	0.809	2010
05529000	1	No	No	1960	4670	--	883	0.604	0.142	0.068	6480
05529000	1	No	No	1961	1150	--	217	0.425	0.148	0.828	1920
05529000	1	No	No	1962	2820	E	533	0.00314	0.154	0.29	4040
05529000	1	No	No	1963	732	E	138	1.4	0.161	0.934	1340
05529000	1	No	No	1964	840	E	159	0.715	0.167	0.916	1480
05529000	1	No	No	1965	2160	--	408	0.541	0.173	0.491	3170
05529000	1	No	No	1966	1920	--	363	0.496	0.179	0.588	2840
05529000	1	No	No	1967	2820	--	533	1.41	0.185	0.31	3940
05529000	1	No	No	1968	1730	E	327	1.01	0.192	0.663	2560
05529000	1	No	No	1969	2430	--	459	1.37	0.198	0.423	3440
05529000	1	No	No	1970	3620	--	684	1.65	0.204	0.175	4830
05529000	1	No	No	1971	2440	--	461	0.0771	0.212	0.432	3400
05529000	1	No	No	1972	2710	--	512	1.03	0.22	0.363	3700
05529000	1	No	No	1973	2900	--	548	1.39	0.229	0.321	3890
05529000	1	No	No	1974	2480	--	469	0.652	0.237	0.44	3370
05529000	1	No	No	1975	1810	--	342	0.848	0.245	0.675	2520
05529000	1	No	No	1976	2600	--	491	1.31	0.253	0.418	3460
05529000	1	No	No	1977	514	E	97	0.825	0.261	0.98	863
05529000	1	No	No	1978	1960	--	370	1.28	0.27	0.643	2630
05529000	1	No	No	1979	3430	--	648	0.3	0.278	0.24	4310
05529000	1	No	No	1980	1440	--	272	0.294	0.286	0.816	1980
05529000	1	No	No	1981	1700	--	321	1.15	0.292	0.746	2270
05529000	1	No	No	1982	3920	--	741	1.9	0.298	0.179	4800
05529000	1	No	No	1983	3900	--	737	1.53	0.304	0.183	4750
05529000	1	No	No	1984	1830	E	346	0.5	0.31	0.717	2370
05529000	1	No	No	1985	3490	--	660	1.08	0.316	0.252	4240
05529000	1	No	No	1986	2890	--	546	0.597	0.321	0.394	3560
05529000	1	No	No	1987	4900	--	926	0.804	0.327	0.0964	5810
05529000	1	No	No	1988	1810	--	342	0.567	0.333	0.74	2290
05529000	1	No	No	1989	1930	E	365	1.06	0.339	0.708	2410
05529000	1	No	No	1990	2430	--	459	1.57	0.345	0.552	2960
05529000	1	No	No	1991	2170	--	410	0.88	0.351	0.641	2640
05529000	1	No	No	1992	1220	D, E	231	0.784	0.357	0.902	1570

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05529000	1	No	No	1993	2660	C	503	0.92	0.362	0.494	3160
05529000	1	No	No	1994	2700	C	510	0.742	0.368	0.488	3190
05529000	1	No	No	1995	2470	C	467	1.17	0.374	0.565	2910
05529000	1	No	No	1996	3850	C	728	0.975	0.38	0.229	4390
05529000	1	No	No	1997	3540	C	669	1.89	0.385	0.29	4030
05529000	1	No	No	1998	1860	C	351	0.59	0.391	0.764	2190
05529000	1	No	No	1999	3420	C	646	1.16	0.397	0.325	3870
05529000	1	No	No	2000	2460	C	465	0.0862	0.403	0.596	2810
05529000	1	No	No	2001	2090	C	395	1.83	0.414	0.716	2380
05529000	1	No	No	2002	2970	C	561	1.35	0.425	0.462	3290
05529000	1	No	No	2003	1630	C, E	308	0.602	0.437	0.849	1830
05529000	1	No	No	2004	3760	C	711	0.0874	0.448	0.291	4030
05529000	1	No	No	2005	1860	C, E	351	0.464	0.46	0.808	2010
05529000	1	No	No	2006	2030	C	384	0.95	0.471	0.773	2160
05529000	1	No	No	2007	3780	C	714	1.04	0.482	0.313	3910
05529000	1	No	No	2008	3010	C	569	2.48	0.494	0.515	3090
05529000	1	No	No	2009	3190	C	603	0.665	0.505	0.477	3230
05529300	1	No	No	1955	372	7	1948	3.45	0.382	0.0122	565
05529300	1	No	No	1957	698	7	3655	2.7	0.448	0	978
05529300	1	No	No	1961	138	--	723	1.54	0.581	0.393	206
05529300	1	No	No	1962	80	--	419	0.225	0.616	0.826	128
05529300	1	No	No	1963	39	--	204	1.13	0.651	0.982	72.5
05529300	1	No	No	1964	76	--	398	1.78	0.685	0.892	115
05529300	1	No	No	1965	76	--	398	0.5	0.72	0.911	110
05529300	1	No	No	1966	125	--	655	1.14	0.755	0.654	159
05529300	1	No	No	1967	389	--	2037	1.48	0.79	0.0256	442
05529300	1	No	No	1968	184	--	964	1.18	0.824	0.363	211
05529300	1	No	No	1969	181	--	948	1.29	0.859	0.421	201
05529300	1	No	No	1970	326	--	1707	1.32	0.894	0.0646	343
05529300	1	No	No	1971	169	--	885	0.382	0.9	0.531	180
05529300	1	No	No	1972	485	--	2540	1.06	0.906	0.0174	503
05529300	1	No	No	1973	221	--	1157	0.781	0.912	0.262	230
05529300	1	No	No	1974	244	--	1278	1.04	0.917	0.197	252
05529300	1	No	No	1975	271	--	1419	0.963	0.923	0.149	279
05529300	1	No	No	1976	257	--	1346	0.961	0.929	0.178	263

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05529300	1	No	No	1977	51	--	267	1.2	0.935	1	53.2
05529300	1	No	No	1978	178	--	932	1.48	0.941	0.526	181
05529300	1	No	No	1979	222	--	1163	0.896	0.947	0.289	223
05529500	1	Yes	Yes	1953	27	E	117	0.694	0.381	0.982	65
05529500	1	Yes	Yes	1954	103	--	447	1.5	0.421	0.638	144
05529500	1	Yes	Yes	1955	146	--	634	3.33	0.46	0.394	184
05529500	1	Yes	Yes	1956	45	E	195	1.24	0.5	0.961	78
05529500	1	Yes	Yes	1957	430	--	1868	2.42	0.54	0.0181	435
05529500	1	Yes	Yes	1958	42	E	182	0.216	0.58	0.98	66.8
05529500	1	Yes	Yes	1959	76	E	330	0.371	0.62	0.918	97.2
05529500	1	Yes	Yes	1960	261	--	1134	0.384	0.659	0.14	253
05529500	1	Yes	Yes	1961	194	--	843	1.49	0.684	0.35	190
05529500	1	Yes	Yes	1962	154	--	669	0.233	0.708	0.585	152
05529500	1	Yes	Yes	1963	44	E	191	1.13	0.732	1	54
05529500	1	Yes	Yes	1964	74	--	321	0.783	0.756	0.959	79.3
05529500	1	Yes	Yes	1965	93	--	404	0.501	0.78	0.932	92.6
05529500	1	Yes	Yes	1966	175	--	760	1.32	0.804	0.57	154
05529500	1	Yes	Yes	1967	618	D	2684	1.48	0.829	0.0131	501
05529500	1	Yes	Yes	1968	134	--	582	1.17	0.853	0.827	114
05529500	1	Yes	Yes	1969	239	--	1038	1.29	0.877	0.339	192
05529500	1	Yes	Yes	1970	434	D	1885	1.32	0.901	0.0453	336
05529500	1	Yes	Yes	1971	260	2, E	1129	0.383	0.906	0.28	202
05529500	1	Yes	Yes	1972	664	--	2884	0.683	0.911	0.0128	507
05529500	1	Yes	Yes	1973	396	--	1720	1.38	0.916	0.0677	303
05529500	1	Yes	Yes	1974	291	--	1264	0.52	0.921	0.206	222
05529500	1	Yes	Yes	1975	276	--	1199	0.96	0.927	0.245	210
05529500	1	Yes	Yes	1976	305	D	1325	0.965	0.932	0.186	231
05529500	1	Yes	Yes	1977	86	E	374	0.725	0.937	0.98	66.2
05529500	1	Yes	Yes	1978	204	--	886	1.19	0.942	0.574	153
05529500	1	Yes	Yes	1979	246	--	1068	0.898	0.947	0.396	184
05529500	1	Yes	Yes	1980	144	E	625	0.745	0.952	0.869	107
05529500	1	Yes	Yes	1981	247	E	1073	0.927	0.953	0.398	183
05529500	1	Yes	Yes	1982	484	--	2102	1.93	0.953	0.0367	358
05529500	1	Yes	Yes	1983	548	--	2380	1.51	0.954	0.0233	406
05529500	1	Yes	Yes	1984	148	E	643	0.677	0.954	0.853	110

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05529500	1	Yes	Yes	1985	346	E	1503	1.25	0.955	0.136	256
05529500	1	Yes	Yes	1986	403	--	1750	0.786	0.955	0.0718	298
05529500	1	Yes	Yes	1987	806	--	3501	2.8	0.956	0.00726	596
05529500	1	Yes	Yes	1988	146	E	634	0.738	0.956	0.864	108
05529500	1	Yes	Yes	1989	232	E	1008	1.53	0.957	0.468	171
05529500	0	Yes	No	1990	208	E	1051	1.67	0.957	0.424	179
05529500	2	Yes	Yes	1991	121	E	712	2.01	0.957	0.79	121
05529500	2	Yes	Yes	1992	115	C, E	677	1.81	0.957	0.824	115
05529500	2	Yes	Yes	1993	160	C, E	941	1.14	0.957	0.534	160
05529500	2	Yes	Yes	1994	180	C, E	1059	1.41	0.957	0.417	180
05529500	2	Yes	Yes	1995	202	C, E	1188	0.913	0.957	0.278	202
05529500	2	Yes	Yes	1996	194	C	1141	0.925	0.957	0.322	194
05529500	2	Yes	Yes	1997	322	C, E	1894	2.38	0.957	0.0513	322
05529500	2	Yes	Yes	1998	111	C, E	653	1.62	0.957	0.846	111
05529500	2	Yes	Yes	1999	286	C	1683	1.42	0.957	0.0859	286
05529500	2	Yes	Yes	2000	153	C, E	900	1.92	0.957	0.576	153
05529500	2	Yes	Yes	2001	206	C, E	1212	2.75	0.957	0.26	206
05529500	2	Yes	Yes	2002	345	C	2030	0.31	0.957	0.0416	345
05529500	2	Yes	Yes	2003	135	C, E	794	1.6	0.957	0.707	135
05529500	2	Yes	Yes	2004	171	C, E	1006	0.12	0.957	0.47	171
05529500	2	Yes	Yes	2005	141	C	830	0.58	0.957	0.662	141
05529500	2	Yes	Yes	2006	90	C, E	530	0.508	0.957	0.939	90
05529500	2	Yes	Yes	2007	220	C	1294	1.9	0.957	0.213	220
05529500	2	Yes	Yes	2008	474	C, E	2789	4.25	0.957	0.0154	474
05529500	2	Yes	Yes	2009	252	C	1483	1.04	0.957	0.143	252
05529900	1	No	No	1961	444	--	824	0.936	0.926	0.627	468
05529900	1	No	No	1962	210	4, B	390	0.372	0.929	0.973	227
05529900	1	No	No	1963	195	--	362	1.55	0.932	0.981	210
05529900	1	No	No	1964	235	2	436	0.455	0.935	0.962	250
05529900	1	No	No	1965	291	--	540	0.685	0.939	0.928	306
05529900	1	No	No	1966	821	--	1524	1.15	0.942	0.123	842
05529900	1	No	No	1967	1160	--	2153	1.54	0.945	0.0329	1180
05529900	1	No	No	1968	627	--	1164	1.3	0.949	0.29	640
05529900	1	No	No	1969	418	--	776	0.835	0.952	0.72	427
05529900	1	No	No	1970	919	--	1706	1.26	0.955	0.0801	931

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05529900	1	No	No	1971	680	2	1262	0.372	0.956	0.229	689
05529900	1	No	No	1972	1190	--	2209	1.07	0.957	0.0309	1200
05529900	1	No	No	1973	840	2	1559	0.809	0.957	0.119	849
05529900	1	No	No	1974	444	--	824	1.02	0.958	0.67	450
05529900	1	No	No	1975	571	--	1060	1.01	0.959	0.418	578
05529900	1	No	No	1976	392	--	728	0.829	0.959	0.776	397
05529900	1	No	No	1977	266	--	494	1.27	0.96	0.953	270
05529900	0	No	No	1979	287	--	NA	0.877	0.962	NA	NA
05530000	1	Yes	Yes	1951	245	--	368	0.588	0.647	0.899	409
05530000	1	Yes	Yes	1952	328	--	493	1.53	0.676	0.785	489
05530000	1	Yes	Yes	1953	169	E	254	1.51	0.706	0.973	287
05530000	1	Yes	Yes	1954	461	--	692	3.11	0.735	0.582	608
05530000	1	Yes	Yes	1955	535	--	804	4.74	0.764	0.479	676
05530000	1	Yes	Yes	1956	245	--	368	1.56	0.794	0.952	340
05530000	1	Yes	Yes	1957	668	--	1003	5.8	0.823	0.315	779
05530000	1	Yes	Yes	1958	384	--	577	1.59	0.853	0.832	456
05530000	1	Yes	Yes	1959	376	E	565	1.87	0.882	0.868	431
05530000	1	Yes	Yes	1960	562	--	844	1.89	0.911	0.586	605
05530000	1	Yes	Yes	1961	596	--	895	2.81	0.917	0.538	637
05530000	1	Yes	Yes	1962	394	--	592	2.64	0.922	0.876	426
05530000	1	Yes	Yes	1963	478	D	718	1.55	0.927	0.754	509
05530000	1	Yes	Yes	1964	432	--	649	0.455	0.933	0.828	458
05530000	1	Yes	Yes	1965	336	--	505	0.236	0.938	0.942	358
05530000	1	Yes	Yes	1966	1530	D	2298	1.15	0.943	0.0259	1570
05530000	1	Yes	Yes	1967	1590	--	2388	1.54	0.949	0.0226	1620
05530000	1	Yes	Yes	1968	1140	--	1712	1.3	0.954	0.0784	1160
05530000	1	Yes	Yes	1969	897	--	1347	1.3	0.959	0.191	910
05530000	1	Yes	Yes	1970	1060	--	1592	1.25	0.965	0.112	1070
05530000	1	Yes	Yes	1971	1000	2	1502	0.371	0.965	0.141	1010
05530000	1	Yes	Yes	1972	1280	--	1923	1.06	0.966	0.0497	1290
05530000	1	Yes	Yes	1973	1190	--	1787	1.35	0.966	0.0688	1200
05530000	1	Yes	Yes	1974	673	D	1011	0.848	0.967	0.476	679
05530000	1	Yes	Yes	1975	1040	--	1562	1.04	0.967	0.123	1050
05530000	1	Yes	Yes	1976	887	--	1332	0.904	0.968	0.2	893
05530000	1	Yes	Yes	1977	515	E	774	1.27	0.969	0.738	519

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05530000	1	Yes	Yes	1978	883	--	1326	1.54	0.969	0.204	888
05530000	1	Yes	Yes	1979	919	--	1380	0.873	0.97	0.184	924
05530000	1	Yes	Yes	1980	658	--	988	0.626	0.97	0.503	662
05530000	1	Yes	Yes	1981	896	--	1346	0.905	0.971	0.197	900
05530000	1	Yes	Yes	1982	966	--	1451	0.286	0.971	0.16	969
05530000	1	Yes	Yes	1983	792	--	1190	1.54	0.972	0.291	795
05530000	1	Yes	Yes	1984	812	E	1220	1.32	0.972	0.268	814
05530000	1	Yes	Yes	1985	913	--	1371	1.06	0.973	0.188	915
05530000	1	Yes	Yes	1986	962	--	1445	0.818	0.973	0.163	964
05530000	1	Yes	Yes	1987	1490	--	2238	2.88	0.974	0.031	1490
05530000	1	Yes	Yes	1988	610	E	916	0.381	0.974	0.577	611
05530000	1	Yes	Yes	1989	1170	--	1757	1.51	0.975	0.0754	1170
05530000	1	Yes	Yes	1990	1190	--	1787	1.55	0.975	0.0708	1190
05530000	1	Yes	Yes	1991	831	--	1248	2.05	0.975	0.249	831
05530000	1	Yes	Yes	1992	911	E	1368	1.83	0.975	0.191	911
05530000	1	Yes	Yes	1993	962	C	1445	1.1	0.975	0.164	962
05530000	1	Yes	Yes	1994	1150	C	1727	1.42	0.975	0.0821	1150
05530000	1	Yes	Yes	1995	586	C, E	880	0.934	0.975	0.619	586
05530000	1	Yes	Yes	1996	820	C	1232	0.985	0.975	0.261	820
05530000	1	Yes	Yes	1997	1040	C	1562	2.41	0.975	0.126	1040
05530000	1	Yes	Yes	1998	484	C, E	727	1.4	0.975	0.792	484
05530000	1	Yes	Yes	1999	792	C	1190	1.32	0.975	0.294	792
05530000	1	Yes	Yes	2000	531	C, E	798	1.45	0.975	0.721	531
05530000	1	Yes	Yes	2001	890	C	1337	1.46	0.975	0.203	890
05530000	1	Yes	Yes	2002	1070	C	1607	1.4	0.975	0.112	1070
05530000	1	Yes	Yes	2003	619	C	930	1.14	0.975	0.565	619
05530000	1	Yes	Yes	2004	768	C	1154	0.586	0.975	0.333	768
05530000	1	Yes	Yes	2005	414	C	622	0.754	0.975	0.893	414
05530000	1	Yes	Yes	2006	292	C, E	439	0.811	0.975	0.97	292
05530000	1	Yes	Yes	2007	927	C	1392	1.5	0.975	0.182	927
05530000	1	Yes	Yes	2008	1310	C	1968	3.62	0.975	0.0476	1310
05530000	1	Yes	Yes	2009	818	C	1229	1.42	0.975	0.264	818
05530400	1	Yes	Yes	1961	63	--	249	2.2	0.244	0.828	110
05530400	1	Yes	Yes	1962	50	2	197	0.13	0.261	0.903	91.4
05530400	1	Yes	Yes	1963	95	--	375	0.353	0.279	0.643	147

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05530400	1	Yes	Yes	1964	16	--	63	0.806	0.296	1	35.1
05530400	1	Yes	Yes	1965	38	--	150	0.149	0.313	0.954	69.6
05530400	1	Yes	Yes	1966	158	--	623	1.42	0.33	0.301	217
05530400	1	Yes	Yes	1967	382	--	1507	1.54	0.347	0.0207	480
05530400	1	Yes	Yes	1968	156	--	615	1.3	0.365	0.337	208
05530400	1	Yes	Yes	1969	195	--	769	1.3	0.382	0.197	249
05530400	1	Yes	Yes	1970	343	2	1353	1.25	0.399	0.0357	419
05530400	1	Yes	Yes	1971	133	2	525	0.622	0.413	0.506	173
05530400	1	Yes	Yes	1972	463	--	1826	1.06	0.427	0.0157	545
05530400	1	Yes	Yes	1973	324	--	1278	0.809	0.441	0.0471	384
05530400	1	Yes	Yes	1974	87	--	343	0.495	0.455	0.816	113
05530400	1	Yes	Yes	1975	184	--	726	1.04	0.469	0.291	219
05530400	1	Yes	Yes	1976	116	--	458	0.905	0.484	0.676	141
05530400	1	Yes	Yes	1977	114	--	450	1.12	0.498	0.702	137
05530400	1	Yes	Yes	1978	145	--	572	1.54	0.512	0.527	169
05530400	1	Yes	Yes	1979	115	--	454	0.875	0.526	0.718	134
05530480	1	Yes	No	1955	782	7	865	3.79	0.156	0.0736	1380
05530480	1	Yes	No	1957	1200	7	1328	3.38	0.186	0.0205	1920
05530480	1	Yes	Yes	1961	322	--	356	2.03	0.254	0.656	619
05530480	1	Yes	Yes	1962	310	--	343	0.18	0.277	0.698	591
05530480	1	Yes	Yes	1963	126	--	139	1.6	0.299	0.958	317
05530480	1	Yes	Yes	1964	210	--	232	1.14	0.322	0.886	433
05530480	1	Yes	Yes	1965	184	--	204	0.185	0.345	0.925	390
05530480	1	Yes	Yes	1966	692	--	766	2.17	0.368	0.193	1030
05530480	1	Yes	Yes	1967	2100	--	2324	2.46	0.391	0.00725	2800
05530480	1	Yes	Yes	1968	340	--	376	2.56	0.413	0.745	558
05530480	1	Yes	Yes	1969	494	--	547	1.42	0.436	0.494	740
05530480	1	Yes	Yes	1970	845	--	935	1.26	0.459	0.143	1150
05530480	1	Yes	Yes	1971	366	--	405	1.62	0.481	0.752	551
05530480	1	Yes	Yes	1972	1350	--	1494	1.83	0.504	0.034	1710
05530480	1	Yes	Yes	1973	718	--	794	0.899	0.526	0.265	936
05530480	1	Yes	Yes	1974	494	--	547	0.791	0.548	0.601	661
05530480	1	Yes	Yes	1975	1070	2	1184	1.56	0.571	0.0883	1310
05530480	1	Yes	Yes	1976	754	--	834	1.23	0.593	0.277	922
05530480	1	Yes	Yes	1977	426	--	471	1.21	0.615	0.764	541

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05530480	1	Yes	Yes	1978	1680	--	1859	2.3	0.638	0.0228	1900
05530480	1	Yes	Yes	1979	1010	--	1118	1.36	0.66	0.147	1150
05530600	1	No	No	1960	3620	--	653	0.542	0.25	0.219	4970
05530600	1	No	No	1961	1280	--	231	1.33	0.258	0.859	2060
05530600	1	No	No	1962	2850	--	514	0.003	0.265	0.393	4020
05530600	1	No	No	1963	1550	--	280	1.31	0.273	0.797	2370
05530600	1	No	No	1964	1540	--	278	0.758	0.281	0.804	2330
05530600	1	No	No	1965	2100	--	379	0.512	0.288	0.643	3000
05530600	1	No	No	1966	2800	--	505	1.17	0.296	0.432	3850
05530600	1	No	No	1967	3620	--	653	1.5	0.303	0.251	4760
05530600	1	No	No	1968	2050	--	370	0.988	0.311	0.676	2870
05530600	1	No	No	1969	2880	--	520	1.36	0.318	0.429	3860
05530600	1	No	No	1970	3600	--	650	1.54	0.326	0.269	4640
05530600	1	No	No	1971	2400	--	433	0.0848	0.333	0.588	3220
05530600	1	No	No	1972	3600	--	650	1.09	0.341	0.279	4590
05530600	1	No	No	1973	3100	--	560	1.37	0.348	0.397	4000
05530600	1	No	No	1974	2880	--	520	0.603	0.355	0.461	3720
05530600	1	No	No	1975	2890	--	522	0.79	0.362	0.465	3700
05530600	1	No	No	1976	3300	--	596	1.18	0.37	0.366	4150
05530600	1	No	No	1977	1290	--	233	1.07	0.377	0.907	1800
05530700	1	Yes	No	1955	547	7	1113	3.35	0.651	0.145	682
05530700	1	Yes	Yes	1961	589	--	1198	2	0.776	0.164	656
05530700	1	Yes	Yes	1962	262	--	533	1.98	0.781	0.821	306
05530700	1	Yes	Yes	1963	309	--	628	1.59	0.787	0.721	353
05530700	1	Yes	Yes	1964	524	--	1066	1.9	0.792	0.238	576
05530700	1	Yes	Yes	1965	586	--	1192	0.495	0.798	0.177	639
05530700	1	Yes	Yes	1966	356	--	724	1.89	0.804	0.613	395
05530700	1	Yes	Yes	1967	372	--	757	2.07	0.809	0.579	409
05530700	1	Yes	Yes	1968	600	2	1220	2.09	0.815	0.173	644
05530700	1	Yes	Yes	1969	560	--	1139	0.807	0.82	0.211	599
05530700	1	Yes	Yes	1970	317	--	645	1.04	0.826	0.738	345
05530700	1	Yes	Yes	1971	378	--	769	1.2	0.828	0.584	407
05530700	1	Yes	Yes	1972	752	--	1530	1.29	0.83	0.0797	795
05530700	1	Yes	Yes	1973	459	--	934	0.482	0.832	0.408	490
05530700	1	Yes	Yes	1974	347	--	706	0.756	0.834	0.674	372

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05530700	1	Yes	Yes	1975	499	--	1015	1.39	0.837	0.317	528
05530700	1	Yes	Yes	1976	308	--	626	1.69	0.839	0.769	330
05530700	1	Yes	Yes	1977	434	--	883	0.349	0.841	0.471	459
05530700	1	Yes	Yes	1978	496	--	1009	1.9	0.843	0.332	522
05530700	1	Yes	Yes	1979	511	--	1039	1.14	0.845	0.3	536
05530700	1	Yes	Yes	1980	450	--	915	0.676	0.847	0.443	473
05530800	1	No	No	1954	3020	--	523	1.43	0.217	0.345	4480
05530800	1	No	No	1955	3800	--	658	2.71	0.227	0.201	5370
05530800	1	No	No	1956	1700	--	295	1.25	0.238	0.754	2710
05530800	1	No	No	1957	4080	--	707	1.61	0.248	0.179	5640
05530800	1	No	No	1958	1320	--	229	0.185	0.258	0.863	2170
05530800	1	No	No	1959	1200	--	208	1.19	0.268	0.894	1990
05530800	1	No	No	1960	3800	--	658	0.535	0.278	0.231	5150
05530800	1	No	No	1961	2330	--	404	1.33	0.286	0.601	3350
05530800	1	No	No	1962	3050	--	528	0.249	0.293	0.395	4230
05530800	1	No	No	1963	1520	--	263	1.31	0.3	0.835	2310
05530800	1	No	No	1964	1550	--	269	0.759	0.307	0.832	2330
05530800	1	No	No	1965	2180	--	378	0.512	0.315	0.666	3070
05530800	1	No	No	1966	3280	--	568	1.18	0.322	0.364	4390
05530800	1	No	No	1967	3600	--	624	1.5	0.329	0.3	4710
05530800	1	No	No	1968	2230	--	386	0.997	0.336	0.668	3060
05530800	1	No	No	1969	3200	--	554	1.35	0.343	0.4	4210
05530800	1	No	No	1970	3870	--	671	1.52	0.351	0.264	4930
05530800	1	No	No	1971	2780	--	482	0.0865	0.357	0.524	3650
05530800	1	No	No	1972	2620	--	454	1.09	0.364	0.579	3430
05530800	1	No	No	1973	3200	--	554	1.37	0.371	0.424	4100
05530800	1	No	No	1974	3340	--	579	0.599	0.378	0.396	4230
05530800	1	No	No	1975	3610	--	625	0.784	0.385	0.341	4500
05530800	1	No	No	1976	3850	--	667	1.17	0.392	0.296	4730
05530940	1	Yes	Yes	1961	215	--	774	1.27	0.377	0.192	363
05530940	1	Yes	Yes	1962	177	--	637	0.269	0.403	0.341	309
05530940	1	Yes	Yes	1963	171	--	615	2.01	0.428	0.39	296
05530940	1	Yes	Yes	1964	106	--	381	0.901	0.454	0.764	201
05530940	1	Yes	Yes	1965	151	--	543	0.01	0.479	0.539	255
05530940	1	Yes	Yes	1966	173	--	623	1.23	0.505	0.449	280

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05530940	1	Yes	Yes	1967	482	--	1734	1.23	0.53	0.0212	661
05530940	1	Yes	Yes	1968	180	--	648	4.15	0.555	0.463	276
05530940	1	Yes	Yes	1969	184	--	662	2.46	0.581	0.469	274
05530940	1	Yes	Yes	1970	275	--	990	2.87	0.606	0.179	375
05530940	1	Yes	Yes	1971	183	--	658	0.386	0.631	0.523	260
05530940	1	Yes	Yes	1972	513	--	1846	1.75	0.656	0.0248	641
05530940	1	Yes	Yes	1973	356	--	1281	2.2	0.68	0.0946	450
05530940	1	Yes	Yes	1974	210	--	756	1.13	0.705	0.475	273
05530940	1	Yes	Yes	1975	205	--	738	1.85	0.73	0.521	260
05530940	1	Yes	Yes	1976	148	--	533	1.89	0.754	0.801	191
05530940	1	Yes	Yes	1978	249	--	896	2.2	0.804	0.417	289
05530940	1	Yes	Yes	1979	148	--	533	0.38	0.828	0.857	174
05530940	1	Yes	Yes	1980	122	--	439	0.951	0.853	0.94	142
05530960	1	No	No	1961	213	--	473	1.35	0.334	0.518	356
05530960	1	No	No	1962	215	--	477	0.26	0.362	0.536	349
05530960	1	No	No	1963	123	--	273	1.75	0.389	0.868	222
05530960	1	No	No	1964	112	--	249	0.739	0.417	0.907	202
05530960	1	No	No	1965	210	--	466	0.56	0.444	0.628	316
05530960	1	No	No	1966	367	--	815	1.22	0.472	0.213	495
05530960	1	No	No	1967	744	--	1652	1.29	0.499	0.0234	932
05530960	1	No	No	1968	240	--	533	3.28	0.526	0.601	326
05530960	1	No	No	1969	180	--	400	2.11	0.554	0.808	248
05530960	1	No	No	1970	371	--	824	2.39	0.581	0.278	455
05530960	1	No	No	1971	232	2	515	0.38	0.596	0.692	294
05530960	1	No	No	1972	609	--	1352	1.58	0.611	0.063	711
05530960	1	No	No	1973	526	--	1168	1.82	0.626	0.112	610
05530960	1	No	No	1974	264	--	586	0.947	0.641	0.631	315
05530960	1	No	No	1975	314	--	697	1.59	0.656	0.497	365
05530960	1	No	No	1976	417	--	926	1.61	0.67	0.254	468
05530960	1	No	No	1977	244	--	542	0.703	0.685	0.734	279
05530960	1	No	No	1978	697	--	1547	1.9	0.7	0.0497	751
05530960	1	No	No	1979	366	--	813	0.504	0.715	0.418	397
05530990	1	No	No	1974	540	--	615	1.03	0.726	0.679	622
05530990	1	No	No	1975	910	--	1036	0.797	0.738	0.222	1000
05530990	1	No	No	1976	731	D	832	1.39	0.749	0.431	809

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05530990	1	No	No	1977	213	E	242	1	0.761	0.984	252
05530990	1	No	No	1978	642	--	731	1.67	0.773	0.573	695
05530990	1	No	No	1979	755	--	859	0.585	0.784	0.437	804
05530990	1	No	No	1980	422	--	480	0.909	0.796	0.885	452
05530990	1	No	No	1981	575	--	654	1.66	0.8	0.704	606
05530990	1	No	No	1982	609	--	693	0.533	0.804	0.656	638
05530990	1	No	No	1983	1060	--	1207	1.77	0.808	0.175	1090
05530990	1	No	No	1984	548	--	624	0.703	0.812	0.749	570
05530990	1	No	No	1985	763	--	868	1.57	0.816	0.46	785
05530990	1	No	No	1986	887	--	1010	0.837	0.82	0.304	907
05530990	1	No	No	1987	1650	--	1878	2.17	0.824	0.0377	1670
05530990	1	No	No	1988	535	--	609	0.211	0.828	0.778	545
05530990	1	No	No	1989	1110	--	1263	2.25	0.832	0.164	1120
05530990	1	No	No	1990	1010	--	1150	2.02	0.836	0.215	1020
05530990	1	No	No	1991	673	--	766	1.84	0.836	0.596	677
05530990	1	No	No	1992	444	E	505	1.58	0.837	0.89	447
05530990	1	No	No	1993	1080	C, D	1229	0.999	0.838	0.18	1080
05530990	1	No	No	1994	1200	C	1366	1.9	0.838	0.13	1200
05530990	1	No	No	1995	827	C	941	1.84	0.839	0.406	830
05530990	1	No	No	1996	796	C	906	1.46	0.84	0.444	798
05530990	1	No	No	1997	1450	C	1650	2.75	0.84	0.0617	1450
05530990	1	No	No	1998	668	C, E	760	1.42	0.841	0.608	669
05530990	1	No	No	1999	1140	C	1298	1.72	0.841	0.156	1140
05530990	1	No	No	2000	837	C	953	2.41	0.842	0.398	837
05530990	1	No	No	2001	1370	C	1559	2.44	0.842	0.0765	1370
05530990	1	No	No	2002	1450	C	1650	2.3	0.842	0.0621	1450
05530990	1	No	No	2003	811	C	923	1.6	0.842	0.429	811
05530990	1	No	No	2004	854	C	972	1.19	0.842	0.374	854
05530990	1	No	No	2005	505	C, E	575	0.745	0.842	0.826	505
05530990	1	No	No	2006	521	C	593	1.34	0.842	0.808	521
05530990	1	No	No	2007	1400	C	1594	2.05	0.842	0.0707	1400
05530990	1	No	No	2008	2510	C	2857	3.53	0.842	0.0112	2510
05530990	1	No	No	2009	1470	C	1673	0.92	0.842	0.0587	1470
05531000	1	No	No	1951	350	2	493	0.421	0.243	0.406	671
05531000	1	No	No	1952	430	--	606	0.862	0.264	0.276	763

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05531000	1	No	No	1953	139	--	196	0.759	0.285	0.912	342
05531000	1	No	No	1954	540	--	761	1.95	0.306	0.171	889
05531000	1	No	No	1955	516	--	727	3.64	0.327	0.199	838
05531000	1	No	No	1956	188	--	265	1.3	0.348	0.857	387
05531000	1	No	No	1957	572	--	806	3.45	0.369	0.171	889
05531000	1	No	No	1958	200	--	282	0.769	0.39	0.857	388
05531000	1	No	No	1959	350	2	493	0.402	0.411	0.555	576
05531000	1	No	No	1960	721	--	1016	0.394	0.432	0.0971	1050
05531000	1	No	No	1961	551	--	776	1.62	0.458	0.235	798
05531000	1	No	No	1962	385	2	543	0.219	0.484	0.545	582
05531000	1	No	No	1963	200	--	282	1.52	0.509	0.912	344
05531000	1	No	No	1964	210	--	296	0.616	0.535	0.91	346
05531000	1	No	No	1965	294	--	414	0.534	0.56	0.795	432
05531000	1	No	No	1966	410	--	578	0.476	0.586	0.59	555
05531000	1	No	No	1967	1060	--	1494	1.38	0.611	0.0449	1290
05531000	1	No	No	1968	396	--	558	2.52	0.637	0.668	511
05531000	1	No	No	1969	388	--	547	1.82	0.662	0.709	488
05531000	1	No	No	1970	731	--	1030	1.99	0.688	0.196	847
05531000	1	No	No	1971	427	--	602	0.377	0.699	0.669	510
05531000	1	No	No	1972	1060	2	1494	1.4	0.711	0.0595	1190
05531000	1	No	No	1973	712	--	1003	1.48	0.722	0.233	801
05531000	1	No	No	1974	550	2	775	1.03	0.734	0.481	624
05531000	1	No	No	1975	927	2	1306	0.81	0.745	0.111	1020
05531000	1	No	No	1976	745	2	1050	1.36	0.757	0.225	811
05531050	1	No	No	1955	610	7	624	3.53	0.263	0.255	1010
05531050	1	No	No	1957	287	7	294	0.0405	0.305	0.795	547
05531050	1	No	No	1960	583	7	597	0.386	0.368	0.364	903
05531050	1	No	No	1961	465	--	476	1.56	0.393	0.567	729
05531050	1	No	No	1962	565	--	578	0.232	0.417	0.43	844
05531050	1	No	No	1963	305	--	312	1.36	0.441	0.846	498
05531050	1	No	No	1964	307	--	314	0.71	0.465	0.857	487
05531050	1	No	No	1965	456	--	467	0.132	0.49	0.667	652
05531050	1	No	No	1966	575	--	588	1.22	0.514	0.505	779
05531050	1	No	No	1967	1160	--	1187	1.41	0.538	0.0783	1440
05531050	1	No	No	1968	363	--	371	1.98	0.562	0.846	498

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05531050	1	No	No	1969	508	--	520	1.59	0.587	0.676	646
05531050	1	No	No	1970	654	--	669	1.69	0.611	0.489	794
05531050	1	No	No	1971	714	--	731	0.372	0.624	0.424	850
05531050	1	No	No	1972	1510	--	1545	1.3	0.637	0.0432	1710
05531050	1	No	No	1973	619	--	633	1.24	0.65	0.575	722
05531050	1	No	No	1974	648	--	663	1.04	0.663	0.548	744
05531050	1	No	No	1975	848	--	868	0.894	0.676	0.313	946
05531050	1	No	No	1976	1110	--	1136	1.19	0.689	0.152	1210
05531050	0	No	No	1977	365	--	NA	0.95	0.702	NA	NA
05531050	0	No	No	1978	1180	--	NA	1.46	0.715	NA	NA
05531050	0	No	No	1979	1740	--	NA	0.676	0.728	NA	NA
05531080	1	Yes	Yes	1961	176	--	758	1.44	0.42	0.228	282
05531080	1	Yes	Yes	1962	146	--	629	0.254	0.436	0.379	244
05531080	1	Yes	Yes	1963	173	--	745	1.16	0.451	0.259	272
05531080	1	Yes	No	1964	70	4, B	302	0.254	0.467	0.874	137
05531080	1	Yes	No	1965	70	4, B	302	0.254	0.482	0.881	135
05531080	1	Yes	Yes	1966	98	--	422	1.33	0.498	0.74	168
05531080	1	Yes	Yes	1967	98	--	422	1.41	0.513	0.752	166
05531080	1	Yes	Yes	1968	90	--	388	1.31	0.529	0.806	153
05531080	1	Yes	Yes	1969	16	--	69	1.31	0.544	1	37.2
05531080	1	Yes	Yes	1970	126	--	543	1.32	0.56	0.616	192
05531080	1	Yes	Yes	1971	114	--	491	0.365	0.582	0.713	174
05531080	1	Yes	Yes	1972	645	--	2778	1.2	0.605	0.00661	803
05531080	1	Yes	Yes	1973	193	--	831	0.445	0.628	0.308	259
05531080	1	Yes	Yes	1974	263	--	1133	0.535	0.651	0.137	335
05531080	1	Yes	Yes	1975	256	--	1103	0.98	0.674	0.159	320
05531080	1	Yes	Yes	1976	165	--	711	0.988	0.697	0.521	212
05531080	1	Yes	Yes	1977	181	--	780	0.738	0.72	0.461	225
05531080	1	Yes	Yes	1978	158	--	681	1.24	0.743	0.605	194
05531080	1	Yes	Yes	1979	180	--	775	1.25	0.766	0.513	214
05531100	1	Yes	Yes	1956	73	--	777	1.18	0.414	0.208	124
05531100	1	Yes	Yes	1957	51	--	543	0.967	0.452	0.514	92
05531100	1	Yes	Yes	1958	38	--	405	1.41	0.49	0.758	71.6
05531100	1	Yes	Yes	1959	54	--	575	0.692	0.528	0.538	89.9
05531100	1	Yes	Yes	1960	87	--	926	0.445	0.565	0.192	128

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05531100	1	Yes	Yes	1961	77	--	820	1.47	0.578	0.279	114
05531100	1	Yes	Yes	1962	67	--	713	0.311	0.591	0.413	102
05531100	1	Yes	Yes	1963	35	--	373	1.14	0.603	0.87	60.8
05531100	1	Yes	Yes	1964	33	--	351	0.779	0.616	0.898	57.8
05531100	1	Yes	Yes	1965	55	--	586	0.505	0.628	0.62	82.8
05531100	1	Yes	Yes	1966	98	--	1043	1.37	0.641	0.17	133
05531100	1	Yes	Yes	1967	119	--	1267	1.46	0.654	0.0904	159
05531100	1	Yes	Yes	1968	40	--	426	1.24	0.666	0.852	62.5
05531100	1	Yes	Yes	1969	64	--	681	1.29	0.679	0.54	89.7
05531100	1	Yes	Yes	1970	32	--	341	1.32	0.692	0.935	52.1
05531100	1	Yes	Yes	1971	39	2	415	0.364	0.713	0.892	58.4
05531100	1	Yes	Yes	1972	256	2	2725	1.16	0.735	0.00992	304
05531100	1	Yes	Yes	1978	56	--	596	1.2	0.865	0.823	65.3
05531100	1	Yes	Yes	1979	96	--	1022	0.781	0.887	0.371	106
05531130	1	No	No	1961	208	--	474	1.45	0.456	0.627	360
05531130	1	No	No	1962	196	--	446	0.251	0.468	0.681	341
05531130	1	No	No	1963	171	4	390	1.15	0.481	0.772	306
05531130	1	No	No	1964	171	4, B	390	0.144	0.493	0.78	302
05531130	1	No	No	1965	191	--	435	0.144	0.505	0.728	324
05531130	1	No	No	1966	365	--	831	1.35	0.518	0.228	535
05531130	1	No	No	1967	330	--	752	1.44	0.53	0.311	490
05531130	1	No	No	1968	213	--	485	1.27	0.543	0.687	339
05531130	1	No	No	1969	258	--	588	1.3	0.555	0.546	391
05531130	1	No	No	1970	148	--	337	1.29	0.567	0.887	254
05531130	1	No	No	1971	171	4, B	390	0.144	0.586	0.84	275
05531130	1	No	No	1972	770	--	1754	1.18	0.604	0.0257	987
05531130	1	No	No	1973	256	--	583	0.805	0.622	0.617	364
05531130	1	No	No	1974	274	--	624	0.522	0.64	0.578	379
05531130	1	No	No	1975	297	--	677	1	0.658	0.526	400
05531130	1	No	No	1976	312	--	711	0.964	0.677	0.501	410
05531130	1	No	No	1978	239	--	544	1.22	0.713	0.754	313
05531130	1	No	No	1979	404	--	920	0.784	0.731	0.309	489
05531200	1	No	No	1948	1060	7	776	1.89	0.153	0.102	1930
05531200	1	No	No	1950	910	7	666	1.23	0.171	0.173	1660
05531200	1	No	No	1955	1150	7	842	3.46	0.283	0.118	1870

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05531200	1	No	No	1957	776	7	568	2.83	0.328	0.369	1300
05531200	1	No	No	1960	984	--	720	0.381	0.395	0.245	1480
05531200	1	No	No	1961	755	--	553	1.52	0.416	0.467	1180
05531200	1	No	No	1962	838	--	613	0.241	0.437	0.4	1260
05531200	1	No	No	1963	531	--	389	1.28	0.459	0.758	850
05531200	1	No	No	1964	528	--	387	0.74	0.48	0.775	828
05531200	1	No	No	1965	613	--	449	0.514	0.501	0.705	912
05531200	1	No	No	1966	1070	--	783	1.29	0.522	0.272	1430
05531200	1	No	No	1967	1260	--	922	1.43	0.543	0.184	1630
05531200	1	No	No	1968	609	--	446	1.69	0.564	0.758	850
05531200	1	No	No	1969	876	--	641	1.48	0.585	0.501	1140
05531200	1	No	No	1970	570	--	417	1.34	0.607	0.822	766
05531200	1	No	No	1971	768	--	562	0.368	0.62	0.646	975
05531200	1	No	No	1972	2110	--	1545	1.25	0.634	0.043	2460
05531200	1	No	No	1973	531	--	389	1.24	0.648	0.88	688
05531200	1	No	No	1974	1050	--	769	1.04	0.662	0.416	1250
05531200	1	No	No	1975	989	--	724	0.949	0.676	0.484	1160
05531200	1	No	No	1976	1150	--	842	1.09	0.689	0.356	1320
05531300	1	No	No	1948	1130	7	749	1.9	0.21	0.139	1770
05531300	1	No	No	1950	1160	7	769	1.23	0.23	0.136	1790
05531300	1	No	No	1955	1380	7	915	3.45	0.34	0.105	1910
05531300	1	No	No	1957	895	7	594	2.78	0.384	0.381	1280
05531300	1	No	No	1960	1260	--	836	0.377	0.45	0.189	1600
05531300	1	No	No	1961	688	--	456	2	0.47	0.666	948
05531300	1	No	No	1962	1090	--	723	0.246	0.489	0.309	1370
05531300	1	No	No	1963	608	--	403	1.27	0.509	0.773	828
05531300	1	No	No	1964	614	--	407	0.745	0.528	0.781	818
05531300	1	No	No	1965	688	--	456	0.515	0.548	0.732	878
05531300	1	No	No	1966	1400	--	928	1.29	0.568	0.192	1590
05531300	1	No	No	1967	1480	--	982	1.43	0.587	0.175	1650
05531300	1	No	No	1968	934	--	619	1.67	0.607	0.551	1070
05531300	1	No	No	1969	982	--	651	1.46	0.626	0.528	1100
05531300	1	No	No	1970	808	--	536	1.34	0.646	0.709	906
05531300	1	No	No	1971	964	--	639	0.364	0.658	0.575	1050
05531300	1	No	No	1972	2230	--	1479	1.26	0.67	0.0541	2280

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05531300	1	No	No	1973	729	--	483	1.24	0.682	0.8	795
05531300	1	No	No	1974	1030	--	683	1.04	0.694	0.553	1070
05531300	1	No	No	1975	944	--	626	0.965	0.706	0.641	976
05531300	1	No	No	1976	1100	--	730	1.07	0.718	0.519	1110
05531300	0	No	No	1977	606	--	411	1.18	0.73	0.905	648
05531300	0	No	No	1978	914	--	633	1.34	0.742	0.669	948
05531300	0	No	No	1979	1520	--	1077	0.731	0.754	0.206	1550
05531300	0	No	No	1980	703	--	509	0.764	0.766	0.833	750
05531300	2	No	No	1989	1580	C	1170	1.61	0.793	0.183	1630
05531300	2	No	No	1990	1530	C	1133	1.59	0.796	0.2	1570
05531300	2	No	No	1991	1270	C	940	1.96	0.797	0.358	1310
05531300	2	No	No	1992	645	C, E	478	0.984	0.798	0.889	674
05531300	2	No	No	1993	1130	C	837	0.693	0.8	0.478	1160
05531300	2	No	No	1994	1500	C	1111	2.48	0.801	0.216	1530
05531300	2	No	No	1995	1390	C	1029	1.93	0.802	0.272	1420
05531300	2	No	No	1996	1250	C	926	0.839	0.804	0.383	1280
05531300	2	No	No	1997	1460	C	1081	2.57	0.805	0.236	1490
05531300	0	No	No	1998	1050	C	779	0.498	0.806	0.55	1080
05531300	0	No	No	1999	1300	C	965	1.68	0.807	0.341	1330
05531300	0	No	No	2000	1250	C	930	1.43	0.809	0.385	1280
05531300	0	No	No	2001	1110	C	827	2.34	0.811	0.502	1130
05531300	0	No	No	2002	1520	C	1134	3	0.814	0.21	1550
05531300	3	No	No	2003	1170	C	874	1.35	0.816	0.454	1190
05531300	3	No	No	2004	1070	C	799	1.1	0.818	0.54	1090
05531300	3	No	No	2005	1040	C, E	777	0.866	0.821	0.568	1050
05531300	3	No	No	2006	798	C	596	0.512	0.823	0.789	809
05531300	3	No	No	2007	1310	C	979	1.27	0.826	0.347	1320
05531300	3	No	No	2008	1940	C	1449	3.46	0.828	0.0982	1950
05531300	3	No	No	2009	1430	C	1068	0.974	0.831	0.264	1430
05531380	1	No	No	1948	1560	7	1059	1.91	0.247	0.0512	2600
05531380	1	No	No	1950	1250	7	849	1.23	0.269	0.109	2110
05531380	1	No	No	1955	1380	7	937	3.45	0.384	0.112	2100
05531380	1	No	No	1957	1010	7	686	2.74	0.43	0.304	1540
05531380	1	No	No	1960	1240	--	842	0.375	0.499	0.209	1720
05531380	1	No	No	1961	911	--	619	1.5	0.517	0.466	1310

