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OA/ID Number: 13746
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Folder Title:
Fife Symington Fundraiser 2/7/91 [OA 6855] [1]

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Fife Symington. Smart. Steady. Ready To Lead Arizona Into The 1990's.

Once in a great while, someone new arrives on the political horizon to give hope and optimism at a time when those qualities are needed.

So it is with Fife Symington.

Fife has lived, worked and raised a family in Arizona for the past twenty-two years. He grew up in the East and then moved west with the U.S. Air Force. His first tour of duty was Luke Air Force Base, Arizona, in 1968. He fell in love with the state. After service to his nation in Southeast Asia during Vietnam (he was awarded the Bronze Star for meritorious service), Captain Symington made Arizona his permanent residence.

With only a secretary, Fife started a new business specializing in commercial and industrial development. Today, The Symington Company is a respected and successful Arizona enterprise, one that has created thousands of new jobs for Arizonans through its projects. Evidence of Fife's ability is the Camelback Esplanade in central Phoenix. Also, the exciting Mercado Project — a Mexican village in the heart of downtown Phoenix — built, according to the Phoenix Gazette, as a result of "the dreams and efforts of a few daring and resourceful men like Fife Symington . . . "

Whether it's in business, Republican Party politics or community affairs, Fife Symington is a man who gets things done. As State GOP Finance Chairman, he raised more money than anyone in that post before or since, to say nothing of the funds he's raised for numerous candidates, from John Rhodes to John McCain.

In his community, Fife has supported such worthy causes as the Arizona Children's Foundation, the Heard Museum, COMPAS, and many others.

An avid outdoorsman, Fife is deeply committed to protecting the natural environment that first attracted him to Arizona. A can-do businessman, Fife is determined to create new jobs and attract investment to help Arizona's troubled economy . . . but not at the expense of the environment.

When you add it all up, Fife Symington is the right man for these times. Arizona needs his style of energetic, innovative leadership. We need a leader from the private sector, not another professional politician who prefers popularity to progress. Fife understands and believes in our free market system. With Fife and his proven ability to get things done, our future can be full of promise and hope.

As Governor, Fife Symington will move quickly to deal with the major issues facing Arizona.

■ **Education:** Fife Symington believes we must reform our public education system. He wants to see high standards and measured results. He believes teachers should be empowered to take charge of their classrooms and schools. Fife supports the concept of parents and students being free to choose the school program that meets their individual needs. "Choice is the only way to reform our top-down, centralized system of education as we move into the competitive 1990's."

■ **Drugs:** Arizona is now the principal point of entry into the U.S. for illegal drugs and has the fourth highest crime rate in the nation. The next Governor must take an activist role in changing this. A coordinated federal, state and local drug war is needed to cut the drug supply. On the demand side, we should concentrate our energy and resources on our children and work toward making them a drug-free generation.

■ **Environment:** Fife Symington believes we must attack the sources of all environmental damage to the air we breathe, the water we drink, and the environment in which we live. Toxic waste polluters must be prosecuted. New leadership is needed to develop alternatives to our reliance on gasoline-fueled automobiles. Our precious open spaces and our desert must be protected from unbridled development. Put best by a native American, "We do not inherit the land from our ancestors, we borrow it from our children."

■ **Jobs And The Economy:** Our state faces important challenges. It's time to elect a Governor who understands the economy and knows how to create jobs . . . a Governor bold enough to try some new approaches to the problems we face . . . a Governor with the stamina and enthusiasm to get the job done right.

Fife Symington has what it takes to lead Arizona into the 1990's with confidence and optimism.

Symington '90 GOVERNOR

Personal to Fife Symington

☑ YES, I want to restore effective executive leadership to Arizona.
I want Fife Symington as our next Governor.

I'll Help By:

- ☐ Working in your headquarters.
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- ☐ Making phone calls.
- ☐ Raising funds.
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- ☐ Voting by absentee ballot.

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Arizona law places a limit of $550 per individual contribution ($1100 per married couple). If two people are making a contribution, please write the check on a joint bank account or send separate checks.

What Others Are Saying About Fife Symington

"Fife grew up learning politics. He understands government. He understands business. He understands what it takes to make Arizona great."

—Barry Goldwater
former U.S. Senator

"Symington has an insatiable intellectual thirst, an ability to grasp issues that have no easy answers . . . He is a fiscal conservative with a social conscience."