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05531380	1	No	No	1962	1040	--	706	0.251	0.535	0.369	1450
05531380	1	No	No	1963	582	--	395	1.26	0.553	0.813	872
05531380	1	No	No	1964	562	--	382	0.747	0.571	0.84	832
05531380	1	No	No	1965	689	--	468	0.16	0.589	0.749	962
05531380	1	No	No	1966	1210	--	822	1.29	0.607	0.299	1540
05531380	1	No	No	1967	1200	--	815	1.41	0.625	0.324	1510
05531380	1	No	No	1968	770	--	523	1.65	0.643	0.722	997
05531380	1	No	No	1969	766	--	520	1.43	0.661	0.741	973
05531380	1	No	No	1970	1120	--	760	1.46	0.679	0.443	1350
05531380	1	No	No	1971	740	--	502	0.36	0.69	0.784	913
05531380	1	No	No	1972	1790	--	1215	1.29	0.701	0.125	2050
05531380	1	No	No	1973	1040	--	706	1.25	0.711	0.541	1210
05531380	1	No	No	1974	1080	--	733	1.05	0.722	0.519	1240
05531380	1	No	No	1975	1330	--	903	0.977	0.733	0.33	1500
05531380	1	No	No	1976	1430	--	971	1.06	0.743	0.273	1580
05531500	1	Yes	Yes	1946	775	--	425	0.785	0.222	0.501	1420
05531500	1	Yes	Yes	1947	1000	--	549	2.15	0.233	0.323	1700
05531500	1	Yes	Yes	1948	1920	--	1053	1.92	0.243	0.0517	2900
05531500	1	Yes	Yes	1949	836	--	459	0.725	0.254	0.471	1460
05531500	1	Yes	Yes	1950	1360	--	746	1.23	0.265	0.162	2100
05531500	1	Yes	Yes	1951	1200	2	658	0.346	0.287	0.236	1850
05531500	1	Yes	Yes	1952	925	D	507	0.725	0.309	0.44	1510
05531500	1	Yes	Yes	1953	506	E	278	1.14	0.331	0.832	947
05531500	1	Yes	Yes	1954	1140	--	625	1.47	0.353	0.316	1700
05531500	1	Yes	Yes	1955	1710	--	938	3.45	0.375	0.108	2370
05531500	1	Yes	Yes	1956	624	--	342	0.831	0.397	0.781	1030
05531500	1	Yes	Yes	1957	1020	--	559	2.69	0.419	0.459	1480
05531500	1	Yes	Yes	1958	778	--	427	1.45	0.441	0.689	1160
05531500	1	Yes	Yes	1959	1200	2	658	0.379	0.463	0.365	1630
05531500	1	Yes	Yes	1960	1220	--	669	0.371	0.485	0.371	1620
05531500	1	Yes	Yes	1961	1430	--	784	1.97	0.503	0.258	1810
05531500	1	Yes	Yes	1962	940	E	516	0.257	0.521	0.621	1250
05531500	1	Yes	Yes	1963	585	E	321	1.26	0.539	0.889	849
05531500	1	Yes	Yes	1964	650	E	357	0.749	0.557	0.86	899
05531500	1	Yes	Yes	1965	700	2	384	0.129	0.575	0.839	933

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05531500	1	Yes	Yes	1966	1460	--	801	1.3	0.593	0.31	1710
05531500	1	Yes	Yes	1967	1350	--	741	1.4	0.61	0.4	1580
05531500	1	Yes	Yes	1968	1220	--	669	1.63	0.628	0.506	1410
05531500	1	Yes	Yes	1969	1040	--	570	0.943	0.646	0.659	1200
05531500	1	Yes	Yes	1970	1110	--	609	1.43	0.664	0.622	1250
05531500	1	Yes	Yes	1971	739	D, E	405	0.355	0.675	0.88	868
05531500	1	Yes	Yes	1972	1790	--	982	1.31	0.686	0.225	1890
05531500	1	Yes	Yes	1973	1280	--	702	0.811	0.697	0.532	1370
05531500	1	Yes	Yes	1974	1160	--	636	1.05	0.708	0.629	1240
05531500	1	Yes	Yes	1975	1600	--	878	0.992	0.719	0.346	1650
05531500	1	Yes	Yes	1976	1460	D	801	1.05	0.731	0.447	1500
05531500	0	Yes	No	1977	1000	E	541	1.18	0.742	0.781	1030
05531500	2	Yes	Yes	1978	1150	E	613	1.3	0.753	0.708	1140
05531500	2	Yes	Yes	1979	1930	--	1030	0.765	0.764	0.243	1840
05531500	2	Yes	Yes	1980	1370	E	731	0.712	0.775	0.575	1310
05531500	2	Yes	Yes	1981	1450	E	773	1.79	0.778	0.528	1380
05531500	2	Yes	Yes	1982	1330	--	709	0.36	0.781	0.608	1270
05531500	2	Yes	Yes	1983	2070	--	1104	1.63	0.784	0.209	1930
05531500	2	Yes	Yes	1984	1040	--	555	0.552	0.787	0.803	995
05531500	2	Yes	Yes	1985	1850	--	987	1.32	0.789	0.297	1730
05531500	0	Yes	No	1986	1330	--	715	0.836	0.792	0.614	1260
05531500	3	Yes	Yes	1987	3540	--	1915	2.49	0.795	0.0324	3290
05531500	3	Yes	Yes	1988	1180	--	638	0.84	0.798	0.72	1120
05531500	3	Yes	Yes	1989	1360	--	736	1.45	0.801	0.596	1280
05531500	3	Yes	Yes	1990	2320	--	1255	1.82	0.804	0.155	2150
05531500	3	Yes	Yes	1991	1760	--	952	2.01	0.805	0.354	1640
05531500	3	Yes	Yes	1992	1140	E	617	0.971	0.807	0.752	1070
05531500	3	Yes	Yes	1993	1160	C	628	0.652	0.808	0.741	1090
05531500	3	Yes	Yes	1994	1520	C	822	2.21	0.809	0.505	1420
05531500	3	Yes	Yes	1995	1470	C	795	0.197	0.81	0.536	1370
05531500	3	Yes	Yes	1996	1650	C	893	0.751	0.812	0.429	1530
05531500	3	Yes	Yes	1997	2510	C	1358	2.55	0.813	0.122	2310
05531500	0	Yes	No	1998	1470	C	811	0.64	0.814	0.522	1390
05531500	0	Yes	No	1999	1550	C	872	1.47	0.816	0.456	1490
05531500	0	Yes	No	2000	1520	C	872	1.44	0.817	0.457	1490

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05531500	0	Yes	No	2001	1280	C	749	1.1	0.82	0.6	1280
05531500	0	Yes	No	2002	2080	C	1241	2.53	0.824	0.169	2090
05531500	4	Yes	Yes	2003	1220	C	742	1.38	0.827	0.616	1250
05531500	4	Yes	Yes	2004	1110	C, E	675	1.36	0.83	0.709	1140
05531500	4	Yes	Yes	2005	1390	C, E	845	1.02	0.834	0.505	1420
05531500	4	Yes	Yes	2006	945	C, E	575	0.536	0.837	0.822	963
05531500	4	Yes	Yes	2007	1920	C	1168	1.63	0.841	0.208	1940
05531500	4	Yes	Yes	2008	2890	C	1758	3.34	0.844	0.0484	2910
05531500	4	Yes	Yes	2009	2080	C	1265	0.824	0.847	0.17	2090
05531800	1	No	No	1961	389	--	946	1.7	0.627	0.212	509
05531800	1	No	No	1962	334	--	812	0.226	0.641	0.342	442
05531800	1	No	No	1963	303	--	737	1.31	0.655	0.447	402
05531800	1	No	No	1964	316	--	769	1.09	0.669	0.423	412
05531800	1	No	No	1965	311	--	756	0.583	0.683	0.451	400
05531800	1	No	No	1966	449	--	1092	2.07	0.697	0.173	548
05531800	1	No	No	1967	342	--	832	0.946	0.711	0.391	424
05531800	1	No	No	1968	388	--	944	2.39	0.725	0.281	467
05531800	1	No	No	1969	367	--	893	1.37	0.739	0.349	439
05531800	1	No	No	1970	406	--	987	2.76	0.753	0.266	474
05531800	1	No	No	1971	335	--	815	0.376	0.758	0.46	397
05531800	1	No	No	1972	343	--	834	1.57	0.764	0.444	403
05531800	1	No	No	1973	307	--	747	0.498	0.77	0.551	361
05531800	1	No	No	1975	239	--	581	1.5	0.781	0.769	284
05531800	1	No	No	1976	177	--	430	1.78	0.787	0.921	217
05531800	0	No	No	1977	233	--	NA	1.61	0.792	NA	NA
05531800	0	No	No	1978	236	--	NA	1.27	0.798	NA	NA
05531800	0	No	No	1979	271	--	NA	0.841	0.804	NA	NA
05531800	0	No	No	1980	216	--	NA	0.836	0.809	NA	NA
05532000	1	Yes	Yes	1951	295	--	616	0.344	0.601	0.55	369
05532000	1	Yes	Yes	1952	200	--	418	0.829	0.626	0.834	265
05532000	1	Yes	Yes	1953	57	--	119	0.666	0.651	1	94.2
05532000	1	Yes	Yes	1954	548	--	1145	1.66	0.677	0.143	591
05532000	1	Yes	Yes	1955	598	--	1249	3.37	0.702	0.113	629
05532000	1	Yes	Yes	1956	228	--	476	0.389	0.727	0.84	263
05532000	1	Yes	Yes	1957	560	--	1170	2.15	0.753	0.165	564

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05532000	1	Yes	Yes	1958	405	--	846	1.45	0.778	0.445	411
05532000	1	Yes	Yes	1959	273	D	570	0.67	0.803	0.8	280
05532000	1	Yes	Yes	1960	295	--	616	0.77	0.828	0.771	291
05532000	1	Yes	Yes	1961	588	--	1228	1.76	0.835	0.179	550
05532000	1	Yes	Yes	1962	260	--	543	1.73	0.841	0.856	256
05532000	1	Yes	Yes	1963	325	--	679	1.38	0.847	0.721	311
05532000	1	Yes	Yes	1964	284	--	593	0.909	0.854	0.817	273
05532000	1	Yes	Yes	1965	434	--	907	0.386	0.86	0.466	403
05532000	1	Yes	Yes	1966	499	--	1042	1.68	0.867	0.321	457
05532000	1	Yes	Yes	1967	264	--	552	1.02	0.873	0.874	249
05532000	1	Yes	Yes	1968	584	--	1220	1.72	0.879	0.203	524
05532000	1	Yes	Yes	1969	553	--	1155	0.839	0.886	0.244	494
05532000	1	Yes	Yes	1970	449	D	938	1.79	0.892	0.467	402
05532000	1	Yes	Yes	1971	336	--	702	0.903	0.894	0.739	304
05532000	1	Yes	Yes	1972	706	--	1475	0.93	0.896	0.118	623
05532000	1	Yes	Yes	1973	509	--	1063	0.762	0.898	0.336	451
05532000	1	Yes	Yes	1974	428	--	894	0.72	0.899	0.521	381
05532000	1	Yes	Yes	1975	598	--	1249	1.26	0.901	0.201	526
05532000	1	Yes	Yes	1976	454	D	948	0.963	0.903	0.469	402
05532000	1	Yes	Yes	1977	359	E	750	1.42	0.905	0.701	319
05532000	1	Yes	Yes	1978	607	--	1268	0.999	0.907	0.196	531
05532000	1	Yes	Yes	1979	591	--	1235	0.547	0.909	0.214	516
05532000	1	Yes	Yes	1980	662	--	1383	0.546	0.911	0.156	576
05532000	1	Yes	Yes	1981	548	--	1145	0.835	0.911	0.272	478
05532000	1	Yes	Yes	1982	839	--	1753	0.757	0.911	0.0617	729
05532000	1	Yes	Yes	1983	639	--	1335	1.98	0.912	0.174	556
05532000	1	Yes	Yes	1984	464	--	969	1.5	0.912	0.457	407
05532000	1	Yes	Yes	1985	556	--	1162	1.35	0.912	0.26	485
05532000	1	Yes	Yes	1986	391	--	817	0.866	0.913	0.621	343
05532000	1	Yes	Yes	1987	1120	--	2340	3.33	0.913	0.0218	968
05532000	1	Yes	Yes	1988	370	--	773	0.59	0.913	0.68	325
05532000	1	Yes	Yes	1989	541	--	1130	2.02	0.913	0.285	471
05532000	1	Yes	Yes	1990	895	--	1870	3.29	0.914	0.0477	775
05532000	1	Yes	Yes	1991	675	--	1410	2.87	0.914	0.148	586
05532000	0	Yes	No	1992	351	C	801	1.59	0.914	0.644	336

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05532000	2	Yes	Yes	1993	517	C	1288	1.82	0.914	0.192	536
05532000	2	Yes	Yes	1994	425	C	1059	2.01	0.915	0.363	442
05532000	2	Yes	Yes	1995	273	C, E	680	2.44	0.915	0.782	287
05532000	2	Yes	Yes	1996	400	C	997	2.14	0.915	0.432	416
05532000	2	Yes	Yes	1997	753	C	1877	3.13	0.916	0.0475	777
05532000	2	Yes	Yes	1998	466	C	1161	1.05	0.916	0.263	483
05532000	2	Yes	Yes	1999	385	C	959	1.43	0.916	0.472	401
05532000	2	Yes	Yes	2000	477	C	1189	2.25	0.917	0.244	494
05532000	2	Yes	Yes	2001	379	C	945	1.09	0.92	0.492	393
05532000	2	Yes	Yes	2002	652	C	1625	3.13	0.924	0.0878	669
05532000	2	Yes	Yes	2003	567	C	1413	2.34	0.927	0.153	580
05532000	2	Yes	Yes	2004	516	C	1286	1.67	0.931	0.2	526
05532000	2	Yes	Yes	2005	377	C	940	1.44	0.934	0.512	385
05532000	2	Yes	Yes	2006	343	C	855	0.864	0.938	0.603	349
05532000	2	Yes	Yes	2007	777	C	1936	2.03	0.942	0.0461	784
05532000	2	Yes	Yes	2008	808	C	2014	5.3	0.945	0.0414	813
05532000	2	Yes	Yes	2009	727	C	1812	2.08	0.949	0.0613	729
05532500	1	No	No	1940	2660	--	330	0.401	0.145	0.623	4220
05532500	1	No	No	1941	3580	--	444	0.191	0.153	0.411	5360
05532500	1	No	No	1942	3320	--	412	0.729	0.16	0.473	5010
05532500	1	No	No	1943	3820	--	474	0.981	0.167	0.377	5570
05532500	1	No	No	1944	4480	--	556	1.1	0.175	0.275	6250
05532500	1	No	No	1945	3670	--	456	1.36	0.182	0.416	5330
05532500	1	No	No	1946	3370	--	418	0.545	0.19	0.486	4930
05532500	1	No	No	1947	3780	--	469	1.84	0.197	0.406	5390
05532500	1	No	No	1948	6510	--	808	1.84	0.204	0.105	8500
05532500	1	No	No	1949	1890	--	235	1.39	0.212	0.832	3070
05532500	1	No	No	1950	6340	D	787	1.32	0.219	0.122	8190
05532500	1	No	No	1951	3100	--	385	0.191	0.232	0.589	4400
05532500	1	No	No	1952	3620	--	449	0.797	0.245	0.479	4970
05532500	1	No	No	1953	1470	--	183	0.624	0.257	0.918	2450
05532500	1	No	No	1954	3980	--	494	1.43	0.27	0.428	5270
05532500	1	No	No	1955	6340	--	787	2.89	0.283	0.147	7750
05532500	1	No	No	1956	2460	--	305	1.23	0.296	0.771	3440
05532500	1	No	No	1957	5950	--	739	1.85	0.308	0.184	7130

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05532500	1	No	No	1958	2100	--	261	1.24	0.321	0.849	2950
05532500	1	No	No	1959	1680	--	209	1.18	0.334	0.916	2460
05532500	1	No	No	1960	5500	--	683	0.0655	0.347	0.249	6440
05532500	1	No	No	1961	4690	--	582	1.95	0.355	0.373	5600
05532500	1	No	No	1962	4230	--	525	0.251	0.364	0.461	5080
05532500	1	No	No	1963	2410	--	299	1.29	0.373	0.826	3110
05532500	1	No	No	1964	2500	--	310	0.761	0.382	0.816	3170
05532500	1	No	No	1965	3200	--	397	0.311	0.391	0.695	3860
05532500	1	No	No	1966	5210	--	647	1.22	0.4	0.326	5880
05532500	1	No	No	1967	4600	--	571	1.48	0.409	0.433	5240
05532500	1	No	No	1968	3600	--	447	1.12	0.417	0.636	4150
05532500	1	No	No	1969	4380	--	544	0.871	0.426	0.489	4920
05532500	1	No	No	1970	4890	--	607	1.48	0.435	0.407	5390
05532500	1	No	No	1971	3380	--	420	0.436	0.443	0.702	3830
05532500	1	No	No	1972	5460	--	678	1.13	0.45	0.329	5860
05532500	1	No	No	1973	4330	--	538	1.35	0.457	0.527	4710
05532500	1	No	No	1974	4290	--	533	0.587	0.464	0.542	4640
05532500	1	No	No	1975	4630	--	575	0.794	0.472	0.485	4940
05532500	1	No	No	1976	4830	--	600	1.13	0.479	0.457	5100
05532500	0	No	No	1977	2170	--	283	1.11	0.486	0.902	2590
05532500	2	No	No	1978	3380	--	463	1.02	0.494	0.676	3950
05532500	2	No	No	1979	5870	--	805	0.776	0.501	0.239	6530
05532500	2	No	No	1980	2960	--	406	0.676	0.508	0.769	3450
05532500	2	No	No	1981	3160	--	433	1.65	0.512	0.736	3640
05532500	2	No	No	1982	3840	--	526	1.86	0.517	0.602	4330
05532500	2	No	No	1983	6130	--	840	1.57	0.521	0.223	6680
05532500	2	No	No	1984	3250	--	445	0.489	0.525	0.729	3680
05532500	2	No	No	1985	6360	--	872	1.18	0.529	0.205	6870
05532500	2	No	No	1986	4180	--	573	0.702	0.533	0.546	4610
05532500	2	No	No	1987	9770	--	1339	2.62	0.537	0.0519	10400
05532500	2	No	No	1988	3250	--	445	0.704	0.541	0.742	3610
05532500	2	No	No	1989	3720	--	510	1.27	0.545	0.652	4070
05532500	2	No	No	1990	5950	--	816	1.71	0.55	0.262	6330
05532500	2	No	No	1991	5270	--	722	1.7	0.553	0.367	5630
05532500	2	No	No	1992	2760	--	378	0.792	0.557	0.835	3050

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05532500	2	No	No	1993	4690	C	643	0.975	0.56	0.475	5000
05532500	2	No	No	1994	4880	C	669	0.694	0.564	0.444	5180
05532500	2	No	No	1995	4720	C	647	1.12	0.567	0.476	5000
05532500	2	No	No	1996	5270	C	722	0.799	0.571	0.383	5530
05532500	2	No	No	1997	6990	C	958	2.26	0.574	0.18	7230
05532500	0	No	No	1998	4450	C	624	1.37	0.578	0.518	4770
05532500	3	No	No	1999	5680	C	814	1.12	0.581	0.287	6130
05532500	3	No	No	2000	4660	C	667	1.68	0.585	0.466	5050
05532500	3	No	No	2001	4040	C	579	1.76	0.592	0.595	4360
05532500	3	No	No	2002	6050	C	867	1.51	0.6	0.253	6400
05532500	3	No	No	2003	3840	C	550	1.03	0.607	0.65	4080
05532500	3	No	No	2004	4780	C	685	0.74	0.614	0.472	5020
05532500	3	No	No	2005	3930	C	563	0.621	0.622	0.646	4110
05532500	3	No	No	2006	2550	C	365	0.891	0.629	0.892	2670
05532500	3	No	No	2007	5790	C	829	1.32	0.636	0.318	5920
05532500	3	No	No	2008	9560	C	1369	3.19	0.644	0.0663	9680
05532500	3	No	No	2009	6110	C	875	0.875	0.651	0.284	6150
05533000	1	Yes	Yes	1951	540	--	631	1.45	0.495	0.429	870
05533000	1	Yes	Yes	1952	398	--	465	0.978	0.52	0.697	663
05533000	1	Yes	Yes	1953	306	--	358	1.27	0.545	0.851	534
05533000	1	Yes	Yes	1954	770	--	900	1.68	0.57	0.209	1080
05533000	1	Yes	Yes	1955	1300	--	1520	3.43	0.595	0.041	1720
05533000	1	Yes	Yes	1956	285	--	333	0.803	0.62	0.915	472
05533000	1	Yes	Yes	1957	1350	--	1578	2.21	0.645	0.0413	1710
05533000	1	Yes	Yes	1958	388	E	454	1.51	0.67	0.824	559
05533000	1	Yes	Yes	1959	1550	--	1812	1.24	0.695	0.0295	1870
05533000	1	Yes	Yes	1960	800	--	935	1.93	0.72	0.285	987
05533000	1	Yes	Yes	1961	2680	--	3133	1.77	0.73	0.00569	3090
05533000	1	Yes	Yes	1962	344	E	402	0.286	0.74	0.918	470
05533000	1	Yes	Yes	1963	367	--	429	1.17	0.749	0.902	488
05533000	1	Yes	Yes	1964	375	--	438	0.777	0.759	0.9	491
05533000	1	Yes	Yes	1965	576	--	673	0.527	0.769	0.644	699
05533000	1	Yes	Yes	1966	975	--	1140	1.41	0.779	0.189	1120
05533000	1	Yes	Yes	1967	816	D	954	1.16	0.789	0.333	945
05533000	1	Yes	Yes	1968	648	--	758	1.4	0.799	0.568	755

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05533000	1	Yes	Yes	1969	803	--	939	0.883	0.809	0.374	915
05533000	1	Yes	Yes	1970	400	--	468	0.955	0.819	0.91	479
05533000	1	Yes	Yes	1971	188	E	220	0.302	0.825	1	239
05533000	1	Yes	Yes	1972	830	--	970	1.29	0.831	0.363	923
05533000	1	Yes	Yes	1973	786	--	919	0.851	0.837	0.428	871
05533000	1	Yes	Yes	1974	696	--	814	0.56	0.843	0.549	770
05533000	1	Yes	Yes	1975	1630	--	1906	1.15	0.849	0.0385	1740
05533000	1	Yes	Yes	1976	2230	D	2607	0.558	0.856	0.015	2360
05533000	1	Yes	Yes	1977	560	--	655	1.23	0.862	0.759	614
05533000	1	Yes	Yes	1978	575	--	672	0.774	0.868	0.747	624
05533000	1	Yes	Yes	1979	967	--	1130	0.968	0.874	0.251	1020
05533000	1	Yes	Yes	1980	439	--	513	0.594	0.88	0.912	477
05533000	1	Yes	Yes	1981	823	--	962	1.93	0.882	0.431	869
05533000	1	Yes	Yes	1982	826	--	966	0.316	0.884	0.43	870
05533000	1	Yes	Yes	1983	1960	--	2291	1.51	0.886	0.0218	2030
05533000	1	Yes	Yes	1984	670	D	783	0.593	0.889	0.635	705
05533000	1	Yes	Yes	1985	1390	--	1625	1.24	0.891	0.0771	1440
05533000	1	Yes	Yes	1986	636	--	743	0.686	0.893	0.695	667
05533000	1	Yes	Yes	1987	939	--	1098	2.06	0.895	0.295	974
05533000	1	Yes	Yes	1988	759	E	887	0.783	0.897	0.526	789
05533000	1	Yes	Yes	1989	708	E	828	1.97	0.899	0.592	735
05533000	1	Yes	Yes	1990	1910	--	2233	2.71	0.902	0.0254	1960
05533000	1	Yes	Yes	1991	1470	--	1718	2.64	0.903	0.0649	1510
05533000	1	Yes	Yes	1992	1100	C, E	1286	2.5	0.904	0.188	1130
05533000	1	Yes	Yes	1993	791	C	925	2.61	0.905	0.496	815
05533000	1	Yes	Yes	1994	569	C	665	1.19	0.906	0.79	589
05533000	1	Yes	Yes	1995	567	C, E	663	0.967	0.907	0.793	586
05533000	1	Yes	Yes	1996	2300	C	2689	3.61	0.909	0.0154	2340
05533000	1	Yes	Yes	1997	1540	C	1800	2.67	0.91	0.0544	1570
05533000	1	Yes	Yes	1998	1160	C	1356	2.31	0.911	0.166	1180
05533000	1	Yes	Yes	1999	860	C	1005	1.17	0.912	0.42	879
05533000	1	Yes	Yes	2000	633	C	740	1.77	0.913	0.719	648
05533000	1	Yes	Yes	2001	745	C	871	2.23	0.915	0.562	759
05533000	1	Yes	Yes	2002	962	C	1125	1.98	0.917	0.293	976
05533000	1	Yes	Yes	2003	600	C	701	1.14	0.919	0.763	610

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05533000	1	Yes	Yes	2004	790	C	924	2.35	0.921	0.514	800
05533000	1	Yes	Yes	2005	692	C, E	809	1.1	0.922	0.644	700
05533000	1	Yes	Yes	2006	559	C	653	1.67	0.924	0.817	565
05533000	1	Yes	Yes	2007	1490	C	1742	1.85	0.926	0.0666	1500
05533000	1	Yes	Yes	2008	1240	C	1450	3.06	0.928	0.141	1240
05533000	1	Yes	Yes	2009	1330	C	1555	1.28	0.93	0.108	1330
05533200	1	Yes	Yes	1961	200	--	855	2.2	0.6	0.263	292
05533200	1	Yes	Yes	1962	178	--	761	0.42	0.626	0.389	262
05533200	1	Yes	Yes	1963	49	--	210	1.4	0.653	0.981	97.3
05533200	1	Yes	No	1964	48	4, B	205	0.42	0.679	0.984	91.3
05533200	1	Yes	Yes	1965	219	--	936	0.98	0.706	0.272	289
05533200	1	Yes	Yes	1966	254	--	1086	4.05	0.732	0.191	323
05533200	1	Yes	Yes	1967	225	--	962	1.18	0.759	0.293	283
05533200	1	Yes	Yes	1968	257	--	1099	3.07	0.785	0.213	311
05533200	1	Yes	Yes	1969	202	--	864	1.74	0.812	0.46	246
05533200	1	Yes	Yes	1970	166	--	710	1.23	0.838	0.673	199
05533200	1	Yes	Yes	1971	168	--	718	0.56	0.85	0.676	199
05533200	1	Yes	Yes	1972	256	--	1095	1.45	0.863	0.269	290
05533200	1	Yes	Yes	1973	300	--	1283	0.6	0.875	0.176	333
05533200	1	Yes	Yes	1974	282	--	1206	1.61	0.887	0.216	310
05533200	1	Yes	Yes	1975	286	--	1223	2.3	0.899	0.214	311
05533200	1	Yes	Yes	1976	315	--	1347	0.96	0.912	0.169	338
05533200	1	Yes	Yes	1977	289	--	1236	1.36	0.924	0.223	307
05533200	1	Yes	Yes	1979	276	--	1180	1.14	0.948	0.277	287
05533300	1	Yes	Yes	1962	60	--	619	0.42	0.306	0.289	116
05533300	1	Yes	Yes	1963	20	2	206	1.4	0.344	0.922	55.8
05533300	1	Yes	Yes	1964	35	--	361	1.51	0.382	0.745	74.4
05533300	1	Yes	Yes	1965	55	--	567	0.98	0.421	0.449	100
05533300	1	Yes	Yes	1966	151	--	1558	4.12	0.459	0.0259	225
05533300	1	Yes	Yes	1967	109	--	1124	1.18	0.497	0.084	166
05533300	1	Yes	Yes	1968	48	--	495	3.07	0.536	0.665	80.9
05533300	1	Yes	Yes	1969	73	--	753	1.74	0.574	0.348	110
05533300	1	Yes	Yes	1970	95	--	980	1.3	0.612	0.186	132
05533300	1	Yes	Yes	1971	70	--	722	0.56	0.627	0.438	102
05533300	1	Yes	Yes	1972	87	--	897	3.3	0.642	0.257	119

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05533300	1	Yes	Yes	1973	94	--	970	2.17	0.656	0.214	126
05533300	1	Yes	Yes	1974	102	--	1052	1.61	0.671	0.179	134
05533300	1	Yes	Yes	1975	146	--	1506	2.3	0.686	0.0529	186
05533300	1	Yes	Yes	1976	101	--	1042	4.38	0.701	0.196	130
05533400	1	No	No	1961	924	--	1252	2.62	0.336	0.039	1340
05533400	1	No	No	1962	195	--	264	0.414	0.359	0.864	367
05533400	1	No	No	1963	59	--	80	1.38	0.382	1	148
05533400	1	No	No	1964	156	4, B	211	0.214	0.405	0.933	300
05533400	1	No	No	1965	395	4, B	535	0.214	0.428	0.504	593
05533400	1	No	No	1966	984	--	1333	3.99	0.451	0.0428	1300
05533400	1	No	No	1967	725	--	982	1.18	0.474	0.127	967
05533400	1	No	No	1968	472	--	639	2.98	0.497	0.42	649
05533400	1	No	No	1969	541	--	733	1.69	0.52	0.323	713
05533400	1	No	No	1970	279	--	378	1.2	0.543	0.827	394
05533400	1	No	No	1971	385	4, B	522	0.214	0.555	0.643	510
05533400	1	No	No	1972	883	--	1196	3.18	0.567	0.0841	1080
05533400	1	No	No	1973	718	--	973	0.793	0.58	0.176	872
05533400	1	No	No	1974	654	--	886	1.57	0.592	0.233	790
05533400	1	No	No	1975	984	--	1333	2.24	0.604	0.0648	1160
05533400	1	No	No	1976	970	--	1314	0.94	0.617	0.0702	1130
05533400	1	No	No	1977	535	--	725	2.42	0.629	0.437	638
05533400	1	No	No	1978	835	--	1131	1.96	0.642	0.133	956
05533400	1	No	No	1979	916	--	1241	1.1	0.654	0.0972	1040
05533400	1	No	No	1986	494	--	669	1.51	0.693	0.569	553
05533400	1	No	No	1987	560	--	759	3.73	0.697	0.463	621
05533400	1	No	No	1988	396	--	536	0.873	0.701	0.754	444
05533400	1	No	No	1989	912	--	1235	2.07	0.706	0.12	985
05533400	1	No	No	1990	1730	--	2344	3.15	0.71	0.0147	1840
05533400	1	No	No	1991	1260	--	1707	3.45	0.712	0.0384	1340
05533400	1	No	No	1992	241	D, E	326	0.214	0.715	0.949	276
05533400	1	No	No	1993	1600	--	2167	3.03	0.717	0.0178	1690
05533400	1	No	No	1994	526	--	713	1.6	0.719	0.541	570
05533400	1	No	No	1995	456	--	618	0.999	0.721	0.669	496
05533400	1	No	No	1996	3070	C	4159	5.87	0.723	0	3210
05533400	1	No	No	1997	1360	C	1842	2.8	0.726	0.0303	1430

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05533400	1	No	No	1998	968	C	1311	3.94	0.728	0.102	1020
05533400	1	No	No	1999	576	C, D	780	1.55	0.73	0.471	616
05533400	1	No	No	2000	655	C	887	2.12	0.732	0.348	696
05533400	1	No	No	2001	479	C, E	649	0.773	0.738	0.644	510
05533400	1	No	No	2002	1060	C	1436	2.71	0.744	0.0753	1100
05533400	1	No	No	2003	387	C, E	524	0.837	0.75	0.806	409
05533400	1	No	No	2004	615	C	833	2.7	0.756	0.436	639
05533400	1	No	No	2005	522	C	707	0.846	0.761	0.59	540
05533400	1	No	No	2006	493	C, E	668	2.04	0.767	0.649	507
05533400	1	No	No	2007	821	C	1112	2.63	0.773	0.198	834
05533400	1	No	No	2008	832	C	1127	3.56	0.779	0.194	841
05533400	1	No	No	2009	1020	C	1382	2.06	0.784	0.101	1030
05534300	1	No	No	1961	124	--	266	1.14	0.0697	0.696	282
05534300	1	No	No	1962	192	--	411	0.211	0.0767	0.408	391
05534300	1	No	No	1963	107	--	229	1.44	0.0838	0.775	253
05534300	1	No	No	1964	134	--	287	0.833	0.0908	0.667	292
05534300	1	No	No	1965	167	--	358	0.178	0.0979	0.527	343
05534300	1	No	No	1966	225	--	482	0.587	0.105	0.324	428
05534300	1	No	No	1967	240	--	514	0.963	0.112	0.286	445
05534300	1	No	No	1968	108	2	231	0.386	0.119	0.79	247
05534300	1	No	No	1969	299	--	640	2.81	0.126	0.172	524
05534300	1	No	No	1970	290	--	621	2.28	0.133	0.188	507
05534300	1	No	No	1971	255	--	546	0.311	0.143	0.267	455
05534300	1	No	No	1972	295	--	632	3.95	0.152	0.188	507
05534300	1	No	No	1973	242	--	518	1.59	0.162	0.313	432
05534300	1	No	No	1974	230	--	492	1.45	0.172	0.354	414
05534300	1	No	No	1975	90	2	193	1.4	0.181	0.88	207
05534300	1	No	No	1976	196	--	420	2.21	0.191	0.485	360
05534400	1	No	No	1960	321	--	551	0.467	0.113	0.243	606
05534400	1	No	No	1961	175	--	300	1.2	0.122	0.663	385
05534400	1	No	No	1962	250	--	429	0.22	0.132	0.421	503
05534400	1	No	No	1963	117	--	201	1.37	0.141	0.85	291
05534400	1	No	No	1964	174	--	298	0.81	0.151	0.687	375
05534400	1	No	No	1965	202	--	347	0.538	0.16	0.605	414
05534400	1	No	No	1966	269	--	461	0.546	0.17	0.397	515

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05534400	1	No	No	1967	355	--	609	1.37	0.179	0.221	623
05534400	1	No	No	1968	145	2	249	0.506	0.189	0.799	320
05534400	1	No	No	1969	319	--	547	2.44	0.198	0.301	569
05534400	1	No	No	1970	278	--	477	2.05	0.208	0.403	512
05534400	1	No	No	1971	300	2	515	0.329	0.218	0.357	538
05534400	1	No	No	1972	339	--	582	3.17	0.228	0.28	582
05534400	1	No	No	1973	327	--	561	1.42	0.238	0.311	563
05534400	1	No	No	1974	268	--	460	1.22	0.248	0.465	480
05534400	1	No	No	1975	156	--	268	0.409	0.259	0.807	316
05534400	1	No	No	1976	282	--	484	1.91	0.269	0.443	492
05534500	1	Yes	Yes	1953	79	E	137	0.742	0.144	0.932	252
05534500	1	Yes	Yes	1954	247	--	430	1.52	0.159	0.441	522
05534500	1	Yes	Yes	1955	247	--	430	1.01	0.174	0.453	515
05534500	1	Yes	Yes	1956	207	E	360	1.24	0.189	0.602	442
05534500	1	Yes	Yes	1957	284	--	494	1.07	0.203	0.375	559
05534500	1	Yes	Yes	1958	178	E	310	0.157	0.218	0.714	387
05534500	1	Yes	Yes	1959	292	--	508	1.53	0.233	0.377	557
05534500	1	Yes	Yes	1960	284	--	494	0.45	0.248	0.409	539
05534500	1	Yes	Yes	1961	178	--	310	1.02	0.26	0.743	374
05534500	1	Yes	Yes	1962	268	--	466	0.226	0.272	0.474	504
05534500	1	Yes	Yes	1963	134	E	233	1.31	0.284	0.869	302
05534500	1	Yes	Yes	1964	228	--	397	0.808	0.296	0.62	432
05534500	1	Yes	Yes	1965	208	--	362	0.528	0.308	0.689	399
05534500	1	Yes	Yes	1966	311	--	541	0.517	0.321	0.4	544
05534500	1	Yes	Yes	1967	386	--	672	1.4	0.333	0.251	633
05534500	1	Yes	Yes	1968	173	E	301	0.652	0.345	0.807	338
05534500	1	Yes	Yes	1969	359	--	625	2.2	0.357	0.32	589
05534500	1	Yes	Yes	1970	268	D	466	1.9	0.369	0.562	459
05534500	1	Yes	Yes	1971	341	E	593	0.341	0.379	0.377	557
05534500	1	Yes	Yes	1972	368	--	640	2.65	0.389	0.326	585
05534500	1	Yes	Yes	1973	390	--	679	1.3	0.399	0.289	607
05534500	1	Yes	Yes	1974	362	--	630	1.3	0.409	0.355	569
05534500	1	Yes	Yes	1975	370	2	644	1.1	0.419	0.346	574
05534500	1	Yes	Yes	1976	550	--	957	1.71	0.429	0.121	804
05534500	1	Yes	Yes	1977	58	E	101	1.09	0.439	1	139

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05534500	1	Yes	Yes	1978	292	--	508	1.67	0.449	0.566	457
05534500	1	Yes	Yes	1979	358	--	623	1.28	0.459	0.407	541
05534500	1	Yes	Yes	1980	237	--	412	0.671	0.469	0.732	379
05534500	1	Yes	Yes	1981	348	--	606	0.827	0.478	0.448	518
05534500	1	Yes	Yes	1982	756	--	1316	2.73	0.488	0.0483	1020
05534500	1	Yes	Yes	1983	702	--	1222	2.25	0.497	0.064	952
05534500	1	Yes	Yes	1984	415	D	722	0.347	0.507	0.325	585
05534500	1	Yes	Yes	1985	678	--	1180	0.683	0.516	0.0745	908
05534500	1	Yes	Yes	1986	465	--	809	1.45	0.526	0.251	632
05534500	1	Yes	Yes	1987	933	--	1624	3.5	0.535	0.0277	1200
05534500	1	Yes	Yes	1988	273	E	475	0.713	0.545	0.704	393
05534500	1	Yes	Yes	1989	210	E	365	1.58	0.554	0.848	314
05534500	1	Yes	Yes	1990	557	--	969	1.76	0.564	0.171	722
05534500	1	Yes	Yes	1991	462	--	804	1.95	0.575	0.292	604
05534500	0	Yes	No	1992	198	C, E	340	2.25	0.586	0.894	286
05534500	2	Yes	Yes	1993	469	C	793	1.33	0.597	0.323	585
05534500	2	Yes	Yes	1994	590	C	997	2.18	0.608	0.177	714
05534500	2	Yes	Yes	1995	561	C	948	1.54	0.619	0.206	673
05534500	2	Yes	Yes	1996	559	C	945	1.57	0.63	0.215	665
05534500	2	Yes	Yes	1997	630	C, E	1065	2.64	0.641	0.161	738
05534500	2	Yes	Yes	1998	239	C, E	404	0.863	0.652	0.867	303
05534500	2	Yes	Yes	1999	590	C	997	1.68	0.663	0.201	679
05534500	2	Yes	Yes	2000	437	C	738	1.7	0.675	0.465	510
05534500	2	Yes	Yes	2001	537	C	907	2.85	0.688	0.284	608
05534500	2	Yes	Yes	2002	787	C	1330	2.28	0.702	0.0888	869
05534500	2	Yes	Yes	2003	309	C	522	0.702	0.716	0.782	352
05534500	2	Yes	Yes	2004	386	C	652	0.902	0.73	0.63	426
05534500	2	Yes	Yes	2005	377	C, E	637	0.675	0.744	0.667	410
05534500	2	Yes	Yes	2006	356	C	602	0.789	0.758	0.726	382
05534500	2	Yes	Yes	2007	513	C	867	1.62	0.772	0.416	537
05534500	2	Yes	Yes	2008	749	C	1266	3.44	0.786	0.143	768
05534500	2	Yes	Yes	2009	624	C	1054	0.803	0.8	0.25	632
05534600	1	No	No	1960	358	--	561	0.441	0.317	0.37	601
05534600	1	No	No	1961	277	--	434	1.26	0.327	0.581	482
05534600	1	No	No	1962	307	--	481	0.23	0.338	0.507	520

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05534600	1	No	No	1963	204	--	320	1.28	0.349	0.783	375
05534600	1	No	No	1964	214	--	335	0.802	0.359	0.767	384
05534600	1	No	No	1965	273	--	428	0.525	0.37	0.627	457
05534600	1	No	No	1966	361	--	566	0.5	0.381	0.416	573
05534600	1	No	No	1967	470	--	737	1.41	0.391	0.228	699
05534600	1	No	No	1968	213	--	334	0.734	0.402	0.796	367
05534600	1	No	No	1969	424	--	664	2.04	0.413	0.315	633
05534600	1	No	No	1970	327	--	512	1.8	0.423	0.535	505
05534600	1	No	No	1971	430	--	674	0.347	0.432	0.319	631
05534600	1	No	No	1972	424	--	664	2.32	0.44	0.338	620
05534600	0	No	No	1973	473	--	737	1.23	0.448	0.264	668
05534600	2	No	No	1974	384	--	595	1.25	0.457	0.443	558
05534600	2	No	No	1975	399	--	618	1.02	0.465	0.419	572
05534600	2	No	No	1976	481	--	745	1.3	0.474	0.274	661
05534600	2	No	No	1978	307	--	476	1.58	0.491	0.654	443
05534600	2	No	No	1979	471	--	730	0.949	0.499	0.309	636
05534600	2	No	No	1980	232	--	360	0.6	0.508	0.827	348
05534900	1	No	No	1962	132	--	456	0.21	0.376	0.587	223
05534900	1	No	No	1963	73	--	252	1.45	0.398	0.896	142
05534900	1	No	No	1964	158	--	546	3.07	0.42	0.48	249
05534900	1	No	No	1965	158	--	546	1.4	0.442	0.501	243
05534900	1	No	No	1966	145	--	501	0.589	0.464	0.593	221
05534900	1	No	No	1967	244	--	842	1.48	0.486	0.2	336
05534900	1	No	No	1968	77	--	266	1.04	0.508	0.926	131
05534900	1	No	No	1969	374	--	1291	2.82	0.53	0.0582	483
05534900	1	No	No	1970	324	--	1119	2.29	0.552	0.101	415
05534900	1	No	No	1971	166	--	573	0.309	0.56	0.572	226
05534900	1	No	No	1972	350	--	1208	3.99	0.568	0.081	441
05534900	1	No	No	1973	280	--	967	1.6	0.576	0.177	353
05534900	1	No	No	1974	316	--	1091	1.46	0.584	0.126	394
05534900	1	No	No	1975	162	--	559	1.41	0.592	0.623	214
05534900	1	No	No	1976	395	--	1364	2.22	0.6	0.0591	480
05535000	1	Yes	Yes	1952	321	--	914	2.3	0.211	0.0725	570
05535000	1	Yes	Yes	1953	92	E	262	0.802	0.225	0.797	218
05535000	1	Yes	Yes	1954	257	--	731	1.53	0.239	0.161	456

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05535000	1	Yes	Yes	1955	194	--	552	0.673	0.252	0.333	364
05535000	1	Yes	Yes	1956	155	E	441	1.42	0.266	0.512	303
05535000	1	Yes	Yes	1957	201	E	572	1.19	0.28	0.327	365
05535000	1	Yes	Yes	1958	98	E	279	0.123	0.294	0.81	214
05535000	1	Yes	Yes	1959	313	E	891	1.8	0.308	0.104	517
05535000	1	Yes	Yes	1960	250	--	712	0.486	0.321	0.208	416
05535000	1	Yes	Yes	1961	155	--	441	1.15	0.341	0.58	283
05535000	1	Yes	Yes	1962	194	--	552	0.211	0.36	0.418	335
05535000	1	Yes	Yes	1963	161	E	458	1.44	0.379	0.585	282
05535000	1	Yes	Yes	1964	151	--	430	3.03	0.399	0.647	263
05535000	1	Yes	Yes	1965	130	--	370	0.684	0.418	0.756	232
05535000	1	Yes	Yes	1966	176	D	501	0.583	0.437	0.567	287
05535000	1	Yes	Yes	1967	295	--	840	1.44	0.457	0.19	430
05535000	1	Yes	Yes	1968	80	E	228	0.38	0.476	0.94	157
05535000	1	Yes	Yes	1969	315	--	897	2.77	0.495	0.177	443
05535000	1	Yes	Yes	1970	249	--	709	2.26	0.515	0.348	358
05535000	1	Yes	Yes	1971	223	E	635	0.312	0.522	0.449	325
05535000	1	Yes	Yes	1972	367	--	1045	1.13	0.529	0.123	497
05535000	1	Yes	Yes	1973	302	--	860	1.57	0.536	0.218	411
05535000	1	Yes	Yes	1974	272	--	774	1.42	0.544	0.297	374
05535000	1	Yes	Yes	1975	185	--	527	1.38	0.551	0.632	268
05535000	1	Yes	Yes	1976	315	--	897	2.18	0.558	0.205	419
05535000	1	Yes	Yes	1977	70	E	199	1.34	0.565	0.97	125
05535000	1	Yes	Yes	1978	169	--	481	1.98	0.573	0.719	244
05535000	1	Yes	Yes	1979	274	--	780	1.53	0.58	0.322	366
05535000	1	Yes	Yes	1980	175	--	498	0.775	0.587	0.708	247
05535000	1	Yes	Yes	1981	201	--	572	1.64	0.593	0.605	275
05535000	1	Yes	Yes	1982	435	--	1238	3.32	0.599	0.082	550
05535000	1	Yes	Yes	1983	394	--	1121	2.45	0.604	0.122	498
05535000	1	Yes	Yes	1984	195	--	555	0.482	0.61	0.646	264
05535000	1	Yes	Yes	1985	265	--	754	0.962	0.616	0.388	345
05535000	1	Yes	Yes	1986	492	--	1400	2.99	0.621	0.0572	606
05535000	1	Yes	Yes	1987	259	--	737	1.16	0.627	0.419	335
05535000	1	Yes	Yes	1988	221	--	629	0.81	0.633	0.564	288
05535000	1	Yes	Yes	1989	102	E	290	1.29	0.638	0.946	152

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05535000	1	Yes	Yes	1990	272	--	774	2.04	0.644	0.392	344
05535000	1	Yes	Yes	1991	276	--	786	1.82	0.653	0.387	345
05535000	1	Yes	Yes	1992	138	C	393	2.72	0.661	0.884	187
05535000	1	Yes	Yes	1993	294	C, D	837	1.79	0.67	0.343	359
05535000	1	Yes	Yes	1994	318	C	905	1.03	0.679	0.279	381
05535000	1	Yes	Yes	1995	305	C	868	1.63	0.687	0.324	365
05535000	1	Yes	Yes	1996	460	C	1309	1.9	0.696	0.092	534
05535000	1	Yes	Yes	1997	496	C, E	1412	2.52	0.705	0.0712	570
05535000	1	Yes	Yes	1998	246	C	700	2.07	0.713	0.551	292
05535000	1	Yes	Yes	1999	472	C	1343	1.96	0.722	0.0912	536
05535000	1	Yes	Yes	2000	429	C	1221	1.93	0.73	0.136	484
05535000	1	Yes	Yes	2001	392	C	1116	2.95	0.744	0.184	438
05535000	1	Yes	Yes	2002	580	C	1651	3.01	0.757	0.0473	634
05535000	1	Yes	Yes	2003	238	C	677	0.757	0.77	0.639	266
05535000	1	Yes	Yes	2004	267	C	760	0.967	0.783	0.549	292
05535000	1	Yes	Yes	2005	208	C, E	592	0.693	0.797	0.77	227
05535000	1	Yes	Yes	2006	277	C	788	0.888	0.81	0.543	294
05535000	1	Yes	Yes	2007	355	C	1010	1.17	0.823	0.307	370
05535000	1	Yes	Yes	2008	464	C	1321	2.84	0.836	0.145	475
05535000	1	Yes	Yes	2009	412	C	1173	0.76	0.85	0.211	417
05535070	1	No	No	1967	410	--	694	1.38	0.573	0.42	590
05535070	1	No	No	1968	388	E	657	0.636	0.589	0.484	553
05535070	1	No	No	1969	500	--	847	2.18	0.606	0.275	673
05535070	1	No	No	1970	368	--	623	1.89	0.623	0.562	510
05535070	1	No	No	1971	344	--	583	0.339	0.629	0.625	478
05535070	1	No	No	1972	570	--	965	1.72	0.636	0.204	735
05535070	1	No	No	1973	422	--	715	0.685	0.642	0.462	566
05535070	1	No	No	1974	440	--	745	1.07	0.649	0.431	584
05535070	1	No	No	1975	381	--	645	0.599	0.655	0.564	509
05535070	1	No	No	1976	512	D	867	1.7	0.661	0.299	655
05535070	1	No	No	1977	164	E	278	1.09	0.668	0.957	255
05535070	1	No	No	1978	326	--	552	1.65	0.674	0.712	437
05535070	1	No	No	1979	388	--	657	0.985	0.681	0.573	504
05535070	1	No	No	1980	263	--	445	0.916	0.687	0.845	360
05535070	1	No	No	1981	351	--	595	0.827	0.691	0.671	456

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05535070	1	No	No	1982	716	--	1213	2.51	0.695	0.124	869
05535070	1	No	No	1983	724	--	1226	2.58	0.699	0.121	875
05535070	1	No	No	1984	381	--	645	2.13	0.703	0.612	484
05535070	1	No	No	1985	524	--	888	0.825	0.707	0.321	643
05535070	1	No	No	1986	584	--	989	1.47	0.711	0.236	705
05535070	1	No	No	1987	895	--	1516	4.18	0.715	0.0569	1060
05535070	1	No	No	1988	337	--	571	0.505	0.719	0.728	428
05535070	1	No	No	1989	298	--	505	2	0.723	0.807	383
05535070	1	No	No	1990	503	--	852	1.46	0.727	0.385	610
05535070	1	No	No	1991	477	--	808	1.9	0.733	0.441	578
05535070	1	No	No	1992	281	E	476	1.83	0.738	0.848	358
05535070	1	No	No	1993	372	C	630	0.777	0.744	0.677	454
05535070	1	No	No	1994	665	C	1126	1.06	0.75	0.182	770
05535070	1	No	No	1995	589	C	998	2	0.755	0.26	683
05535070	1	No	No	1996	745	C	1262	1.62	0.761	0.134	851
05535070	1	No	No	1997	894	C, E	1514	2.79	0.767	0.0674	1010
05535070	1	No	No	1998	300	C	508	0.999	0.773	0.839	363
05535070	1	No	No	1999	880	C	1491	2.04	0.778	0.0735	986
05535070	1	No	No	2000	634	C	1074	1.55	0.784	0.227	713
05535070	1	No	No	2001	762	C	1291	2.69	0.796	0.138	844
05535070	1	No	No	2002	1230	C	2083	3.06	0.809	0.0249	1330
05535070	1	No	No	2003	454	C	769	0.865	0.821	0.577	502
05535070	1	No	No	2004	536	C	908	1.13	0.833	0.436	581
05535070	1	No	No	2005	553	C, E	937	0.785	0.846	0.419	591
05535070	1	No	No	2006	499	C	845	0.873	0.858	0.53	528
05535070	1	No	No	2007	745	C	1262	1.75	0.871	0.182	771
05535070	1	No	No	2008	1150	C	1948	2.98	0.883	0.0391	1170
05535070	1	No	No	2009	857	C	1452	0.638	0.895	0.126	867
05535150	1	No	No	1960	387	--	654	0.436	0.471	0.377	565
05535150	1	No	No	1961	320	--	541	1.26	0.485	0.549	473
05535150	1	No	No	1962	374	--	632	0.233	0.499	0.431	536
05535150	1	No	No	1963	267	--	451	1.26	0.513	0.711	396
05535150	1	No	No	1964	279	--	471	0.793	0.527	0.694	405
05535150	1	No	No	1965	285	--	482	0.525	0.54	0.691	406
05535150	1	No	No	1966	312	--	527	1.15	0.554	0.634	432

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05535150	1	No	No	1967	567	2	958	1.39	0.568	0.178	720
05535150	1	No	No	1968	309	--	522	0.766	0.582	0.668	416
05535150	1	No	No	1969	450	--	760	1.94	0.596	0.361	574
05535150	0	No	No	1970	420	--	712	1.73	0.61	0.434	535
05535150	2	No	No	1971	404	--	687	0.349	0.615	0.47	515
05535150	2	No	No	1972	459	--	780	2.13	0.62	0.36	574
05535150	2	No	No	1973	385	--	655	0.71	0.625	0.522	487
05535150	2	No	No	1974	438	--	745	1.23	0.63	0.413	546
05535150	2	No	No	1975	399	--	678	0.986	0.635	0.501	498
05535150	2	No	No	1976	499	--	848	1.51	0.64	0.3	606
05535150	2	No	No	1978	303	--	515	1.52	0.65	0.738	383
05535150	2	No	No	1979	414	--	704	1.18	0.655	0.488	505
05535200	1	No	No	1960	786	--	661	0.432	0.442	0.344	1160
05535200	1	No	No	1961	688	--	578	1.27	0.454	0.464	1030
05535200	1	No	No	1962	674	--	566	0.233	0.465	0.491	998
05535200	1	No	No	1963	532	--	447	1.25	0.477	0.687	807
05535200	1	No	No	1964	532	--	447	0.798	0.488	0.698	798
05535200	1	No	No	1965	458	--	385	0.521	0.5	0.791	700
05535200	1	No	No	1966	616	--	518	0.486	0.511	0.609	880
05535200	1	No	No	1967	1070	--	899	1.41	0.523	0.187	1400
05535200	1	No	No	1968	519	--	436	0.799	0.535	0.749	747
05535200	1	No	No	1969	866	--	728	1.91	0.546	0.353	1150
05535200	0	No	No	1970	730	2	NA	1.72	0.558	NA	NA
05535200	0	No	No	1971	608	--	NA	0.351	0.564	NA	NA
05535200	0	No	No	1972	998	--	NA	2.06	0.57	NA	NA
05535200	0	No	No	1973	678	--	NA	1.18	0.576	NA	NA
05535200	0	No	No	1974	755	--	NA	1.22	0.582	NA	NA
05535200	0	No	No	1975	704	--	NA	0.967	0.588	NA	NA
05535200	0	No	No	1976	1200	--	NA	1.31	0.594	NA	NA
05535200	0	No	No	1977	319	--	NA	0.751	0.6	NA	NA
05535300	1	No	No	1961	166	--	388	1.38	0.242	0.593	357
05535300	1	No	No	1962	128	--	299	0.249	0.26	0.76	296
05535300	1	No	No	1963	111	--	259	1.13	0.277	0.829	266
05535300	1	No	No	1964	162	--	378	1.78	0.294	0.649	336
05535300	1	No	No	1965	160	--	374	0.504	0.311	0.67	328

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05535300	1	No	No	1966	245	--	572	0.417	0.328	0.364	448
05535300	1	No	No	1967	325	--	759	1.47	0.345	0.188	545
05535300	1	No	No	1968	112	--	262	1.15	0.363	0.87	249
05535300	1	No	No	1969	301	--	703	1.29	0.38	0.251	499
05535300	1	No	No	1970	265	--	619	1.34	0.397	0.359	450
05535300	1	No	No	1971	193	--	451	0.386	0.411	0.624	345
05535300	1	No	No	1972	387	--	904	0.693	0.424	0.144	599
05535300	1	No	No	1973	299	--	698	1.39	0.438	0.296	476
05535300	1	No	No	1974	231	--	539	0.524	0.451	0.519	384
05535300	1	No	No	1975	178	--	416	0.953	0.465	0.724	310
05535300	1	No	No	1976	256	--	598	0.976	0.478	0.459	409
05535400	1	No	No	1961	324	--	552	1.78	0.423	0.474	573
05535400	1	No	No	1962	290	--	494	0.248	0.44	0.582	514
05535400	1	No	No	1963	247	--	421	1.12	0.458	0.712	449
05535400	1	No	No	1964	376	--	640	1.79	0.476	0.4	616
05535400	1	No	No	1965	208	--	354	0.498	0.494	0.826	385
05535400	1	No	No	1966	324	--	552	1.32	0.512	0.557	526
05535400	1	No	No	1967	571	--	972	1.49	0.53	0.155	829
05535400	1	No	No	1968	355	--	605	1.17	0.548	0.515	550
05535400	1	No	No	1969	418	--	712	1.29	0.565	0.391	621
05535400	1	No	No	1970	370	--	630	1.33	0.583	0.514	550
05535400	1	No	No	1971	272	--	463	0.387	0.595	0.759	424
05535400	1	No	No	1972	531	--	904	0.69	0.607	0.229	725
05535400	1	No	No	1973	477	--	812	1.39	0.619	0.321	658
05535400	1	No	No	1974	364	--	620	1.04	0.631	0.575	517
05535400	1	No	No	1975	367	--	625	0.963	0.644	0.58	514
05535400	1	No	No	1976	455	--	775	0.96	0.656	0.403	615
05535500	1	Yes	Yes	1953	86	E	123	0.651	0.251	0.961	197
05535500	1	Yes	Yes	1954	411	--	588	1.61	0.281	0.308	516
05535500	1	Yes	Yes	1955	404	--	578	0.786	0.311	0.343	500
05535500	1	Yes	Yes	1956	199	E	285	1.2	0.341	0.828	294
05535500	1	Yes	Yes	1957	930	--	1330	1.87	0.371	0.0351	956
05535500	1	Yes	Yes	1958	159	--	227	0.211	0.401	0.921	245
05535500	1	Yes	Yes	1959	366	--	523	1.07	0.431	0.524	419
05535500	1	Yes	Yes	1960	275	--	393	0.387	0.461	0.754	328

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05535500	1	Yes	Yes	1961	502	--	718	1.41	0.477	0.304	516
05535500	1	Yes	Yes	1962	428	--	612	0.246	0.493	0.453	451
05535500	1	Yes	Yes	1963	350	--	500	1.1	0.509	0.633	375
05535500	1	Yes	Yes	1964	298	--	426	1.82	0.525	0.755	327
05535500	1	Yes	Yes	1965	285	--	408	0.487	0.541	0.79	312
05535500	1	Yes	Yes	1966	390	D	558	1.34	0.557	0.593	391
05535500	1	Yes	Yes	1967	712	--	1018	1.53	0.573	0.152	644
05535500	1	Yes	Yes	1968	397	--	568	1.23	0.59	0.608	384
05535500	1	Yes	Yes	1969	634	--	907	1.28	0.606	0.227	562
05535500	1	Yes	Yes	1970	423	--	605	1.32	0.622	0.587	393
05535500	1	Yes	Yes	1971	358	D	512	0.389	0.635	0.729	338
05535500	1	Yes	Yes	1972	680	--	972	0.683	0.648	0.208	577
05535500	1	Yes	Yes	1973	674	--	964	1.39	0.662	0.222	566
05535500	1	Yes	Yes	1974	557	--	796	1.02	0.675	0.397	477
05535500	1	Yes	Yes	1975	534	D	764	0.981	0.688	0.448	453
05535500	1	Yes	Yes	1976	600	--	858	0.931	0.702	0.35	496
05535500	1	Yes	Yes	1977	175	E	250	1.18	0.715	0.976	173
05535500	1	Yes	Yes	1978	569	--	814	1.17	0.728	0.43	462
05535500	1	Yes	Yes	1979	602	--	861	0.87	0.741	0.39	479
05535500	1	Yes	Yes	1980	582	--	832	0.756	0.755	0.436	459
05535500	1	Yes	Yes	1981	636	--	909	0.934	0.759	0.351	495
05535500	1	Yes	Yes	1982	1070	--	1530	2.05	0.762	0.0641	807
05535500	1	Yes	Yes	1983	744	--	1064	1.51	0.766	0.222	566
05535500	1	Yes	Yes	1984	646	D	924	1.28	0.77	0.347	497
05535500	1	Yes	Yes	1985	666	--	952	0.759	0.774	0.318	508
05535500	1	Yes	Yes	1986	698	--	998	0.789	0.778	0.278	528
05535500	1	Yes	Yes	1987	1190	--	1702	3	0.781	0.0459	879
05535500	1	Yes	Yes	1988	346	--	495	0.272	0.785	0.863	277
05535500	1	Yes	Yes	1989	536	--	766	1.68	0.789	0.547	409
05535500	0	Yes	No	1990	719	--	1142	2.33	0.793	0.195	591
05535500	0	Yes	No	1991	446	--	786	2.28	0.796	0.532	416
05535500	0	Yes	No	1992	425	C, E	832	2.06	0.8	0.484	438
05535500	2	Yes	Yes	1993	418	C	908	0.536	0.803	0.403	474
05535500	2	Yes	Yes	1994	767	C	1667	2.7	0.806	0.0524	845
05535500	2	Yes	Yes	1995	390	C	847	1.39	0.81	0.477	441

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05535500	2	Yes	Yes	1996	570	C	1239	0.564	0.813	0.165	629
05535500	2	Yes	Yes	1997	507	C	1102	2.74	0.817	0.231	559
05535500	2	Yes	Yes	1998	374	C, E	813	1.54	0.82	0.526	419
05535500	2	Yes	Yes	1999	522	C	1134	1.42	0.823	0.216	572
05535500	2	Yes	Yes	2000	361	C	784	1.27	0.827	0.565	402
05535500	2	Yes	Yes	2001	624	C	1356	2.88	0.836	0.133	673
05535500	2	Yes	Yes	2002	848	C	1843	3.67	0.845	0.0424	902
05535500	2	Yes	Yes	2003	369	C, E	802	1.01	0.855	0.574	398
05535500	2	Yes	Yes	2004	560	C	1217	1.42	0.864	0.196	590
05535500	2	Yes	Yes	2005	300	C	652	0.535	0.873	0.773	319
05535500	2	Yes	Yes	2006	308	C, E	669	0.801	0.883	0.763	323
05535500	2	Yes	Yes	2007	670	C	1456	2.81	0.892	0.123	687
05535500	2	Yes	Yes	2008	637	C	1384	5.14	0.901	0.151	648
05535500	2	Yes	Yes	2009	421	C	915	1.42	0.91	0.512	425
05535700	1	No	No	1960	713	--	785	0.33	0.455	0.227	1040
05535700	1	No	No	1961	647	--	712	1.57	0.474	0.309	952
05535700	1	No	No	1962	491	--	540	0.222	0.493	0.557	744
05535700	1	No	No	1963	397	--	437	0.944	0.511	0.73	616
05535700	1	No	No	1964	432	--	475	2.14	0.53	0.691	646
05535700	1	No	No	1965	319	--	351	0.384	0.549	0.862	500
05535700	1	No	No	1966	678	--	746	1.51	0.568	0.351	916
05535700	1	No	No	1967	1140	--	1255	1.93	0.587	0.0746	1450
05535700	1	No	No	1968	527	--	580	1.69	0.606	0.606	707
05535700	1	No	No	1969	905	--	996	1.3	0.624	0.184	1120
05535700	1	No	No	1970	638	--	702	1.3	0.643	0.478	809
05535700	1	No	No	1971	472	--	519	0.418	0.654	0.735	612
05535700	1	No	No	1972	1000	--	1101	2.11	0.664	0.155	1190
05535700	1	No	No	1973	733	--	807	0.712	0.674	0.383	890
05535700	1	No	No	1974	666	--	733	0.564	0.685	0.482	807
05535700	1	No	No	1975	761	--	838	1.16	0.695	0.368	902
05535700	1	No	No	1976	937	--	1031	1.41	0.706	0.205	1080
05535700	1	No	No	1977	224	--	247	1.17	0.716	0.978	297
05535800	1	No	No	1960	1220	2	700	0.385	0.5	0.345	1320
05535800	1	No	No	1961	1190	--	683	1.4	0.512	0.378	1290
05535800	1	No	No	1962	971	--	557	0.227	0.524	0.561	1060

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05535800	1	No	No	1963	827	--	474	1.12	0.536	0.698	917
05535800	1	No	No	1964	763	--	438	0.883	0.549	0.757	848
05535800	1	No	No	1965	629	--	361	0.166	0.561	0.857	716
05535800	1	No	No	1966	1280	--	734	1.31	0.573	0.371	1290
05535800	1	No	No	1967	2130	--	1222	1.66	0.585	0.0824	2040
05535800	1	No	No	1968	793	--	455	1.2	0.598	0.771	830
05535800	1	No	No	1969	1350	--	774	1.68	0.61	0.357	1310
05535800	0	No	No	1970	1090	--	659	1.55	0.622	0.514	1120
05535800	0	No	No	1971	859	--	547	0.379	0.628	0.676	939
05535800	0	No	No	1972	1440	--	966	1.45	0.634	0.203	1560
05535800	0	No	No	1973	1040	--	735	1.2	0.64	0.435	1210
05535800	2	No	No	1974	1060	--	789	1.09	0.647	0.376	1290
05535800	2	No	No	1975	1080	--	804	0.798	0.653	0.364	1300
05535800	2	No	No	1976	1500	--	1116	1.35	0.659	0.147	1750
05535800	2	No	No	1977	661	--	492	0.803	0.665	0.777	822
05535800	2	No	No	1978	619	--	461	1.34	0.671	0.817	770
05535800	0	No	No	1979	1000	--	NA	0.824	0.677	NA	NA
05536000	1	Yes	Yes	1951	952	--	549	1.68	0.351	0.414	1490
05536000	1	Yes	Yes	1952	870	--	502	0.981	0.371	0.503	1360
05536000	1	Yes	Yes	1953	428	E	247	0.756	0.39	0.898	790
05536000	1	Yes	Yes	1954	1510	--	871	1.52	0.41	0.154	2070
05536000	1	Yes	Yes	1955	1700	--	981	2.85	0.429	0.11	2270
05536000	1	Yes	Yes	1956	1030	--	594	1.26	0.449	0.436	1460
05536000	1	Yes	Yes	1957	1850	--	1068	2.13	0.468	0.0919	2380
05536000	1	Yes	Yes	1958	647	--	373	0.18	0.488	0.798	957
05536000	1	Yes	Yes	1959	695	--	401	1.14	0.507	0.774	992
05536000	1	Yes	Yes	1960	1340	--	773	0.382	0.527	0.285	1690
05536000	1	Yes	Yes	1961	1290	--	745	1.4	0.538	0.326	1620
05536000	1	Yes	Yes	1962	1010	--	583	0.228	0.55	0.548	1290
05536000	1	Yes	Yes	1963	905	E	522	1.11	0.561	0.648	1160
05536000	1	Yes	Yes	1964	810	--	467	0.879	0.573	0.737	1050
05536000	1	Yes	Yes	1965	658	--	380	0.717	0.584	0.85	872
05536000	1	Yes	Yes	1966	1360	--	785	1.32	0.596	0.331	1610
05536000	1	Yes	Yes	1967	2210	--	1275	1.65	0.608	0.075	2500
05536000	1	Yes	Yes	1968	858	--	495	1.21	0.619	0.738	1050

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05536000	1	Yes	Yes	1969	1300	--	750	1.65	0.631	0.407	1500
05536000	0	Yes	No	1970	1170	--	688	1.52	0.642	0.495	1370
05536000	0	Yes	No	1971	1070	D	642	0.378	0.648	0.561	1280
05536000	0	Yes	No	1972	1440	--	880	1.45	0.653	0.281	1690
05536000	0	Yes	No	1973	1050	--	654	1.21	0.659	0.555	1280
05536000	2	Yes	Yes	1974	1070	--	680	1.08	0.664	0.528	1320
05536000	2	Yes	Yes	1975	1160	--	737	0.845	0.67	0.462	1420
05536000	2	Yes	Yes	1976	1550	D	985	1.36	0.675	0.216	1840
05536000	2	Yes	Yes	1977	723	E	459	0.811	0.681	0.826	913
05536000	2	Yes	Yes	1978	1150	--	731	1.03	0.686	0.486	1380
05536000	0	Yes	No	1979	1150	--	734	0.819	0.692	0.488	1380
05536000	3	Yes	Yes	1980	712	--	457	0.814	0.697	0.84	889
05536000	3	Yes	Yes	1981	1160	--	744	0.932	0.701	0.485	1390
05536000	3	Yes	Yes	1982	1420	--	911	2.57	0.704	0.294	1670
05536000	3	Yes	Yes	1983	1480	--	949	1.84	0.708	0.263	1720
05536000	3	Yes	Yes	1984	1210	--	776	1.77	0.711	0.456	1430
05536000	3	Yes	Yes	1985	1350	--	866	1.12	0.714	0.354	1580
05536000	3	Yes	Yes	1986	1800	--	1154	1.07	0.718	0.156	2060
05536000	3	Yes	Yes	1987	2590	--	1661	4.03	0.721	0.0427	2930
05536000	3	Yes	Yes	1988	831	E	533	0.445	0.724	0.776	989
05536000	3	Yes	Yes	1989	1780	--	1141	2.2	0.728	0.166	2020
05536000	3	Yes	Yes	1990	1600	--	1026	1.84	0.731	0.224	1820
05536000	3	Yes	Yes	1991	1360	--	872	2.26	0.734	0.369	1560
05536000	0	Yes	No	1992	893	C, E	563	2.12	0.738	0.753	1020
05536000	4	Yes	Yes	1993	1250	C	776	1	0.741	0.488	1380
05536000	4	Yes	Yes	1994	1530	C	950	2.01	0.745	0.292	1670
05536000	4	Yes	Yes	1995	1330	C, E	826	1.32	0.748	0.437	1460
05536000	4	Yes	Yes	1996	1220	C	757	0.805	0.752	0.52	1340
05536000	4	Yes	Yes	1997	2260	C	1403	2.79	0.755	0.0866	2420
05536000	4	Yes	Yes	1998	993	C	616	1.09	0.759	0.71	1090
05536000	4	Yes	Yes	1999	1800	C	1117	1.31	0.762	0.191	1920
05536000	4	Yes	Yes	2000	1290	C, E	801	1.7	0.765	0.483	1390
05536000	4	Yes	Yes	2001	1380	C	857	0.686	0.772	0.427	1470
05536000	4	Yes	Yes	2002	1940	C	1204	3.13	0.779	0.163	2040
05536000	4	Yes	Yes	2003	1130	C	702	1.36	0.785	0.623	1190

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05536000	4	Yes	Yes	2004	1130	C, E	702	1.2	0.792	0.631	1180
05536000	4	Yes	Yes	2005	1210	C, E	751	0.701	0.798	0.575	1260
05536000	4	Yes	Yes	2006	965	C	599	0.753	0.805	0.769	999
05536000	4	Yes	Yes	2007	1730	C	1074	1.46	0.812	0.245	1760
05536000	4	Yes	Yes	2008	3340	C	2073	4.23	0.818	0.0261	3370
05536000	4	Yes	Yes	2009	1980	C	1229	2.14	0.825	0.174	1990
05536105	1	No	No	1990	1890	--	1188	1.97	0.746	0.155	2050
05536105	1	No	No	1991	1540	--	968	2.3	0.749	0.28	1680
05536105	1	No	No	1992	965	C, D	607	2.16	0.752	0.715	1070
05536105	1	No	No	1993	1290	C	811	1.09	0.755	0.461	1410
05536105	1	No	No	1994	1400	C	880	0.629	0.758	0.386	1520
05536105	1	No	No	1995	1370	C, E	861	1.23	0.761	0.411	1480
05536105	1	No	No	1996	1280	C	805	0.856	0.764	0.478	1380
05536105	1	No	No	1997	2360	C	1483	2.79	0.767	0.0723	2500
05536105	1	No	No	1998	954	C, E	600	1.16	0.77	0.739	1040
05536105	1	No	No	2000	963	C, E	605	1.07	0.776	0.737	1040
05536105	1	No	No	2001	1620	C	1018	0.845	0.782	0.264	1710
05536105	1	No	No	2002	1800	C	1131	3.18	0.788	0.197	1880
05536105	1	No	No	2003	1130	C, E	710	1.39	0.793	0.621	1190
05536105	1	No	No	2004	1030	C, E	647	1.12	0.799	0.711	1080
05536105	1	No	No	2005	1200	C, E	754	0.697	0.805	0.578	1240
05536105	1	No	No	2006	1060	C	666	0.765	0.811	0.702	1090
05536105	1	No	No	2007	2110	C	1326	1.55	0.817	0.135	2140
05536105	1	No	No	2008	3580	C	2250	4.3	0.823	0.0195	3610
05536105	1	No	No	2009	2420	C	1521	2.21	0.829	0.0811	2430
05536178	1	No	No	1955	2480	7	876	3.37	0.0278	0.0529	3620
05536178	1	No	No	1966	2080	--	735	1.51	0.0561	0.0928	3020
05536178	1	No	No	1967	991	--	350	1.18	0.0586	0.509	1580
05536178	1	No	No	1968	1390	--	491	1.58	0.0611	0.284	2090
05536178	1	No	No	1969	916	--	324	0.496	0.0636	0.574	1460
05536178	1	No	No	1970	1330	--	470	1.49	0.0661	0.315	2010
05536178	1	No	No	1971	430	--	152	0.973	0.0736	0.896	796
05536178	1	No	No	1972	816	--	288	1.26	0.0812	0.658	1300
05536178	1	No	No	1973	1860	--	657	0.92	0.0887	0.147	2640
05536178	1	No	No	1974	1380	--	488	0.983	0.0963	0.31	2020

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05536178	1	No	No	1975	1600	--	565	1.34	0.104	0.222	2260
05536178	1	No	No	1976	914	--	323	1.57	0.111	0.613	1390
05536178	1	No	No	1977	285	--	101	0.722	0.119	0.957	545
05536179	1	No	No	1990	927	--	411	1.57	0.218	0.526	1240
05536179	1	No	No	1991	3010	--	1333	3.02	0.226	0.023	3650
05536179	1	No	No	1992	631	E	279	0.532	0.234	0.775	868
05536179	1	No	No	1993	1110	--	492	1.85	0.242	0.408	1430
05536179	1	No	No	1994	1590	--	704	0.981	0.25	0.181	1960
05536179	1	No	No	1995	721	E	319	1.02	0.257	0.725	950
05536179	1	No	No	1996	1420	--	629	3.33	0.265	0.252	1740
05536179	1	No	No	1997	1650	--	731	2.06	0.273	0.175	1990
05536179	1	No	No	1998	1230	--	545	1.84	0.281	0.364	1510
05536179	1	No	No	1999	1080	--	478	0.607	0.289	0.469	1330
05536179	1	No	No	2000	950	--	421	1.29	0.297	0.578	1170
05536179	1	No	No	2001	1120	--	496	0.692	0.315	0.463	1340
05536179	1	No	No	2002	1120	--	496	1.68	0.332	0.478	1310
05536179	1	No	No	2003	887	--	393	1.24	0.35	0.669	1030
05536179	1	No	No	2004	453	--	201	0.88	0.368	0.932	543
05536179	1	No	No	2005	1170	--	518	1.17	0.386	0.491	1290
05536179	1	No	No	2006	1430	--	633	3.23	0.404	0.346	1540
05536179	1	No	No	2007	2660	--	1178	2.01	0.422	0.0585	2790
05536179	1	No	No	2008	3110	--	1377	4.33	0.44	0.0376	3200
05536179	1	No	No	2009	1450	--	642	1.17	0.457	0.381	1480
05536190	1	Yes	Yes	1943	2280	--	773	0.967	0.124	0.0957	3620
05536190	1	Yes	Yes	1944	2420	--	820	1.41	0.131	0.0814	3800
05536190	1	Yes	Yes	1945	1270	--	430	0.997	0.138	0.423	2190
05536190	1	Yes	Yes	1946	780	--	264	0.338	0.145	0.749	1480
05536190	1	Yes	Yes	1947	2490	--	844	2.89	0.152	0.0786	3830
05536190	1	Yes	Yes	1948	1950	--	661	1.04	0.159	0.172	3040
05536190	1	Yes	Yes	1949	850	--	288	0.919	0.166	0.717	1540
05536190	1	Yes	Yes	1950	1570	--	532	1.51	0.172	0.303	2510
05536190	1	Yes	Yes	1951	1430	--	485	2.24	0.183	0.373	2320
05536190	1	Yes	Yes	1952	1190	--	403	1.19	0.193	0.517	1970
05536190	1	Yes	Yes	1953	960	--	325	0.571	0.203	0.674	1630
05536190	1	Yes	Yes	1954	1110	--	376	1.51	0.214	0.591	1820

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05536190	1	Yes	Yes	1955	2600	--	881	3.41	0.224	0.0843	3760
05536190	1	Yes	Yes	1956	1550	--	525	0.778	0.234	0.355	2370
05536190	1	Yes	Yes	1957	2060	--	698	2.27	0.244	0.183	2970
05536190	1	Yes	Yes	1958	960	--	325	1.2	0.255	0.712	1550
05536190	1	Yes	Yes	1959	2670	--	905	1.37	0.265	0.0871	3730
05536190	1	Yes	Yes	1960	855	--	290	1.65	0.275	0.783	1390
05536190	1	Yes	Yes	1961	960	--	325	1.71	0.281	0.731	1510
05536190	1	Yes	Yes	1962	715	--	242	0.234	0.286	0.857	1190
05536190	1	Yes	Yes	1963	885	--	300	1.59	0.291	0.777	1400
05536190	1	Yes	Yes	1964	465	--	158	1.03	0.296	0.947	854
05536190	1	Yes	Yes	1965	1160	--	393	0.946	0.301	0.63	1730
05536190	1	Yes	Yes	1966	2500	--	847	1.7	0.307	0.125	3380
05536190	1	Yes	Yes	1967	950	--	322	1.2	0.312	0.757	1450
05536190	1	Yes	Yes	1968	1250	--	424	1.96	0.317	0.591	1810
05536190	1	Yes	Yes	1969	720	--	244	0.472	0.322	0.873	1150
05536190	1	Yes	Yes	1970	1050	--	356	1.47	0.328	0.714	1550
05536190	1	Yes	Yes	1971	629	--	213	0.962	0.338	0.913	1020
05536190	1	Yes	Yes	1972	1250	--	424	1.36	0.348	0.616	1760
05536190	1	Yes	Yes	1973	1500	--	508	0.841	0.358	0.481	2050
05536190	1	Yes	Yes	1974	1540	--	522	1.35	0.368	0.47	2080
05536190	1	Yes	Yes	1975	1450	--	491	1.31	0.378	0.527	1950
05536190	1	Yes	Yes	1976	1270	--	430	0.844	0.388	0.638	1710
05536190	1	Yes	Yes	1977	1200	--	407	1.11	0.398	0.686	1610
05536190	1	Yes	Yes	1978	1120	--	380	0.429	0.408	0.736	1500
05536190	1	Yes	Yes	1979	1390	--	471	0.783	0.418	0.6	1800
05536190	1	Yes	Yes	1980	1380	--	468	0.755	0.429	0.613	1770
05536190	1	Yes	No	1981	1850	1, 8	627	1.9	0.433	0.379	2300
05536190	1	Yes	Yes	1982	1880	--	637	1.24	0.438	0.37	2320
05536190	1	Yes	Yes	1983	2110	--	715	1.99	0.442	0.282	2560
05536190	1	Yes	Yes	1984	1560	--	529	0.69	0.447	0.531	1940
05536190	1	Yes	Yes	1985	2400	2	813	0.891	0.451	0.202	2860
05536190	1	Yes	Yes	1986	1700	2	576	1.12	0.456	0.469	2080
05536190	1	Yes	Yes	1987	1640	--	556	1.25	0.461	0.503	2000
05536190	1	Yes	Yes	1988	1300	--	441	0.76	0.465	0.688	1610
05536190	1	Yes	Yes	1989	2100	--	712	1.52	0.47	0.306	2490

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05536190	1	Yes	Yes	1990	2170	--	735	1.54	0.474	0.285	2550
05536190	1	Yes	Yes	1991	3010	--	1020	3.01	0.481	0.114	3470
05536190	1	Yes	Yes	1992	1540	--	522	2.65	0.488	0.581	1830
05536190	1	Yes	Yes	1993	2360	--	800	1.9	0.495	0.239	2710
05536190	1	Yes	Yes	1994	2490	--	844	0.908	0.502	0.209	2830
05536190	1	Yes	Yes	1995	1590	--	539	1.27	0.509	0.574	1850
05536190	1	Yes	Yes	1996	2710	--	918	3.48	0.515	0.174	3040
05536190	1	Yes	Yes	1997	2700	--	915	2.08	0.522	0.179	3010
05536190	1	Yes	Yes	1998	2370	--	803	1.29	0.529	0.259	2640
05536190	1	Yes	Yes	1999	2470	--	837	0.646	0.536	0.235	2720
05536190	1	Yes	No	2000	1700	1, 8	576	1.39	0.543	0.551	1900
05536190	1	Yes	No	2001	1250	1, 8	424	0.667	0.552	0.777	1400
05536190	1	Yes	No	2002	2500	1, 8	847	1.88	0.562	0.243	2690
05536190	1	Yes	Yes	2003	2400	--	813	1.24	0.572	0.28	2560
05536190	1	Yes	Yes	2004	1440	--	488	0.835	0.581	0.716	1550
05536190	1	Yes	Yes	2005	2670	--	905	1.13	0.591	0.219	2790
05536190	1	Yes	Yes	2006	3260	--	1105	1.23	0.6	0.127	3380
05536190	1	Yes	Yes	2007	3060	--	1037	1.89	0.61	0.16	3140
05536190	1	Yes	Yes	2008	3840	2	1301	4.46	0.619	0.0729	3910
05536190	1	Yes	Yes	2009	3160	2	1071	1.22	0.629	0.153	3190
05536201	1	Yes	No	1955	475	7	762	4.9	0.198	0.128	672
05536201	1	Yes	No	1957	1320	7	2117	2.54	0.212	0.00638	1710
05536201	1	Yes	Yes	1962	116	--	186	0.215	0.247	0.911	197
05536201	1	Yes	No	1963	60	4, B	96	0.215	0.255	0.98	116
05536201	1	Yes	Yes	1964	134	--	215	1.25	0.262	0.883	217
05536201	1	Yes	Yes	1965	215	--	345	1.1	0.269	0.689	315
05536201	1	Yes	Yes	1966	502	--	805	2.99	0.276	0.135	662
05536201	1	Yes	Yes	1967	369	--	592	1.46	0.284	0.305	497
05536201	1	Yes	Yes	1968	1140	--	1828	3.5	0.291	0.012	1410
05536201	1	Yes	Yes	1969	139	--	223	0.692	0.298	0.888	213
05536201	1	Yes	Yes	1970	400	--	641	1.52	0.306	0.265	523
05536201	1	Yes	Yes	1971	440	2	706	1.37	0.31	0.207	567
05536201	1	Yes	Yes	1972	218	--	350	1.26	0.314	0.714	304
05536201	1	Yes	Yes	1973	472	--	757	1.24	0.318	0.178	601
05536201	1	Yes	Yes	1974	1460	--	2341	2.98	0.322	0.00582	1750

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05536201	1	Yes	Yes	1975	300	--	481	1.66	0.326	0.497	399
05536201	1	Yes	Yes	1976	332	--	532	2.2	0.33	0.421	435
05536201	1	Yes	Yes	1977	191	--	306	1.66	0.335	0.794	266
05536201	1	Yes	Yes	1978	387	--	621	1.35	0.339	0.311	494
05536207	1	Yes	Yes	1962	155	--	650	0.65	0.83	0.737	165
05536207	1	Yes	Yes	1963	127	--	532	2.3	0.833	0.861	136
05536207	1	Yes	Yes	1964	276	--	1157	1.82	0.835	0.21	288
05536207	1	Yes	Yes	1965	274	--	1148	1.8	0.837	0.217	286
05536207	1	Yes	Yes	1966	406	2	1702	3.89	0.839	0.054	421
05536207	1	Yes	Yes	1967	197	--	826	1.55	0.842	0.534	206
05536207	1	Yes	Yes	1968	1090	--	4569	4.94	0.844	0	1120
05536207	1	Yes	Yes	1969	312	--	1308	1.96	0.846	0.154	322
05536207	1	Yes	Yes	1970	238	--	998	1.74	0.848	0.352	246
05536207	1	Yes	Yes	1971	346	--	1450	1.58	0.849	0.106	356
05536207	1	Yes	Yes	1972	364	--	1526	1.22	0.849	0.0865	375
05536207	1	Yes	Yes	1973	244	--	1023	1.43	0.849	0.324	252
05536207	1	Yes	Yes	1974	758	--	3177	4.24	0.85	0.00788	775
05536207	1	Yes	Yes	1975	110	--	461	1.26	0.85	0.93	116
05536207	1	Yes	Yes	1976	179	--	750	1.86	0.851	0.633	186
05536207	1	Yes	Yes	1977	166	--	696	2	0.851	0.706	172
05536210	1	No	No	1965	684	--	517	1.44	0.523	0.621	827
05536210	1	No	No	1966	1520	--	1148	3.14	0.528	0.086	1750
05536210	1	No	No	1967	670	--	506	1.48	0.534	0.647	802
05536210	1	No	No	1968	2040	--	1541	3.78	0.54	0.0338	2290
05536210	1	No	No	1969	437	--	330	1.19	0.546	0.883	539
05536210	1	No	No	1970	886	--	669	1.54	0.552	0.432	1020
05536210	1	No	No	1971	950	--	718	1.39	0.555	0.374	1090
05536210	1	No	No	1972	714	--	539	2.43	0.558	0.62	828
05536210	1	No	No	1973	1330	--	1005	1.27	0.561	0.153	1490
05536210	1	No	No	1974	2220	--	1677	3.21	0.564	0.0268	2440
05536210	1	No	No	1975	667	--	504	1.69	0.567	0.681	770
05536210	1	No	No	1976	1040	D	786	1.69	0.57	0.306	1170
05536210	1	No	No	1977	942	--	712	1.71	0.573	0.399	1060
05536210	1	No	No	1978	1070	--	808	1.39	0.576	0.288	1190
05536210	1	No	No	1979	1070	--	808	0.356	0.579	0.29	1190

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05536215	1	No	No	1950	780	--	532	1.53	0.397	0.48	1090
05536215	1	No	No	1951	831	--	566	2.6	0.411	0.442	1140
05536215	1	No	No	1952	780	--	532	1.24	0.425	0.506	1060
05536215	1	No	No	1953	848	--	578	2.41	0.439	0.451	1130
05536215	1	No	No	1954	729	--	497	1.33	0.453	0.589	971
05536215	1	No	No	1955	1180	--	804	4.65	0.467	0.219	1470
05536215	1	No	No	1956	830	--	566	1.23	0.482	0.508	1060
05536215	1	No	No	1957	2460	--	1677	2.39	0.496	0.0218	2880
05536215	1	No	No	1958	950	--	648	1.71	0.51	0.421	1170
05536215	1	No	No	1959	1060	D	723	1.57	0.524	0.34	1270
05536215	1	No	No	1960	661	--	451	1.05	0.538	0.732	813
05536215	1	No	No	1961	1220	--	832	2.38	0.544	0.245	1420
05536215	1	No	No	1962	610	--	416	0.705	0.55	0.786	746
05536215	1	No	No	1963	528	--	360	1.91	0.556	0.856	651
05536215	1	No	No	1964	464	--	316	1.22	0.562	0.904	577
05536215	1	No	No	1965	756	--	515	1.23	0.568	0.665	888
05536215	1	No	No	1966	1690	--	1152	2.72	0.574	0.098	1890
05536215	1	No	No	1967	920	--	627	1.4	0.58	0.515	1050
05536215	1	No	No	1968	2600	--	1772	3.15	0.586	0.0234	2840
05536215	1	No	No	1969	636	--	434	1.15	0.592	0.793	736
05536215	1	No	No	1970	1080	--	736	1.42	0.598	0.393	1210
05536215	1	No	No	1971	1010	--	688	1.28	0.601	0.454	1130
05536215	1	No	No	1972	905	--	617	2.23	0.603	0.551	1010
05536215	1	No	No	1973	1570	2	1070	1.18	0.606	0.143	1710
05536215	1	No	No	1974	2300	--	1568	2.64	0.608	0.0384	2480
05536215	1	No	No	1975	715	--	487	1.14	0.611	0.741	803
05536215	1	No	No	1976	1200	D	818	1.6	0.613	0.309	1310
05536215	1	No	No	1977	1180	--	804	1.54	0.616	0.327	1290
05536215	1	No	No	1978	1190	--	811	1.34	0.618	0.322	1290
05536215	1	No	No	1979	1420	--	968	0.464	0.621	0.196	1530
05536215	1	No	No	1980	1180	--	804	1.25	0.623	0.335	1280
05536215	1	No	No	1981	2310	--	1575	2.51	0.624	0.0395	2460
05536215	1	No	No	1982	2120	--	1445	3.97	0.624	0.0509	2260
05536215	1	No	No	1983	2210	--	1506	2.99	0.625	0.0452	2360
05536215	1	No	No	1984	1530	--	1043	1.42	0.625	0.164	1640

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05536215	1	No	No	1985	957	--	652	1.16	0.626	0.526	1040
05536215	1	No	No	1986	1250	E	852	1.67	0.626	0.286	1350
05536215	1	No	No	1987	1090	--	743	1.46	0.627	0.412	1180
05536215	1	No	No	1988	517	E	352	1.07	0.627	0.903	580
05536215	1	No	No	1989	1710	--	1166	2.42	0.628	0.114	1830
05536215	1	No	No	1990	1130	E	770	1.57	0.628	0.381	1220
05536215	1	No	No	1991	2120	--	1445	2.03	0.629	0.0517	2250
05536215	1	No	No	1992	908	C, E	619	1.87	0.629	0.574	986
05536215	1	No	No	1993	1470	C	1002	0.898	0.63	0.184	1570
05536215	1	No	No	1994	1210	C	825	2.35	0.63	0.317	1300
05536215	1	No	No	1995	763	C, E	520	1.34	0.631	0.716	833
05536215	1	No	No	1996	2700	2, C	1840	4.57	0.631	0.0232	2850
05536215	1	No	No	1997	1370	C, E	934	2.16	0.632	0.224	1460
05536215	1	No	No	1998	1180	C	804	1.67	0.632	0.343	1270
05536215	1	No	No	1999	1100	C	750	1.33	0.633	0.41	1180
05536215	1	No	No	2000	1050	C	716	1.73	0.633	0.451	1130
05536215	1	No	No	2001	692	C, E	472	1.2	0.64	0.782	751
05536215	1	No	No	2002	1290	C, E	879	2.2	0.647	0.277	1360
05536215	1	No	No	2003	1580	C, E	1077	2.25	0.653	0.161	1650
05536215	1	No	No	2004	867	C	591	1.85	0.66	0.644	910
05536215	1	No	No	2005	1270	C	866	1.18	0.667	0.306	1310
05536215	1	No	No	2006	2540	C	1731	2.39	0.674	0.0328	2600
05536215	1	No	No	2007	1080	C	736	1.22	0.681	0.474	1100
05536215	1	No	No	2008	2240	C	1527	3.68	0.687	0.0501	2270
05536215	1	No	No	2009	817	C	557	0.646	0.694	0.723	824
05536235	1	Yes	Yes	1948	663	5	630	1.94	0.142	0.185	1070
05536235	1	Yes	Yes	1949	376	5, E	357	0.884	0.147	0.571	673
05536235	1	Yes	Yes	1950	438	5	416	1.52	0.152	0.459	762
05536235	1	Yes	Yes	1951	467	5	444	2.74	0.162	0.419	797
05536235	1	Yes	Yes	1952	419	5	398	1.15	0.172	0.508	720
05536235	1	Yes	Yes	1953	435	5	413	1.62	0.181	0.488	737
05536235	1	Yes	Yes	1954	417	5	396	1.5	0.191	0.529	704
05536235	1	Yes	Yes	1955	637	5	605	3.8	0.201	0.237	982
05536235	1	Yes	Yes	1956	467	5	444	1.35	0.21	0.459	762
05536235	1	Yes	Yes	1957	1380	5	1311	2.48	0.22	0.0241	1930

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05536235	1	Yes	Yes	1958	471	5	448	1.56	0.23	0.469	754
05536235	1	Yes	Yes	1959	850	5	808	1.38	0.239	0.119	1240
05536235	1	Yes	Yes	1960	430	5	409	1.39	0.249	0.557	683
05536235	1	Yes	Yes	1961	510	5	485	1.85	0.255	0.43	788
05536235	1	Yes	Yes	1962	250	5, E	238	0.231	0.261	0.852	439
05536235	1	Yes	Yes	1963	149	5, E	142	1.65	0.268	0.952	300
05536235	1	Yes	Yes	1964	141	5, E	134	1.1	0.274	0.957	284
05536235	1	Yes	Yes	1965	443	5	421	0.851	0.28	0.562	680
05536235	1	Yes	Yes	1966	898	5	853	1.93	0.286	0.114	1250
05536235	1	Yes	Yes	1967	459	5	436	1.25	0.293	0.545	692
05536235	1	Yes	Yes	1968	874	5	831	1.94	0.299	0.13	1210
05536235	1	Yes	Yes	1969	558	5	530	0.6	0.305	0.403	812
05536235	1	Yes	Yes	1970	447	5	425	1.38	0.311	0.584	664
05536235	1	Yes	Yes	1971	289	5	275	0.245	0.317	0.829	463
05536235	1	Yes	Yes	1972	342	5, E	325	1.26	0.322	0.759	527
05536235	1	Yes	Yes	1973	722	5	686	1.01	0.327	0.234	986
05536235	1	Yes	Yes	1974	610	5	580	1.56	0.332	0.357	854
05536235	1	Yes	Yes	1975	542	5	515	1.43	0.338	0.453	768
05536235	1	Yes	Yes	1976	607	5	577	1.67	0.343	0.369	843
05536235	1	Yes	Yes	1977	425	5, E	404	1.24	0.348	0.648	612
05536235	1	Yes	Yes	1978	454	5	431	0.417	0.353	0.608	645
05536235	1	Yes	Yes	1979	533	5	507	0.676	0.358	0.485	741
05536235	1	Yes	Yes	1980	616	5, E	585	0.934	0.364	0.375	837
05536235	1	Yes	Yes	1981	848	5	806	2.12	0.366	0.17	1110
05536235	1	Yes	Yes	1982	704	5	669	0.564	0.368	0.278	933
05536235	1	Yes	Yes	1983	848	5	806	2.39	0.37	0.172	1100
05536235	1	Yes	Yes	1984	623	5	592	1.04	0.373	0.374	839
05536235	1	Yes	Yes	1985	727	5	691	0.993	0.375	0.26	953
05536235	1	Yes	Yes	1986	630	5	599	1.34	0.377	0.369	843
05536235	1	Yes	Yes	1987	409	5	389	1.51	0.379	0.7	575
05536235	1	Yes	Yes	1988	428	5	407	0.796	0.381	0.671	596
05536235	1	Yes	Yes	1989	739	5, E	702	1.82	0.384	0.254	959
05536235	1	Yes	Yes	1990	446	5	424	0.891	0.386	0.647	614
05536235	1	Yes	Yes	1991	809	5	769	2.41	0.39	0.2	1040
05536235	1	Yes	Yes	1992	470	5, C	447	0.417	0.394	0.617	638

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05536235	1	Yes	Yes	1993	830	5, C	789	1.85	0.397	0.192	1050
05536235	1	Yes	Yes	1994	707	5, C	672	1.01	0.401	0.298	910
05536235	1	Yes	Yes	1995	478	5, C	454	1.13	0.405	0.614	640
05536235	1	Yes	Yes	1996	824	5, C	783	3.56	0.409	0.2	1040
05536235	1	Yes	Yes	1997	803	5, C	763	2.09	0.413	0.219	1010
05536235	1	Yes	Yes	1998	632	5, C	601	1.96	0.416	0.399	816
05536235	1	Yes	Yes	1999	587	5, C	558	0.617	0.42	0.463	760
05536235	1	Yes	Yes	2000	678	5, C	644	0.823	0.424	0.349	861
05536235	1	Yes	Yes	2001	645	5, C	613	0.635	0.447	0.41	806
05536235	1	Yes	Yes	2002	755	5, C	718	1.57	0.47	0.299	908
05536235	1	Yes	Yes	2003	597	5, C	567	1.44	0.493	0.516	716
05536235	1	Yes	Yes	2004	413	5, C	392	1.78	0.516	0.792	497
05536235	1	Yes	Yes	2005	674	5, C	641	1.12	0.539	0.457	765
05536235	0	Yes	No	2006	873	5, C	NA	1.67	0.562	NA	NA
05536235	0	Yes	No	2007	1320	5, C	NA	1.55	0.585	NA	NA
05536235	0	Yes	No	2008	1320	5, C	NA	3.78	0.608	NA	NA
05536235	0	Yes	No	2009	509	5, C	NA	1.74	0.63	NA	NA
05536238	1	Yes	Yes	1961	248	--	639	1.62	0.0702	0.151	337
05536238	1	Yes	Yes	1962	71	--	183	0.246	0.0728	0.848	114
05536238	1	Yes	No	1963	44	4, B	113	0.246	0.0754	0.94	78
05536238	1	Yes	Yes	1964	61	--	157	0.867	0.078	0.89	101
05536238	1	Yes	Yes	1965	132	--	340	0.948	0.0806	0.55	191
05536238	1	Yes	Yes	1966	201	--	518	1.58	0.0832	0.264	275
05536238	1	Yes	Yes	1967	100	--	258	1.19	0.0858	0.723	150
05536238	1	Yes	Yes	1968	372	--	959	1.49	0.0885	0.0471	486
05536238	1	Yes	Yes	1969	60	--	155	0.492	0.0911	0.898	97.8
05536238	1	Yes	Yes	1970	271	--	699	1.45	0.0937	0.124	360
05536238	1	Yes	Yes	1971	30	--	77	1.03	0.109	0.975	54
05536238	1	Yes	Yes	1972	75	--	193	1.25	0.124	0.854	113
05536238	1	Yes	Yes	1973	120	--	309	1.29	0.139	0.657	165
05536238	1	Yes	Yes	1974	299	--	771	1.15	0.154	0.106	375
05536238	1	Yes	Yes	1975	226	--	583	1.13	0.169	0.242	283
05536238	1	Yes	Yes	1976	150	--	387	1.56	0.184	0.542	193
05536238	1	Yes	Yes	1977	210	--	541	0.752	0.199	0.309	259
05536238	1	Yes	Yes	1978	149	--	384	1.17	0.214	0.575	186

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05536238	1	Yes	Yes	1979	573	--	1477	0.767	0.229	0.0177	654
05536255	1	Yes	Yes	1948	970	--	925	1.87	0.124	0.0574	1590
05536255	1	Yes	Yes	1949	465	--	443	0.749	0.13	0.395	843
05536255	1	Yes	Yes	1950	555	--	529	1.19	0.136	0.283	961
05536255	1	Yes	Yes	1951	525	--	500	2.06	0.156	0.332	908
05536255	1	Yes	Yes	1952	339	--	323	0.957	0.175	0.658	621
05536255	1	Yes	Yes	1953	810	--	772	2.05	0.195	0.121	1280
05536255	1	Yes	Yes	1954	450	--	429	1.42	0.215	0.489	758
05536255	1	Yes	Yes	1955	1380	--	1315	4.25	0.235	0.0249	2000
05536255	1	Yes	Yes	1956	510	--	486	1.27	0.255	0.428	814
05536255	1	Yes	Yes	1957	2000	--	1906	2.4	0.275	0.0101	2750
05536255	1	Yes	Yes	1958	311	--	296	1.29	0.295	0.784	514
05536255	1	Yes	Yes	1959	375	E	357	1.48	0.315	0.702	587
05536255	1	Yes	Yes	1960	318	--	303	1.23	0.335	0.798	502
05536255	1	Yes	Yes	1961	935	--	891	2.12	0.348	0.119	1280
05536255	1	Yes	Yes	1962	297	--	283	0.231	0.361	0.84	459
05536255	1	Yes	Yes	1963	187	E	178	1.8	0.375	0.949	311
05536255	1	Yes	Yes	1964	251	E	239	1.03	0.388	0.905	388
05536255	1	Yes	Yes	1965	405	--	386	1.13	0.401	0.72	572
05536255	1	Yes	Yes	1966	888	--	846	2.33	0.415	0.169	1150
05536255	1	Yes	Yes	1967	424	--	404	1.33	0.428	0.713	578
05536255	1	Yes	Yes	1968	1680	--	1601	2.6	0.441	0.022	2070
05536255	0	Yes	No	1969	432	--	398	0.591	0.455	0.743	553
05536255	2	Yes	Yes	1970	666	--	592	1.31	0.468	0.458	787
05536255	2	Yes	Yes	1971	376	--	334	1.17	0.478	0.84	459
05536255	2	Yes	Yes	1972	399	--	354	1.24	0.488	0.822	479
05536255	2	Yes	Yes	1973	820	2	728	1.09	0.498	0.31	927
05536255	2	Yes	Yes	1974	1480	--	1315	2.14	0.508	0.0507	1630
05536255	2	Yes	Yes	1975	548	--	487	1.52	0.518	0.661	619
05536255	2	Yes	Yes	1976	586	D	521	1.51	0.528	0.62	653
05536255	2	Yes	Yes	1977	964	--	856	1.4	0.538	0.222	1040
05536255	2	Yes	Yes	1978	932	--	828	1.28	0.548	0.249	999
05536255	2	Yes	Yes	1979	730	--	648	0.566	0.557	0.464	782
05536255	2	Yes	Yes	1980	448	--	398	1.34	0.567	0.819	481
05536255	2	Yes	Yes	1981	1980	--	1759	2.35	0.57	0.0229	2060

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05536255	2	Yes	Yes	1982	2160	--	1919	3.17	0.572	0.018	2240
05536255	2	Yes	Yes	1983	1700	--	1510	2.7	0.575	0.0397	1760
05536255	2	Yes	Yes	1984	1020	--	906	1.24	0.577	0.209	1060
05536255	2	Yes	Yes	1985	816	--	725	1.07	0.579	0.388	852
05536255	2	Yes	Yes	1986	713	--	633	1.49	0.582	0.508	744
05536255	2	Yes	Yes	1987	711	--	632	1.62	0.584	0.513	740
05536255	2	Yes	Yes	1988	512	--	455	0.423	0.586	0.763	535
05536255	2	Yes	Yes	1989	870	--	773	2.12	0.589	0.339	898
05536255	2	Yes	Yes	1990	829	--	736	2.12	0.591	0.385	854
05536255	2	Yes	Yes	1991	2090	--	1857	3.37	0.593	0.0198	2130
05536255	2	Yes	Yes	1992	465	C	413	2.28	0.595	0.819	481
05536255	2	Yes	Yes	1993	1070	C	951	2.5	0.596	0.193	1090
05536255	2	Yes	Yes	1994	909	C, E	807	1.78	0.598	0.307	929
05536255	2	Yes	Yes	1995	575	C	511	1.14	0.6	0.702	589
05536255	2	Yes	Yes	1996	2220	C	1972	5.24	0.601	0.0179	2250
05536255	2	Yes	Yes	1997	1070	C, E	951	2.25	0.603	0.196	1090
05536255	2	Yes	Yes	1998	707	C	628	1.53	0.605	0.538	719
05536255	2	Yes	Yes	1999	710	C	631	1.27	0.606	0.536	720
05536255	2	Yes	Yes	2000	497	C	441	1.26	0.608	0.795	505
05536255	2	Yes	Yes	2001	544	C	483	0.535	0.609	0.745	551
05536255	2	Yes	Yes	2002	949	C	843	1.43	0.61	0.282	957
05536255	2	Yes	Yes	2003	634	C	563	2.4	0.611	0.635	640
05536255	2	Yes	Yes	2004	931	C	827	3.41	0.613	0.299	937
05536255	2	Yes	Yes	2005	774	C, E	688	1.02	0.614	0.468	779
05536255	2	Yes	Yes	2006	2640	C	2345	3.02	0.615	0.012	2650
05536255	2	Yes	Yes	2007	840	C	746	2.01	0.616	0.398	843
05536255	2	Yes	Yes	2008	2020	C	1794	4.8	0.617	0.0245	2020
05536255	2	Yes	Yes	2009	788	C	700	1.2	0.618	0.456	789
05536265	1	Yes	Yes	1948	461	5	1081	1.12	0.0402	0.0285	321
05536265	1	Yes	Yes	1949	371	5	870	0.766	0.0439	0.0564	266
05536265	1	Yes	Yes	1950	301	5	706	1.17	0.0476	0.102	219
05536265	1	Yes	Yes	1951	425	5	996	2.05	0.0626	0.0398	295
05536265	1	Yes	Yes	1952	323	5	757	0.0211	0.0776	0.09	228
05536265	1	Yes	Yes	1953	354	5	830	1.11	0.0925	0.0713	245
05536265	1	Yes	Yes	1954	362	5	849	0.909	0.107	0.0697	247

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05536265	1	Yes	Yes	1955	302	5	708	3.31	0.122	0.129	207
05536265	1	Yes	Yes	1956	320	5	750	1.42	0.137	0.111	215
05536265	1	Yes	Yes	1957	240	5, E	563	2.41	0.152	0.254	163
05536265	1	Yes	Yes	1958	150	5, E	352	1.11	0.167	0.601	108
05536265	1	Yes	Yes	1959	155	5	363	1.25	0.182	0.59	109
05536265	1	Yes	Yes	1960	204	5	478	1.05	0.197	0.393	137
05536265	1	Yes	Yes	1961	126	5, E	295	1.5	0.204	0.73	89.7
05536265	1	Yes	Yes	1962	77	5, E	181	0.242	0.212	0.905	59.8
05536265	1	Yes	Yes	1963	94	5, E	220	0.563	0.219	0.856	69.3
05536265	1	Yes	Yes	1964	56	5, E	131	0.996	0.226	0.952	45.5
05536265	1	Yes	Yes	1965	165	5	387	0.898	0.233	0.587	110
05536265	1	Yes	Yes	1966	272	5	638	1.61	0.241	0.228	169
05536265	1	Yes	Yes	1967	130	5, E	305	1.15	0.248	0.743	87.9
05536265	1	Yes	Yes	1968	260	5	610	1.6	0.255	0.266	160
05536265	1	Yes	Yes	1969	48	5, E	113	0.923	0.262	0.969	37.7
05536265	1	Yes	Yes	1970	135	5, E	316	1.48	0.269	0.738	88.7
05536265	1	Yes	Yes	1971	96	5	225	0.931	0.278	0.877	65.8
05536265	1	Yes	Yes	1972	105	5	246	1.07	0.286	0.852	70.1
05536265	1	Yes	Yes	1973	238	5	558	0.892	0.294	0.356	144
05536265	1	Yes	Yes	1974	228	5	534	1.31	0.302	0.394	137
05536265	1	Yes	Yes	1975	199	5, E	467	1.31	0.31	0.507	120
05536265	1	Yes	Yes	1976	202	5	474	1.55	0.318	0.502	121
05536265	1	Yes	Yes	1977	188	5, E	441	1.02	0.327	0.568	112
05536265	1	Yes	Yes	1978	138	5, E	324	1.16	0.335	0.769	83.9
05536265	1	Yes	Yes	1979	222	5, E	520	0.801	0.343	0.45	129
05536265	1	Yes	Yes	1980	176	5, E	413	0.754	0.351	0.637	102
05536265	1	Yes	Yes	1981	204	5	478	1.85	0.355	0.528	117
05536265	1	Yes	Yes	1982	198	5	464	1.19	0.358	0.555	114
05536265	1	Yes	Yes	1983	203	5	476	1.48	0.361	0.538	116
05536265	1	Yes	Yes	1984	146	5	342	0.675	0.365	0.761	85.2
05536265	1	Yes	Yes	1985	187	5	438	0.865	0.368	0.609	106
05536265	1	Yes	Yes	1986	183	5, E	429	1.08	0.372	0.627	104
05536265	1	Yes	Yes	1987	136	5, E	319	1.17	0.375	0.8	78.9
05536265	0	Yes	No	1988	109	5, E	371	0.393	0.379	0.727	90.2
05536265	2	Yes	Yes	1989	142	5, E	701	1.43	0.382	0.254	163

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05536265	2	Yes	Yes	1990	129	5, E	637	2.68	0.385	0.327	149
05536265	2	Yes	Yes	1991	197	5, E	973	3.83	0.389	0.0982	222
05536265	2	Yes	Yes	1992	100	5, C	494	0.76	0.392	0.536	116
05536265	2	Yes	Yes	1993	184	5, C	909	2	0.395	0.13	207
05536265	2	Yes	Yes	1994	180	5, C	889	1.12	0.398	0.14	202
05536265	2	Yes	Yes	1995	120	5, C	593	0.9	0.401	0.397	137
05536265	2	Yes	Yes	1996	208	5, C	1027	4.19	0.404	0.0862	231
05536265	2	Yes	Yes	1997	168	5, C	830	2.06	0.407	0.174	187
05536265	2	Yes	Yes	1998	114	5, C	563	1.19	0.41	0.446	129
05536265	2	Yes	Yes	1999	150	5, C	741	0.81	0.413	0.238	167
05536265	2	Yes	Yes	2000	169	5, C	835	2.02	0.416	0.175	187
05536265	2	Yes	Yes	2001	119	5, C	588	0.8	0.427	0.426	132
05536265	2	Yes	Yes	2002	116	5, C	573	2.56	0.438	0.457	127
05536265	2	Yes	Yes	2003	169	5, C	835	1.74	0.448	0.189	181
05536265	2	Yes	Yes	2004	100	5, C	494	2.2	0.459	0.599	108
05536265	2	Yes	Yes	2005	127	5, C	627	1.95	0.47	0.411	135
05536265	2	Yes	Yes	2006	202	5, C	997	5.56	0.48	0.123	210
05536265	2	Yes	Yes	2007	123	5, C	607	2.69	0.491	0.457	127
05536265	2	Yes	Yes	2008	219	5, C	1081	5.35	0.502	0.0972	223
05536265	2	Yes	Yes	2009	100	5, C	494	1.58	0.512	0.646	101
05536270	1	Yes	Yes	1948	730	5	972	1.85	0.125	0.0491	1060
05536270	1	Yes	Yes	1949	531	5	707	0.768	0.129	0.132	794
05536270	1	Yes	Yes	1950	575	5	766	1.15	0.134	0.101	852
05536270	1	Yes	Yes	1951	649	5	864	2.03	0.145	0.0722	943
05536270	1	Yes	Yes	1952	435	5	579	0.0207	0.156	0.238	646
05536270	1	Yes	Yes	1953	531	5	707	0.615	0.168	0.147	768
05536270	1	Yes	Yes	1954	623	5	829	0.916	0.179	0.0899	884
05536270	1	Yes	Yes	1955	692	5	921	3.32	0.19	0.0678	965
05536270	1	Yes	Yes	1956	348	5	463	1.42	0.201	0.42	520
05536270	1	Yes	Yes	1957	515	5, E	686	2.39	0.213	0.178	717
05536270	1	Yes	Yes	1958	269	5	358	1.1	0.224	0.631	405
05536270	1	Yes	Yes	1959	328	5	437	0.612	0.235	0.492	477
05536270	1	Yes	Yes	1960	285	5, E	379	1.05	0.246	0.611	416
05536270	1	Yes	Yes	1961	305	5	406	1.49	0.256	0.568	438
05536270	1	Yes	Yes	1962	185	5, E	246	0.242	0.265	0.841	285

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05536270	1	Yes	Yes	1963	295	5, E	393	1.49	0.274	0.61	417
05536270	1	Yes	Yes	1964	121	5, E	161	0.991	0.283	0.941	199
05536270	1	Yes	Yes	1965	234	5, E	312	0.896	0.292	0.761	336
05536270	1	Yes	Yes	1966	540	5	719	1.63	0.302	0.193	693
05536270	1	Yes	Yes	1967	240	5	320	1.15	0.311	0.76	337
05536270	1	Yes	Yes	1968	374	5	498	2.11	0.32	0.464	493
05536270	1	Yes	Yes	1969	142	5, E	189	0.945	0.329	0.931	213
05536270	1	Yes	Yes	1970	244	5, E	325	1.47	0.338	0.769	331
05536270	1	Yes	Yes	1971	220	5, E	293	0.924	0.35	0.822	299
05536270	1	Yes	Yes	1972	266	5	354	1.09	0.361	0.741	348
05536270	1	Yes	Yes	1973	390	5	519	0.887	0.373	0.478	486
05536270	1	Yes	Yes	1974	328	5	437	1.3	0.384	0.625	409
05536270	1	Yes	Yes	1975	340	5	453	1.12	0.396	0.609	417
05536270	1	Yes	Yes	1976	497	5	662	1.56	0.407	0.314	586
05536270	1	Yes	Yes	1977	238	5, E	317	1.02	0.418	0.828	294
05536270	1	Yes	Yes	1978	249	5	331	1.16	0.43	0.816	302
05536270	1	Yes	Yes	1979	505	5	672	0.803	0.441	0.329	576
05536275	1	No	No	1947	4200	--	1197	2.85	0.185	0.0298	5680
05536275	1	No	No	1948	4040	--	1151	2.07	0.192	0.0351	5460
05536275	1	No	No	1949	1320	--	376	0.815	0.2	0.578	2040
05536275	1	No	No	1950	2010	--	573	1.52	0.207	0.276	2880
05536275	1	No	No	1951	2720	--	775	2.36	0.22	0.129	3740
05536275	1	No	No	1952	1570	--	447	1.05	0.233	0.472	2290
05536275	1	No	No	1953	2280	--	650	1.74	0.246	0.22	3100
05536275	1	No	No	1954	1890	--	538	1.47	0.26	0.356	2620
05536275	1	No	No	1955	3370	--	960	3.95	0.273	0.0732	4370
05536275	1	No	No	1956	2280	--	650	1.32	0.286	0.244	3000
05536275	1	No	No	1957	4700	--	1339	2.41	0.299	0.0279	5790
05536275	1	No	No	1958	1560	--	444	1.33	0.312	0.548	2110
05536275	1	No	No	1959	1780	--	507	1.41	0.325	0.455	2340
05536275	1	No	No	1960	1220	D	348	1.36	0.339	0.735	1660
05536275	1	No	No	1961	2420	--	689	1.93	0.347	0.244	3000
05536275	1	No	No	1962	1100	--	313	0.23	0.356	0.796	1490
05536275	1	No	No	1963	975	--	278	1.7	0.365	0.849	1330
05536275	1	No	No	1964	621	--	177	1.12	0.373	0.95	908

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05536275	1	No	No	1965	1290	--	368	1.05	0.382	0.735	1660
05536275	1	No	No	1966	3240	--	923	2.04	0.391	0.121	3810
05536275	1	No	No	1967	1690	--	481	1.27	0.399	0.564	2070
05536275	1	No	No	1968	3420	--	974	2.13	0.408	0.104	3950
05536275	1	No	No	1969	1090	--	311	0.68	0.417	0.835	1370
05536275	1	No	No	1970	1830	--	521	1.33	0.425	0.523	2170
05536275	1	No	No	1971	1250	--	356	1.1	0.432	0.784	1520
05536275	1	No	No	1972	1410	--	402	1.26	0.438	0.724	1680
05536275	1	No	No	1973	3060	--	872	1.03	0.445	0.168	3430
05536275	1	No	No	1974	2970	--	846	1.71	0.451	0.184	3310
05536275	1	No	No	1975	1630	--	464	1.45	0.457	0.642	1880
05536275	1	No	No	1976	1940	--	553	1.7	0.464	0.51	2200
05536275	1	No	No	1977	1580	--	450	1.28	0.47	0.676	1800
05536275	1	No	No	1978	2020	--	575	1.24	0.476	0.489	2250
05536275	1	No	No	1979	2680	--	764	0.641	0.483	0.263	2920
05536275	1	No	No	1980	1440	--	410	0.971	0.489	0.751	1620
05536275	1	No	No	1981	4140	--	1179	2.18	0.491	0.0701	4430
05536275	1	No	No	1982	2370	--	675	2.54	0.493	0.37	2580
05536275	1	No	No	1983	3370	--	960	2.46	0.494	0.146	3610
05536275	1	No	No	1984	2060	--	587	1.09	0.496	0.491	2250
05536275	1	No	No	1985	2110	--	601	1.01	0.497	0.472	2300
05536275	1	No	No	1986	1630	--	464	1.37	0.499	0.68	1790
05536275	1	No	No	1987	1350	--	385	1.98	0.501	0.792	1500
05536275	0	No	No	1988	964	--	279	0.715	0.502	0.912	1120
05536275	2	No	No	1989	3000	--	882	1.9	0.504	0.188	3290
05536275	2	No	No	1990	1620	--	476	1.51	0.506	0.667	1820
05536275	2	No	No	1991	4210	--	1238	2.87	0.508	0.0631	4570
05536275	2	No	No	1992	1070	C	315	2.11	0.51	0.881	1230
05536275	2	No	No	1993	2610	C	767	2.09	0.512	0.28	2860
05536275	2	No	No	1994	1640	C	482	1.4	0.514	0.665	1830
05536275	2	No	No	1995	1400	C	412	1.11	0.516	0.767	1570
05536275	2	No	No	1996	4470	C	1314	4.28	0.518	0.0525	4810
05536275	2	No	No	1997	3370	C	991	2.16	0.52	0.142	3640
05536275	2	No	No	1998	2360	C	694	1.5	0.522	0.373	2570
05536275	2	No	No	1999	2230	C	656	0.787	0.524	0.423	2430

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05536275	2	No	No	2000	1390	C	409	1.15	0.526	0.777	1540
05536275	2	No	No	2001	1900	C	559	0.636	0.533	0.568	2060
05536275	2	No	No	2002	2920	C	859	1.46	0.541	0.222	3100
05536275	2	No	No	2003	2730	C	803	1.86	0.549	0.274	2880
05536275	2	No	No	2004	2340	C	688	2.32	0.557	0.413	2460
05536275	2	No	No	2005	3400	C	1000	1.12	0.564	0.157	3520
05536275	2	No	No	2006	5540	C	1629	2.6	0.572	0.0302	5680
05536275	0	No	No	2007	2820	C	NA	1.84	0.58	NA	NA
05536275	0	No	No	2008	5860	C	NA	4.41	0.588	NA	NA
05536275	0	No	No	2009	3490	C	NA	1.09	0.595	NA	NA
05536290	1	No	No	1947	4760	5	1186	2.88	0.221	0.0343	6670
05536290	1	No	No	1948	3810	5	949	1.04	0.23	0.0686	5440
05536290	1	No	No	1949	1580	5	394	0.901	0.239	0.578	2500
05536290	1	No	No	1950	2780	5	693	1.32	0.248	0.188	3990
05536290	1	No	No	1951	3360	5	837	2.24	0.26	0.112	4730
05536290	1	No	No	1952	2480	5	618	1	0.273	0.269	3550
05536290	1	No	No	1953	2420	5	603	1.41	0.285	0.293	3440
05536290	1	No	No	1954	2100	5	523	1.45	0.297	0.406	3030
05536290	1	No	No	1955	4210	5	1049	3.71	0.31	0.0627	5600
05536290	1	No	No	1956	2420	5	603	1.35	0.322	0.32	3340
05536290	1	No	No	1957	4440	5	1106	2.24	0.334	0.0565	5760
05536290	1	No	No	1958	1930	5	481	1.44	0.346	0.516	2680
05536290	1	No	No	1959	2820	5	703	1.43	0.359	0.238	3680
05536290	1	No	No	1960	1860	5	463	1.53	0.371	0.568	2530
05536290	1	No	No	1961	2410	5	600	1.88	0.378	0.367	3170
05536290	1	No	No	1962	1280	5	319	0.23	0.385	0.806	1810
05536290	1	No	No	1963	1400	5	349	1.69	0.392	0.768	1940
05536290	1	No	No	1964	995	5	248	1.08	0.399	0.901	1450
05536290	1	No	No	1965	1710	5	426	0.964	0.406	0.66	2260
05536290	1	No	No	1966	3490	5	870	1.76	0.413	0.156	4290
05536290	1	No	No	1967	1890	5	471	1.24	0.42	0.601	2440
05536290	1	No	No	1968	3060	5	762	1.85	0.427	0.228	3740
05536290	1	No	No	1969	1340	5	334	0.505	0.434	0.815	1780
05536290	1	No	No	1970	2340	5	583	1.39	0.441	0.445	2910
05536290	1	No	No	1971	1520	5	379	1.02	0.448	0.764	1950

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05536290	1	No	No	1972	1820	5	453	1.32	0.455	0.657	2270
05536290	1	No	No	1973	3500	5	872	0.91	0.462	0.175	4120
05536290	1	No	No	1974	2980	5	742	1.46	0.469	0.273	3520
05536290	1	No	No	1975	2480	5	618	1.37	0.476	0.429	2960
05536290	1	No	No	1976	2650	5	660	0.856	0.483	0.38	3130
05536290	1	No	No	1977	2050	5	511	1.21	0.49	0.601	2440
05536290	1	No	No	1978	2860	5	713	1.19	0.497	0.328	3310
05536290	1	No	No	1979	3100	5	772	0.714	0.504	0.269	3540
05536290	1	No	No	1980	2320	5	578	0.852	0.511	0.517	2680
05536290	1	No	No	1981	4070	5	1014	2.03	0.513	0.129	4560
05536290	1	No	No	1982	2790	5	695	0.507	0.515	0.365	3180
05536290	1	No	No	1983	3520	5	877	2.2	0.518	0.196	3940
05536290	1	No	No	1984	2550	5	635	0.927	0.52	0.447	2900
05536290	1	No	No	1985	2980	5	742	0.942	0.522	0.315	3350
05536290	1	No	No	1986	2510	5	625	1.23	0.525	0.464	2850
05536290	1	No	No	1987	1950	5	486	1.32	0.527	0.672	2230
05536290	1	No	No	1988	1470	5, C	366	0.658	0.53	0.833	1710
05536290	1	No	No	1989	3390	5, C	845	1.69	0.532	0.227	3750
05536290	1	No	No	1990	2070	5, C	516	1.56	0.534	0.633	2340
05536290	1	No	No	1991	4150	5, C	1034	2.9	0.538	0.131	4550
05536290	1	No	No	1992	1650	5, C	411	2.43	0.541	0.785	1880
05536290	1	No	No	1993	3020	5, C	752	2.02	0.544	0.322	3320
05536290	1	No	No	1994	2120	5, C	528	0.946	0.547	0.626	2360
05536290	1	No	No	1995	2010	5, C	501	1.03	0.551	0.67	2240
05536290	1	No	No	1996	3870	5, C	964	3.83	0.554	0.169	4180
05536290	1	No	No	1997	3540	5, C	882	2.14	0.557	0.215	3820
05536290	1	No	No	1998	2820	5, C	703	1.41	0.561	0.398	3070
05536290	1	No	No	1999	2630	5, C	655	0.72	0.564	0.462	2860
05536290	1	No	No	2000	2160	5, C	538	1.29	0.567	0.63	2350
05536290	1	No	No	2001	2410	5, C	600	0.638	0.574	0.546	2590
05536290	1	No	No	2002	3620	5, C	902	1.69	0.581	0.215	3820
05536290	1	No	No	2003	1610	5, C	401	0.907	0.589	0.829	1730
05536290	1	No	No	2004	1820	5, C	453	2.12	0.596	0.771	1930
05536290	1	No	No	2005	2310	5, C	576	1.1	0.603	0.61	2410
05536290	1	No	No	2006	2600	5, C	648	2.67	0.61	0.516	2680

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05536290	1	No	No	2007	2310	5, C	576	1.82	0.617	0.623	2370
05536290	1	No	No	2008	3930	5, C	979	4.43	0.624	0.192	3980
05536290	1	No	No	2009	2650	5, C	660	1.14	0.631	0.52	2670
05536310	1	Yes	No	1955	389	7	998	3.51	0.577	0.163	503
05536310	1	Yes	No	1957	467	7	1198	2.37	0.626	0.101	575
05536310	1	Yes	Yes	1961	410	--	1052	1.61	0.709	0.196	471
05536310	1	Yes	Yes	1962	191	--	490	0.249	0.717	0.818	232
05536310	1	Yes	Yes	1963	259	--	664	1.58	0.726	0.609	302
05536310	1	Yes	Yes	1964	145	--	372	1.03	0.734	0.933	179
05536310	1	Yes	Yes	1965	306	--	785	0.949	0.742	0.478	348
05536310	1	Yes	Yes	1966	431	--	1106	1.52	0.751	0.191	476
05536310	1	Yes	Yes	1967	311	--	798	1.19	0.759	0.48	347
05536310	1	Yes	Yes	1968	502	--	1288	1.5	0.767	0.127	545
05536310	1	Yes	Yes	1969	210	--	539	0.861	0.776	0.811	235
05536310	1	Yes	Yes	1970	398	--	1021	1.4	0.784	0.264	427
05536310	1	Yes	Yes	1971	322	--	826	0.269	0.79	0.48	347
05536310	1	Yes	Yes	1972	265	--	680	0.88	0.796	0.665	285
05536310	1	Yes	Yes	1973	356	--	913	0.927	0.802	0.397	377
05536310	1	Yes	Yes	1974	385	--	988	1.08	0.809	0.316	404
05536310	0	Yes	No	1975	214	--	NA	1.11	0.815	NA	NA
05536310	0	Yes	No	1976	259	--	NA	0.928	0.821	NA	NA
05536335	1	No	No	1954	204	--	545	1.65	0.27	0.355	379
05536335	1	No	No	1955	481	--	1285	3.27	0.294	0.0318	759
05536335	1	No	No	1956	160	--	427	1.37	0.319	0.585	300
05536335	1	No	No	1957	479	--	1279	2.41	0.343	0.037	732
05536335	1	No	No	1958	145	2	387	1.4	0.368	0.693	267
05536335	1	No	No	1959	195	2	521	1.26	0.392	0.493	330
05536335	1	No	No	1960	180	2	481	0.0494	0.417	0.581	301
05536335	1	No	No	1961	282	--	753	1.45	0.428	0.237	427
05536335	1	No	No	1962	191	--	510	0.3	0.44	0.555	309
05536335	1	No	No	1963	162	--	433	1.51	0.452	0.689	268
05536335	1	No	No	1964	65	--	174	0.989	0.464	0.965	139
05536335	1	No	No	1965	165	--	441	0.89	0.476	0.697	266
05536335	1	No	No	1966	332	--	887	1.31	0.488	0.178	469
05536335	1	No	No	1967	205	--	548	1.15	0.499	0.552	310

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05536335	1	No	No	1968	253	--	676	1.46	0.511	0.386	368
05536335	1	No	No	1969	166	--	443	0.93	0.523	0.73	255
05536335	1	No	No	1970	298	--	796	1.1	0.535	0.27	410
05536335	1	No	No	1971	189	--	505	0.309	0.561	0.674	273
05536335	1	No	No	1972	232	--	620	1.23	0.587	0.532	317
05536335	1	No	No	1973	580	2	1549	1.31	0.613	0.0404	712
05536335	1	No	No	1974	234	--	625	1.24	0.639	0.575	303
05536335	1	No	No	1975	279	--	745	0.665	0.665	0.447	347
05536335	1	No	No	1976	201	--	537	0.915	0.691	0.745	251
05536335	1	No	No	1977	188	--	502	1.4	0.717	0.805	229
05536335	1	No	No	1978	280	--	748	1.11	0.743	0.522	320
05536335	1	No	No	1979	273	--	729	0.847	0.769	0.571	304
05536340	1	Yes	Yes	1951	375	--	750	1.32	0.209	0.138	283
05536340	1	Yes	Yes	1952	256	D	512	0.943	0.231	0.37	205
05536340	1	Yes	Yes	1953	384	--	768	1.14	0.253	0.145	279
05536340	1	Yes	Yes	1954	248	E	496	1.65	0.275	0.428	193
05536340	1	Yes	Yes	1955	569	--	1138	3.27	0.296	0.0469	383
05536340	1	Yes	Yes	1956	204	E	408	0.738	0.318	0.618	157
05536340	1	Yes	Yes	1957	550	--	1100	2.4	0.34	0.0585	360
05536340	1	Yes	Yes	1958	168	E	336	1.4	0.362	0.767	130
05536340	1	Yes	Yes	1959	228	E	456	1.26	0.383	0.593	162
05536340	1	Yes	Yes	1960	210	E	420	0.0492	0.405	0.669	148
05536340	1	Yes	Yes	1961	328	E	656	1.45	0.415	0.328	213
05536340	1	Yes	Yes	1962	210	D	420	0.3	0.426	0.686	145
05536340	1	Yes	Yes	1963	226	E	452	1.51	0.436	0.643	152
05536340	1	Yes	Yes	1964	128	E	256	0.493	0.446	0.911	97.5
05536340	1	Yes	Yes	1965	192	--	384	0.892	0.456	0.763	131
05536340	1	Yes	Yes	1966	391	D	782	1.3	0.466	0.236	236
05536340	1	Yes	Yes	1967	237	--	474	1.15	0.477	0.644	152
05536340	1	Yes	Yes	1968	314	--	628	1.46	0.487	0.425	193
05536340	1	Yes	Yes	1969	158	--	316	0.925	0.497	0.874	107
05536340	1	Yes	Yes	1970	296	--	592	1.1	0.507	0.494	180
05536340	1	Yes	Yes	1971	178	--	356	0.308	0.528	0.843	114
05536340	1	Yes	Yes	1972	271	--	542	1.23	0.548	0.607	159
05536340	1	Yes	Yes	1973	501	--	1002	1.31	0.569	0.158	272

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05536340	0	Yes	No	1974	210	5, C	540	1.24	0.59	0.649	152
05536340	2	Yes	Yes	1975	251	5, C	829	0.665	0.61	0.295	220
05536340	2	Yes	Yes	1976	201	5, C	664	1.05	0.631	0.516	176
05536340	2	Yes	Yes	1977	166	5, C	548	1.39	0.651	0.698	144
05536340	2	Yes	Yes	1978	224	5, C	740	0.822	0.672	0.46	187
05536340	2	Yes	Yes	1979	253	5, C	835	0.843	0.692	0.367	205
05536340	2	Yes	Yes	1980	128	5, C	423	1.04	0.713	0.885	105
05536340	2	Yes	Yes	1981	350	5, C	1156	1.91	0.717	0.156	274
05536340	2	Yes	Yes	1982	192	5, C	634	0.387	0.721	0.646	152
05536340	2	Yes	Yes	1983	300	5, C	991	1.42	0.725	0.244	234
05536340	2	Yes	Yes	1984	244	5, C	806	0.745	0.73	0.441	190
05536340	2	Yes	Yes	1985	222	5, C	733	0.836	0.734	0.531	173
05536340	2	Yes	Yes	1986	125	5, C	413	0.844	0.738	0.908	98.5
05536340	2	Yes	Yes	1987	267	5, C	882	1.09	0.742	0.366	205
05536340	0	Yes	No	1988	131	5, C	502	0.606	0.747	0.827	118
05536340	3	Yes	Yes	1989	305	5, C	1356	1.3	0.751	0.0968	312
05536340	3	Yes	Yes	1990	261	5, C	1161	2.49	0.755	0.17	266
05536340	3	Yes	Yes	1991	339	5, C	1508	3.15	0.757	0.0664	345
05536340	3	Yes	Yes	1992	183	5, C	814	4.07	0.759	0.461	186
05536340	3	Yes	Yes	1993	187	5, C	832	1.06	0.761	0.443	190
05536340	3	Yes	Yes	1994	152	5, C	676	1.67	0.763	0.633	154
05536340	3	Yes	Yes	1995	174	5, C	774	1.14	0.765	0.514	176
05536340	3	Yes	Yes	1996	382	5, C	1699	3.48	0.767	0.0446	385
05536340	3	Yes	Yes	1997	259	5, C	1152	2.47	0.769	0.18	261
05536340	3	Yes	Yes	1998	214	5, C	952	1.57	0.771	0.315	215
05536340	3	Yes	Yes	1999	197	5, C	876	1.17	0.772	0.406	198
05536340	3	Yes	Yes	2000	298	5, C	1325	3.78	0.774	0.116	298
05536340	3	Yes	Yes	2001	241	5, C	1072	0.915	0.774	0.223	241
05536340	3	Yes	Yes	2002	260	5, C	1156	2.7	0.775	0.181	260
05536340	3	Yes	Yes	2003	236	5, C	1050	2.26	0.775	0.237	236
05536340	3	Yes	Yes	2004	295	5, C	1312	2.2	0.775	0.121	295
05536340	3	Yes	Yes	2005	159	5, C	707	0.925	0.775	0.604	159
05536340	3	Yes	Yes	2006	217	5, C	965	2.93	0.775	0.305	217
05536340	3	Yes	Yes	2007	225	5, C	1001	2.66	0.775	0.274	225
05536340	3	Yes	Yes	2008	325	5, C	1445	4.52	0.775	0.0825	325

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05536340	3	Yes	Yes	2009	318	5, C	1414	1.76	0.775	0.09	318
05536460	1	No	No	1961	386	2	468	1.43	0.21	0.418	674
05536460	1	No	No	1962	261	--	317	0.27	0.23	0.71	484
05536460	1	No	No	1963	430	--	522	1.51	0.25	0.371	709
05536460	1	No	No	1964	109	4	132	0.983	0.27	0.958	252
05536460	1	No	No	1965	337	--	409	0.881	0.29	0.595	557
05536460	1	No	No	1966	783	--	950	1.38	0.31	0.0847	1130
05536460	1	No	No	1967	488	--	592	1.15	0.33	0.34	733
05536460	1	No	No	1968	447	--	542	1.45	0.35	0.423	671
05536460	1	No	No	1969	210	2	255	0.419	0.37	0.881	357
05536460	1	No	No	1970	999	--	1212	1.09	0.39	0.0486	1320
05536460	1	No	No	1971	197	--	239	0.311	0.42	0.917	322
05536460	1	No	No	1972	501	--	608	1.23	0.449	0.418	675
05536460	1	No	No	1973	715	--	867	1.33	0.478	0.184	897
05536460	1	No	No	1974	569	--	690	1.2	0.508	0.364	714
05536460	1	No	No	1975	575	--	698	1.02	0.537	0.382	701
05536460	1	No	No	1976	352	--	427	0.924	0.566	0.783	434
05536460	1	No	No	1977	266	--	323	1.43	0.596	0.913	327
05536460	1	No	No	1978	853	2	1035	1.09	0.625	0.167	934
05536460	1	No	No	1979	260	2	315	0.863	0.654	0.938	293
05536500	1	Yes	Yes	1951	505	--	491	1.34	0.0462	0.274	889
05536500	1	Yes	Yes	1952	405	--	394	0.944	0.0615	0.426	746
05536500	1	Yes	Yes	1953	530	--	515	1.15	0.0768	0.263	901
05536500	1	Yes	Yes	1954	367	--	357	1.66	0.0922	0.523	667
05536500	1	Yes	Yes	1955	1930	--	1877	3.27	0.108	0.00744	2780
05536500	1	Yes	Yes	1957	1730	--	1683	2.37	0.138	0.0108	2450
05536500	1	Yes	Yes	1958	227	E	221	0.974	0.154	0.826	436
05536500	1	Yes	Yes	1959	455	E	443	1.26	0.169	0.427	745
05536500	1	Yes	Yes	1960	395	--	384	0.0504	0.184	0.548	650
05536500	1	Yes	Yes	1961	453	--	441	1.44	0.202	0.458	720
05536500	1	Yes	Yes	1962	306	--	298	0.268	0.219	0.736	511
05536500	1	Yes	Yes	1963	484	E	471	1.52	0.237	0.437	737
05536500	1	Yes	Yes	1964	110	E	107	0.982	0.254	0.972	225
05536500	1	Yes	Yes	1965	391	--	380	0.887	0.272	0.628	591
05536500	1	Yes	Yes	1966	769	D	748	1.34	0.289	0.171	1040

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05536500	1	Yes	Yes	1967	524	E	510	1.15	0.307	0.435	739
05536500	1	Yes	Yes	1968	495	--	481	1.44	0.324	0.495	690
05536500	1	Yes	Yes	1969	240	E	233	0.426	0.342	0.893	369
05536500	1	Yes	Yes	1970	1580	--	1537	1.1	0.359	0.0199	1930
05536500	1	Yes	Yes	1971	224	E	218	0.309	0.382	0.924	333
05536500	1	Yes	Yes	1972	491	--	478	1.23	0.405	0.575	630
05536500	1	Yes	Yes	1973	775	--	754	1.32	0.427	0.236	933
05536500	1	Yes	Yes	1974	670	--	652	1.2	0.45	0.362	802
05536500	1	Yes	Yes	1975	700	--	681	1.02	0.473	0.345	817
05536500	1	Yes	Yes	1976	456	--	444	0.931	0.495	0.709	534
05536500	1	Yes	Yes	1977	372	--	362	1.42	0.518	0.831	430
05536500	1	Yes	Yes	1978	1220	--	1187	1.1	0.541	0.0792	1310
05536500	1	Yes	Yes	1979	615	--	598	1.03	0.564	0.539	657
05536500	1	Yes	Yes	1980	270	--	263	0.756	0.586	0.948	287
05536500	1	Yes	Yes	1981	1560	--	1517	1.93	0.589	0.0406	1600
05536500	1	Yes	Yes	1982	713	--	693	0.365	0.591	0.439	737
05536500	1	Yes	Yes	1983	1310	--	1274	1.81	0.594	0.0726	1340
05536500	1	Yes	Yes	1984	708	--	689	0.712	0.597	0.45	727
05536500	1	Yes	Yes	1985	644	--	626	0.824	0.599	0.535	660
05536500	1	Yes	Yes	1986	490	--	477	0.963	0.602	0.748	502
05536500	1	Yes	Yes	1987	689	--	670	1.05	0.604	0.481	702
05536500	1	Yes	Yes	1988	361	--	351	0.592	0.607	0.894	369
05536500	1	Yes	Yes	1989	830	--	807	1.27	0.61	0.318	840
05536500	1	Yes	Yes	1990	758	D	737	2.28	0.612	0.405	765
05536500	1	Yes	Yes	1991	1340	--	1303	2.28	0.613	0.0713	1350
05536500	1	Yes	Yes	1992	593	C	577	4.1	0.614	0.619	598
05536500	1	Yes	Yes	1993	820	C	798	1.36	0.615	0.334	825
05536500	1	Yes	Yes	1994	439	C, E	427	0.51	0.616	0.817	442
05536500	1	Yes	Yes	1995	564	C	549	1.18	0.617	0.662	567
05536500	1	Yes	Yes	1996	2010	C	1955	3.38	0.618	0.0187	2020
05536500	1	Yes	Yes	1997	1080	C	1050	2.53	0.619	0.157	1080
05536500	1	Yes	Yes	1998	604	C	587	1.6	0.619	0.609	605
05536500	1	Yes	Yes	1999	575	C	559	0.847	0.62	0.65	576
05536500	1	Yes	Yes	2000	582	C	566	1.11	0.621	0.641	582
05536500	1	Yes	Yes	2001	473	C, E	460	0.767	0.621	0.782	473

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05536500	1	Yes	Yes	2002	830	C	807	2.58	0.621	0.329	830
05536500	1	Yes	Yes	2003	350	2, C	340	0.505	0.621	0.91	350
05536500	1	Yes	Yes	2004	690	C	671	1.94	0.621	0.497	690
05536500	1	Yes	Yes	2005	712	C	693	0.922	0.621	0.469	712
05536500	1	Yes	Yes	2006	1210	C	1177	1.94	0.621	0.107	1210
05536500	1	Yes	Yes	2007	808	C	786	2.35	0.621	0.354	808
05536500	1	Yes	Yes	2008	907	C	882	4.31	0.621	0.255	907
05536500	1	Yes	Yes	2009	1190	C	1157	1.91	0.621	0.114	1190
05536510	1	Yes	Yes	1961	260	2	762	1.43	0.631	0.393	293
05536510	1	Yes	Yes	1962	166	--	487	0.277	0.631	0.758	192
05536510	1	Yes	Yes	1963	225	--	660	1.54	0.632	0.522	255
05536510	1	Yes	Yes	1964	133	--	390	0.737	0.632	0.869	157
05536510	1	Yes	Yes	1965	166	--	487	0.899	0.633	0.759	192
05536510	1	Yes	Yes	1966	222	--	651	1.33	0.633	0.534	252
05536510	1	Yes	Yes	1967	232	--	680	1.15	0.633	0.497	263
05536510	1	Yes	Yes	1968	273	--	801	1.38	0.634	0.349	306
05536510	1	Yes	Yes	1969	186	--	545	0.42	0.634	0.684	213
05536510	1	Yes	Yes	1970	423	--	1240	1.12	0.635	0.0917	467
05536510	1	Yes	Yes	1971	150	--	440	0.933	0.644	0.822	172
05536510	1	Yes	Yes	1972	221	--	648	1.21	0.653	0.558	245
05536510	1	Yes	Yes	1973	241	--	707	1.31	0.663	0.492	264
05536510	1	Yes	Yes	1974	377	--	1106	1.14	0.672	0.157	403
05536510	1	Yes	Yes	1975	196	--	575	1.07	0.681	0.689	212
05536510	1	Yes	Yes	1976	434	--	1273	0.977	0.691	0.0999	455
05536510	1	Yes	Yes	1977	244	--	715	1.44	0.7	0.518	256
05536510	1	Yes	Yes	1978	375	--	1100	1.09	0.709	0.175	387
05536510	1	Yes	Yes	1979	204	--	598	0.853	0.719	0.695	210
05536560	1	Yes	Yes	1962	137	--	1514	0.283	0.972	0.14	382
05536560	1	Yes	Yes	1963	67	2	740	1.61	0.973	0.776	187
05536560	1	Yes	Yes	1964	35	2	387	0.783	0.974	0.983	98.4
05536560	1	Yes	Yes	1965	56	2	619	0.496	0.975	0.895	156
05536560	1	Yes	Yes	1966	143	--	1580	1.59	0.976	0.121	397
05536560	1	Yes	Yes	1967	91	--	1006	1.18	0.977	0.493	253
05536560	1	Yes	Yes	1968	117	--	1293	1.51	0.978	0.227	324
05536560	1	Yes	Yes	1969	79	--	873	0.735	0.979	0.634	219

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05536560	1	Yes	Yes	1970	183	--	2022	1.23	0.981	0.0446	505
05536560	0	Yes	No	1971	100	--	858	0.452	0.981	0.656	215
05536560	0	Yes	No	1972	104	--	693	1.14	0.981	0.83	173
05536560	0	Yes	No	1973	110	--	569	1.27	0.982	0.932	142
05536560	2	Yes	Yes	1974	166	--	666	1.01	0.982	0.856	167
05536560	2	Yes	Yes	1975	231	--	927	1.36	0.982	0.575	231
05536560	2	Yes	Yes	1976	408	--	1637	0.983	0.983	0.106	409
05536560	2	Yes	Yes	1977	234	--	939	1.57	0.983	0.564	234
05536560	2	Yes	Yes	1978	256	--	1027	1.02	0.983	0.478	256
05536560	2	Yes	Yes	1979	352	--	1413	1.16	0.984	0.179	352
05536560	2	Yes	Yes	1980	230	--	923	1.02	0.984	0.581	230
05536570	1	No	No	1962	520	2	1563	0.471	0.95	0.115	527
05536570	1	No	No	1963	340	--	1022	2.42	0.952	0.448	345
05536570	1	No	No	1964	94	--	283	1.14	0.954	1	96.5
05536570	1	No	No	1965	212	--	637	0.834	0.955	0.86	215
05536570	1	No	No	1966	619	--	1860	2.16	0.957	0.056	624
05536570	1	No	No	1967	350	--	1052	1.77	0.958	0.425	353
05536570	1	No	No	1968	708	--	2128	2.13	0.96	0.0359	711
05536570	1	No	No	1969	301	--	905	0.603	0.962	0.576	302
05536570	1	No	No	1970	632	--	1900	1.65	0.963	0.052	633
05536570	0	No	No	1971	169	--	NA	1.3	0.963	NA	NA
05536570	0	No	No	1972	441	--	NA	1.83	0.964	NA	NA
05536570	0	No	No	1973	356	--	NA	1.36	0.964	NA	NA
05536570	0	No	No	1974	365	--	NA	1.71	0.964	NA	NA
05536570	0	No	No	1975	683	--	NA	1.69	0.964	NA	NA
05536570	0	No	No	1976	1570	--	NA	0.97	0.964	NA	NA
05536620	1	No	No	1961	208	--	892	1.42	0.293	0.0984	270
05536620	1	No	No	1962	101	--	433	0.281	0.306	0.563	139
05536620	1	No	No	1963	100	--	429	1.53	0.319	0.583	136
05536620	1	No	No	1964	54	--	232	0.734	0.331	0.891	79.6
05536620	1	No	No	1965	118	--	506	0.884	0.344	0.473	154
05536620	1	No	No	1966	330	--	1415	1.42	0.357	0.0272	395
05536620	1	No	No	1967	203	--	870	1.15	0.37	0.138	247
05536620	1	No	No	1968	134	2	574	1.42	0.382	0.405	167
05536620	1	No	No	1969	69	--	296	0.408	0.395	0.842	90.3

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05536620	1	No	No	1970	181	--	776	1.09	0.408	0.205	214
05536620	1	No	No	1971	38	--	163	0.903	0.418	0.963	52
05536620	1	No	No	1972	157	--	673	1.21	0.429	0.318	184
05536620	1	No	No	1973	163	--	699	0.845	0.439	0.296	189
05536620	1	No	No	1974	110	--	472	1.14	0.45	0.625	129
05536620	1	No	No	1975	122	--	523	1.07	0.46	0.553	141
05536620	1	No	No	1976	99	--	424	0.889	0.471	0.716	114
05536620	1	No	No	1977	80	--	343	1.45	0.481	0.832	92.5
05536630	1	Yes	No	1955	2050	7	5507	3.3	0.233	0	2610
05536630	1	Yes	Yes	1961	174	2	467	1.42	0.324	0.518	237
05536630	1	Yes	Yes	1962	117	2	314	0.282	0.336	0.782	166
05536630	1	Yes	Yes	1963	109	2	293	1.53	0.347	0.82	154
05536630	1	Yes	Yes	1964	61	--	164	0.736	0.359	0.954	94.1
05536630	1	Yes	Yes	1965	107	2	287	0.885	0.371	0.84	147
05536630	1	Yes	Yes	1966	558	--	1499	1.43	0.382	0.0237	659
05536630	1	Yes	Yes	1967	251	2	674	1.15	0.394	0.29	307
05536630	1	Yes	Yes	1968	130	--	349	1.42	0.405	0.776	168
05536630	1	Yes	Yes	1969	98	2	263	0.407	0.417	0.892	129
05536630	1	Yes	Yes	1970	526	--	1413	1.09	0.429	0.0334	603
05536630	1	Yes	Yes	1971	59	2	159	0.902	0.437	0.968	80.3
05536630	1	Yes	Yes	1972	188	--	505	1.21	0.445	0.568	224
05536630	1	Yes	Yes	1973	125	--	336	1.34	0.453	0.825	153
05536630	1	Yes	Yes	1974	411	--	1104	1.14	0.462	0.0799	463
05536630	1	Yes	Yes	1975	429	--	1152	1.08	0.47	0.0711	480
05536630	1	Yes	Yes	1976	309	--	830	0.986	0.478	0.205	345
05536630	1	Yes	Yes	1977	130	--	349	1.45	0.486	0.827	152
05536630	1	Yes	Yes	1978	325	--	873	1.08	0.495	0.188	357
05536630	1	Yes	Yes	1979	762	--	2047	0.862	0.503	0.0138	817
05537500	1	Yes	Yes	1951	390	--	243	1.45	0.0399	0.724	639
05537500	1	Yes	Yes	1952	1000	--	622	1.25	0.0468	0.154	1260
05537500	1	Yes	Yes	1953	495	--	308	1.42	0.0537	0.602	742
05537500	1	Yes	Yes	1954	658	E	409	1.67	0.0607	0.399	916
05537500	1	Yes	Yes	1955	3160	--	1966	3.39	0.0676	0.00572	3330
05537500	1	Yes	Yes	1956	348	--	216	0.445	0.0745	0.792	578
05537500	1	Yes	Yes	1957	2390	--	1487	2.29	0.0815	0.0135	2560

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05537500	1	Yes	Yes	1958	358	E	223	1.47	0.0884	0.789	582
05537500	1	Yes	Yes	1959	397	E	247	1.38	0.0954	0.751	619
05537500	1	Yes	Yes	1960	477	--	297	1.86	0.102	0.656	693
05537500	1	Yes	Yes	1961	1000	--	622	0.607	0.116	0.18	1190
05537500	1	Yes	Yes	1962	304	--	189	0.296	0.129	0.864	507
05537500	1	Yes	Yes	1963	348	E	216	1.57	0.143	0.827	545
05537500	0	Yes	No	1964	139	E	108	0.996	0.157	0.957	354
05537500	2	Yes	Yes	1965	263	E	256	0.89	0.17	0.776	594
05537500	2	Yes	Yes	1966	1360	--	1325	1.68	0.184	0.0205	2150
05537500	2	Yes	Yes	1967	616	E	600	1.2	0.197	0.24	1080
05537500	2	Yes	Yes	1968	400	--	390	0.995	0.211	0.561	772
05537500	2	Yes	Yes	1969	333	--	324	0.926	0.225	0.692	665
05537500	2	Yes	Yes	1970	1140	--	1110	1.01	0.238	0.044	1800
05537500	2	Yes	Yes	1971	217	E	211	0.439	0.26	0.886	482
05537500	2	Yes	Yes	1972	825	--	804	1.16	0.282	0.138	1310
05537500	2	Yes	Yes	1973	663	--	646	0.826	0.304	0.259	1060
05537500	2	Yes	Yes	1974	960	--	935	1.06	0.326	0.0932	1450
05537500	2	Yes	Yes	1975	1050	--	1023	1.18	0.348	0.0736	1540
05537500	2	Yes	Yes	1976	500	--	487	0.953	0.37	0.527	800
05537500	2	Yes	Yes	1977	179	E	174	1.54	0.392	0.954	366
05537500	2	Yes	Yes	1978	983	--	958	1.01	0.414	0.114	1380
05537500	2	Yes	Yes	1979	530	2	516	0.852	0.436	0.54	789
05537500	2	Yes	Yes	1980	230	E	224	0.867	0.458	0.938	405
05537500	2	Yes	Yes	1981	1820	--	1773	2.04	0.47	0.018	2310
05537500	2	Yes	Yes	1982	795	--	774	0.307	0.482	0.252	1070
05537500	2	Yes	Yes	1983	740	--	721	1.56	0.494	0.315	995
05537500	2	Yes	Yes	1984	567	--	552	0.619	0.506	0.551	780
05537500	2	Yes	Yes	1985	686	--	668	1.34	0.518	0.402	915
05537500	2	Yes	Yes	1986	365	--	356	0.871	0.53	0.845	525
05537500	2	Yes	Yes	1987	394	E	384	2.16	0.542	0.82	552
05537500	2	Yes	Yes	1988	302	--	294	0.358	0.554	0.92	441
05537500	2	Yes	Yes	1989	521	E	508	1.26	0.566	0.675	680
05537500	2	Yes	Yes	1990	1200	--	1169	2.44	0.578	0.0945	1450
05537500	2	Yes	Yes	1991	1050	--	1023	3.12	0.59	0.158	1260
05537500	2	Yes	Yes	1992	707	E	689	4.02	0.602	0.455	865

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05537500	2	Yes	Yes	1993	942	C	918	1.03	0.614	0.224	1110
05537500	2	Yes	Yes	1994	378	C, E	368	0.747	0.626	0.887	482
05537500	2	Yes	Yes	1995	519	C	506	1.17	0.638	0.74	627
05537500	2	Yes	Yes	1996	5310	C	5173	4.73	0.65	0	5810
05537500	2	Yes	Yes	1997	1670	C	1627	2.66	0.662	0.0393	1850
05537500	2	Yes	Yes	1998	820	C	799	1.97	0.674	0.392	924
05537500	2	Yes	Yes	1999	604	C	588	0.888	0.686	0.674	682
05537500	2	Yes	Yes	2000	568	C	553	1.39	0.698	0.731	635
05537500	2	Yes	Yes	2001	635	C	619	0.793	0.706	0.652	698
05537500	2	Yes	Yes	2002	811	C	790	2.35	0.715	0.444	876
05537500	2	Yes	Yes	2003	1500	C, E	1461	3.87	0.724	0.0672	1580
05537500	2	Yes	Yes	2004	1090	C	1062	2.41	0.733	0.203	1150
05537500	2	Yes	Yes	2005	668	C	651	0.938	0.742	0.645	704
05537500	2	Yes	Yes	2006	305	C	297	1.72	0.75	0.966	326
05537500	2	Yes	Yes	2007	859	C	837	2.37	0.759	0.436	884
05537500	2	Yes	Yes	2008	1220	C	1188	3.7	0.768	0.165	1240
05537500	2	Yes	Yes	2009	1250	C	1218	1.93	0.777	0.157	1260
05538440	1	Yes	No	1955	112	7	1423	3.21	0.192	0.018	180
05538440	1	Yes	Yes	1961	66	--	839	1.42	0.296	0.125	106
05538440	1	Yes	Yes	1962	32	2	407	0.268	0.305	0.61	58.3
05538440	1	Yes	Yes	1963	30	2	381	1.5	0.314	0.659	55.1
05538440	1	Yes	Yes	1964	23	--	292	0.926	0.323	0.807	45.2
05538440	1	Yes	Yes	1965	23	--	292	0.871	0.332	0.812	44.8
05538440	1	Yes	Yes	1966	78	--	991	1.4	0.341	0.0803	119
05538440	1	Yes	Yes	1967	56	--	712	1.14	0.35	0.225	87.3
05538440	1	Yes	Yes	1968	37	2	470	1.47	0.359	0.545	62.4
05538440	1	Yes	Yes	1969	39	--	496	0.145	0.368	0.511	64.7
05538440	1	Yes	Yes	1970	49	--	623	1.08	0.377	0.338	77.3
05538440	1	Yes	Yes	1971	15	2	191	0.931	0.39	0.944	31.8
05538440	1	Yes	Yes	1972	37	--	470	1.23	0.404	0.588	59.7
05538440	1	Yes	Yes	1973	62	--	788	0.839	0.418	0.202	90.1
05538440	1	Yes	Yes	1974	50	--	635	1.21	0.432	0.367	75.1
05538440	1	Yes	Yes	1975	46	--	584	1.01	0.446	0.448	69.3
05538440	1	Yes	Yes	1976	34	--	432	0.904	0.459	0.697	53
05538440	1	Yes	Yes	1977	38	--	483	1.43	0.473	0.628	57.1

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05539000	1	Yes	No	1942	9000	2, 7	1488	0.0435	0.0789	0.0134	14000
05539000	1	Yes	Yes	1945	2040	--	337	0.829	0.0865	0.562	4000
05539000	1	Yes	Yes	1946	1430	--	236	0.379	0.0891	0.765	3080
05539000	1	Yes	Yes	1947	10200	--	1687	2.6	0.0916	0.00964	15500
05539000	1	Yes	Yes	1948	4370	--	723	1.84	0.0942	0.11	7390
05539000	1	Yes	Yes	1949	2400	--	397	0.767	0.0967	0.449	4540
05539000	1	Yes	Yes	1950	3910	--	647	1.2	0.0993	0.158	6640
05539000	1	Yes	Yes	1951	2550	D	422	0.385	0.105	0.411	4730
05539000	1	Yes	Yes	1952	3580	--	592	1.27	0.11	0.198	6070
05539000	1	Yes	Yes	1953	2350	--	389	1.17	0.115	0.479	4380
05539000	1	Yes	Yes	1954	3150	--	521	1.74	0.121	0.283	5450
05539000	1	Yes	Yes	1955	8130	--	1344	3.24	0.126	0.0181	12300
05539000	1	Yes	Yes	1956	2300	--	380	0.779	0.132	0.509	4240
05539000	1	Yes	Yes	1957	15200	--	2514	2.95	0.137	0.00208	21900
05539000	1	Yes	Yes	1958	1980	--	327	1.21	0.142	0.626	3720
05539000	1	Yes	Yes	1959	2870	--	475	1.31	0.148	0.362	5000
05539000	1	Yes	Yes	1960	1980	--	327	0.0435	0.153	0.634	3680
05539000	1	Yes	Yes	1961	4560	E	754	1.45	0.16	0.117	7280
05539000	1	Yes	Yes	1962	2020	--	334	0.527	0.166	0.631	3690
05539000	1	Yes	Yes	1963	850	2, E	141	0.415	0.173	0.935	2000
05539000	1	Yes	Yes	1964	1180	E	195	1.02	0.18	0.876	2470
05539000	1	Yes	Yes	1965	1650	E	273	0.883	0.186	0.758	3120
05539000	1	Yes	Yes	1966	4680	--	774	1.46	0.193	0.119	7250
05539000	1	Yes	Yes	1967	2020	E	334	1.12	0.2	0.656	3580
05539000	1	Yes	Yes	1968	2460	--	407	1.99	0.206	0.522	4180
05539000	1	Yes	Yes	1969	1220	E	202	0.849	0.213	0.88	2440
05539000	1	Yes	Yes	1970	2670	--	442	1.57	0.22	0.471	4430
05539000	1	Yes	Yes	1971	1390	E	230	0.425	0.229	0.847	2630
05539000	1	Yes	Yes	1972	1710	--	283	1.33	0.239	0.772	3040
05539000	1	Yes	Yes	1973	4080	--	675	1.32	0.248	0.199	6080
05539000	1	Yes	Yes	1974	5070	--	838	1.14	0.258	0.11	7400
05539000	1	Yes	Yes	1975	2680	--	443	1.34	0.267	0.509	4240
05539000	1	Yes	Yes	1976	3580	D	592	1.48	0.277	0.3	5340
05539000	1	Yes	Yes	1977	1290	E	213	1.64	0.286	0.894	2350
05539000	1	Yes	Yes	1978	3800	E	628	1.05	0.296	0.272	5510

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05539000	1	Yes	Yes	1979	2750	--	455	1.18	0.305	0.523	4180
05539000	1	Yes	Yes	1980	1960	E	324	1.24	0.315	0.756	3130
05539000	1	Yes	Yes	1981	17300	E	2861	2.27	0.322	0	21900
05539000	1	Yes	Yes	1982	3620	--	599	0.419	0.329	0.33	5170
05539000	1	Yes	Yes	1983	8360	--	1382	2.07	0.335	0.0277	10900
05539000	1	Yes	Yes	1984	2670	--	442	0.928	0.342	0.581	3920
05539000	1	Yes	Yes	1985	3120	--	516	1.28	0.349	0.462	4480
05539000	1	Yes	Yes	1986	2320	E	384	1.08	0.356	0.689	3440
05539000	1	Yes	Yes	1987	1710	E	283	1.11	0.363	0.841	2660
05539000	1	Yes	Yes	1988	1090	E	180	0.673	0.37	0.946	1870
05539000	1	Yes	Yes	1989	4160	E	688	1.29	0.377	0.264	5570
05539000	1	Yes	Yes	1990	1950	E	322	2.01	0.383	0.8	2900
05539000	1	Yes	Yes	1991	6220	--	1029	3.16	0.395	0.0833	7980
05539000	1	Yes	Yes	1992	1840	E	304	3.59	0.406	0.837	2690
05539000	1	Yes	Yes	1993	2540	C, E	420	1.49	0.417	0.679	3480
05539000	1	Yes	Yes	1994	5980	C, E	989	1.54	0.428	0.106	7480
05539000	1	Yes	Yes	1995	3780	C, E	625	0.978	0.439	0.387	4860
05539000	1	Yes	Yes	1996	8710	C	1440	4.74	0.45	0.0332	10400
05539000	1	Yes	Yes	1997	5170	C, E	855	2.3	0.462	0.184	6300
05539000	1	Yes	Yes	1998	2990	C, E	494	1.5	0.473	0.61	3790
05539000	1	Yes	Yes	1999	2190	C, E	362	1.7	0.484	0.81	2850
05539000	1	Yes	Yes	2000	1980	C, E	327	1.34	0.495	0.858	2570
05539000	1	Yes	Yes	2001	2920	C, E	483	0.535	0.513	0.663	3550
05539000	1	Yes	Yes	2002	4400	C	728	2.18	0.531	0.34	5110
05539000	1	Yes	Yes	2003	2640	C	437	1.06	0.549	0.759	3110
05539000	1	Yes	Yes	2004	4630	C	766	1.52	0.567	0.327	5170
05539000	1	Yes	Yes	2005	3290	C, E	544	0.971	0.585	0.638	3660
05539000	1	Yes	Yes	2006	3270	C	541	2.3	0.603	0.66	3570
05539000	1	Yes	Yes	2007	4120	C	681	2.45	0.621	0.483	4380
05539000	1	Yes	Yes	2008	7150	C	1182	4.15	0.639	0.112	7390
05539000	0	Yes	No	2009	4920	C	NA	1.68	0.657	NA	NA
05539870	1	No	No	1961	212	--	475	0.945	0.387	0.563	402
05539870	1	No	No	1962	138	--	309	0.197	0.429	0.843	288
05539870	1	No	No	1963	100	--	224	0.874	0.471	0.941	228
05539870	1	No	No	1964	147	--	329	1.27	0.513	0.867	278

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05539870	1	No	No	1965	88	--	197	0.0936	0.555	0.969	187
05539870	1	No	No	1966	295	--	661	0.931	0.598	0.487	435
05539870	1	No	No	1967	542	--	1214	0.866	0.64	0.1	714
05539870	1	No	No	1968	535	--	1199	1.13	0.682	0.124	680
05539870	1	No	No	1969	238	--	533	0.973	0.724	0.775	319
05539870	1	No	No	1970	400	--	896	1.07	0.766	0.375	484
05539870	1	No	No	1971	395	--	885	0.265	0.78	0.405	472
05539870	1	No	No	1972	630	--	1412	0.977	0.795	0.0967	722
05539870	1	No	No	1973	390	--	874	0.557	0.809	0.447	453
05539870	1	No	No	1974	365	--	818	0.447	0.823	0.524	419
05539870	1	No	No	1975	480	--	1075	0.599	0.838	0.264	533
05539870	1	No	No	1976	418	--	937	0.83	0.852	0.425	463
05539870	0	No	No	1977	170	--	NA	0.448	0.867	NA	NA
05539870	0	No	No	1978	429	--	NA	0.995	0.881	NA	NA
05539870	0	No	No	1979	553	--	NA	0.589	0.895	NA	NA
05539890	1	No	No	1955	1620	7	2053	3.05	0.19	0.00674	2540
05539890	1	No	No	1961	397	--	503	1.31	0.29	0.431	717
05539890	1	No	No	1962	306	--	388	0.276	0.315	0.649	567
05539890	1	No	No	1963	191	2	242	1.22	0.34	0.883	401
05539890	1	No	No	1964	195	--	247	1.75	0.365	0.888	396
05539890	1	No	No	1965	209	--	265	0.131	0.39	0.879	405
05539890	1	No	No	1966	442	--	560	1.3	0.415	0.455	699
05539890	1	No	No	1967	1270	--	1609	1.2	0.44	0.0215	1710
05539890	1	No	No	1968	638	--	808	1.56	0.465	0.214	900
05539890	1	No	No	1969	375	--	475	1.35	0.49	0.655	565
05539890	1	No	No	1970	560	--	710	1.49	0.515	0.348	778
05539890	1	No	No	1971	494	--	626	0.368	0.535	0.473	687
05539890	1	No	No	1972	726	--	920	1.39	0.554	0.19	939
05539890	1	No	No	1973	482	--	611	0.772	0.573	0.531	646
05539890	1	No	No	1974	528	--	669	0.62	0.593	0.471	688
05539890	1	No	No	1975	487	--	617	0.837	0.612	0.56	626
05539890	1	No	No	1976	530	--	672	1.15	0.631	0.506	664
05539890	0	No	No	1977	269	--	NA	0.624	0.65	NA	NA
05539890	0	No	No	1978	808	--	NA	1.38	0.67	NA	NA
05539890	0	No	No	1979	900	--	NA	0.827	0.689	NA	NA

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05539900	1	Yes	Yes	1961	450	--	554	1.31	0.258	0.334	701
05539900	1	Yes	Yes	1962	361	--	444	0.277	0.28	0.518	580
05539900	1	Yes	Yes	1963	217	E	267	1.22	0.302	0.831	393
05539900	1	Yes	Yes	1964	201	--	247	1.74	0.324	0.869	366
05539900	1	Yes	Yes	1965	250	2	308	0.131	0.345	0.798	416
05539900	1	Yes	Yes	1966	537	--	661	1.31	0.367	0.285	735
05539900	1	Yes	Yes	1967	805	--	991	1.19	0.389	0.0928	1030
05539900	1	Yes	Yes	1968	340	--	419	1.56	0.411	0.676	489
05539900	1	Yes	Yes	1969	399	--	491	1.34	0.432	0.579	545
05539900	1	Yes	Yes	1970	521	D	641	1.48	0.454	0.379	671
05539900	1	Yes	Yes	1971	333	E	410	0.367	0.477	0.742	452
05539900	1	Yes	Yes	1972	715	--	880	1.41	0.499	0.186	841
05539900	1	Yes	Yes	1973	535	--	659	0.77	0.521	0.417	646
05539900	1	Yes	Yes	1974	522	--	643	0.616	0.544	0.459	619
05539900	1	Yes	Yes	1975	537	--	661	0.844	0.566	0.456	621
05539900	1	Yes	Yes	1976	557	--	686	1.15	0.589	0.446	628
05539900	0	Yes	No	1977	158	E	209	0.865	0.611	0.974	225
05539900	2	Yes	Yes	1978	468	--	663	0.929	0.633	0.519	581
05539900	2	Yes	Yes	1979	779	D	1104	0.832	0.656	0.151	910
05539900	2	Yes	Yes	1980	311	--	441	0.687	0.678	0.844	383
05539900	2	Yes	Yes	1981	483	--	684	0.55	0.683	0.541	567
05539900	2	Yes	Yes	1982	673	--	954	0.343	0.688	0.245	767
05539900	2	Yes	Yes	1983	984	--	1394	1.74	0.693	0.0718	1100
05539900	2	Yes	Yes	1984	392	E	555	0.599	0.698	0.729	460
05539900	2	Yes	Yes	1985	706	--	1000	1.28	0.704	0.223	792
05539900	2	Yes	Yes	1986	613	E	869	0.804	0.709	0.345	692
05539900	2	Yes	Yes	1987	958	--	1358	2.24	0.714	0.0852	1060
05539900	2	Yes	Yes	1988	377	E	534	0.857	0.719	0.77	434
05539900	2	Yes	Yes	1989	549	E	778	1.21	0.724	0.467	614
05539900	2	Yes	Yes	1990	571	E	809	1.42	0.729	0.436	634
05539900	2	Yes	Yes	1991	470	--	666	1.7	0.732	0.614	524
05539900	2	Yes	Yes	1992	278	E	394	1.55	0.735	0.922	322
05539900	2	Yes	Yes	1993	460	C	652	0.79	0.738	0.64	510
05539900	2	Yes	Yes	1994	786	C	1114	5.06	0.742	0.184	849
05539900	2	Yes	Yes	1995	643	C	911	2.13	0.745	0.334	698

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05539900	2	Yes	Yes	1996	592	C	839	1.82	0.748	0.422	644
05539900	2	Yes	Yes	1997	892	C, E	1264	2.51	0.751	0.129	954
05539900	2	Yes	Yes	1998	623	C, E	883	1.2	0.754	0.378	672
05539900	2	Yes	Yes	1999	666	C	944	1.42	0.757	0.31	713
05539900	2	Yes	Yes	2000	517	C	733	1.4	0.761	0.558	556
05539900	2	Yes	Yes	2001	825	C	1169	3.9	0.767	0.172	870
05539900	2	Yes	Yes	2002	913	C	1294	3.79	0.774	0.127	957
05539900	2	Yes	Yes	2003	565	C	801	2.27	0.78	0.499	594
05539900	2	Yes	Yes	2004	538	C	762	1.4	0.786	0.549	562
05539900	2	Yes	Yes	2005	495	C, E	701	0.76	0.793	0.632	514
05539900	2	Yes	Yes	2006	569	C	806	1.61	0.799	0.512	586
05539900	2	Yes	Yes	2007	1040	C	1474	2.21	0.806	0.0851	1060
05539900	2	Yes	Yes	2008	1840	C	2607	4.27	0.812	0.0137	1860
05539900	2	Yes	Yes	2009	1080	C	1530	0.754	0.819	0.0759	1090
05539950	1	Yes	Yes	1961	172	--	478	1.41	0.197	0.393	379
05539950	1	Yes	Yes	1962	107	--	297	0.623	0.216	0.735	267
05539950	1	Yes	Yes	1963	119	--	330	1.36	0.235	0.689	281
05539950	1	Yes	Yes	1964	101	--	280	2.16	0.254	0.785	250
05539950	1	Yes	Yes	1965	114	--	317	0.791	0.273	0.74	266
05539950	1	Yes	Yes	1966	440	--	1222	1.49	0.292	0.0376	744
05539950	1	Yes	Yes	1967	213	--	591	1.31	0.311	0.326	403
05539950	1	Yes	Yes	1968	224	--	622	1.98	0.33	0.303	411
05539950	1	Yes	Yes	1969	119	--	330	1.35	0.349	0.768	256
05539950	1	Yes	Yes	1970	148	--	411	1.37	0.368	0.653	292
05539950	1	Yes	Yes	1971	144	--	400	0.335	0.404	0.702	278
05539950	1	Yes	Yes	1972	888	--	2466	2.11	0.439	0.00662	1260
05539950	1	Yes	Yes	1973	165	--	458	0.819	0.475	0.668	287
05539950	1	Yes	Yes	1974	186	--	517	0.584	0.51	0.61	305
05539950	1	Yes	Yes	1975	170	--	472	1.07	0.546	0.709	276
05539950	1	Yes	Yes	1976	280	--	778	1.12	0.582	0.327	401
05539950	1	Yes	Yes	1977	141	--	392	0.644	0.617	0.857	223
05539950	1	Yes	Yes	1978	212	--	589	0.835	0.653	0.639	296
05539950	1	Yes	Yes	1979	412	--	1144	0.989	0.688	0.148	516
05540030	1	No	No	1955	1260	7	1036	3.47	0.232	0.0531	2130
05540030	1	No	No	1961	758	--	623	1.38	0.329	0.3	1270

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05540030	1	No	No	1962	688	--	565	0.285	0.345	0.387	1170
05540030	1	No	No	1963	415	2	341	1.34	0.362	0.761	781
05540030	1	No	No	1964	550	2	452	2.08	0.379	0.596	948
05540030	1	No	No	1965	460	2	378	0.115	0.395	0.728	815
05540030	1	No	No	1966	1020	--	838	1.45	0.412	0.172	1520
05540030	1	No	No	1967	1080	--	888	1.28	0.429	0.154	1580
05540030	1	No	No	1968	748	--	615	1.91	0.445	0.406	1150
05540030	1	No	No	1969	520	2	427	1.35	0.462	0.705	840
05540030	1	No	No	1970	730	--	600	1.42	0.479	0.456	1100
05540030	1	No	No	1971	506	2	416	0.345	0.5	0.751	793
05540030	1	No	No	1972	1670	--	1373	1.99	0.521	0.0463	2200
05540030	1	No	No	1973	869	--	714	0.802	0.541	0.366	1200
05540030	1	No	No	1974	740	--	608	0.599	0.562	0.524	1020
05540030	1	No	No	1975	651	--	535	1.01	0.583	0.649	892
05540030	1	No	No	1976	925	--	760	1.15	0.604	0.369	1190
05540030	1	No	No	1977	257	--	211	1.34	0.625	0.975	399
05540030	1	No	No	1978	584	--	480	0.852	0.646	0.777	762
05540030	1	No	No	1979	1220	--	1003	0.281	0.667	0.199	1440
05540060	1	Yes	Yes	1961	192	--	313	1.3	0.189	0.687	255
05540060	1	Yes	Yes	1962	175	--	285	0.289	0.199	0.745	234
05540060	1	Yes	Yes	1963	131	--	214	1.22	0.208	0.862	182
05540060	1	Yes	Yes	1964	637	--	1038	1.65	0.218	0.0505	726
05540060	1	Yes	Yes	1965	159	--	259	0.134	0.228	0.803	209
05540060	1	Yes	Yes	1966	356	--	580	1.37	0.237	0.287	416
05540060	1	Yes	Yes	1967	426	--	694	1.17	0.247	0.186	485
05540060	1	Yes	Yes	1968	203	--	331	1.49	0.256	0.704	249
05540060	1	Yes	Yes	1969	150	--	245	0.1	0.266	0.844	191
05540060	1	Yes	Yes	1970	200	--	326	1.42	0.275	0.726	241
05540060	1	Yes	Yes	1971	215	--	350	0.358	0.28	0.687	255
05540060	1	Yes	Yes	1972	278	--	453	1.58	0.284	0.507	320
05540060	1	Yes	Yes	1973	288	--	469	0.753	0.289	0.483	329
05540060	1	Yes	Yes	1974	282	--	460	1.2	0.294	0.504	321
05540060	1	Yes	Yes	1975	361	--	588	0.901	0.298	0.32	400
05540060	1	Yes	Yes	1976	389	--	634	1.1	0.303	0.271	425
05540060	1	Yes	Yes	1977	194	--	316	1.15	0.307	0.763	226

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05540060	1	Yes	Yes	1978	407	--	663	0.901	0.312	0.246	439
05540060	1	Yes	Yes	1979	418	--	681	0.878	0.316	0.232	448
05540060	1	Yes	Yes	1980	267	--	435	0.906	0.321	0.573	297
05540060	1	Yes	Yes	1986	425	--	693	0.832	0.331	0.231	449
05540060	1	Yes	Yes	1987	573	--	934	2.14	0.333	0.0953	599
05540060	1	Yes	Yes	1988	181	--	295	0.865	0.334	0.81	206
05540060	1	Yes	Yes	1989	180	--	293	2.01	0.336	0.813	205
05540060	1	Yes	Yes	1990	326	--	531	1.37	0.337	0.428	351
05540060	1	Yes	Yes	1991	374	--	610	0.95	0.343	0.328	396
05540060	0	Yes	No	1992	134	E	228	0.407	0.348	0.902	162
05540060	0	Yes	No	1993	349	--	619	1.56	0.354	0.324	398
05540060	2	Yes	Yes	1994	369	--	683	0.57	0.359	0.257	432
05540060	2	Yes	Yes	1995	286	--	530	0.972	0.365	0.455	340
05540060	2	Yes	Yes	1996	1980	--	3666	2.69	0.37	0	2190
05540060	2	Yes	Yes	1997	579	--	1072	2.23	0.376	0.0693	659
05540060	2	Yes	Yes	1998	238	--	441	1.88	0.381	0.616	281
05540060	2	Yes	Yes	1999	241	C	446	1.4	0.387	0.612	283
05540060	2	Yes	Yes	2000	225	C, E	417	1.76	0.392	0.664	263
05540060	2	Yes	Yes	2001	283	C	524	0.741	0.405	0.5	323
05540060	2	Yes	Yes	2002	446	C	826	2.51	0.419	0.181	491
05540060	2	Yes	Yes	2003	195	C	361	2.12	0.432	0.777	220
05540060	2	Yes	Yes	2004	160	C, D	296	0.841	0.445	0.868	180
05540060	2	Yes	Yes	2005	184	C, E	341	0.741	0.458	0.821	201
05540060	2	Yes	Yes	2006	149	C, E	276	2.34	0.471	0.902	162
05540060	2	Yes	Yes	2007	307	C	568	1.97	0.484	0.506	321
05540060	2	Yes	Yes	2008	2100	C	3888	6.02	0.497	0	2140
05540060	2	Yes	Yes	2009	448	C	829	1.54	0.51	0.225	454
05540080	1	Yes	Yes	1961	158	--	1043	1.7	0.741	0.219	201
05540080	1	Yes	Yes	1962	70	2	462	0.303	0.749	0.87	101
05540080	1	Yes	Yes	1963	103	--	680	1.85	0.756	0.62	136
05540080	1	Yes	Yes	1964	120	--	792	3.63	0.764	0.491	155
05540080	1	Yes	Yes	1965	147	--	971	1.73	0.771	0.296	184
05540080	1	Yes	Yes	1966	144	--	951	1.97	0.779	0.325	180
05540080	1	Yes	Yes	1967	166	--	1096	1.64	0.786	0.215	202
05540080	1	Yes	Yes	1968	222	--	1466	3.49	0.794	0.0832	266

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05540080	1	Yes	Yes	1969	177	--	1169	1.48	0.801	0.187	212
05540080	1	Yes	Yes	1970	152	--	1004	1.27	0.809	0.299	183
05540080	1	Yes	Yes	1971	147	--	971	1.08	0.821	0.35	176
05540080	1	Yes	Yes	1972	552	--	3645	4.24	0.834	0.00366	617
05540080	1	Yes	Yes	1973	152	--	1004	1.76	0.846	0.342	177
05540080	1	Yes	Yes	1974	113	--	746	0.589	0.859	0.648	133
05540080	1	Yes	Yes	1975	172	--	1136	1.57	0.871	0.246	194
05540080	1	Yes	Yes	1976	162	--	1070	1.24	0.884	0.311	181
05540080	1	Yes	Yes	1977	84	--	555	2.29	0.896	0.889	97.7
05540080	1	Yes	Yes	1978	232	--	1532	2.01	0.909	0.106	251
05540080	1	Yes	Yes	1979	178	--	1175	1.43	0.921	0.257	191
05540091	1	No	No	1992	118	C, E	531	2.2	0.729	0.782	152
05540091	1	No	No	1993	194	C	873	0.983	0.731	0.363	237
05540091	1	No	No	1994	297	C	1337	2.7	0.732	0.096	352
05540091	1	No	No	1995	213	C	959	1.58	0.734	0.276	256
05540091	1	No	No	1996	393	C	1769	7.81	0.736	0.0363	457
05540091	1	No	No	1997	310	C	1396	2.72	0.738	0.0831	365
05540091	1	No	No	1998	179	C	806	1.12	0.74	0.451	219
05540091	1	No	No	1999	203	C	914	0.892	0.742	0.327	244
05540091	1	No	No	2000	282	C	1270	1.65	0.743	0.123	331
05540091	1	No	No	2001	177	C	797	0.97	0.761	0.484	212
05540091	1	No	No	2002	364	C	1639	3.57	0.779	0.0511	411
05540091	1	No	No	2003	178	C	801	2.14	0.797	0.515	205
05540091	1	No	No	2004	180	C	810	0.885	0.815	0.523	203
05540091	1	No	No	2005	190	C, E	855	1.47	0.832	0.492	210
05540091	1	No	No	2006	201	C	905	2.47	0.85	0.457	217
05540091	1	No	No	2007	333	C	1499	3.36	0.868	0.0988	349
05540091	1	No	No	2008	391	C	1760	2.99	0.886	0.0551	403
05540091	1	No	No	2009	372	C	1675	1.03	0.903	0.0716	378
05540095	1	No	No	1969	612	--	328	1.36	0.411	0.81	1010
05540095	1	No	No	1970	990	--	530	1.4	0.425	0.508	1470
05540095	1	No	No	1971	641	E	343	0.341	0.442	0.808	1010
05540095	1	No	No	1972	1980	--	1061	2.14	0.458	0.0911	2630
05540095	1	No	No	1973	1200	--	643	0.805	0.475	0.395	1660
05540095	1	No	No	1974	1200	--	643	0.596	0.491	0.41	1630

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05540095	1	No	No	1975	1080	--	579	1.04	0.508	0.514	1460
05540095	1	No	No	1976	1520	--	814	1.15	0.525	0.246	1940
05540095	1	No	No	1977	300	E	161	0.911	0.541	0.982	487
05540095	1	No	No	1978	916	--	491	1.57	0.558	0.693	1200
05540095	1	No	No	1979	1740	D	932	0.274	0.574	0.193	2100
05540095	1	No	No	1980	761	--	408	0.818	0.591	0.823	985
05540095	1	No	No	1981	970	--	520	1.89	0.596	0.685	1210
05540095	1	No	No	1982	1210	E	648	0.362	0.601	0.507	1470
05540095	1	No	No	1983	2160	--	1157	1.97	0.606	0.108	2520
05540095	1	No	No	1984	1170	E	627	0.683	0.611	0.545	1410
05540095	1	No	No	1985	1620	--	868	1.06	0.616	0.264	1890
05540095	1	No	No	1986	1310	E	702	0.857	0.621	0.457	1560
05540095	1	No	No	1987	3050	--	1634	2.8	0.626	0.0351	3450
05540095	1	No	No	1988	888	E	476	1.04	0.631	0.77	1080
05540095	1	No	No	1989	750	E	402	0.94	0.636	0.858	920
05540095	1	No	No	1990	1520	--	814	1.33	0.641	0.34	1750
05540095	1	No	No	1991	1310	--	702	1.59	0.645	0.48	1520
05540095	1	No	No	1992	580	E	311	0.487	0.648	0.938	724
05540095	1	No	No	1993	1010	C	541	0.755	0.652	0.707	1180
05540095	1	No	No	1994	1590	C	852	3.02	0.655	0.311	1800
05540095	1	No	No	1995	1360	C	729	1.5	0.659	0.461	1550
05540095	1	No	No	1996	3470	C	1859	3.6	0.663	0.0246	3790
05540095	1	No	No	1997	2640	C	1414	2.43	0.666	0.0633	2910
05540095	1	No	No	1998	1500	C	804	1.35	0.67	0.382	1680
05540095	1	No	No	1999	1630	C	873	0.787	0.673	0.304	1810
05540095	1	No	No	2000	1590	C, E	852	1.5	0.677	0.332	1760
05540095	1	No	No	2001	1560	C	836	0.644	0.687	0.361	1710
05540095	1	No	No	2002	2130	C	1141	2.13	0.697	0.153	2290
05540095	1	No	No	2003	1460	C	782	1.74	0.707	0.445	1580
05540095	1	No	No	2004	1240	C, D	664	1.04	0.717	0.6	1330
05540095	1	No	No	2005	1100	C, E	589	0.787	0.727	0.713	1170
05540095	1	No	No	2006	1100	C	589	1.12	0.737	0.722	1160
05540095	1	No	No	2007	1780	C	954	1.33	0.747	0.29	1830
05540095	1	No	No	2008	4930	C	2641	4.63	0.757	0.0117	5000
05540095	1	No	No	2009	2780	C	1489	1.08	0.767	0.0713	2800

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05540110	1	Yes	Yes	1961	81	--	381	1.35	0.131	0.508	121
05540110	1	Yes	Yes	1962	71	--	334	0.301	0.136	0.611	107
05540110	1	Yes	Yes	1963	40	--	188	1.31	0.141	0.871	66.7
05540110	1	Yes	Yes	1964	214	--	1006	1.8	0.146	0.0471	285
05540110	1	Yes	Yes	1965	45	--	211	0.135	0.152	0.838	72.3
05540110	1	Yes	Yes	1966	102	--	479	1.34	0.157	0.362	144
05540110	1	Yes	Yes	1967	108	--	508	1.35	0.162	0.327	151
05540110	1	Yes	Yes	1968	60	--	282	1.39	0.167	0.73	90.1
05540110	1	Yes	Yes	1969	72	--	338	0.587	0.172	0.628	104
05540110	1	Yes	Yes	1970	66	--	310	1.44	0.177	0.684	96.4
05540110	1	Yes	Yes	1971	62	2	291	0.362	0.184	0.724	90.9
05540110	1	Yes	Yes	1972	180	--	846	2.18	0.191	0.0875	234
05540110	1	Yes	Yes	1973	74	--	348	1.36	0.198	0.63	104
05540110	1	Yes	Yes	1974	93	--	437	1.23	0.205	0.466	127
05540110	1	Yes	Yes	1975	74	--	348	1.02	0.212	0.64	103
05540110	1	Yes	Yes	1976	134	--	630	1.11	0.219	0.223	173
05540110	1	Yes	Yes	1977	60	--	282	1.26	0.226	0.766	84.5
05540110	1	Yes	Yes	1978	187	--	879	1.95	0.233	0.0872	235
05540110	1	Yes	Yes	1979	110	--	517	0.924	0.24	0.37	143
05540130	1	No	No	1989	977	C	406	2.21	0.659	0.869	1200
05540130	1	No	No	1990	2290	C	950	1.83	0.665	0.233	2600
05540130	1	No	No	1991	3420	C	1419	1.41	0.669	0.063	3820
05540130	1	No	No	1992	2020	C, D	838	1.53	0.672	0.343	2300
05540130	1	No	No	1993	1530	C	635	1.69	0.675	0.598	1760
05540130	1	No	No	1994	2320	C	963	3.02	0.679	0.233	2600
05540130	1	No	No	1995	2150	C	892	1.55	0.682	0.293	2410
05540130	1	No	No	1996	6620	C	2748	4.47	0.686	0.00859	7170
05540130	1	No	No	1997	3260	C	1353	2.53	0.689	0.079	3590
05540130	1	No	No	1998	2020	C	838	1.16	0.692	0.364	2250
05540130	1	No	No	1999	1960	C	813	0.805	0.696	0.398	2180
05540130	1	No	No	2000	2040	C, E	847	1.47	0.699	0.361	2260
05540130	1	No	No	2001	1910	C	793	0.716	0.709	0.435	2100
05540130	1	No	No	2002	3090	C	1282	2.45	0.719	0.108	3320
05540130	1	No	No	2003	1530	C	635	1.81	0.728	0.652	1660
05540130	1	No	No	2004	1580	C, D	656	1.22	0.738	0.634	1690

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05540130	1	No	No	2005	1450	C, E	602	0.919	0.748	0.717	1540
05540130	1	No	No	2006	1110	C, E	461	1.43	0.758	0.878	1180
05540130	1	No	No	2007	1940	C	805	1.42	0.767	0.48	2000
05540130	1	No	No	2008	4160	C	1727	4.21	0.777	0.0436	4230
05540130	1	No	No	2009	2640	C	1096	1.05	0.787	0.216	2660
05540140	1	Yes	Yes	1961	50	--	560	1.88	0.312	0.367	102
05540140	1	Yes	Yes	1962	38	--	426	0.249	0.341	0.607	80.6
05540140	1	Yes	Yes	1963	18	--	202	1.15	0.37	0.932	50.9
05540140	1	Yes	Yes	1964	14	--	157	0.78	0.398	0.963	42.3
05540140	1	Yes	Yes	1965	24	--	269	0.0987	0.427	0.89	56.3
05540140	1	Yes	Yes	1966	77	--	863	1.37	0.456	0.177	126
05540140	1	Yes	Yes	1967	68	--	762	1.46	0.484	0.265	111
05540140	1	Yes	Yes	1968	40	--	448	1.25	0.513	0.715	72.3
05540140	1	Yes	Yes	1969	40	--	448	1.29	0.542	0.738	70.5
05540140	1	Yes	Yes	1970	81	--	908	1.28	0.57	0.204	119
05540140	1	Yes	Yes	1971	28	--	314	0.364	0.61	0.926	52.3
05540140	1	Yes	Yes	1972	204	--	2287	1.17	0.649	0.0139	261
05540140	1	Yes	Yes	1973	67	--	751	0.808	0.688	0.463	93
05540140	1	Yes	Yes	1974	56	--	628	1.05	0.727	0.661	76.4
05540140	1	Yes	Yes	1975	105	--	1177	1.02	0.766	0.168	128
05540140	1	Yes	Yes	1976	81	--	908	0.874	0.805	0.406	98.3
05540140	1	Yes	Yes	1977	91	--	1020	0.608	0.844	0.32	105
05540140	1	Yes	Yes	1978	98	--	1099	1.49	0.883	0.284	108
05540140	1	Yes	Yes	1979	143	--	1603	0.783	0.922	0.0924	151
05540150	1	No	No	1961	207	--	658	2.08	0.546	0.441	310
05540150	1	No	No	1963	82	--	261	1.34	0.582	0.948	148
05540150	1	No	No	1964	64	2	204	0.815	0.6	0.974	119
05540150	1	No	No	1965	107	2	340	0.113	0.619	0.909	171
05540150	1	No	No	1966	468	--	1488	1.45	0.637	0.048	591
05540150	1	No	No	1967	303	--	964	1.42	0.655	0.217	387
05540150	1	No	No	1968	220	--	700	1.87	0.673	0.511	289
05540150	1	No	No	1969	227	--	722	1.32	0.691	0.501	292
05540150	1	No	No	1970	354	--	1126	1.26	0.709	0.164	428
05540150	1	No	No	1971	145	2	461	0.327	0.722	0.852	191
05540150	1	No	No	1972	912	--	2901	2.03	0.735	0.00809	1040

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05540150	1	No	No	1973	278	--	884	0.842	0.749	0.37	331
05540150	1	No	No	1974	242	--	770	0.533	0.762	0.516	287
05540150	1	No	No	1975	303	--	964	1.17	0.775	0.307	349
05540150	1	No	No	1976	318	--	1011	1.03	0.788	0.275	360
05540150	1	No	No	1978	227	--	722	1.53	0.815	0.629	255
05540150	1	No	No	1979	360	--	1145	0.978	0.828	0.213	390
05540150	1	No	No	1980	218	--	693	0.333	0.842	0.701	239
05540160	1	Yes	No	1955	1590	7	2526	3.91	0.48	0.00675	2190
05540160	1	Yes	Yes	1961	652	--	1036	2.2	0.614	0.162	876
05540160	1	Yes	Yes	1963	299	--	475	1.38	0.648	0.784	438
05540160	1	Yes	Yes	1964	227	--	361	0.838	0.665	0.913	351
05540160	1	Yes	Yes	1965	265	--	421	1.2	0.681	0.867	385
05540160	1	Yes	Yes	1966	993	--	1578	1.58	0.698	0.047	1210
05540160	1	Yes	Yes	1967	675	--	1072	1.42	0.715	0.189	828
05540160	1	Yes	Yes	1968	728	--	1157	2.18	0.732	0.162	877
05540160	1	Yes	Yes	1969	420	--	667	1.34	0.749	0.63	523
05540160	1	Yes	Yes	1970	725	--	1152	1.26	0.765	0.178	848
05540160	1	Yes	Yes	1971	321	--	510	0.313	0.774	0.839	403
05540160	1	Yes	Yes	1972	1720	--	2732	2.47	0.783	0.0112	1920
05540160	1	Yes	Yes	1973	786	--	1249	0.859	0.791	0.152	897
05540160	1	Yes	Yes	1974	530	2	842	0.545	0.8	0.472	616
05540160	1	Yes	Yes	1975	661	--	1050	1.24	0.808	0.26	747
05540160	1	Yes	Yes	1976	575	--	913	1.07	0.817	0.412	653
05540160	1	Yes	Yes	1990	881	C	1400	1.38	0.872	0.133	933
05540160	1	Yes	Yes	1991	747	C	1187	1.77	0.873	0.217	792
05540160	1	Yes	Yes	1992	393	C, D	624	0.739	0.874	0.803	427
05540160	1	Yes	Yes	1993	464	C	737	0.884	0.874	0.68	500
05540160	1	Yes	Yes	1994	617	C	980	1.87	0.875	0.405	658
05540160	1	Yes	Yes	1995	538	C	855	1.24	0.876	0.538	575
05540160	1	Yes	Yes	1996	936	C	1487	3.9	0.876	0.106	987
05540160	1	Yes	Yes	1997	925	C	1469	2.43	0.877	0.112	975
05540160	1	Yes	Yes	1998	547	C	869	1.39	0.878	0.525	583
05540160	1	Yes	Yes	1999	517	C	821	0.653	0.878	0.577	552
05540160	1	Yes	Yes	2000	535	C	850	1.32	0.879	0.547	570
05540160	1	Yes	Yes	2001	460	C	731	0.714	0.885	0.702	489

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05540160	1	Yes	Yes	2002	1040	C	1652	1.97	0.89	0.0722	1080
05540160	1	Yes	Yes	2003	538	C	855	1.85	0.896	0.559	562
05540160	1	Yes	Yes	2004	372	C	591	1.46	0.901	0.858	390
05540160	1	Yes	Yes	2005	517	C, E	821	1.42	0.907	0.608	534
05540160	1	Yes	Yes	2006	386	C	613	2.26	0.912	0.846	398
05540160	1	Yes	Yes	2007	840	C	1334	3.12	0.918	0.177	853
05540160	1	Yes	Yes	2008	1190	C	1890	3.34	0.924	0.0473	1200
05540160	1	Yes	Yes	2009	1040	C	1652	1.11	0.929	0.0835	1050
05540190	1	Yes	Yes	1961	583	--	1724	2	0.891	0.0614	624
05540190	1	Yes	Yes	1962	139	--	411	0.288	0.895	0.96	159
05540190	1	Yes	Yes	1963	542	--	1603	1.45	0.899	0.0846	577
05540190	1	Yes	Yes	1964	123	--	364	0.886	0.903	0.975	140
05540190	1	Yes	Yes	1965	253	--	748	0.843	0.907	0.705	273
05540190	1	Yes	Yes	1966	497	--	1470	1.78	0.911	0.127	524
05540190	1	Yes	Yes	1967	314	--	929	1.37	0.915	0.503	333
05540190	1	Yes	Yes	1968	569	--	1683	2.06	0.919	0.0739	594
05540190	1	Yes	Yes	1969	247	--	731	1.27	0.923	0.737	262
05540190	1	Yes	Yes	1970	330	--	976	1.22	0.927	0.467	345
05540190	1	Yes	Yes	1971	267	--	790	0.868	0.928	0.677	280
05540190	1	Yes	Yes	1972	642	--	1899	2.15	0.929	0.0473	664
05540190	1	Yes	Yes	1973	448	--	1325	0.856	0.93	0.186	464
05540190	1	Yes	Yes	1974	344	--	1017	0.983	0.931	0.429	358
05540190	1	Yes	Yes	1975	620	--	1834	1.32	0.932	0.0544	640
05540190	1	Yes	Yes	1976	216	--	639	0.964	0.933	0.838	227
05540190	1	Yes	Yes	1977	213	--	630	1.12	0.934	0.848	224
05540195	1	No	No	1989	464	C	930	2.22	0.92	0.506	486
05540195	1	No	No	1990	938	C	1881	1.75	0.92	0.0476	970
05540195	1	No	No	1991	715	C	1434	1.71	0.92	0.143	742
05540195	1	No	No	1992	560	C, D	1123	1.34	0.92	0.297	583
05540195	1	No	No	1993	390	C	782	1.09	0.92	0.677	410
05540195	1	No	No	1994	542	C	1087	1.57	0.92	0.337	565
05540195	1	No	No	1995	322	C, E	646	1.22	0.92	0.821	340
05540195	1	No	No	1996	1280	C	2566	5.12	0.92	0.0175	1320
05540195	1	No	No	1997	898	C	1800	2.55	0.92	0.0567	929
05540195	1	No	No	1998	641	C	1285	1.83	0.92	0.196	665

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05540195	1	No	No	1999	491	C	984	1.49	0.92	0.451	513
05540195	1	No	No	2000	474	C	950	1.31	0.92	0.486	495
05540195	1	No	No	2001	429	C	860	0.756	0.924	0.583	447
05540195	1	No	No	2002	796	C	1596	2.02	0.928	0.0961	819
05540195	1	No	No	2003	404	C	810	1.12	0.932	0.655	418
05540195	1	No	No	2004	533	C	1069	1.52	0.936	0.381	547
05540195	1	No	No	2005	467	C, E	936	1.58	0.94	0.522	478
05540195	1	No	No	2006	346	C	694	2.26	0.944	0.796	353
05540195	1	No	No	2007	975	C	1955	3.27	0.948	0.0456	985
05540195	1	No	No	2008	764	C	1532	2.87	0.952	0.125	770
05540195	1	No	No	2009	886	C	1776	2.34	0.956	0.0681	889
05540240	1	Yes	Yes	1961	532	--	2513	1.93	0.557	0.00841	719
05540240	1	Yes	Yes	1962	152	--	718	0.292	0.584	0.402	233
05540240	1	Yes	Yes	1963	441	--	2084	1.42	0.612	0.0162	581
05540240	1	Yes	Yes	1964	92	--	435	3.18	0.639	0.824	148
05540240	1	Yes	Yes	1965	351	--	1658	1.46	0.666	0.0373	454
05540240	1	Yes	Yes	1966	163	--	770	3.03	0.694	0.446	223
05540240	1	Yes	Yes	1967	177	--	836	1.54	0.721	0.397	234
05540240	1	Yes	Yes	1968	238	--	1124	3.15	0.748	0.182	295
05540240	1	Yes	Yes	1969	189	--	893	1.17	0.776	0.39	235
05540240	1	Yes	Yes	1970	128	--	605	1.17	0.803	0.761	161
05540240	1	Yes	Yes	1971	157	--	742	0.209	0.816	0.604	190
05540240	1	Yes	Yes	1972	465	--	2197	3.09	0.829	0.0214	523
05540240	1	Yes	Yes	1973	165	--	780	0.912	0.841	0.586	194
05540240	1	Yes	Yes	1974	204	--	964	1.16	0.854	0.4	234
05540240	1	Yes	Yes	1975	423	--	1998	2	0.867	0.0344	464
05540240	1	Yes	Yes	1976	112	--	529	0.776	0.88	0.9	131
05540240	1	Yes	Yes	1977	120	--	567	1.53	0.893	0.875	137
05540240	1	Yes	Yes	1978	149	--	704	1.34	0.906	0.748	164
05540240	1	Yes	Yes	1979	117	--	553	1.2	0.919	0.907	129
05540240	1	Yes	Yes	1980	112	--	529	1.78	0.932	0.93	122
05540250	0	No	No	1989	497	C	NA	1.63	0.789	NA	NA
05540250	0	No	No	1990	1990	C	NA	2.11	0.792	NA	NA
05540250	0	No	No	1991	1070	C	NA	1.56	0.793	NA	NA
05540250	1	No	No	1992	615	C, D	518	1.6	0.793	0.845	689

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05540250	1	No	No	1993	1100	C	927	1.82	0.794	0.371	1200
05540250	1	No	No	1994	945	C	796	0.804	0.795	0.52	1030
05540250	1	No	No	1995	858	C, D	723	1.28	0.796	0.607	938
05540250	1	No	No	1996	3980	C	3353	6.01	0.797	0.00508	4190
05540250	1	No	No	1997	1910	C	1609	2.62	0.798	0.0593	2040
05540250	1	No	No	1998	1090	C	918	1.28	0.799	0.387	1180
05540250	1	No	No	1999	1200	C	1011	0.762	0.8	0.286	1290
05540250	1	No	No	2000	938	C	790	1.29	0.801	0.532	1020
05540250	1	No	No	2001	1070	C	901	0.82	0.808	0.416	1150
05540250	1	No	No	2002	1680	C	1415	2.59	0.816	0.103	1770
05540250	1	No	No	2003	668	C	563	1.11	0.823	0.822	716
05540250	1	No	No	2004	989	C	833	1.26	0.83	0.514	1040
05540250	1	No	No	2005	1380	C	1162	1.45	0.837	0.208	1430
05540250	1	No	No	2006	573	C	483	2.36	0.844	0.913	600
05540250	1	No	No	2007	1460	C	1230	3.08	0.851	0.186	1490
05540250	1	No	No	2008	2410	C	2030	3.02	0.859	0.0316	2440
05540250	1	No	No	2009	2140	C	1803	1.11	0.866	0.0474	2150
05540275	1	Yes	Yes	1988	78	--	263	1.11	0.481	0.918	115
05540275	1	Yes	Yes	1989	80	--	270	1.58	0.507	0.922	113
05540275	1	Yes	Yes	1990	694	D	2343	1.81	0.534	0.00986	793
05540275	1	Yes	Yes	1991	267	--	901	1.48	0.545	0.195	314
05540275	1	Yes	Yes	1992	134	E	452	1.78	0.557	0.744	165
05540275	1	Yes	Yes	1993	153	--	516	1.72	0.568	0.663	184
05540275	1	Yes	Yes	1994	147	E	496	0.712	0.579	0.704	175
05540275	1	Yes	Yes	1995	107	--	361	1.27	0.59	0.876	130
05540275	1	Yes	Yes	1996	1750	--	5907	3.67	0.602	0	1890
05540275	1	Yes	Yes	1997	465	--	1570	2.52	0.613	0.0388	507
05540275	1	Yes	Yes	1998	391	--	1320	1.25	0.624	0.0707	425
05540275	1	Yes	Yes	1999	218	--	736	0.599	0.635	0.429	239
05540275	1	Yes	Yes	2000	178	C	601	1.49	0.647	0.616	194
05540275	1	Yes	Yes	2001	208	C	702	0.694	0.654	0.489	224
05540275	1	Yes	Yes	2002	538	C	1816	2.2	0.661	0.0267	563
05540275	1	Yes	Yes	2003	129	C	435	0.902	0.668	0.843	139
05540275	1	Yes	Yes	2004	164	C	554	1.74	0.675	0.712	173
05540275	1	Yes	Yes	2005	195	C	658	1.19	0.683	0.574	203

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05540275	1	Yes	Yes	2006	66	C, E	223	1.62	0.69	0.981	70
05540275	1	Yes	Yes	2007	188	C	635	2.33	0.697	0.62	193
05540275	1	Yes	Yes	2008	422	C	1425	2.74	0.704	0.0691	427
05540275	1	Yes	Yes	2009	473	C	1597	1.01	0.711	0.0468	476
05540500	1	Yes	Yes	1941	1730	--	230	0.553	0.105	0.786	3280
05540500	1	Yes	Yes	1942	4360	--	578	1.13	0.109	0.211	6350
05540500	1	Yes	Yes	1943	2640	--	350	0.75	0.112	0.556	4380
05540500	1	Yes	Yes	1944	2220	--	295	1.46	0.116	0.67	3840
05540500	1	Yes	Yes	1945	1820	--	241	1.27	0.119	0.772	3360
05540500	1	Yes	Yes	1946	3700	--	491	0.394	0.122	0.323	5610
05540500	1	Yes	Yes	1947	5200	--	690	3.09	0.126	0.141	7330
05540500	1	Yes	Yes	1948	11000	--	1459	2.36	0.129	0.0154	13900
05540500	1	Yes	Yes	1949	4500	2	597	0.761	0.133	0.206	6400
05540500	1	Yes	Yes	1950	9070	--	1203	1.29	0.136	0.0257	11700
05540500	1	Yes	Yes	1951	4230	D	561	0.333	0.148	0.252	6040
05540500	1	Yes	Yes	1952	2390	--	317	1.31	0.159	0.657	3900
05540500	1	Yes	Yes	1953	5100	E	677	1.61	0.171	0.167	6930
05540500	1	Yes	Yes	1954	3830	--	508	1.91	0.182	0.34	5500
05540500	1	Yes	Yes	1955	12000	--	1592	4.07	0.194	0.0141	14400
05540500	1	Yes	Yes	1956	1880	--	249	1.02	0.205	0.806	3170
05540500	1	Yes	Yes	1957	6040	--	801	3.18	0.217	0.113	7800
05540500	1	Yes	Yes	1958	2880	--	382	1.73	0.228	0.592	4220
05540500	1	Yes	Yes	1959	4360	--	578	1.37	0.24	0.291	5780
05540500	1	Yes	Yes	1960	3460	--	459	2.15	0.251	0.468	4810
05540500	1	Yes	Yes	1961	4920	--	653	1.47	0.264	0.228	6220
05540500	1	Yes	Yes	1962	3960	--	525	0.31	0.277	0.387	5240
05540500	1	Yes	Yes	1963	1300	E	172	1.47	0.29	0.934	2300
05540500	1	Yes	Yes	1964	3330	E	442	2.3	0.303	0.544	4430
05540500	1	Yes	Yes	1965	1750	2	232	0.226	0.315	0.884	2720
05540500	1	Yes	Yes	1966	6990	--	927	1.78	0.328	0.0962	8130
05540500	1	Yes	Yes	1967	3160	--	419	1.36	0.341	0.618	4090
05540500	1	Yes	Yes	1968	1760	--	234	2.2	0.354	0.898	2620
05540500	1	Yes	Yes	1969	1890	--	251	0.975	0.367	0.884	2720
05540500	1	Yes	Yes	1970	2800	--	372	1.4	0.38	0.727	3590
05540500	1	Yes	Yes	1971	1940	--	257	0.298	0.393	0.888	2690

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05540500	0	Yes	No	1972	6520	--	977	2.52	0.407	0.103	7990
05540500	2	Yes	Yes	1973	3110	--	526	0.79	0.421	0.511	4590
05540500	2	Yes	Yes	1974	5440	--	920	1.08	0.435	0.14	7370
05540500	2	Yes	Yes	1975	3840	--	650	1.26	0.449	0.364	5370
05540500	2	Yes	Yes	1976	4200	--	711	1.03	0.463	0.301	5700
05540500	2	Yes	Yes	1977	1080	E	183	1.53	0.477	0.963	1870
05540500	2	Yes	Yes	1978	3450	--	584	1.07	0.49	0.49	4700
05540500	2	Yes	Yes	1979	6100	--	1032	0.284	0.504	0.118	7740
05540500	2	Yes	Yes	1980	2140	--	362	0.887	0.518	0.831	3030
05540500	2	Yes	Yes	1981	5050	--	854	2.06	0.524	0.215	6350
05540500	2	Yes	Yes	1982	4600	--	778	0.359	0.529	0.283	5820
05540500	2	Yes	Yes	1983	8030	--	1359	2.18	0.535	0.0491	9770
05540500	2	Yes	Yes	1984	3620	--	612	0.703	0.541	0.497	4670
05540500	2	Yes	Yes	1985	5760	--	974	1.06	0.546	0.161	7060
05540500	2	Yes	Yes	1986	2700	--	457	0.909	0.552	0.734	3550
05540500	2	Yes	Yes	1987	4780	--	809	2.15	0.557	0.274	5870
05540500	2	Yes	Yes	1988	3470	D	587	1.08	0.563	0.555	4380
05540500	2	Yes	Yes	1989	2120	E	359	1.39	0.569	0.865	2840
05540500	2	Yes	Yes	1990	6220	--	1052	1.55	0.574	0.138	7420
05540500	2	Yes	Yes	1991	4600	--	778	1.64	0.581	0.325	5570
05540500	2	Yes	Yes	1992	2580	E	436	1.33	0.587	0.786	3280
05540500	2	Yes	Yes	1993	3610	--	611	1.75	0.593	0.55	4400
05540500	2	Yes	Yes	1994	3330	C	563	0.631	0.599	0.624	4060
05540500	2	Yes	Yes	1995	2730	C	462	1.22	0.605	0.768	3380
05540500	2	Yes	Yes	1996	17300	C	2927	4.51	0.612	0.00528	19300
05540500	2	Yes	Yes	1997	7100	C	1201	2.48	0.618	0.0972	8120
05540500	2	Yes	Yes	1998	3470	C	587	1.31	0.624	0.614	4100
05540500	2	Yes	Yes	1999	4680	C	792	0.695	0.63	0.356	5400
05540500	2	Yes	Yes	2000	3740	C	633	1.4	0.636	0.562	4340
05540500	2	Yes	Yes	2001	4240	C	717	0.622	0.65	0.466	4830
05540500	2	Yes	Yes	2002	5010	C	848	1.79	0.663	0.323	5570
05540500	2	Yes	Yes	2003	2070	C	350	1.38	0.676	0.926	2410
05540500	2	Yes	Yes	2004	3840	C	650	1.29	0.689	0.591	4210
05540500	2	Yes	Yes	2005	3800	C, E	643	1.1	0.702	0.614	4100
05540500	2	Yes	Yes	2006	1870	C, E	316	1.18	0.715	0.953	2060

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05540500	2	Yes	Yes	2007	5310	C	898	1.62	0.728	0.331	5530
05540500	2	Yes	Yes	2008	9440	C	1597	3.46	0.741	0.0499	9650
05540500	2	Yes	Yes	2009	7310	C	1237	0.986	0.754	0.14	7400
05541750	1	Yes	Yes	1959	131	--	415	0.663	0.00327	0.352	131
05541750	1	Yes	Yes	1960	118	--	374	0.0216	0.00327	0.418	118
05541750	1	Yes	Yes	1961	59	--	187	1.34	0.00327	0.811	59
05541750	1	Yes	Yes	1962	110	--	348	0.305	0.00327	0.468	110
05541750	1	Yes	Yes	1963	90	--	285	0.544	0.00327	0.612	90
05541750	1	Yes	Yes	1964	19	--	60	1.2	0.00327	0.977	19
05541750	1	Yes	Yes	1965	72	--	228	0.202	0.00327	0.731	72
05541750	1	Yes	Yes	1966	119	--	377	1.41	0.00327	0.413	119
05541750	1	Yes	Yes	1967	100	--	317	1.05	0.00327	0.537	100
05541750	1	Yes	Yes	1968	163	--	516	1.95	0.00327	0.219	163
05541750	1	Yes	Yes	1969	44	--	139	0.38	0.00327	0.891	44
05541750	1	Yes	Yes	1970	132	--	418	1.64	0.00327	0.347	132
05541750	1	Yes	Yes	1971	48	--	152	0.893	0.00327	0.873	48
05541750	1	Yes	Yes	1972	108	--	342	0.831	0.00327	0.48	108
05541750	1	Yes	Yes	1973	77	2	244	0.977	0.00327	0.697	77
05541750	1	Yes	Yes	1974	143	--	453	1.04	0.00327	0.298	143
05541750	1	Yes	Yes	1975	125	--	396	0.647	0.00327	0.381	125
05541750	1	Yes	Yes	1976	119	--	377	0.549	0.00327	0.413	119
05541750	1	Yes	Yes	1977	125	--	396	1.4	0.00327	0.381	125
05541750	1	Yes	Yes	1978	122	--	387	0.864	0.00327	0.396	122
05541750	1	Yes	Yes	1979	173	--	548	1.25	0.00327	0.189	173
05541750	1	Yes	Yes	1980	170	--	539	0.556	0.00327	0.196	170
05542000	1	Yes	Yes	1940	1090	--	44	1.66	0.00936	0.989	1120
05542000	1	Yes	Yes	1941	1820	--	74	1.22	0.00947	0.964	1860
05542000	1	Yes	Yes	1942	14000	--	570	2.42	0.00959	0.175	14100
05542000	1	Yes	Yes	1943	13600	--	554	1.44	0.0097	0.187	13700
05542000	1	Yes	Yes	1944	13700	--	558	1.37	0.00982	0.184	13800
05542000	1	Yes	Yes	1945	7900	--	322	1.39	0.00994	0.531	8000
05542000	1	Yes	Yes	1946	11600	--	473	2.28	0.0101	0.277	11700
05542000	1	Yes	Yes	1947	12500	--	509	2.2	0.0102	0.231	12600
05542000	1	Yes	Yes	1948	8120	--	331	1.18	0.0103	0.51	8220
05542000	1	Yes	Yes	1949	7340	--	299	0.801	0.0104	0.587	7430

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05542000	1	Yes	Yes	1950	17300	--	705	1.67	0.0105	0.093	17500
05542000	1	Yes	Yes	1951	11100	D	452	0.374	0.0107	0.304	11200
05542000	1	Yes	Yes	1952	5880	--	240	0.826	0.0109	0.712	5960
05542000	1	Yes	Yes	1953	5180	--	211	0.548	0.0111	0.77	5250
05542000	1	Yes	Yes	1954	10300	--	420	1.85	0.0113	0.35	10400
05542000	1	Yes	Yes	1955	3760	E	153	0.759	0.0115	0.874	3810
05542000	1	Yes	Yes	1956	2070	E	84	0.328	0.0117	0.956	2110
05542000	1	Yes	Yes	1957	7800	--	318	0.392	0.0119	0.542	7880
05542000	1	Yes	Yes	1958	17600	--	717	1.34	0.0121	0.0889	17700
05542000	1	Yes	Yes	1959	8200	--	334	1.2	0.0123	0.505	8280
05542000	1	Yes	Yes	1960	5800	--	236	0.963	0.0124	0.72	5860
05542000	1	Yes	Yes	1961	5500	E	224	1.58	0.0126	0.746	5560
05542000	1	Yes	Yes	1962	7010	--	286	0.318	0.0127	0.618	7080
05542000	1	Yes	Yes	1963	3680	E	150	0.533	0.0128	0.879	3730
05542000	1	Yes	Yes	1964	1200	E	49	1.11	0.0129	0.986	1220
05542000	1	Yes	Yes	1965	9390	--	383	1.12	0.013	0.41	9470
05542000	1	Yes	Yes	1966	8650	--	352	1.48	0.0131	0.467	8730
05542000	1	Yes	Yes	1967	7710	--	314	1.05	0.0132	0.552	7780
05542000	1	Yes	Yes	1968	16800	--	684	1.98	0.0134	0.102	16900
05542000	1	Yes	Yes	1969	4470	E	182	1.17	0.0135	0.825	4520
05542000	1	Yes	Yes	1970	16800	E	684	1.71	0.0136	0.102	16900
05542000	1	Yes	Yes	1971	4750	--	194	0.431	0.0138	0.804	4800
05542000	1	Yes	Yes	1972	8000	--	326	1.1	0.014	0.525	8060
05542000	1	Yes	Yes	1973	12000	--	489	0.738	0.0142	0.258	12100
05542000	1	Yes	Yes	1974	9250	--	377	1.08	0.0144	0.421	9320
05542000	1	Yes	Yes	1975	7080	--	288	1.14	0.0146	0.613	7130
05542000	1	Yes	Yes	1976	8340	--	340	0.926	0.0148	0.494	8400
05542000	1	Yes	Yes	1977	4670	--	190	1.47	0.015	0.81	4710
05542000	1	Yes	Yes	1978	5560	--	227	1.01	0.0152	0.743	5600
05542000	1	Yes	Yes	1979	13300	--	542	1.38	0.0154	0.198	13400
05542000	1	Yes	Yes	1980	12200	--	497	1.05	0.0156	0.249	12300
05542000	1	Yes	Yes	1981	9970	--	406	1.62	0.0157	0.373	10000
05542000	1	Yes	Yes	1982	10200	--	416	0.342	0.0158	0.359	10300
05542000	1	Yes	Yes	1983	22400	--	913	2.22	0.0159	0.0459	22500
05542000	1	Yes	Yes	1984	16800	--	684	0.626	0.016	0.103	16900

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05542000	1	Yes	Yes	1985	18800	--	766	0.778	0.0161	0.0736	18900
05542000	1	Yes	Yes	1986	16800	--	684	1.07	0.0162	0.103	16900
05542000	1	Yes	Yes	1987	9310	--	379	1.58	0.0163	0.418	9360
05542000	1	Yes	Yes	1988	4610	E	188	0.468	0.0164	0.816	4640
05542000	1	Yes	Yes	1989	11400	--	464	2.14	0.0165	0.291	11500
05542000	1	Yes	Yes	1990	10500	--	428	0.572	0.0166	0.342	10500
05542000	1	Yes	Yes	1991	20800	--	847	1.41	0.0168	0.057	20900
05542000	1	Yes	Yes	1992	3040	E	124	0.731	0.017	0.917	3060
05542000	1	Yes	Yes	1993	10700	--	436	1.88	0.0171	0.331	10700
05542000	1	Yes	Yes	1994	9150	E	373	1.81	0.0173	0.431	9190
05542000	1	Yes	Yes	1995	8140	--	332	1.5	0.0175	0.515	8170
05542000	1	Yes	Yes	1997	13500	--	550	1.75	0.0179	0.193	13500
05542000	1	Yes	Yes	1998	16600	--	676	1.44	0.018	0.109	16600
05542000	1	Yes	Yes	1999	10200	--	416	1.36	0.0182	0.361	10200
05542000	1	Yes	Yes	2000	3830	E	156	1.21	0.0184	0.872	3850
05542000	1	Yes	Yes	2001	12600	--	513	0.676	0.0187	0.231	12600
05542000	1	Yes	Yes	2002	14100	--	574	1.9	0.0189	0.175	14100
05542000	1	Yes	Yes	2003	8220	E	335	1.73	0.0192	0.509	8240
05542000	1	Yes	Yes	2004	8520	E	347	2.12	0.0195	0.483	8540
05542000	1	Yes	Yes	2005	14300	--	583	1.19	0.0197	0.17	14300
05542000	1	Yes	Yes	2006	3170	--	129	1.09	0.02	0.91	3180
05542000	1	Yes	Yes	2007	12300	--	501	2.05	0.0203	0.247	12300
05542000	1	Yes	Yes	2008	18800	--	766	2.52	0.0206	0.0742	18800
05542000	1	Yes	Yes	2009	14000	--	570	1.92	0.0208	0.179	14000
05543830	1	Yes	No	1960	2500	7	1744	1.09	0.266	0.0129	3580
05543830	1	Yes	Yes	1963	620	--	432	0.44	0.293	0.553	1050
05543830	1	Yes	Yes	1964	644	--	449	1.29	0.303	0.531	1080
05543830	1	Yes	Yes	1965	1240	--	865	0.949	0.312	0.118	1860
05543830	1	Yes	Yes	1966	1040	--	725	0.72	0.321	0.197	1560
05543830	1	Yes	Yes	1967	369	--	257	1.57	0.331	0.859	685
05543830	1	Yes	Yes	1968	542	--	378	0.996	0.34	0.686	904
05543830	1	Yes	Yes	1969	1220	--	851	2.13	0.349	0.14	1770
05543830	1	Yes	Yes	1970	660	--	460	1.82	0.358	0.562	1040
05543830	1	Yes	Yes	1971	660	--	460	0.169	0.368	0.571	1030
05543830	1	Yes	Yes	1972	1150	--	802	2.88	0.378	0.177	1630

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05543830	1	Yes	Yes	1973	2260	--	1576	3.21	0.387	0.0198	2990
05543830	1	Yes	Yes	1974	1520	--	1060	0.708	0.397	0.075	2090
05543830	1	Yes	Yes	1975	1200	--	837	0.74	0.406	0.17	1660
05543830	1	Yes	Yes	1976	1080	--	753	1.84	0.416	0.229	1490
05543830	1	Yes	Yes	1977	379	--	264	0.374	0.425	0.894	632
05543830	1	Yes	Yes	1978	910	--	635	1.91	0.435	0.37	1280
05543830	1	Yes	Yes	1979	1270	--	886	0.332	0.444	0.161	1690
05543830	1	Yes	Yes	1980	569	--	397	1.2	0.454	0.744	840
05543830	1	Yes	Yes	1981	900	--	628	0.756	0.458	0.4	1240
05543830	1	Yes	Yes	1982	965	--	673	1.47	0.462	0.346	1310
05543830	1	Yes	Yes	1983	1060	--	739	1.3	0.467	0.275	1410
05543830	1	Yes	Yes	1984	562	--	392	0.26	0.471	0.762	816
05543830	1	Yes	Yes	1985	646	--	451	0.423	0.475	0.68	911
05543830	1	Yes	Yes	1986	955	--	666	1.45	0.48	0.37	1280
05543830	1	Yes	Yes	1987	653	--	455	1.96	0.484	0.68	911
05543830	1	Yes	Yes	1988	793	--	553	0.168	0.488	0.533	1080
05543830	1	Yes	Yes	1989	759	--	529	0.394	0.492	0.574	1030
05543830	1	Yes	Yes	1990	1210	--	844	1.08	0.497	0.206	1540
05543830	1	Yes	Yes	1991	755	--	527	0.76	0.507	0.592	1010
05543830	1	Yes	Yes	1992	479	--	334	0.501	0.518	0.864	679
05543830	1	Yes	Yes	1993	1520	--	1060	2	0.529	0.116	1870
05543830	1	Yes	Yes	1994	800	--	558	1.77	0.539	0.575	1030
05543830	1	Yes	Yes	1995	1070	--	746	2.67	0.55	0.335	1320
05543830	1	Yes	Yes	1996	967	--	674	1.99	0.561	0.434	1200
05543830	1	Yes	Yes	1997	1320	--	921	3.51	0.572	0.197	1570
05543830	1	Yes	Yes	1998	1460	--	1018	1.94	0.582	0.156	1710
05543830	1	Yes	Yes	1999	1010	--	704	1.95	0.593	0.427	1210
05543830	1	Yes	Yes	2000	1730	--	1207	3.99	0.604	0.0916	1980
05543830	1	Yes	Yes	2001	746	--	520	2.27	0.619	0.706	886
05543830	1	Yes	Yes	2002	963	--	672	4.41	0.634	0.509	1100
05543830	1	Yes	Yes	2003	497	--	347	0.805	0.649	0.918	592
05543830	1	Yes	Yes	2004	1300	--	907	2.56	0.665	0.266	1420
05543830	1	Yes	Yes	2005	542	--	378	0.377	0.68	0.907	612
05543830	1	Yes	Yes	2006	1200	--	837	1.64	0.695	0.369	1280
05543830	1	Yes	Yes	2007	815	--	568	1.35	0.711	0.724	864

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05543830	1	Yes	Yes	2008	2440	--	1702	2.25	0.726	0.0401	2500
05543830	1	Yes	Yes	2009	1910	--	1332	2.77	0.741	0.1	1940
05544200	1	Yes	Yes	1974	292	--	536	0.568	0.0876	0.245	362
05544200	1	Yes	Yes	1977	140	--	257	0.332	0.103	0.735	183
05544200	1	Yes	Yes	1978	235	--	432	1.66	0.108	0.397	292
05544200	1	Yes	Yes	1979	274	--	503	1.08	0.113	0.3	334
05544200	1	Yes	Yes	1980	184	--	338	0.773	0.118	0.588	230
05544200	1	Yes	Yes	1981	219	--	402	0.428	0.122	0.459	270
05544200	1	Yes	Yes	1982	225	--	413	1.27	0.125	0.442	276
05544200	1	Yes	Yes	1983	173	--	318	1.34	0.129	0.635	215
05544200	1	Yes	Yes	1984	145	--	266	0.29	0.133	0.737	182
05544200	1	Yes	Yes	1985	209	--	384	0.203	0.137	0.506	254
05544200	1	Yes	Yes	1986	278	--	511	1.1	0.14	0.308	330
05544200	1	Yes	Yes	1987	201	--	369	0.0386	0.144	0.543	243
05544200	1	Yes	Yes	1988	165	--	303	0.155	0.148	0.676	201
05544200	1	Yes	Yes	1989	240	--	441	1.68	0.151	0.416	286
05544200	1	Yes	Yes	1990	261	--	479	0.638	0.155	0.361	308
05544200	1	Yes	Yes	1991	193	5	355	0.892	0.165	0.593	229
05544200	1	Yes	Yes	1992	204	5	375	1.15	0.175	0.559	239
05544200	1	Yes	Yes	1993	268	5	492	1.66	0.185	0.364	306
05544200	1	Yes	Yes	1994	199	5	366	0.918	0.194	0.596	228
05544200	1	Yes	Yes	1995	210	5	386	1.58	0.204	0.562	237
05544200	1	Yes	Yes	1996	224	5	412	1.66	0.214	0.52	250
05544200	1	Yes	Yes	1997	270	5	496	1.61	0.224	0.388	296
05544200	1	Yes	Yes	1998	130	5	239	0.549	0.234	0.837	145
05544200	1	Yes	Yes	1999	236	5	434	1.81	0.244	0.505	255
05544200	1	Yes	Yes	2000	200	5	367	2.09	0.253	0.636	214
05544200	1	Yes	Yes	2001	200	5	367	0.015	0.259	0.641	213
05544200	1	Yes	Yes	2002	172	5	316	1.06	0.265	0.736	183
05544200	1	Yes	Yes	2003	170	5	312	0.861	0.271	0.746	179
05544200	1	Yes	Yes	2004	240	5	441	1.89	0.277	0.522	250
05544200	1	Yes	Yes	2005	241	5	443	0.938	0.283	0.524	249
05544200	1	Yes	Yes	2006	238	5	437	1.05	0.288	0.539	244
05544200	1	Yes	Yes	2007	317	5	582	1.69	0.294	0.325	323
05544200	1	Yes	Yes	2008	364	5	669	1.54	0.3	0.234	368

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05544200	1	Yes	Yes	2009	271	5	498	1.3	0.306	0.452	273
05544300	1	Yes	Yes	1960	36	--	411	0.991	0.0534	0.39	41.9
05544300	1	Yes	Yes	1961	13	--	149	0.392	0.0537	0.894	16.2
05544300	1	Yes	Yes	1962	14	--	160	0.0835	0.054	0.879	17.3
05544300	1	Yes	No	1963	10	4, B	114	0.0835	0.0543	0.935	12.7
05544300	1	Yes	Yes	1964	26	--	297	0.0835	0.0546	0.623	30.7
05544300	1	Yes	Yes	1965	14	--	160	1.24	0.0549	0.879	17.3
05544300	1	Yes	Yes	1966	24	--	274	0.725	0.0552	0.668	28.5
05544300	1	Yes	Yes	1967	30	--	343	0.466	0.0555	0.522	35.2
05544300	1	Yes	Yes	1968	48	--	549	0.874	0.0558	0.213	54.8
05544300	1	Yes	Yes	1969	66	--	754	2.24	0.0561	0.086	74.8
05544300	1	Yes	No	1970	10	4, B	114	0.0835	0.0564	0.935	12.7
05544300	1	Yes	Yes	1971	30	--	343	0.868	0.0618	0.528	34.9
05544300	1	Yes	Yes	1973	31	--	354	3.04	0.0727	0.512	35.6
05544300	1	Yes	Yes	1974	50	--	571	0.622	0.0782	0.201	55.8
05544300	1	Yes	Yes	1975	44	--	503	0.358	0.0836	0.283	49.2
05544300	1	Yes	Yes	1976	56	--	640	1.75	0.0891	0.158	61.8
05544300	1	Yes	Yes	1977	11	--	126	1.82	0.0946	0.932	13.1
05544300	1	Yes	Yes	1978	58	--	663	1.19	0.1	0.148	63.3
05544300	1	Yes	Yes	1979	60	--	686	0.33	0.105	0.136	65.2
05544300	1	Yes	Yes	1980	58	--	663	0.949	0.111	0.152	62.7
05544300	1	Yes	Yes	1981	10	--	114	1.62	0.112	0.946	11.6
05545100	1	Yes	Yes	1962	125	--	307	0.00118	0.0214	0.577	128
05545100	1	Yes	Yes	1963	55	--	135	0.551	0.0215	0.903	56.8
05545100	1	Yes	Yes	1964	37	--	91	0.637	0.0216	0.952	38.4
05545100	1	Yes	Yes	1965	56	--	137	1.16	0.0217	0.9	57.8
05545100	1	Yes	Yes	1966	145	--	356	0.824	0.0218	0.467	148
05545100	1	Yes	Yes	1967	122	--	299	2.31	0.022	0.597	125
05545100	1	Yes	Yes	1968	73	--	179	1.25	0.0221	0.833	75.1
05545100	1	Yes	Yes	1969	125	--	307	2	0.0222	0.578	128
05545100	1	Yes	Yes	1970	95	--	233	1.21	0.0223	0.733	97.4
05545100	1	Yes	Yes	1971	150	--	368	0.762	0.0225	0.444	153
05545100	1	Yes	Yes	1972	225	--	552	1.77	0.0227	0.193	229
05545100	1	Yes	Yes	1973	900	--	2209	1.94	0.0229	0.00305	912
05545100	1	Yes	Yes	1974	315	--	773	0.658	0.0231	0.073	320

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft³/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft³/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft³/s)
05545100	1	Yes	Yes	1975	87	--	214	0.414	0.0233	0.771	89.2
05545100	1	Yes	Yes	1976	190	--	466	1.67	0.0235	0.293	194
05545100	1	Yes	Yes	1977	65	--	160	1.1	0.0236	0.868	66.8
05545100	1	Yes	Yes	1978	165	--	405	1.89	0.0238	0.38	168
05545100	1	Yes	Yes	1979	185	--	454	0.234	0.024	0.31	188
05545100	1	Yes	Yes	1980	92	--	226	0.847	0.0242	0.75	94.2
05545100	1	Yes	Yes	1981	170	--	417	0.77	0.0245	0.362	173
05545100	1	Yes	Yes	1982	295	--	724	1.41	0.0248	0.0893	300
05545100	1	Yes	Yes	1983	220	--	540	1.79	0.0251	0.205	224
05545100	1	Yes	Yes	1984	100	--	245	0.606	0.0254	0.709	102
05545100	1	Yes	Yes	1985	160	--	393	0.388	0.0258	0.401	163
05545100	1	Yes	Yes	1986	190	--	466	0.222	0.0261	0.294	193
05545100	1	Yes	Yes	1987	95	--	233	1.37	0.0264	0.735	96.9
05545100	1	Yes	Yes	1988	145	--	356	0.189	0.0267	0.471	148
05545100	1	Yes	Yes	1989	65	--	160	2.55	0.027	0.869	66.5
05545100	1	Yes	Yes	1990	75	--	184	1.28	0.0273	0.828	76.6
05545100	1	Yes	Yes	1991	75	--	184	0.757	0.0284	0.828	76.5
05545100	1	Yes	Yes	1992	45	--	110	1.18	0.0295	0.934	46
05545100	1	Yes	Yes	1993	235	--	577	1.13	0.0307	0.178	238
05545100	1	Yes	Yes	1994	185	--	454	1.05	0.0318	0.314	187
05545100	1	Yes	Yes	1995	83	--	204	1.49	0.0329	0.794	84
05545100	1	Yes	Yes	1996	215	--	528	1.42	0.034	0.224	217
05545100	1	Yes	Yes	1997	134	--	329	1.72	0.0351	0.536	135
05545100	1	Yes	Yes	1998	117	--	287	0.785	0.0363	0.63	118
05545100	1	Yes	Yes	1999	235	--	577	2.13	0.0374	0.181	236
05545100	1	Yes	Yes	2000	153	--	376	1.17	0.0385	0.442	154
05545100	1	Yes	Yes	2001	163	--	400	2.01	0.0389	0.398	164
05545100	1	Yes	Yes	2002	110	--	270	0.886	0.0392	0.666	110
05545100	1	Yes	Yes	2003	42	--	103	0.908	0.0396	0.943	42.2
05545100	1	Yes	Yes	2004	208	--	511	1.14	0.04	0.247	208
05545100	1	Yes	Yes	2005	110	--	270	0.48	0.0403	0.667	110
05545100	1	Yes	Yes	2006	344	--	844	1.02	0.0407	0.0609	344
05545100	1	Yes	Yes	2007	336	--	825	1.37	0.0411	0.0649	336
05545100	1	Yes	Yes	2008	277	--	680	0.416	0.0415	0.115	277
05545100	1	Yes	Yes	2009	277	--	680	0.78	0.0418	0.115	277

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05545200	1	Yes	No	1958	40	--	156	0.199	0.00492	0.867	42.1
05545200	1	Yes	No	1959	100	--	390	0.199	0.00492	0.392	104
05545200	1	Yes	Yes	1960	235	--	916	2.14	0.00492	0.0444	242
05545200	1	Yes	Yes	1961	80	--	312	2.72	0.00508	0.551	83.2
05545200	1	Yes	Yes	1962	57	--	222	0.199	0.00525	0.746	59.6
05545200	1	Yes	Yes	1963	50	--	195	0.575	0.00541	0.797	52.3
05545200	1	Yes	Yes	1964	50	--	195	1.65	0.00557	0.797	52.3
05545200	1	Yes	Yes	1965	70	--	273	1.47	0.00574	0.638	72.9
05545200	1	Yes	Yes	1966	225	--	877	1.81	0.0059	0.0499	231
05545200	1	Yes	Yes	1967	215	--	838	1.97	0.00607	0.0574	221
05545200	1	Yes	Yes	1968	58	--	226	2.71	0.00623	0.738	60.5
05545200	1	Yes	Yes	1969	167	--	651	2.64	0.00639	0.12	172
05545200	1	Yes	Yes	1970	35	--	136	1.73	0.00656	0.897	36.8
05545200	1	Yes	Yes	1971	100	--	390	0.819	0.00934	0.395	103
05545200	1	Yes	Yes	1972	155	--	604	0.592	0.0121	0.152	159
05545200	1	Yes	Yes	1973	290	--	1130	1.9	0.0149	0.0227	296
05545200	1	Yes	Yes	1974	75	--	292	0.598	0.0177	0.608	76.9
05545200	1	Yes	Yes	1975	105	--	409	0.199	0.0205	0.372	107
05545200	1	Yes	Yes	1976	65	--	253	1.08	0.0233	0.691	66.3
05545200	1	Yes	Yes	1977	70	--	273	1.37	0.0261	0.652	71.1
05545200	1	Yes	Yes	1978	110	--	429	2.37	0.0289	0.349	111
05545200	1	Yes	Yes	1979	66	--	257	0.199	0.0316	0.688	66.6
05545200	1	Yes	Yes	1980	87	--	339	1.12	0.0344	0.513	87.5
05545200	1	Yes	Yes	1981	95	--	370	0.759	0.0344	0.45	95.5
05545200	1	Yes	Yes	1982	205	--	799	1.73	0.0344	0.0693	206
05545200	1	Yes	Yes	1983	170	--	662	2.13	0.0344	0.123	171
05545200	1	Yes	Yes	1984	85	--	331	2.98	0.0344	0.53	85.5
05545200	1	Yes	Yes	1985	85	--	331	0.282	0.0344	0.53	85.5
05545200	1	Yes	Yes	1986	185	--	721	1.51	0.0344	0.0927	186
05545200	1	Yes	Yes	1987	80	--	312	1.67	0.0344	0.577	80.5
05545200	1	Yes	Yes	1988	80	--	312	0.84	0.0344	0.577	80.5
05545200	1	Yes	Yes	1989	97	--	378	2.78	0.0344	0.435	97.5
05545200	1	Yes	Yes	1990	101	--	394	1.42	0.0344	0.406	102
05545200	1	Yes	Yes	1991	58	--	226	1.46	0.0344	0.755	58.4
05545200	1	Yes	Yes	1992	35	--	136	0.977	0.0344	0.905	35.3

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05545200	1	Yes	Yes	1993	120	--	468	1.47	0.0344	0.298	121
05545200	1	Yes	Yes	1994	130	--	506	1.37	0.0344	0.249	131
05545200	1	Yes	Yes	1995	40	--	156	2.08	0.0344	0.878	40.3
05545200	1	Yes	Yes	1996	182	--	709	1.55	0.0344	0.097	183
05545200	1	Yes	Yes	1997	72	--	281	1.54	0.0344	0.642	72.4
05545200	1	Yes	Yes	1998	24	--	94	1.02	0.0344	0.952	24.2
05545200	1	Yes	Yes	1999	354	--	1379	2.39	0.0344	0.0148	355
05545200	1	Yes	Yes	2000	150	--	584	1.49	0.0344	0.174	151
05545200	1	Yes	Yes	2001	140	2	545	2.82	0.0349	0.204	141
05545200	1	Yes	Yes	2002	24	--	94	0.781	0.0354	0.952	24.2
05545200	1	Yes	Yes	2004	310	--	1208	0.378	0.0364	0.0193	311
05545200	1	Yes	Yes	2005	52	--	203	0.525	0.0369	0.798	52.2
05545200	1	Yes	Yes	2006	61	--	238	1.22	0.0374	0.733	61.2
05545200	1	Yes	Yes	2007	141	--	549	1.83	0.0379	0.201	141
05545200	1	Yes	Yes	2008	230	--	896	0.524	0.0384	0.0506	230
05545200	1	Yes	Yes	2009	14	--	55	0.938	0.0389	0.984	14
05545300	1	Yes	No	1959	800	--	383	0.000673	0.13	0.502	952
05545300	1	Yes	Yes	1960	1900	--	910	1.07	0.133	0.0613	2170
05545300	1	Yes	Yes	1961	480	--	230	0.331	0.134	0.8	589
05545300	1	Yes	Yes	1962	790	--	379	0.000673	0.135	0.516	936
05545300	1	Yes	Yes	1963	420	--	201	0.549	0.136	0.847	520
05545300	1	Yes	Yes	1964	350	--	168	0.104	0.138	0.896	440
05545300	1	Yes	Yes	1965	560	--	268	0.131	0.139	0.737	676
05545300	1	Yes	Yes	1966	1850	--	887	1.58	0.14	0.0669	2100
05545300	1	Yes	Yes	1967	1690	--	810	1.7	0.141	0.0872	1920
05545300	1	Yes	Yes	1968	467	--	224	2.33	0.142	0.815	569
05545300	1	Yes	Yes	1969	1960	--	939	2.17	0.143	0.0574	2210
05545300	1	Yes	Yes	1970	500	--	240	1.26	0.145	0.789	604
05545300	1	Yes	Yes	1971	1140	--	546	0.712	0.148	0.27	1300
05545300	1	Yes	Yes	1972	1140	--	546	0.842	0.151	0.272	1300
05545300	1	Yes	Yes	1973	1470	--	704	1.88	0.154	0.143	1660
05545300	1	Yes	Yes	1974	1080	--	518	0.598	0.157	0.311	1230
05545300	1	Yes	Yes	1975	798	--	382	0.00873	0.16	0.529	920
05545300	1	Yes	Yes	1976	1140	--	546	0.838	0.163	0.279	1290
05545300	1	Yes	Yes	1977	258	--	124	0.88	0.166	0.948	319

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05545300	1	Yes	Yes	1978	722	--	346	2.48	0.169	0.612	828
05545300	1	Yes	Yes	1979	771	--	369	0.226	0.172	0.567	879
05545300	1	Yes	Yes	1980	380	--	182	0.198	0.175	0.891	450
05545300	1	Yes	Yes	1981	492	--	236	0.981	0.176	0.813	572
05545300	1	Yes	Yes	1982	1110	--	532	3.07	0.177	0.306	1240
05545750	1	Yes	Yes	1940	3150	--	401	1.02	0.0505	0.406	3780
05545750	1	Yes	Yes	1941	2130	--	271	0.00333	0.0524	0.673	2660
05545750	1	Yes	Yes	1942	1610	--	205	0.835	0.0543	0.803	2100
05545750	1	Yes	Yes	1943	5700	--	725	1.34	0.0561	0.0963	6440
05545750	1	Yes	Yes	1944	3100	--	394	1.15	0.058	0.423	3700
05545750	1	Yes	Yes	1945	2130	--	271	1.52	0.0599	0.678	2640
05545750	1	Yes	Yes	1946	4170	--	530	0.732	0.0617	0.237	4760
05545750	1	Yes	Yes	1947	2070	--	263	1.08	0.0636	0.697	2570
05545750	1	Yes	Yes	1948	5000	--	636	1.67	0.0654	0.152	5630
05545750	1	Yes	Yes	1949	2400	--	305	0.14	0.0673	0.616	2910
05545750	1	Yes	Yes	1950	2400	--	305	0.406	0.0692	0.617	2900
05545750	1	Yes	Yes	1951	3660	--	465	0.278	0.0735	0.325	4220
05545750	1	Yes	Yes	1952	4010	--	510	0.582	0.0778	0.27	4540
05545750	1	Yes	Yes	1953	1780	--	226	0.0754	0.0822	0.779	2210
05545750	1	Yes	Yes	1954	2050	--	261	1.85	0.0865	0.717	2480
05545750	1	Yes	Yes	1955	1810	--	230	1.13	0.0909	0.777	2220
05545750	1	Yes	Yes	1956	1680	--	214	0.661	0.0952	0.808	2070
05545750	1	Yes	Yes	1957	1350	--	172	1.45	0.0995	0.878	1710
05545750	1	Yes	Yes	1958	1010	--	128	0.0766	0.104	0.932	1340
05545750	1	Yes	Yes	1959	3010	--	383	0.00769	0.108	0.484	3420
05545750	1	Yes	Yes	1960	7520	--	956	0.974	0.113	0.0499	7970
05545750	1	Yes	Yes	1961	2220	--	282	0.345	0.116	0.694	2580
05545750	1	Yes	Yes	1962	4060	--	516	2.42E-05	0.119	0.288	4430
05545750	1	Yes	Yes	1963	1290	--	164	0.11	0.122	0.896	1600
05545750	1	Yes	Yes	1964	1260	--	160	0.756	0.125	0.902	1560
05545750	1	Yes	Yes	1965	2880	--	366	0.43	0.129	0.535	3220
05545750	1	Yes	Yes	1966	3310	--	421	0.602	0.132	0.434	3650
05545750	1	Yes	Yes	1967	2380	--	303	0.965	0.135	0.667	2690
05545750	1	Yes	Yes	1968	1990	--	253	0.461	0.138	0.763	2290
05545750	1	Yes	Yes	1969	2260	--	287	0.965	0.141	0.702	2550

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05545750	1	Yes	Yes	1970	1840	--	234	1.41	0.145	0.799	2120
05545750	1	Yes	Yes	1971	3010	9	383	0.105	0.15	0.52	3280
05545750	1	Yes	Yes	1972	3280	--	417	0.729	0.156	0.46	3530
05545750	1	Yes	Yes	1973	6530	--	830	2.27	0.161	0.0852	6700
05545750	1	Yes	Yes	1974	3950	--	502	0.279	0.167	0.337	4140
05545750	1	Yes	Yes	1975	2840	--	361	0.566	0.172	0.585	3030
05545750	1	Yes	Yes	1976	3700	--	471	1.31	0.178	0.39	3860
05545750	0	Yes	No	1977	1120	--	154	0.831	0.183	0.926	1390
05545750	2	Yes	Yes	1978	2340	--	346	1.11	0.189	0.626	2860
05545750	2	Yes	Yes	1979	5010	--	741	0.518	0.194	0.138	5830
05545750	2	Yes	Yes	1980	1650	--	244	1.04	0.2	0.812	2050
05545750	2	Yes	Yes	1981	2230	--	330	1.21	0.202	0.665	2700
05545750	2	Yes	Yes	1982	3510	--	519	1.5	0.205	0.342	4120
05545750	2	Yes	Yes	1983	4020	--	595	1.36	0.208	0.252	4650
05545750	2	Yes	Yes	1984	2400	--	355	0.206	0.211	0.626	2860
05545750	2	Yes	Yes	1985	3220	--	476	0.822	0.213	0.409	3770
05545750	2	Yes	Yes	1986	3600	--	532	0.234	0.216	0.332	4170
05545750	2	Yes	Yes	1987	3810	--	564	1.23	0.219	0.295	4380
05545750	2	Yes	Yes	1988	2390	--	354	0.149	0.222	0.637	2810
05545750	2	Yes	Yes	1989	1850	--	274	2	0.224	0.778	2210
05545750	2	Yes	Yes	1990	2770	--	410	0.385	0.227	0.535	3220
05545750	2	Yes	Yes	1991	2810	--	416	1.02	0.233	0.53	3240
05545750	2	Yes	Yes	1992	1900	--	281	0.437	0.24	0.776	2230
05545750	2	Yes	Yes	1993	5060	--	748	1.73	0.246	0.154	5610
05545750	2	Yes	Yes	1994	3600	2, 9	532	1.06	0.252	0.358	4030
05545750	2	Yes	Yes	1995	1860	--	275	1.29	0.258	0.796	2130
05545750	2	Yes	Yes	1996	2920	--	432	1.43	0.265	0.527	3250
05545750	2	Yes	Yes	1997	3260	--	482	1.49	0.271	0.447	3590
05545750	2	Yes	Yes	1998	1830	--	271	0.551	0.277	0.813	2050
05545750	2	Yes	Yes	1999	4670	--	691	1.38	0.283	0.204	5010
05545750	2	Yes	Yes	2000	3410	--	504	1.42	0.29	0.428	3680
05545750	2	Yes	Yes	2001	2990	--	442	2.17	0.297	0.537	3210
05545750	2	Yes	Yes	2002	2480	--	367	1.84	0.303	0.676	2650
05545750	2	Yes	Yes	2003	1420	--	210	0.769	0.31	0.906	1530
05545750	2	Yes	Yes	2004	4510	--	667	2.08	0.317	0.246	4700

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05545750	2	Yes	Yes	2005	2260	2, 9	334	0.542	0.324	0.747	2360
05545750	2	Yes	Yes	2006	2980	--	441	1.18	0.331	0.572	3080
05545750	2	Yes	Yes	2007	4880	--	722	1.14	0.338	0.209	4980
05545750	2	Yes	Yes	2008	5960	--	882	1.23	0.345	0.123	6040
05545750	2	Yes	Yes	2009	3600	--	532	1.41	0.352	0.44	3630
05547755	1	Yes	Yes	1990	153	--	337	0.548	0.0661	0.546	228
05547755	1	Yes	Yes	1991	168	--	370	0.898	0.0789	0.486	245
05547755	1	Yes	Yes	1992	89	E	196	0.592	0.0917	0.836	141
05547755	1	Yes	Yes	1993	312	--	686	0.812	0.105	0.135	415
05547755	1	Yes	Yes	1994	225	--	495	0.605	0.117	0.314	305
05547755	1	Yes	Yes	1995	142	--	312	1.01	0.13	0.646	200
05547755	1	Yes	Yes	1996	299	D	658	0.886	0.143	0.168	385
05547755	1	Yes	Yes	1997	232	--	510	2.08	0.156	0.319	303
05547755	1	Yes	Yes	1998	149	E	328	0.495	0.169	0.644	201
05547755	1	Yes	Yes	1999	187	--	411	1.02	0.181	0.492	244
05547755	1	Yes	Yes	2000	200	--	440	1.92	0.194	0.452	256
05547755	1	Yes	Yes	2001	265	--	583	0.745	0.217	0.271	323
05547755	1	Yes	Yes	2002	236	--	519	1.84	0.239	0.367	285
05547755	1	Yes	Yes	2003	86	C, E	189	0.676	0.261	0.912	111
05547755	1	Yes	Yes	2004	196	C	431	2.12	0.284	0.546	228
05547755	1	Yes	Yes	2005	102	C, E	224	0.638	0.306	0.889	121
05548150	1	Yes	Yes	1962	112	--	189	0.0032	0.0335	0.821	117
05548150	1	Yes	No	1963	60	4, B	101	0.0032	0.0338	0.944	63.3
05548150	1	Yes	No	1964	60	4, B	101	0.0032	0.0341	0.944	63.3
05548150	1	Yes	Yes	1965	120	--	203	0.0931	0.0344	0.797	125
05548150	1	Yes	Yes	1966	175	--	296	0.502	0.0346	0.612	181
05548150	1	Yes	Yes	1967	255	--	431	0.84	0.0349	0.349	263
05548150	1	Yes	No	1968	60	4, B	101	0.0032	0.0352	0.944	63.1
05548150	1	Yes	Yes	1969	187	--	316	0.951	0.0355	0.567	193
05548150	1	Yes	Yes	1970	182	--	308	1.02	0.0358	0.588	188
05548150	1	Yes	Yes	1971	315	--	532	0.499	0.0362	0.219	323
05548150	1	Yes	Yes	1972	196	--	331	0.831	0.0366	0.532	202
05548150	1	Yes	Yes	1973	240	--	406	0.746	0.037	0.388	247
05548150	1	Yes	Yes	1974	222	--	375	0.543	0.0374	0.442	229
05548150	1	Yes	Yes	1975	180	--	304	0.294	0.0378	0.598	186

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft³/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft³/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft³/s)
05548150	1	Yes	Yes	1976	202	--	341	0.885	0.0382	0.51	208
05548150	1	Yes	No	1977	60	4, B	101	0.0032	0.0386	0.945	62.8
05548150	1	Yes	Yes	1978	164	--	277	1.31	0.039	0.651	169
05548150	1	Yes	Yes	1979	200	--	338	1.21	0.0394	0.519	206
05548150	1	Yes	Yes	1980	135	--	228	0.631	0.0398	0.754	139
05548150	1	Yes	Yes	1981	110	--	186	0.759	0.0401	0.83	114
05548150	1	Yes	Yes	1982	260	--	439	0.324	0.0403	0.34	266
05548150	1	Yes	Yes	1983	328	--	554	1.45	0.0406	0.198	335
05548150	1	Yes	Yes	1984	220	--	372	1.13	0.0408	0.451	226
05548150	1	Yes	Yes	1985	105	--	177	0.512	0.0411	0.844	109
05548150	1	Yes	Yes	1986	375	--	634	0.176	0.0413	0.144	383
05548150	1	Yes	Yes	1987	110	--	186	0.822	0.0415	0.831	114
05548150	1	Yes	Yes	1988	130	--	220	0.598	0.0418	0.769	134
05548150	1	Yes	Yes	1989	136	--	230	1.84	0.042	0.752	140
05548150	1	Yes	Yes	1990	160	--	270	0.532	0.0423	0.667	164
05548150	1	Yes	Yes	1991	180	--	304	0.927	0.0427	0.602	185
05548150	1	Yes	Yes	1992	85	--	144	0.64	0.043	0.898	87.8
05548150	1	Yes	Yes	1993	350	--	592	1.27	0.0434	0.173	357
05548150	1	Yes	Yes	1994	350	2	592	0.723	0.0438	0.173	357
05548150	1	Yes	Yes	1995	85	--	144	1.01	0.0442	0.898	87.7
05548150	1	Yes	Yes	1996	204	--	345	0.907	0.0446	0.508	209
05548150	1	Yes	Yes	1997	295	--	499	1.85	0.045	0.265	301
05548150	1	Yes	Yes	1998	333	--	563	0.82	0.0454	0.194	339
05548150	1	Yes	Yes	1999	517	--	874	1.27	0.0458	0.0559	525
05548150	1	Yes	Yes	2000	563	--	952	4.51	0.0462	0.0438	571
05548150	1	Yes	Yes	2001	355	--	600	2.37	0.048	0.169	360
05548150	1	Yes	Yes	2002	237	--	401	1.63	0.0498	0.405	241
05548150	1	Yes	Yes	2003	39	--	66	1.82	0.0516	0.978	40
05548150	1	Yes	Yes	2004	238	--	402	2.53	0.0534	0.405	241
05548150	1	Yes	Yes	2005	302	--	510	0.68	0.0552	0.256	305
05548150	1	Yes	Yes	2006	92	--	155	1.52	0.057	0.886	93
05548150	1	Yes	Yes	2007	285	--	482	2.12	0.0588	0.294	287
05548150	1	Yes	Yes	2008	250	--	423	0.51	0.0605	0.378	251
05548150	1	Yes	Yes	2009	314	--	531	0.622	0.0623	0.236	315
05548280	1	Yes	No	1966	1810	7	587	0.513	0.084	0.192	2120

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05548280	1	Yes	Yes	1967	2120	--	687	1.52	0.0853	0.127	2470
05548280	1	Yes	Yes	1968	267	E	87	0.679	0.0865	0.964	366
05548280	1	Yes	Yes	1969	931	--	302	0.981	0.0878	0.636	1130
05548280	1	Yes	Yes	1970	799	--	259	0.981	0.0891	0.722	983
05548280	1	Yes	Yes	1971	2430	D	788	0.496	0.0914	0.0827	2810
05548280	1	Yes	Yes	1972	1360	D	441	0.793	0.0937	0.373	1610
05548280	1	Yes	Yes	1973	1610	--	522	0.742	0.0961	0.267	1880
05548280	1	Yes	Yes	1974	1990	--	645	1.02	0.0984	0.158	2290
05548280	1	Yes	Yes	1975	1040	--	337	0.0916	0.101	0.575	1240
05548280	1	Yes	Yes	1976	2120	--	687	1.29	0.103	0.134	2430
05548280	1	Yes	Yes	1977	362	D	117	0.833	0.105	0.942	469
05548280	1	Yes	Yes	1978	1020	--	331	1.36	0.108	0.596	1210
05548280	1	Yes	Yes	1979	1820	--	590	0.291	0.11	0.2	2080
05548280	1	Yes	Yes	1980	648	--	210	0.763	0.112	0.823	788
05548280	1	Yes	Yes	1981	578	--	187	0.759	0.114	0.859	708
05548280	1	Yes	Yes	1982	1800	2	584	0.33	0.115	0.209	2050
05548280	1	Yes	Yes	1983	1820	--	590	1.51	0.117	0.204	2070
05548280	1	Yes	Yes	1984	1280	E	415	0.576	0.119	0.434	1480
05548280	1	Yes	Yes	1985	962	--	312	0.505	0.12	0.639	1130
05548280	1	Yes	Yes	1986	2910	--	944	1.35	0.122	0.0535	3260
05548280	1	Yes	Yes	1988	1270	--	412	0.207	0.125	0.444	1460
05548280	1	Yes	Yes	1989	603	--	196	1.88	0.126	0.852	724
05548280	1	Yes	Yes	1990	866	--	281	0.422	0.128	0.705	1010
05548280	1	Yes	Yes	1991	1180	--	383	0.95	0.13	0.503	1350
05548280	1	Yes	Yes	1992	571	E	185	0.686	0.133	0.872	683
05548280	1	Yes	Yes	1993	2230	--	723	1.48	0.135	0.125	2480
05548280	1	Yes	Yes	1994	2830	--	918	0.835	0.138	0.0607	3130
05548280	1	Yes	Yes	1995	715	E	232	1.14	0.141	0.801	833
05548280	1	Yes	Yes	1996	1200	--	389	1.1	0.143	0.501	1360
05548280	1	Yes	Yes	1997	1770	--	574	1.85	0.146	0.237	1960
05548280	1	Yes	Yes	1998	758	--	246	1.13	0.148	0.781	872
05548280	1	Yes	Yes	1999	2870	--	931	1.31	0.151	0.0601	3140
05548280	1	Yes	Yes	2000	2860	--	927	2.63	0.154	0.0611	3120
05548280	1	Yes	Yes	2001	1200	--	389	0.716	0.164	0.519	1330
05548280	1	Yes	Yes	2002	893	--	290	1.69	0.174	0.72	988

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05548280	1	Yes	Yes	2003	230	E	75	0.759	0.184	0.984	266
05548280	1	Yes	Yes	2004	1270	--	412	2.03	0.194	0.501	1360
05548280	1	Yes	Yes	2005	868	--	281	0.718	0.203	0.755	926
05548280	1	Yes	Yes	2006	537	--	174	1.55	0.213	0.913	573
05548280	1	Yes	Yes	2007	1740	--	564	1.89	0.223	0.297	1790
05548280	1	Yes	Yes	2008	1590	--	516	2.12	0.233	0.367	1620
05548280	1	Yes	Yes	2009	1410	--	457	0.701	0.243	0.465	1430
05549000	1	Yes	Yes	1949	246	--	668	0.314	0.000715	0.107	386
05549000	1	Yes	Yes	1950	190	--	516	1.41	0.00074	0.218	304
05549000	1	Yes	Yes	1951	118	E	320	2.08	0.00106	0.527	205
05549000	1	Yes	Yes	1952	186	--	505	0.502	0.00138	0.231	298
05549000	1	Yes	Yes	1953	52	E	141	0.651	0.0017	0.888	108
05549000	1	Yes	Yes	1954	167	E	454	1.42	0.00202	0.297	273
05549000	1	Yes	Yes	1955	187	--	508	0.323	0.00234	0.228	299
05549000	1	Yes	Yes	1956	59	E	160	0.414	0.00266	0.858	118
05549000	1	Yes	Yes	1957	90	E	244	0.778	0.00298	0.696	164
05549000	1	Yes	Yes	1958	34	E	92	0.756	0.0033	0.948	78.8
05549000	1	Yes	Yes	1959	137	E	372	0.433	0.00363	0.422	233
05549000	1	Yes	Yes	1960	149	--	405	0.544	0.00395	0.368	249
05549000	1	Yes	Yes	1961	64	E	174	0.979	0.00588	0.836	125
05549000	1	Yes	Yes	1962	88	E	239	0.274	0.00781	0.711	160
05549000	1	Yes	Yes	1963	228	3, E	619	1.28	0.00974	0.141	357
05549000	1	Yes	Yes	1964	81	E	220	1.56	0.0117	0.754	150
05549000	0	Yes	No	1965	175	2	465	0.119	0.0136	0.289	276
05549000	2	Yes	Yes	1966	178	D	462	0.51	0.0155	0.293	274
05549000	2	Yes	Yes	1967	112	E	291	1.3	0.0175	0.611	186
05549000	2	Yes	Yes	1968	45	E	117	1.29	0.0194	0.926	92.1
05549000	2	Yes	Yes	1969	80	2	208	1.36	0.0213	0.781	141
05549000	2	Yes	Yes	1970	276	--	717	1.56	0.0232	0.0916	404
05549000	2	Yes	Yes	1971	220	E	571	0.429	0.0272	0.181	325
05549000	2	Yes	Yes	1972	223	--	579	1.04	0.0311	0.177	328
05549000	2	Yes	Yes	1973	162	--	421	1.56	0.035	0.364	251
05549000	2	Yes	Yes	1974	252	--	654	1.14	0.0389	0.13	366
05549000	2	Yes	Yes	1975	106	--	275	0.848	0.0428	0.658	173
05549000	2	Yes	Yes	1976	258	--	670	1.46	0.0468	0.123	372

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05549000	2	Yes	Yes	1977	42	E	109	0.866	0.0507	0.939	83.8
05549000	2	Yes	Yes	1978	209	--	543	1.52	0.0546	0.218	303
05549000	2	Yes	Yes	1979	145	--	377	0.295	0.0585	0.456	223
05549000	2	Yes	Yes	1980	61	E	158	0.884	0.0625	0.884	110
05549000	2	Yes	Yes	1981	91	E	236	1.46	0.0663	0.754	150
05549000	2	Yes	Yes	1982	196	--	509	0.291	0.0701	0.267	284
05549000	2	Yes	Yes	1983	190	--	493	1.61	0.0739	0.289	276
05549000	2	Yes	Yes	1984	128	--	332	0.626	0.0778	0.566	196
05549000	2	Yes	Yes	1985	116	--	301	0.531	0.0816	0.633	179
05549000	2	Yes	Yes	1986	345	--	896	1.47	0.0854	0.0572	472
05549000	2	Yes	Yes	1987	113	--	293	0.679	0.0893	0.653	174
05549000	2	Yes	Yes	1988	115	--	299	0.913	0.0931	0.646	176
05549000	2	Yes	No	1989	95	4, B	247	0.119	0.0969	0.752	150
05549000	2	Yes	Yes	1990	56	--	145	0.432	0.101	0.912	98.1
05549000	2	Yes	Yes	1991	162	--	421	0.881	0.113	0.42	234
05549000	2	Yes	Yes	1992	50	--	130	0.967	0.125	0.934	86.9
05549700	1	Yes	No	1960	378	7	1745	0.513	0.0211	0.00767	513
05549700	1	Yes	Yes	1962	172	--	794	0.262	0.0235	0.0687	251
05549700	1	Yes	Yes	1963	20	--	92	1.27	0.0247	0.952	43.4
05549700	1	Yes	Yes	1964	24	--	111	0.914	0.0258	0.933	49.6
05549700	1	Yes	Yes	1965	114	--	526	0.0625	0.027	0.221	171
05549700	1	Yes	Yes	1966	111	--	512	0.481	0.0282	0.238	167
05549700	1	Yes	Yes	1967	45	--	208	1.29	0.0293	0.785	79.3
05549700	1	Yes	Yes	1968	47	--	217	1.24	0.0305	0.769	82
05549700	1	Yes	Yes	1969	98	--	452	1.34	0.0317	0.317	150
05549700	1	Yes	Yes	1970	37	--	171	1.52	0.0329	0.852	67.8
05549700	1	Yes	Yes	1971	263	--	1214	0.423	0.0349	0.0191	361
05549700	1	Yes	Yes	1972	75	--	346	0.999	0.037	0.499	120
05549700	1	Yes	Yes	1973	82	--	379	1.46	0.0391	0.437	129
05549700	1	Yes	Yes	1974	57	--	263	1.11	0.0412	0.682	94.4
05549700	1	Yes	Yes	1975	33	--	152	0.814	0.0432	0.886	61.5
05549700	1	Yes	Yes	1976	220	--	1016	1.58	0.0453	0.0358	307
05549850	1	Yes	No	1960	492	7	995	0.481	0.239	0.0614	799
05549850	1	Yes	Yes	1962	239	--	483	0.266	0.259	0.436	431
05549850	1	Yes	Yes	1963	170	--	344	0.288	0.27	0.691	326

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05549850	1	Yes	Yes	1964	175	--	354	3.17	0.28	0.681	330
05549850	1	Yes	Yes	1965	188	--	380	0.0205	0.29	0.643	345
05549850	1	Yes	Yes	1966	260	--	526	0.532	0.3	0.405	445
05549850	1	Yes	Yes	1967	233	--	471	1.24	0.311	0.499	403
05549850	1	Yes	Yes	1968	224	--	453	3.2	0.321	0.54	385
05549850	1	Yes	Yes	1969	286	--	578	2.09	0.331	0.358	467
05549850	1	Yes	Yes	1970	287	--	580	2.43	0.341	0.364	464
05549850	1	Yes	Yes	1971	356	--	720	0.395	0.353	0.22	542
05549850	1	Yes	Yes	1972	238	--	481	0.704	0.365	0.532	389
05549850	1	Yes	Yes	1973	274	--	554	1.81	0.377	0.43	434
05549850	1	Yes	Yes	1974	233	--	471	1.06	0.389	0.572	373
05549850	1	Yes	Yes	1975	221	--	447	1.51	0.401	0.622	353
05549850	1	Yes	Yes	1976	268	--	542	1.68	0.413	0.479	412
05549850	1	Yes	Yes	1990	419	--	847	2.21	0.582	0.257	517
05549850	1	Yes	Yes	1991	305	--	617	0.295	0.588	0.537	387
05549850	1	Yes	Yes	1992	132	E	267	0.447	0.594	0.947	190
05549850	1	Yes	Yes	1993	305	--	617	0.847	0.599	0.548	383
05549850	1	Yes	Yes	1994	552	E	1116	0.608	0.605	0.124	658
05549850	1	Yes	Yes	1995	451	--	912	1.86	0.611	0.226	539
05549850	1	Yes	Yes	1996	690	--	1396	1.98	0.616	0.0571	807
05549900	1	Yes	Yes	1956	4	--	277	0.364	0.77	0.977	6.34
05549900	1	Yes	Yes	1957	31	--	2148	2.16	0.815	0.0225	35.8
05549900	1	Yes	No	1958	3	4, B	208	0.00585	0.86	1	4.11
05549900	1	Yes	Yes	1959	22	--	1525	0.757	0.905	0.107	24
05549900	1	Yes	Yes	1960	13	2	901	0.543	0.95	0.567	13.8
05549900	1	Yes	Yes	1961	8	2	554	0.821	0.95	0.926	8.69
05549900	1	Yes	Yes	1962	5	2	346	0.351	0.95	0.986	5.55
05549900	1	Yes	No	1963	3	4, B	208	0.00585	0.95	1	3.36
05549900	1	Yes	Yes	1964	23	--	1594	1.65	0.95	0.105	24.1
05549900	1	Yes	Yes	1965	22	--	1525	0.843	0.95	0.127	23
05549900	1	Yes	Yes	1966	10	2	693	0.358	0.95	0.803	10.7
05549900	1	Yes	Yes	1967	6	--	416	0.00585	0.95	0.971	6.61
05549900	1	Yes	Yes	1968	25	--	1732	1.22	0.95	0.0733	26.1
05549900	1	Yes	Yes	1969	23	--	1594	0.793	0.95	0.105	24.1
05549900	1	Yes	Yes	1970	45	--	3118	0.762	0.95	0.011	46.7

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05549900	1	Yes	Yes	1971	26	--	1802	0.905	0.95	0.063	27.2
05549900	1	Yes	Yes	1972	59	--	4089	1.06	0.95	0.0027	61
05549900	1	Yes	Yes	1973	5	--	346	0.716	0.95	0.986	5.55
05549900	1	Yes	No	1974	3	4, B	208	0.00585	0.95	1	3.36
05549900	1	Yes	Yes	1975	9	--	624	0.806	0.95	0.869	9.69
05549900	1	Yes	Yes	1977	3	--	208	0.21	0.95	1	3.36
05549900	1	Yes	Yes	1978	28	--	1940	2.04	0.95	0.0467	29.2
05549900	1	Yes	Yes	1979	3.4	--	236	1.16	0.95	1	3.81
05550300	1	Yes	Yes	1962	303	--	285	0.264	0.0684	0.656	424
05550300	1	Yes	Yes	1963	74	--	70	1.42	0.0716	0.977	129
05550300	1	Yes	Yes	1965	368	--	346	0.711	0.078	0.535	500
05550300	1	Yes	Yes	1966	392	--	368	0.938	0.0812	0.49	528
05550300	1	Yes	Yes	1967	333	--	313	2.94	0.0844	0.613	454
05550300	1	Yes	Yes	1968	251	--	236	3.33	0.0876	0.765	353
05550300	1	Yes	Yes	1969	318	--	299	0.109	0.0908	0.644	432
05550300	1	Yes	Yes	1970	306	--	287	2.15	0.094	0.668	417
05550300	1	Yes	Yes	1971	358	--	336	0.346	0.098	0.574	478
05550300	1	Yes	Yes	1972	454	--	427	1.39	0.102	0.401	592
05550300	1	Yes	Yes	1973	488	--	458	2.14	0.106	0.357	629
05550300	1	Yes	Yes	1974	311	--	292	1.13	0.11	0.67	415
05550300	1	Yes	Yes	1975	261	--	245	1.52	0.114	0.764	355
05550300	1	Yes	Yes	1976	324	--	304	1.64	0.118	0.652	427
05550300	1	Yes	Yes	1978	398	--	374	2.39	0.126	0.517	511
05550300	1	Yes	Yes	1979	432	--	406	1.6	0.13	0.46	550
05550300	1	Yes	Yes	1980	208	--	195	0.374	0.134	0.855	283
05550300	1	Yes	Yes	1998	221	C, E	208	0.627	0.204	0.869	273
05550300	1	Yes	Yes	1999	953	C	895	1.09	0.208	0.0759	1080
05550300	1	Yes	Yes	2000	735	C	691	1.02	0.211	0.174	834
05550300	1	Yes	Yes	2001	602	C	566	0.67	0.225	0.296	681
05550300	1	Yes	Yes	2002	1650	C	1550	1.99	0.239	0.0163	1790
05550300	1	Yes	Yes	2003	778	C	731	0.917	0.252	0.166	850
05550300	1	Yes	Yes	2004	795	C	747	1.5	0.266	0.163	858
05550300	1	Yes	Yes	2005	432	C, E	406	0.768	0.28	0.591	468
05550300	1	Yes	Yes	2006	595	C	559	0.299	0.293	0.354	630
05550300	1	Yes	Yes	2007	1430	C	1344	2.2	0.307	0.0282	1480

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05550300	1	Yes	Yes	2008	1250	C	1174	3.78	0.321	0.0454	1280
05550300	1	Yes	Yes	2009	886	C	832	0.699	0.335	0.143	897
05550430	1	Yes	Yes	1961	72	--	475	1.27	0.178	0.383	99.8
05550430	1	Yes	Yes	1962	88	--	581	0.269	0.193	0.259	117
05550430	1	Yes	Yes	1963	41	--	270	2.01	0.208	0.774	59
05550430	1	Yes	Yes	1964	22	--	145	3.86	0.224	0.941	34.6
05550430	1	Yes	Yes	1965	61	--	402	0.579	0.239	0.561	80.8
05550430	1	Yes	Yes	1966	92	--	607	0.559	0.254	0.269	115
05550430	1	Yes	Yes	1967	275	--	1814	1.23	0.27	0.0117	321
05550430	1	Yes	Yes	1968	71	2	468	4.14	0.285	0.482	88.6
05550430	1	Yes	Yes	1969	88	--	581	2.46	0.3	0.332	106
05550430	1	Yes	Yes	1970	80	--	528	2.87	0.316	0.415	96
05550430	1	Yes	Yes	1971	76	--	501	0.24	0.331	0.468	90.1
05550430	1	Yes	Yes	1972	96	--	633	1.75	0.346	0.301	110
05550430	1	Yes	Yes	1973	164	--	1082	2.2	0.361	0.0651	183
05550430	1	Yes	Yes	1974	106	--	699	1.13	0.376	0.252	118
05550430	1	Yes	Yes	1975	86	--	567	1.85	0.391	0.423	95.2
05550430	1	Yes	Yes	1976	114	--	752	1.89	0.406	0.224	123
05550430	1	Yes	Yes	1977	63	--	416	1.6	0.421	0.69	68.1
05550450	1	No	No	1961	200	--	411	1.28	0.133	0.452	292
05550450	1	No	No	1962	275	--	565	0.27	0.146	0.247	373
05550450	1	No	No	1963	118	--	243	1.74	0.159	0.792	185
05550450	1	No	No	1964	146	--	300	3.15	0.172	0.7	216
05550450	1	No	No	1965	200	--	411	0.579	0.185	0.495	277
05550450	1	No	No	1966	263	--	541	0.533	0.198	0.309	345
05550450	1	No	No	1967	410	--	843	1.21	0.211	0.0933	510
05550450	1	No	No	1968	217	2	446	3.27	0.224	0.467	287
05550450	0	No	No	1969	137	--	297	2.08	0.237	0.75	200
05550450	2	No	No	1970	190	--	434	2.4	0.25	0.51	273
05550450	2	No	No	1971	179	--	409	0.235	0.27	0.576	253
05550450	2	No	No	1972	290	--	662	0.662	0.289	0.234	380
05550450	2	No	No	1973	374	--	854	1.83	0.309	0.122	475
05550450	2	No	No	1974	254	--	580	0.957	0.329	0.354	327
05550450	2	No	No	1975	128	--	292	0.643	0.348	0.822	174
05550450	2	No	No	1976	297	--	678	1.64	0.368	0.268	362

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05550450	2	No	No	1977	111	--	254	1.35	0.388	0.89	147
05550470	1	Yes	Yes	1961	97	--	401	1.3	0.389	0.688	151
05550470	1	Yes	Yes	1962	75	--	310	0.274	0.433	0.845	123
05550470	1	Yes	Yes	1963	72	--	297	1.21	0.476	0.883	115
05550470	1	Yes	Yes	1964	167	--	690	1.76	0.519	0.375	206
05550470	1	Yes	Yes	1965	128	--	529	0.577	0.562	0.639	159
05550470	1	Yes	Yes	1966	164	--	677	1.29	0.605	0.473	188
05550470	1	Yes	Yes	1967	565	--	2334	1.19	0.648	0.0131	549
05550470	1	Yes	Yes	1968	144	--	595	1.57	0.691	0.671	154
05550470	1	Yes	Yes	1969	173	--	715	0.808	0.735	0.554	173
05550470	1	Yes	Yes	1970	226	--	934	1.5	0.778	0.344	211
05550470	1	Yes	Yes	1971	201	--	830	0.226	0.791	0.477	187
05550470	1	Yes	Yes	1972	255	--	1053	1.36	0.805	0.254	229
05550470	0	Yes	No	1973	248	--	1115	1.35	0.818	0.224	239
05550470	0	Yes	No	1974	156	--	764	0.624	0.832	0.594	166
05550470	2	Yes	Yes	1975	158	--	843	0.824	0.845	0.52	179
05550470	2	Yes	Yes	1976	116	--	619	1.3	0.859	0.796	133
05550470	2	Yes	Yes	1977	102	--	544	0.868	0.872	0.881	116
05550470	2	Yes	Yes	1978	168	--	896	1.39	0.886	0.505	182
05550470	2	Yes	Yes	1979	346	--	1845	0.316	0.899	0.0479	363
05550500	1	Yes	Yes	1952	303	--	366	0.458	0.0753	0.489	529
05550500	1	Yes	Yes	1953	282	E	341	1.08	0.0838	0.551	494
05550500	1	Yes	Yes	1954	310	--	375	1.22	0.0922	0.486	531
05550500	1	Yes	Yes	1955	291	--	352	2.97	0.101	0.542	499
05550500	1	Yes	Yes	1956	175	--	212	0.728	0.109	0.819	333
05550500	1	Yes	Yes	1957	286	--	346	2.1	0.117	0.57	483
05550500	1	Yes	Yes	1958	210	--	254	0.223	0.126	0.755	376
05550500	1	Yes	Yes	1959	258	--	312	0.402	0.134	0.649	437
05550500	1	Yes	Yes	1960	340	--	411	0.466	0.143	0.46	548
05550500	1	Yes	Yes	1961	327	--	396	1.3	0.162	0.505	520
05550500	1	Yes	Yes	1962	512	--	619	0.272	0.18	0.211	741
05550500	1	Yes	Yes	1963	171	E	207	1.46	0.199	0.868	297
05550500	1	Yes	Yes	1964	263	--	318	2.43	0.218	0.699	409
05550500	1	Yes	Yes	1965	350	2	423	0.0915	0.237	0.518	512
05550500	1	Yes	Yes	1966	476	--	576	0.509	0.255	0.305	656

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05550500	1	Yes	Yes	1967	797	--	964	1.2	0.274	0.0727	1040
05550500	1	Yes	Yes	1968	298	--	360	2.4	0.293	0.679	420
05550500	1	Yes	Yes	1969	247	--	299	1.71	0.312	0.791	351
05550500	1	Yes	Yes	1970	560	--	677	1.94	0.33	0.244	708
05550500	1	Yes	Yes	1971	296	E	358	0.374	0.344	0.722	396
05550500	1	Yes	Yes	1972	294	--	356	0.653	0.358	0.736	387
05550500	1	Yes	Yes	1973	896	--	1084	1.46	0.372	0.0666	1070
05550500	1	Yes	Yes	1974	552	--	668	1.05	0.386	0.292	666
05550500	1	Yes	Yes	1975	488	D	590	1.12	0.4	0.399	589
05550500	1	Yes	Yes	1976	490	D	593	1.39	0.414	0.408	583
05550500	1	Yes	Yes	1977	117	E	142	1.1	0.428	0.976	157
05550500	1	Yes	Yes	1978	571	E	691	1.65	0.442	0.308	653
05550500	1	Yes	Yes	1979	765	--	925	0.292	0.456	0.146	853
05550500	1	Yes	Yes	1980	370	2, E	448	1.02	0.47	0.68	421
05550500	1	Yes	Yes	1981	304	E	368	0.566	0.477	0.798	347
05550500	1	Yes	Yes	1982	537	E	650	0.49	0.485	0.396	591
05550500	1	Yes	Yes	1983	761	--	920	1.84	0.493	0.164	820
05550500	1	Yes	Yes	1984	394	--	477	0.723	0.501	0.662	431
05550500	1	Yes	Yes	1985	633	--	766	1.48	0.508	0.279	675
05550500	1	Yes	Yes	1986	719	--	870	0.815	0.516	0.199	759
05550500	1	Yes	Yes	1987	625	--	756	1.78	0.524	0.3	657
05550500	1	Yes	Yes	1988	441	--	533	1	0.532	0.605	463
05550500	1	Yes	Yes	1989	700	--	847	1.91	0.54	0.23	723
05550500	1	Yes	Yes	1990	669	--	809	1.76	0.547	0.266	687
05550500	1	Yes	Yes	1991	399	--	483	1.64	0.55	0.698	411
05550500	1	Yes	Yes	1992	212	E	256	0.381	0.553	0.942	220
05550500	1	Yes	Yes	1993	691	C	836	0.906	0.555	0.248	704
05550500	1	Yes	Yes	1994	779	C	942	0.616	0.558	0.181	791
05550500	1	Yes	Yes	1995	580	C	702	2.36	0.561	0.4	588
05550500	1	Yes	Yes	1996	437	C	529	1.76	0.564	0.641	443
05550500	1	Yes	Yes	1997	1180	C	1427	2.76	0.566	0.046	1190
05550500	1	Yes	Yes	1998	400	C, E	484	1.55	0.569	0.712	403
05550500	1	Yes	Yes	1999	882	C	1067	1.86	0.572	0.131	884
05550500	1	Yes	Yes	2000	555	C, E	671	1.36	0.574	0.451	555
05550500	1	Yes	Yes	2001	600	C	726	0.734	0.574	0.382	600

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05550500	1	Yes	Yes	2002	637	C	770	3.95	0.574	0.328	637
05550500	1	Yes	Yes	2003	552	C	668	0.955	0.574	0.455	552
05550500	1	Yes	Yes	2004	367	C	444	1.46	0.574	0.768	367
05550500	1	Yes	Yes	2005	407	C, E	492	0.823	0.574	0.705	407
05550500	1	Yes	Yes	2006	461	C	558	1.32	0.574	0.608	461
05550500	1	Yes	Yes	2007	1120	C	1355	2.89	0.574	0.0559	1120
05550500	1	Yes	Yes	2008	1560	C	1887	3.7	0.574	0.0187	1560
05550500	1	Yes	Yes	2009	1170	C	1415	0.935	0.574	0.048	1170
05551030	1	Yes	Yes	1962	125	--	199	0.282	0.0701	0.822	245
05551030	1	Yes	Yes	1963	73	2	116	1.22	0.0765	0.937	166
05551030	1	Yes	Yes	1964	56	2	89	0.675	0.083	0.961	136
05551030	1	Yes	Yes	1965	105	2	167	0.132	0.0894	0.881	212
05551030	1	Yes	Yes	1966	201	--	320	0.472	0.0959	0.609	344
05551030	1	Yes	Yes	1967	687	--	1093	1.18	0.102	0.0326	989
05551030	1	Yes	Yes	1968	226	--	360	1.53	0.109	0.532	375
05551030	1	Yes	Yes	1969	158	2	251	1.31	0.115	0.754	280
05551030	1	Yes	Yes	1970	292	--	465	1.45	0.122	0.359	460
05551030	1	Yes	Yes	1971	408	--	649	0.362	0.133	0.169	602
05551030	1	Yes	Yes	1972	671	--	1068	0.626	0.144	0.0394	941
05551030	1	Yes	Yes	1973	221	--	352	1.36	0.155	0.591	351
05551030	1	Yes	Yes	1974	408	--	649	1.17	0.166	0.182	585
05551030	1	Yes	Yes	1975	325	--	517	0.0347	0.177	0.325	478
05551030	1	Yes	Yes	1976	275	--	438	1.13	0.188	0.452	412
05551030	1	Yes	Yes	1978	156	--	248	1.37	0.211	0.811	250
05551030	1	Yes	Yes	1979	352	--	560	0.76	0.222	0.301	492
05551030	0	Yes	No	2003	100	C	NA	1.74	0.493	NA	NA
05551030	0	Yes	No	2004	111	C	NA	1.28	0.502	NA	NA
05551030	0	Yes	No	2005	62	C	NA	0.583	0.511	NA	NA
05551030	0	Yes	No	2006	77	C	NA	0.717	0.52	NA	NA
05551050	1	Yes	No	1957	890	7	3640	2.27	0.0815	0	1310
05551050	1	Yes	Yes	1962	48	--	196	0.289	0.107	0.842	105
05551050	1	Yes	Yes	1963	33	--	135	1.22	0.112	0.928	82.5
05551050	1	Yes	Yes	1964	25	--	102	0.683	0.118	0.956	67.7
05551050	1	Yes	Yes	1965	43	2	176	0.134	0.124	0.881	96.5
05551050	1	Yes	Yes	1966	115	--	470	1.37	0.129	0.356	200

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05551050	1	Yes	Yes	1967	617	--	2523	1.17	0.135	0	876
05551050	1	Yes	Yes	1968	85	--	348	1.49	0.141	0.587	155
05551050	1	Yes	Yes	1969	69	--	282	1.27	0.146	0.715	132
05551050	1	Yes	Yes	1970	214	--	875	1.42	0.152	0.071	334
05551050	1	Yes	Yes	1971	122	--	499	0.357	0.155	0.334	205
05551050	1	Yes	Yes	1972	97	--	397	0.562	0.158	0.499	170
05551050	1	Yes	Yes	1973	106	--	434	1.37	0.161	0.436	183
05551050	1	Yes	Yes	1974	102	--	417	1.2	0.164	0.467	177
05551050	1	Yes	Yes	1975	88	--	360	0.0356	0.167	0.583	156
05551050	1	Yes	Yes	1976	142	--	581	1.1	0.169	0.244	228
05551050	1	Yes	Yes	1977	35	--	143	0.854	0.172	0.932	80.1
05551050	1	Yes	Yes	1978	78	--	319	1.36	0.175	0.665	140
05551050	1	Yes	Yes	1979	194	--	793	0.332	0.178	0.103	300
05551060	1	No	No	1957	204	7	626	2.27	0.108	0.174	380
05551060	1	No	No	1962	84	--	258	0.289	0.138	0.756	194
05551060	1	No	No	1963	54	--	166	1.22	0.145	0.901	147
05551060	1	No	No	1964	42	--	129	0.683	0.151	0.94	126
05551060	1	No	No	1965	75	--	230	0.134	0.158	0.812	177
05551060	1	No	No	1966	210	--	645	1.37	0.165	0.185	372
05551060	1	No	No	1967	954	--	2928	1.17	0.172	0	1430
05551060	1	No	No	1968	150	--	460	1.49	0.179	0.406	288
05551060	1	No	No	1969	124	--	381	1.27	0.186	0.556	245
05551060	1	No	No	1970	264	--	810	1.42	0.193	0.0996	449
05551060	1	No	No	1971	157	--	482	0.357	0.2	0.39	293
05551060	1	No	No	1972	152	--	467	0.562	0.208	0.42	284
05551060	1	No	No	1973	134	--	411	1.37	0.216	0.522	254
05551060	1	No	No	1974	98	--	301	1.2	0.223	0.734	200
05551060	1	No	No	1975	152	--	467	0.0356	0.231	0.439	278
05551060	1	No	No	1976	142	--	436	1.1	0.239	0.497	261
05551060	1	No	No	1977	47	--	144	0.633	0.247	0.947	122
05551060	1	No	No	1978	101	--	310	1.36	0.254	0.739	199
05551060	1	No	No	1979	149	--	457	0.712	0.262	0.48	266
05551200	1	Yes	Yes	1961	425	--	218	1.53	0.0421	0.772	929
05551200	1	Yes	Yes	1962	855	--	439	0.277	0.0476	0.345	1570
05551200	1	Yes	Yes	1963	360	E	185	1.17	0.0531	0.837	819

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05551200	1	Yes	Yes	1964	195	E	100	0.746	0.0586	0.95	549
05551200	1	Yes	Yes	1965	531	--	273	0.114	0.0641	0.677	1070
05551200	1	Yes	Yes	1966	1700	D	874	0.742	0.0696	0.0592	2770
05551200	1	Yes	Yes	1967	852	--	438	1.55	0.0751	0.365	1540
05551200	1	Yes	Yes	1968	1590	--	817	2.48	0.0806	0.0721	2590
05551200	1	Yes	Yes	1969	810	--	416	0.108	0.0861	0.406	1460
05551200	1	Yes	Yes	1970	1700	--	874	1.85	0.0916	0.0624	2720
05551200	1	Yes	Yes	1971	1970	D	1013	0.32	0.104	0.0419	3060
05551200	1	Yes	Yes	1972	950	--	488	1.62	0.116	0.322	1610
05551200	1	Yes	Yes	1973	1850	--	951	1.66	0.129	0.0532	2850
05551200	1	Yes	Yes	1974	968	--	498	0.881	0.141	0.327	1610
05551200	1	Yes	Yes	1975	496	--	255	1.17	0.154	0.769	934
05551200	1	Yes	Yes	1976	864	--	444	1.42	0.166	0.422	1440
05551200	1	Yes	Yes	1977	156	E	80	1.21	0.179	0.981	396
05551200	1	Yes	Yes	1978	1270	--	653	1.94	0.191	0.19	1920
05551200	1	Yes	Yes	1979	1380	D	709	0.307	0.203	0.16	2050
05551200	1	Yes	Yes	1980	646	--	332	0.367	0.216	0.671	1080
05551200	1	Yes	Yes	1981	967	--	497	2.01	0.226	0.387	1500
05551200	1	Yes	Yes	1982	925	--	475	0.341	0.235	0.428	1430
05551200	1	Yes	Yes	1983	1570	--	807	1.41	0.245	0.121	2240
05551200	1	Yes	Yes	1984	1090	--	560	0.618	0.255	0.324	1610
05551200	1	Yes	Yes	1985	1040	--	535	1.27	0.265	0.365	1540
05551200	1	Yes	Yes	1986	893	--	459	0.995	0.275	0.488	1340
05551200	1	Yes	Yes	1987	1180	--	607	2.13	0.284	0.289	1670
05551200	1	Yes	Yes	1988	922	E	474	0.523	0.294	0.481	1350
05551200	1	Yes	Yes	1989	407	E	209	1.12	0.304	0.905	686
05551200	1	Yes	Yes	1990	438	E	225	1.22	0.314	0.891	717
05551200	1	Yes	Yes	1991	759	--	390	0.854	0.325	0.653	1100
05551200	1	Yes	Yes	1992	193	E	99	0.521	0.336	0.985	359
05551200	1	Yes	Yes	1993	1320	--	678	0.951	0.348	0.254	1740
05551200	1	Yes	Yes	1994	1670	--	858	0.629	0.359	0.14	2150
05551200	1	Yes	Yes	1995	993	--	510	1.04	0.371	0.49	1330
05551200	1	Yes	Yes	1996	1990	--	1023	2.61	0.382	0.0817	2490
05551200	1	Yes	Yes	1997	2580	--	1326	2.17	0.393	0.0376	3150
05551200	1	Yes	Yes	1998	556	E	286	1.13	0.405	0.86	778

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05551200	1	Yes	Yes	1999	1340	--	689	0.965	0.416	0.29	1670
05551200	1	Yes	Yes	2000	345	C, E	177	0.991	0.427	0.958	506
05551200	1	Yes	Yes	2001	781	C	401	0.665	0.448	0.732	991
05551200	1	Yes	Yes	2002	1430	C	735	1.43	0.469	0.281	1690
05551200	1	Yes	Yes	2003	807	C, E	415	1.36	0.49	0.745	973
05551200	1	Yes	Yes	2004	1160	C	596	1.68	0.51	0.491	1330
05551200	1	Yes	Yes	2005	541	C	278	0.769	0.531	0.925	643
05551200	1	Yes	Yes	2006	355	C, E	182	1.1	0.552	0.975	419
05551200	1	Yes	Yes	2007	2360	C	1213	3.04	0.573	0.0812	2490
05551200	1	Yes	Yes	2008	2980	C	1532	4.41	0.594	0.0398	3080
05551200	1	Yes	Yes	2009	2530	C	1300	0.83	0.614	0.072	2580
05551330	1	Yes	Yes	1998	746	C, E	1083	0.675	0.427	0.0765	896
05551330	1	Yes	Yes	1999	1080	C	1568	1.1	0.441	0.0239	1250
05551330	1	Yes	Yes	2000	191	C, E	277	1.5	0.455	0.894	252
05551330	1	Yes	Yes	2001	530	C	769	0.686	0.472	0.25	619
05551330	1	Yes	Yes	2002	406	C	589	1.37	0.49	0.482	476
05551330	1	Yes	Yes	2003	272	C	395	2.33	0.508	0.783	322
05551330	1	Yes	Yes	2004	331	C	480	2.18	0.526	0.679	378
05551330	1	Yes	Yes	2005	181	C	263	0.816	0.544	0.936	211
05551330	1	Yes	Yes	2006	114	C, E	165	1.55	0.562	0.983	132
05551330	1	Yes	Yes	2007	676	C	981	3.16	0.58	0.172	710
05551330	1	Yes	Yes	2008	4510	C	6547	4.12	0.598	0	4620
05551330	1	Yes	Yes	2009	665	C	965	0.749	0.616	0.195	676
05551520	1	Yes	Yes	1961	158	--	555	1.7	0.0912	0.226	222
05551520	1	Yes	Yes	1962	125	--	439	0.379	0.0961	0.378	182
05551520	1	Yes	Yes	1963	58	--	204	1.88	0.101	0.828	94.6
05551520	1	Yes	Yes	1964	84	--	295	2.7	0.106	0.662	127
05551520	1	Yes	Yes	1965	65	--	228	0.139	0.111	0.791	103
05551520	1	Yes	Yes	1966	262	--	920	2.3	0.116	0.057	349
05551520	1	Yes	Yes	1967	224	--	787	2.51	0.121	0.0902	301
05551520	1	Yes	Yes	1968	88	--	309	1.32	0.126	0.649	130
05551520	1	Yes	Yes	1969	171	--	600	1.7	0.131	0.201	231
05551520	1	Yes	Yes	1970	84	--	295	1.56	0.136	0.683	124
05551520	1	Yes	Yes	1971	80	--	281	0.384	0.137	0.712	118
05551520	1	Yes	Yes	1972	224	--	787	6.07	0.139	0.0944	296

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft³/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft³/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft³/s)
05551520	1	Yes	Yes	1973	92	--	323	1.21	0.14	0.633	133
05551520	1	Yes	Yes	1974	216	--	759	1.4	0.141	0.108	286
05551520	1	Yes	Yes	1975	188	--	660	1.79	0.143	0.166	250
05551520	1	Yes	Yes	1976	118	--	414	1.16	0.144	0.456	166
05551520	1	Yes	Yes	1977	40	--	140	1.49	0.146	0.929	66.8
05551520	1	Yes	Yes	1978	402	--	1412	5.21	0.147	0.017	505
05551520	1	Yes	Yes	1979	227	--	797	0.544	0.148	0.0932	298
05551530	1	No	No	1961	436	--	474	1.76	0.223	0.42	773
05551530	1	No	No	1962	270	--	294	0.393	0.231	0.752	529
05551530	1	No	No	1963	507	--	551	1.98	0.239	0.324	854
05551530	1	No	No	1964	433	--	471	2.87	0.248	0.446	752
05551530	1	No	No	1965	375	--	408	0.14	0.256	0.566	661
05551530	1	No	No	1966	658	--	715	2.48	0.265	0.18	1030
05551530	1	No	No	1967	694	--	755	2.72	0.273	0.161	1080
05551530	1	No	No	1968	478	--	520	1.39	0.282	0.398	791
05551530	1	No	No	1969	377	--	410	2.13	0.29	0.592	643
05551530	1	No	No	1970	575	--	625	1.59	0.299	0.278	897
05551530	1	No	No	1971	486	--	528	0.163	0.306	0.406	785
05551530	1	No	No	1972	742	--	807	6.79	0.313	0.148	1110
05551530	1	No	No	1973	511	--	556	1.35	0.32	0.38	807
05551530	1	No	No	1974	647	--	704	1.43	0.327	0.219	964
05551530	1	No	No	1975	596	--	648	1.93	0.335	0.277	897
05551530	1	No	No	1976	592	--	644	0.00507	0.342	0.287	887
05551530	1	No	No	1977	316	--	344	0.658	0.349	0.749	530
05551530	1	No	No	1978	744	--	809	5.82	0.356	0.165	1070
05551530	1	No	No	1979	696	--	757	0.527	0.363	0.196	998
05551620	1	No	No	1961	384	--	313	1.22	0.0412	0.58	507
05551620	1	No	No	1962	466	--	380	0.3	0.0423	0.438	606
05551620	1	No	No	1963	388	--	316	1.25	0.0435	0.574	511
05551620	1	No	No	1965	536	--	437	0.161	0.0458	0.348	686
05551620	1	No	No	1966	550	--	448	1.38	0.0469	0.333	701
05551620	1	No	No	1967	499	--	406	1.07	0.0481	0.395	642
05551620	1	No	No	1969	306	--	249	0.875	0.0504	0.717	410
05551620	1	No	No	1970	558	--	454	1.46	0.0515	0.326	707
05551620	1	No	No	1971	311	--	253	0.376	0.0553	0.712	413

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft^3/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft^3/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft^3/s)
05551620	1	No	No	1972	352	--	287	1.08	0.0591	0.646	460
05551620	1	No	No	1973	302	--	246	1.47	0.0629	0.732	400
05551620	1	No	No	1974	640	--	521	1.3	0.0666	0.25	788
05551620	1	No	No	1975	345	--	281	0.841	0.0704	0.665	446
05551620	1	No	No	1976	403	--	328	1.1	0.0742	0.572	512
05551620	1	No	No	1977	196	--	160	1.19	0.0779	0.887	268
05551620	1	No	No	1978	576	--	469	1.4	0.0817	0.326	708
05551620	1	No	No	1979	511	--	416	0.349	0.0855	0.406	632
05551650	1	Yes	Yes	1961	44	--	246	1.22	0	0.691	49.3
05551650	1	Yes	Yes	1962	48	--	268	0.299	0	0.643	53.6
05551650	1	Yes	Yes	1963	25	--	140	0.404	0	0.89	28.8
05551650	1	Yes	No	1964	11	4, B	62	0.109	0	0.976	13.2
05551650	1	Yes	Yes	1965	32	--	179	0.133	0	0.825	36.4
05551650	1	Yes	Yes	1966	54	--	302	1.37	0	0.571	60
05551650	1	Yes	Yes	1967	146	--	817	1.08	0	0.0608	158
05551650	1	Yes	Yes	1968	14	--	78	1.36	0	0.96	16.6
05551650	1	Yes	Yes	1969	20	--	112	0.109	0	0.928	23.3
05551650	1	Yes	Yes	1970	346	--	1935	1.46	0	0.005	369
05551650	1	Yes	Yes	1971	19	--	106	0.377	0.000196	0.933	22.2
05551650	1	Yes	Yes	1972	43	--	240	0.931	0.000393	0.703	48.2
05551650	1	Yes	Yes	1973	73	--	408	1.47	0.00059	0.36	80.4
05551650	1	Yes	Yes	1974	316	--	1767	1.3	0.000786	0.00705	337
05551650	1	Yes	Yes	1975	76	--	425	0.835	0.000983	0.336	83.5
05551650	1	Yes	Yes	1976	66	--	369	1.11	0.00118	0.426	72.9
05551675	1	No	No	1998	603	C	567	0.863	0.219	0.291	736
05551675	1	No	No	1999	1040	C	978	1.13	0.225	0.0625	1230
05551675	1	No	No	2000	278	C	261	1.58	0.231	0.802	359
05551675	1	No	No	2001	544	C	511	0.664	0.25	0.386	652
05551675	1	No	No	2002	608	C	572	1.55	0.269	0.32	709
05551675	1	No	No	2003	344	C, E	323	1.01	0.288	0.739	407
05551675	1	No	No	2004	425	C, E	400	1.61	0.307	0.623	485
05551675	1	No	No	2005	255	C, E	240	0.746	0.325	0.879	294
05551675	1	No	No	2006	143	C, E	134	0.902	0.344	0.967	165
05551675	1	No	No	2007	754	7, C	709	0.513	0.363	0.236	796
05551675	1	No	No	2008	1740	C	1636	4.12	0.382	0.0183	1790

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05551675	1	No	No	2009	821	C	772	0.902	0.401	0.204	836
05551700	1	Yes	Yes	1961	455	--	277	1.36	0.0694	0.672	700
05551700	1	Yes	Yes	1962	1000	--	609	0.328	0.0727	0.172	1380
05551700	1	Yes	Yes	1963	472	--	288	1.45	0.076	0.656	717
05551700	1	Yes	Yes	1964	159	--	97	1.02	0.0793	0.955	298
05551700	1	Yes	Yes	1965	605	2	369	0.136	0.0826	0.491	886
05551700	1	Yes	Yes	1966	906	D	552	1.5	0.0859	0.226	1250
05551700	1	Yes	Yes	1967	618	--	377	1.2	0.0892	0.481	897
05551700	1	Yes	Yes	1968	289	--	176	1.15	0.0925	0.869	471
05551700	1	Yes	Yes	1969	578	--	352	0.1	0.0958	0.537	839
05551700	1	Yes	Yes	1970	1300	--	792	1.47	0.0991	0.0831	1740
05551700	1	Yes	Yes	1971	686	D, E	418	0.375	0.103	0.417	971
05551700	1	Yes	Yes	1972	546	--	333	1.05	0.108	0.592	788
05551700	1	Yes	Yes	1973	619	--	377	0.625	0.112	0.498	878
05551700	1	Yes	Yes	1974	1320	--	804	1.36	0.117	0.0831	1730
05551700	1	Yes	Yes	1975	483	--	294	1.14	0.121	0.674	698
05551700	1	Yes	Yes	1976	637	--	388	1.1	0.125	0.488	889
05551700	1	Yes	Yes	1977	172	E	105	1.21	0.13	0.956	295
05551700	1	Yes	Yes	1978	1030	--	628	2.54	0.134	0.184	1350
05551700	1	Yes	Yes	1979	1250	--	762	0.386	0.138	0.105	1620
05551700	1	Yes	Yes	1980	210	E	128	0.672	0.143	0.94	342
05551700	1	Yes	Yes	1981	1140	--	695	2.15	0.145	0.145	1470
05551700	1	Yes	Yes	1982	766	--	467	0.347	0.146	0.373	1030
05551700	1	Yes	Yes	1983	2060	--	1255	2.61	0.148	0.0228	2550
05551700	1	Yes	Yes	1984	765	--	466	0.799	0.15	0.376	1020
05551700	1	Yes	Yes	1985	1290	--	786	1.58	0.152	0.0978	1650
05551700	1	Yes	Yes	1986	797	--	486	0.914	0.154	0.351	1060
05551700	1	Yes	Yes	1987	973	--	593	2.12	0.156	0.223	1250
05551700	1	Yes	Yes	1988	432	--	263	1.04	0.157	0.758	611
05551700	1	Yes	Yes	1989	188	--	115	1.01	0.159	0.953	304
05551700	1	Yes	Yes	1990	544	--	332	1.63	0.161	0.632	743
05551700	1	Yes	Yes	1991	1360	--	829	0.845	0.167	0.0872	1710
05551700	1	Yes	Yes	1992	172	E	105	0.507	0.173	0.962	275
05551700	1	Yes	Yes	1993	724	--	441	0.786	0.179	0.438	946
05551700	1	Yes	Yes	1994	1070	--	652	0.752	0.185	0.188	1340

U.S. Geological Survey streamgage number	Segment number	Streamgage used in regression analyses (non-redundant)	Discharge value used in adjustment regression	Water year	Observed annual maximum peak discharge (ft³/s)	NWIS peak code	Observed annual maximum peak discharge with segment intercept value subtracted (ft³/s)	Observed precipitation (inches)	Urban fraction	Exceedance probability	Urban-adjusted annual maximum peak discharge (ft³/s)
05551700	1	Yes	Yes	1995	516	--	314	1.22	0.191	0.686	686
05551700	1	Yes	Yes	1996	5510	--	3358	2.73	0.197	0	6410
05551700	1	Yes	Yes	1997	2040	--	1243	2.48	0.203	0.0277	2430
05551700	1	Yes	Yes	1998	507	--	309	1.01	0.209	0.709	663
05551700	1	Yes	Yes	1999	959	C	584	1.14	0.215	0.269	1180
05551700	1	Yes	Yes	2000	297	C, E	181	1.54	0.221	0.908	410
05551700	1	Yes	Yes	2001	609	C	371	0.65	0.242	0.621	755
05551700	1	Yes	Yes	2002	562	C	342	1.54	0.262	0.687	686
05551700	1	Yes	Yes	2003	313	C	191	0.99	0.282	0.917	394
05551700	1	Yes	Yes	2004	1130	C	689	1.97	0.302	0.217	1270
05551700	1	Yes	Yes	2005	403	C	246	0.781	0.323	0.871	468
05551700	1	Yes	Yes	2006	164	C, E	100	0.911	0.343	0.985	194
05551700	1	Yes	Yes	2007	1070	C	652	0.553	0.363	0.292	1140
05551700	1	Yes	Yes	2008	2130	C	1298	3.71	0.383	0.0392	2200
05551700	1	Yes	Yes	2009	1270	C	774	0.911	0.403	0.205	1290
05551800	1	Yes	Yes	1961	36	--	216	1.3	0.13	0.822	75.2
05551800	1	Yes	Yes	1962	29	--	174	0.318	0.132	0.886	64.8
05551800	1	Yes	Yes	1963	17	--	102	0.725	0.135	0.959	45.1
05551800	1	Yes	Yes	1964	11	--	66	0.996	0.137	0.985	32.7
05551800	1	Yes	Yes	1965	218	--	1308	0.256	0.14	0.0194	324
05551800	1	Yes	Yes	1966	96	--	576	1.5	0.142	0.233	157
05551800	1	Yes	Yes	1967	36	--	216	1.14	0.145	0.829	74.1
05551800	1	Yes	Yes	1968	14	--	84	1.3	0.147	0.974	38.7
05551800	1	Yes	Yes	1969	46	--	276	0.994	0.15	0.73	88.1
05551800	1	Yes	Yes	1970	242	--	1452	1.53	0.153	0.0162	354
05551800	1	Yes	Yes	1971	57	--	342	0.375	0.157	0.611	103
05551800	1	Yes	Yes	1972	192	--	1152	1.5	0.161	0.032	287
05551800	1	Yes	Yes	1973	56	--	336	1.43	0.165	0.627	101
05551800	1	Yes	Yes	1974	147	--	882	0.594	0.169	0.0724	226
05551800	1	Yes	Yes	1975	304	--	1823	0.879	0.174	0.00927	431
05551800	1	Yes	Yes	1976	64	--	384	0.99	0.178	0.543	111
05551800	1	Yes	Yes	1977	11	--	66	1.39	0.182	0.988	30.3
05551800	1	Yes	Yes	1978	320	--	1919	1.65	0.186	0.00828	448
05551800	1	Yes	Yes	1980	125	--	750	0.638	0.195	0.133	191
05551900	1	Yes	Yes	1965	680	--	330	0.0791	0.00395	0.507	701

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05551900	1	Yes	Yes	1966	795	--	386	0.481	0.00408	0.397	818
05551900	1	Yes	Yes	1967	668	--	324	1.11	0.00421	0.52	688
05551900	1	Yes	Yes	1968	243	2	118	1.33	0.00434	0.921	254
05551900	1	Yes	Yes	1969	542	--	263	0.11	0.00447	0.657	559
05551900	1	Yes	Yes	1970	550	--	267	1.46	0.0046	0.649	567
05551900	1	Yes	Yes	1971	498	--	242	0.378	0.00565	0.704	514
05551900	1	Yes	Yes	1972	1410	--	684	1.08	0.00671	0.0997	1440
05551900	1	Yes	Yes	1973	744	--	361	1.48	0.00776	0.446	763
05551900	1	Yes	Yes	1974	1580	--	767	1.33	0.00881	0.0723	1610
05551900	1	Yes	Yes	1975	398	--	193	0.844	0.00986	0.802	409
05551900	1	Yes	Yes	1976	458	--	222	1.09	0.0109	0.749	470
05551900	1	Yes	Yes	1977	382	--	185	0.141	0.012	0.818	392
05551900	1	Yes	Yes	1978	713	--	346	1.39	0.013	0.48	727
05551900	1	Yes	Yes	1979	889	--	432	0.353	0.0141	0.335	904
05551930	1	Yes	Yes	1965	334	--	347	0.0688	0.0442	0.503	366
05551930	1	Yes	Yes	1966	398	--	413	0.477	0.0443	0.381	434
05551930	1	Yes	Yes	1967	306	--	318	1.11	0.0444	0.571	336
05551930	1	Yes	Yes	1968	155	--	161	1.34	0.0446	0.874	175
05551930	1	Yes	Yes	1969	314	--	326	0.109	0.0447	0.551	344
05551930	1	Yes	Yes	1970	354	--	368	1.44	0.0449	0.462	387
05551930	1	Yes	Yes	1971	297	--	308	0.374	0.0458	0.595	326
05551930	1	Yes	Yes	1972	563	--	585	1.07	0.0468	0.179	606
05551930	1	Yes	Yes	1973	334	--	347	1.47	0.0478	0.507	365
05551930	1	Yes	Yes	1974	694	--	721	1.32	0.0488	0.0961	744
05551930	1	Yes	Yes	1975	187	--	194	0.855	0.0497	0.82	208
05551930	1	Yes	Yes	1976	291	--	302	1.09	0.0507	0.611	318
05551930	1	Yes	Yes	1977	141	--	146	0.834	0.0517	0.897	158
05551930	1	Yes	Yes	1978	525	--	545	1.39	0.0527	0.214	562
05551930	1	Yes	Yes	1979	402	--	418	0.354	0.0536	0.381	434
05551930	1	Yes	Yes	1980	180	--	187	0.913	0.0546	0.834	199

APPENDIX 7

Table 8. Quantile regression coefficients from temporal analysis of 117 streamgages in northeastern Illinois and adjacent states, as a function of annual exceedance probability.

Annual exceedance probability	Quantile regression coefficients			Mean bootstrapped coefficients			Standard error of bootstrapped coefficients			Fitted urban fraction coefficients
	Intercept	Urban fraction	Precipitation	Intercept	Urban fraction	Precipitation	Intercept	Urban fraction	Precipitation	
0.990	1.6168	0.9125	0.1092	1.6017	0.9407	0.1107	0.0863	0.0864	0.0249	0.9288
0.980	1.7265	0.8509	0.1114	1.7277	0.8676	0.1056	0.0832	0.0829	0.0182	0.8833
0.950	1.9029	0.7730	0.1039	1.9067	0.7784	0.0997	0.0763	0.0752	0.0152	0.7790
0.925	2.0056	0.7146	0.0979	2.0021	0.7238	0.0966	0.0759	0.0758	0.0113	0.7199
0.900	2.0585	0.6760	0.1008	2.0590	0.6815	0.0993	0.0716	0.0724	0.0089	0.6778
0.875	2.1073	0.6357	0.1054	2.1045	0.6461	0.1030	0.0720	0.0707	0.0084	0.6471
0.825	2.1747	0.5978	0.1050	2.1715	0.6026	0.1045	0.0709	0.0696	0.0089	0.6049
0.800	2.2041	0.5836	0.1019	2.1993	0.5888	0.1042	0.0718	0.0711	0.0098	0.5890
0.750	2.2513	0.5557	0.1065	2.2490	0.5590	0.1063	0.0715	0.0716	0.0095	0.5618
0.700	2.2904	0.5425	0.1059	2.2879	0.5439	0.1062	0.0711	0.0712	0.0079	0.5387
0.600	2.3645	0.4967	0.1052	2.3606	0.5010	0.1053	0.0692	0.0702	0.0089	0.5055
0.500	2.4129	0.4866	0.1065	2.4109	0.4905	0.1063	0.0692	0.0751	0.0075	0.4872
0.400	2.4700	0.4679	0.1055	2.4668	0.4696	0.1063	0.0687	0.0740	0.0065	0.4679
0.300	2.5281	0.4275	0.1098	2.5267	0.4297	0.1096	0.0682	0.0732	0.0068	0.4359
0.250	2.5569	0.4152	0.1125	2.5557	0.4171	0.1121	0.0687	0.0771	0.0086	0.4187
0.200	2.5867	0.4114	0.1152	2.5856	0.4128	0.1141	0.0674	0.0797	0.0081	0.4053
0.100	2.6810	0.3907	0.1169	2.6798	0.3945	0.1148	0.0651	0.0776	0.0085	0.3912
0.075	2.7109	0.3859	0.1208	2.7125	0.3807	0.1184	0.0646	0.0782	0.0101	0.3837
0.050	2.7649	0.3582	0.1225	2.7577	0.3544	0.1278	0.0669	0.0861	0.0148	0.3683
0.040	2.7671	0.3693	0.1429	2.7727	0.3523	0.1386	0.0671	0.0850	0.0154	0.3588
0.030	2.7893	0.3455	0.1527	2.7904	0.3505	0.1481	0.0669	0.0794	0.0129	0.3466
0.020	2.8290	0.3382	0.1495	2.8216	0.3468	0.1550	0.0667	0.0861	0.0201	0.3313
0.010	2.9361	0.3245	0.1666	2.9281	0.3326	0.1570	0.0759	0.1340	0.0283	0.3123
0.005	3.0352	0.3172	0.1440	3.0217	0.3008	0.1507	0.0735	0.1119	0.0188	0.3012
0.002	3.1086	0.3003	0.1312	3.1149	0.2721	0.1365	0.0845	0.1151	0.0282	0.2939

APPENDIX 8

Table 13. Components of variance of prediction for the selected spatial regression equations in northeastern Illinois.

[X, basin characteristics matrix; Λ, generalized least squares (GLS) covariance matrix; mi^2, square miles; NLCD_22_23_24, sum of fractions of 2011 National Land Cover Database (NLCD) classes 22, 23, and 24; DrainageClass1a, sum of fractions of Soil Survey Geographic (SSURGO) database fractions “very poorly drained” and “unknown (likely water)”; DEM_1_0_P, basin elevation range divided by basin perimeter]

Exceedance probability	Model error variance, γ^2		$(X^t \Lambda^{-1} X)^{-1}$ matrices				
			Intercept	**$\log_{10}$(Drainage area (mi^2))**	**$NLCD\_22\_23\_24^{(1/2)}$**	**$DrainageClass1a^{(1/2)}$**	**$\log_{10}$(DEM_P_1_0 (feet per mile))**
0.5	0.0341	Intercept	1.7667E-02	−4.8265E-03	−4.3178E-03	−2.3023E-03	−1.1556E-02
		$\log_{10}$(Drainage area (mi^2))	−4.8265E-03	1.8535E-03	7.8230E-04	−1.4760E-03	3.3775E-03
		$NLCD\_22\_23\_24^{(1/2)}$	−4.3178E-03	7.8230E-04	4.9187E-03	−1.0241E-03	1.1886E-03
		$DrainageClass1a^{(1/2)}$	−2.3023E-03	−1.4760E-03	−1.0241E-03	2.2654E-02	−8.5558E-04
		$\log_{10}$(DEM_P_1_0 (feet per mile))	−1.1556E-02	3.3775E-03	1.1886E-03	−8.5558E-04	1.0173E-02
0.2	0.0354	Intercept	1.8563E-02	−5.0735E-03	−4.4546E-03	−2.4859E-03	−1.2226E-02
		$\log_{10}$(Drainage area (mi^2))	−5.0735E-03	1.9644E-03	7.4577E-04	−1.5818E-03	3.5651E-03
		$NLCD\_22\_23\_24^{(1/2)}$	−4.4546E-03	7.4577E-04	5.5053E-03	−1.0183E-03	1.2752E-03
		$DrainageClass1a^{(1/2)}$	−2.4859E-03	−1.5818E-03	−1.0183E-03	2.4139E-02	−8.6997E-04
		$\log_{10}$(DEM_P_1_0 (feet per mile))	−1.2226E-02	3.5651E-03	1.2752E-03	−8.6997E-04	1.0799E-02
0.1	0.0387	Intercept	2.0606E-02	−5.6211E-03	−4.9499E-03	−2.8415E-03	−1.3589E-02
		$\log_{10}$(Drainage area (mi^2))	−5.6211E-03	2.1846E-03	7.7562E-04	−1.7648E-03	3.9594E-03
		$NLCD\_22\_23\_24^{(1/2)}$	−4.9499E-03	7.7562E-04	6.4730E-03	−1.0558E-03	1.4065E-03
		$DrainageClass1a^{(1/2)}$	−2.8415E-03	−1.7648E-03	−1.0558E-03	2.6995E-02	−9.4280E-04
		$\log_{10}$(DEM_P_1_0 (feet per mile))	−1.3589E-02	3.9594E-03	1.4065E-03	−9.4280E-04	1.2038E-02
0.05	0.0432	Intercept	2.3538E-02	−6.4024E-03	−5.6868E-03	−3.3566E-03	−1.5519E-02
		$\log_{10}$(Drainage area (mi^2))	−6.4024E-03	2.4963E-03	8.2385E-04	−2.0188E-03	4.5193E-03
		$NLCD\_22\_23\_24^{(1/2)}$	−5.6868E-03	8.2385E-04	7.9033E-03	−1.1189E-03	1.5847E-03
		$DrainageClass1a^{(1/2)}$	−3.3566E-03	−2.0188E-03	−1.1189E-03	3.1047E-02	−1.0471E-03

Exceedance probability	Model error variance, γ^2		$(X^t \Lambda^{-1} X)^{-1}$ matrices				
			Intercept	**log_{10}(Drainage area (mi^2))**	**NLCD_22_23_24$^{(1/2)}$**	**DrainageClass1a$^{(1/2)}$**	**log_{10}(DEM_P_1_0 (feet per mile))**
		log_{10}(DEM_P_1_0 (feet per mile))	−1.5519E-02	4.5193E-03	1.5847E-03	−1.0471E-03	1.3804E-02
0.02	0.0476	Intercept	2.6251E-02	−7.1279E-03	−6.3699E-03	−3.8061E-03	−1.7314E-02
		log_{10}(Drainage area (mi^2))	−7.1279E-03	2.7832E-03	8.8105E-04	−2.2508E-03	5.0396E-03
		NLCD_22_23_24$^{(1/2)}$	−6.3699E-03	8.8105E-04	9.1609E-03	−1.2123E-03	1.7563E-03
		DrainageClass1a$^{(1/2)}$	−3.8061E-03	−2.2508E-03	−1.2123E-03	3.4744E-02	−1.1479E-03
		log_{10}(DEM_P_1_0 (feet per mile))	−1.7314E-02	5.0396E-03	1.7563E-03	−1.1479E-03	1.5430E-02
0.01	0.0527	Intercept	2.9362E-02	−7.9624E-03	−7.1505E-03	−4.3019E-03	−1.9383E-02
		log_{10}(Drainage area (mi^2))	−7.9624E-03	3.1120E-03	9.5375E-04	−2.5161E-03	5.6390E-03
		NLCD_22_23_24$^{(1/2)}$	−7.1505E-03	9.5375E-04	1.0558E-02	−1.3442E-03	1.9599E-03
		DrainageClass1a$^{(1/2)}$	−4.3019E-03	−2.5161E-03	−1.3442E-03	3.8956E-02	−1.2652E-03
		log_{10}(DEM_P_1_0 (feet per mile))	−1.9383E-02	5.6390E-03	1.9599E-03	−1.2652E-03	1.7291E-02
0.005	0.0575	Intercept	3.2307E-02	−8.7505E-03	−7.8938E-03	−4.7791E-03	−2.1338E-02
		log_{10}(Drainage area (mi^2))	−8.7505E-03	3.4226E-03	1.0179E-03	−2.7655E-03	6.2052E-03
		NLCD_22_23_24$^{(1/2)}$	−7.8938E-03	1.0179E-03	1.1938E-02	−1.4725E-03	2.1510E-03
		DrainageClass1a$^{(1/2)}$	−4.7791E-03	−2.7655E-03	−1.4725E-03	4.2950E-02	−1.3724E-03
		log_{10}(DEM.P_1_0 (percent))	−2.1338E-02	6.2052E-03	2.1510E-03	−1.3724E-03	1.9058E-02
0.002	0.0644	Intercept	3.6513E-02	−9.8781E-03	−8.9512E-03	−5.4449E-03	−2.4143E-02
		log_{10}(Drainage area (mi^2))	−9.8781E-03	3.8666E-03	1.1131E-03	−3.1217E-03	7.0168E-03
		NLCD_22_23_24$^{(1/2)}$	−8.9512E-03	1.1131E-03	1.3887E-02	−1.6801E-03	2.4308E-03
		DrainageClass1a$^{(1/2)}$	−5.4449E-03	−3.1217E-03	−1.6801E-03	4.8639E-02	−1.5253E-03
		log_{10}(DEM_P_1_0 (feet per mile))	−2.4143E-02	7.0168E-03	2.4308E-03	−1.5253E-03	2.1581E-02

APPENDIX 9

Table 1-1. Skew statistics at U.S. Geological Survey streamgages used in the development of the regional skew model in this study in northeastern Illinois.

[USGS, U.S. Geological Survey; MSE, mean-square error; *NLCD*_22_23_24, urbanization variable that is the sum of fractions of National Land Cover Dataset 2011 classes 22 (developed, low intensity), 23 (developed, medium intensity), 24 (developed, high intensity); mi^2, square miles]

Index #	USGS streamgage number	Pseudo record length, in years	Station skew coefficient (log units) $\hat{\gamma}_S$	MSE of station skew coefficient (log units) $MSE[\hat{\gamma}_S]$	NLCD_22_23_24 (fraction)	Regional skew coefficient, URBAN model (log units)	Drainage area (mi^2)	Basin centroid latitude (decimal degrees)	Basin centroid longitude (decimal degrees)
1	04087300	17	0.86	0.37	0.342	0.178	1.50	42.4901	-87.8452
2	04087400	15	0.92	0.43	0.411	0.232	5.07	42.4695	-87.8553
3	05438250	30	0.51	0.21	0.070	-0.133	85.12	42.1051	-88.5673
4	05438300	20	-0.33	0.28	0.059	-0.154	0.81	42.4627	-88.5880
5	05438500	70	-0.92	0.15	0.091	-0.097	536.74	42.2736	-88.5997
6	05438850	25	-0.67	0.26	0.028	-0.227	1.52	41.8513	-88.9042
7	05439000	30	0.75	0.24	0.076	-0.123	77.41	41.8618	-88.8311
8	05439500	70	-0.28	0.09	0.084	-0.108	387.01	41.9869	-88.7341
9	05439550	18	-0.26	0.29	0.009	-0.300	1.78	42.1760	-88.9284
10	05440500	41	-1.28	0.31	0.038	-0.201	117.64	42.0004	-88.9839
11	05446950	16	0.50	0.35	0.040	-0.195	0.66	41.7659	-89.3352
12	05447000	42	-0.19	0.13	0.026	-0.232	198.69	41.7540	-89.1402
13	05447500	70	-0.42	0.10	0.025	-0.236	999.57	41.5422	-89.6641
14	05526150	25	-0.05	0.20	0.002	-0.345	0.16	41.1934	-87.9442
15	05526500	26	1.77	0.61	0.023	-0.244	13.00	41.1951	-88.0511
16	05527050	17	1.65	0.70	0.074	-0.126	0.83	41.4448	-87.8314
17	05527800	50	-0.42	0.13	0.120	-0.053	123.65	42.5925	-88.0017
18	05527900	17	-0.02	0.29	0.070	-0.134	20.79	42.5011	-88.0316
19	05528150	17	0.08	0.29	0.395	0.220	10.92	42.2324	-88.0451
20	05528170	16	0.15	0.31	0.466	0.272	2.58	42.2549	-88.0210
21	05528360	16	0.69	0.37	0.669	0.403	2.83	42.1831	-87.9694
22	05528440	16	0.61	0.36	0.806	0.481	1.66	42.1888	-88.0709
23	05528500	57	-0.58	0.13	0.586	0.352	19.64	42.1619	-88.0246
24	05529500	57	0.04	0.09	0.841	0.500	7.83	42.1128	-87.9641
25	05530000	59	-0.41	0.12	0.904	0.532	12.73	42.0714	-87.9719
26	05530400	19	-0.27	0.28	0.696	0.419	2.05	42.0350	-87.9810
27	05530480	21	0.26	0.25	0.901	0.531	17.92	42.0019	-87.9461
28	05530700	22	0.00	0.22	0.936	0.549	11.15	41.9417	-87.9085

Index #	USGS streamgage number	Pseudo record length, in years	Station skew coefficient (log units) $\hat{\gamma}_s$	MSE of station skew coefficient (log units) $MSE[\hat{\gamma}_s]$	NLCD_22_23_24 (fraction)	Regional skew coefficient, URBAN model (log units)	Drainage area (mi^2)	Basin centroid latitude (decimal degrees)	Basin centroid longitude (decimal degrees)
29	05530940	19	0.54	0.31	0.628	0.378	5.71	42.1138	-88.0925
30	05531080	19	1.90	0.79	0.812	0.484	6.17	41.9685	-88.0878
31	05531100	19	1.03	0.39	0.847	0.503	4.20	41.9900	-88.0624
32	05531500	64	0.47	0.11	0.760	0.456	116.25	41.9787	-88.0209
33	05532000	59	-0.01	0.09	0.893	0.527	16.19	41.9126	-87.9214
34	05533000	59	0.26	0.10	0.849	0.504	16.82	41.7799	-87.9263
35	05533200	19	0.25	0.28	0.909	0.535	2.35	41.7494	-87.9705
36	05533300	15	-0.24	0.34	0.675	0.407	3.11	41.7386	-88.0032
37	05534500	57	-0.18	0.10	0.452	0.262	19.70	42.2481	-87.8813
38	05535000	58	-0.23	0.10	0.552	0.330	12.63	42.2958	-87.8717
39	05535500	57	-0.14	0.10	0.609	0.367	11.64	42.1757	-87.8728
40	05536000	59	0.33	0.11	0.639	0.386	99.34	42.1656	-87.8330
41	05536201	19	0.31	0.28	0.319	0.158	5.82	41.4471	-87.7078
42	05536207	16	0.86	0.39	0.836	0.497	3.93	41.4849	-87.6904
43	05536235	58	0.34	0.11	0.382	0.210	23.36	41.4523	-87.6336
44	05536238	19	-0.22	0.28	0.528	0.315	1.76	41.4996	-87.7682
45	05536255	62	0.53	0.12	0.674	0.407	23.21	41.5099	-87.7211
46	05536265	62	-0.35	0.11	0.413	0.234	8.02	41.4876	-87.5551
47	05536270	32	0.03	0.16	0.541	0.324	16.83	41.5118	-87.5473
48	05536340	59	-0.06	0.09	0.831	0.494	13.62	41.5843	-87.7878
49	05536500	58	0.40	0.12	0.639	0.386	11.27	41.6162	-87.8110
50	05536510	19	0.48	0.30	0.717	0.431	1.60	41.6522	-87.8058
51	05536560	19	-0.12	0.27	0.979	0.570	5.54	41.7403	-87.7766
52	05536630	19	0.90	0.36	0.601	0.362	10.52	41.6479	-87.8558
53	05537500	59	0.77	0.15	0.467	0.273	21.11	41.6361	-87.9396
54	05538440	18	0.52	0.32	0.624	0.376	1.54	41.6114	-87.8903
55	05539000	64	0.95	0.16	0.516	0.307	108.21	41.5345	-87.8861
56	05539900	49	0.28	0.12	0.716	0.431	27.95	41.9736	-88.1515
57	05539950	19	1.91	0.79	0.903	0.532	9.11	41.9251	-88.1183
58	05540060	44	1.64	0.42	0.531	0.317	18.63	41.8856	-88.2377
59	05540080	19	1.32	0.51	0.876	0.518	2.07	41.8567	-88.1020
60	05540110	19	0.65	0.32	0.278	0.121	3.69	41.8338	-88.2219
61	05540140	19	0.32	0.29	0.924	0.543	2.42	41.9417	-88.0736
62	05540160	36	0.57	0.19	0.795	0.475	25.21	41.8876	-88.0491
63	05540190	17	-0.32	0.31	0.808	0.482	8.82	41.7919	-88.0002

Index #	USGS streamgage number	Pseudo record length, in years	Station skew coefficient (log units) $\hat{\gamma}_S$	MSE of station skew coefficient (log units) $MSE[\hat{\gamma}_S]$	NLCD_22_23_24 (fraction)	Regional skew coefficient, URBAN model (log units)	Drainage area (mi^2)	Basin centroid latitude (decimal degrees)	Basin centroid longitude (decimal degrees)
64	05540240	20	0.69	0.31	0.844	0.501	6.57	41.7670	-88.0272
65	05540275	22	0.87	0.31	0.614	0.370	9.89	41.7467	-88.1887
66	05540500	69	0.35	0.10	0.646	0.390	323.19	41.7774	-88.1421
67	05541750	22	-0.05	0.23	0.010	-0.294	4.74	41.1321	-88.3521
68	05542000	70	-0.44	0.10	0.038	-0.200	451.80	41.0978	-88.3730
69	05547755	16	-0.64	0.37	0.237	0.082	16.37	42.2991	-88.0787
70	05548280	44	-0.51	0.16	0.079	-0.118	195.14	42.4499	-88.3942
71	05549000	44	-0.31	0.14	0.056	-0.161	15.65	42.3126	-88.3616
72	05549700	15	0.35	0.34	0.192	0.036	10.24	42.2907	-88.1423
73	05549850	31	1.07	0.27	0.375	0.204	35.57	42.1758	-88.1350
74	05549900	24	-0.43	0.26	0.945	0.553	0.08	42.1985	-88.2670
75	05550300	43	0.57	0.15	0.257	0.101	39.04	42.0687	-88.4027
76	05550430	17	0.26	0.31	0.403	0.226	2.57	42.0866	-88.1113
77	05550470	19	1.43	0.56	0.879	0.520	5.15	42.0179	-88.1727
78	05550500	58	0.40	0.12	0.562	0.337	35.09	42.0556	-88.1627
79	05551030	17	0.01	0.28	0.416	0.235	15.28	41.9795	-88.2304
80	05551050	18	1.24	0.53	0.356	0.189	7.37	41.9397	-88.2407
81	05551200	49	-0.59	0.15	0.293	0.135	51.80	41.9879	-88.3924
82	05551520	19	-0.02	0.26	0.360	0.192	5.19	41.8291	-88.2638
83	05551650	16	0.51	0.36	0.018	-0.260	1.95	41.8568	-88.4135
84	05551700	49	0.05	0.11	0.267	0.112	68.19	41.8015	-88.4185
85	05551800	19	0.03	0.25	0.093	-0.095	0.45	41.6058	-88.4699
86	05551900	15	0.19	0.34	0.042	-0.191	32.72	41.8396	-88.5821
87	05551930	16	-0.19	0.32	0.065	-0.142	22.75	41.8316	-88.5204
88	04093000	63	-0.02	0.08	0.342	0.177	124.13	41.4570	-87.3261
89	04094000	65	0.38	0.10	0.104	-0.078	66.01	41.5991	-86.9707
90	04094500	47	0.07	0.11	0.260	0.104	75.24	41.5078	-87.0989
91	05517500	61	-0.07	0.09	0.040	-0.196	1351.30	41.4402	-86.4887
92	05517890	36	-0.53	0.18	0.041	-0.193	30.62	41.4019	-87.1220
93	05519000	53	0.44	0.13	0.103	-0.079	122.84	41.3160	-87.3381
94	05519500	24	-0.52	0.25	0.142	-0.024	55.05	41.3521	-87.4975
95	05536190	67	-0.17	0.09	0.419	0.238	69.28	41.4626	-87.5270
96	04087204	46	0.51	0.15	0.559	0.335	24.93	42.8998	-87.9147
97	04087220	46	0.73	0.17	0.519	0.309	49.28	42.9366	-88.0358
98	04087230	32	-0.80	0.23	0.031	-0.218	4.01	42.7764	-88.0403

Index #	USGS streamgage number	Pseudo record length, in years	Station skew coefficient (log units) $\hat{\gamma}_S$	MSE of station skew coefficient (log units) $MSE[\hat{\gamma}_S]$	NLCD_22_23_24 (fraction)	Regional skew coefficient, URBAN model (log units)	Drainage area (mi^2)	Basin centroid latitude (decimal degrees)	Basin centroid longitude (decimal degrees)
99	04087233	46	-0.54	0.15	0.062	-0.149	55.20	42.7452	-88.0133
100	04087250	50	-0.65	0.15	0.417	0.236	7.24	42.5876	-87.9111
101	04087257	38	-0.56	0.18	0.295	0.136	38.57	42.6604	-87.8943
102	05438283	17	-0.34	0.32	0.046	-0.183	9.26	42.5387	-88.6475
103	05543830	48	0.28	0.13	0.339	0.174	127.74	43.0773	-88.2062
104	05544200	34	-0.29	0.17	0.056	-0.161	72.09	42.8550	-88.4424
105	05544300	21	-0.63	0.28	0.066	-0.140	1.31	42.8376	-88.3262
106	05545100	48	0.20	0.12	0.085	-0.108	6.19	42.6824	-88.4912
107	05545200	51	-0.30	0.12	0.017	-0.263	2.36	42.6943	-88.3774
108	05545300	24	-0.02	0.21	0.085	-0.107	106.37	42.6101	-88.4265
109	05545750	70	0.01	0.08	0.130	-0.040	804.31	42.8271	-88.3187
110	05548150	48	-0.60	0.15	0.034	-0.212	13.75	42.4981	-88.4256