—Mark Genrich
Phoenix Gazette

"I think the question is not whether Symington is ready for the job (of Governor), but whether Arizona is ready for him . . . (he is) more qualified in every way that is important, and ready . . . his solutions are the freshest, sharpest, most potent ammo in the war to protect the environment."

—Paul Soderberg
Scottsdale Progress

"Fife has all the qualities needed to be a strong and effective Governor. Everyone who has had a chance to work with Fife has been impressed by his commitment, his sincerity, and his ability to motivate people. These leadership skills will serve him well as Governor."

—John Rhodes
former U.S. Congressman

"Challenging people's minds is as much a part of Mr. Symington's persona as his frankness and independent thinking . . . Mr. Symington is rapidly emerging as the candidate of substance."

—Joel Nilsson
Arizona Republic

"Fife Symington will be a great Governor. He has shown his concern and interest, not just in the Phoenix area, but throughout all of Arizona. He will be a Governor for the entire state."

—Lew Murphy
former Mayor of Tucson

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(Clockwise from top to bottom): Fife as a boy; in the U.S. Air Force; the Symington family

Get to Know Fife Symington . . . Republican . . . A New Leader for Arizona

- Successful businessman who started and built a business from the ground up.
- Served in the U.S. Air Force in Southeast Asia during Vietnam and earned the Bronze Star for meritorious service.
- Former Finance Chairman, Arizona State Republican Party.
- Married to the former Ann Pritzlaff, five children: John, age 20; Scott, age 18; Whitney, age 12; Richard, age 10; Tom, age 7.

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  - goals
  - top 3 issues
    [crime? ed? enviro?]

* humor about him —
  nicknames?
  personal anecdotes
  (childhood or lately OK)
  (who can we call for this? get # for wife, best friend, etc.)

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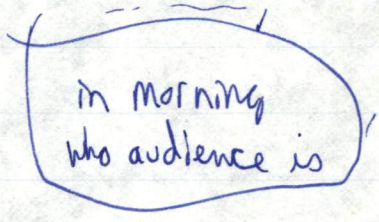

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INSTANT ALMANAC of Events, Anniversaries, Observances, Quotations, and Birthdays for Every Day of the Year

Leonard and Thelma Spinrad

PARKER PUBLISHING COMPANY, INC. West Nyack, N.Y.

February

FEBRUARY IS THE ONLY MONTH with less than 30 days. In leap years such as 1976 it has 29 days (every fourth year), otherwise 28. It was named from the Latin word *februare*, meaning "to purify." The Romans had an annual purification ceremony at this time of year.

February is Heart Month (not only for the Heart Association, but also by virtue of Valentine's day), and the peak of winter carnival time. Its observances include those for the Boy Scouts and for Black history. The science of aluminum processing was born in February, and so was the U.S. weather service. The month's birthdays range from Jack Benny to the Boston Latin School—America's oldest public school—to the Elks and Rotary Club. Also born in February were those great American institutions, the gerrymander and the income tax. And it was in February that Senator Joseph McCarthy made what proved to be an ill-omened allusion to "twenty years of treason."

February's birthstone: Amethyst.
February's flower: Violet or primrose.

Quotations about February:

"February, fill the dyke
With what thou dost like."—Thomas Tusser, *Five Hundred Points of Good Husbandry*, 1573

"February brings the rain,
Thaws the frozen lake again."—Sara Coleridge, "Pretty Lessons in Verse," 1834

"If February give much snow,
A fine summer it doth foreshow."—British proverb

". . . You have such a February face,
So full of frost, of storm and cloudiness . . ."—William Shakespeare, *Much Ado About Nothing,* 1598

Month-long observances in February:

Heart Month (American Heart Assn., 44 East 23 Street, New York, N.Y. 10010)

American History Month (National Society, Daughters of American Revolution, 1776 D Street NW, Washington, D.C. 20006)

American Music Month (National Federation of Music Clubs, 600 South Michigan Avenue, Chicago, Ill. 60605)

National Cherry Month (National Red Cherry Institute, 415 West Grand River Avenue, East Lansing, Mich. 48823)

Catholic Press Month (Catholic Press Assn., 432 Park Avenue South, New York, N.Y. 10016)

Boy Scouts of America Anniversary Month (Boy Scouts of America, New Brunswick, New Jersey 08902)

Frozen Potato Month (Frozen Potato Products Institute, 333 North Michigan Avenue, Chicago, Ill. 60601)

Easter Seal campaign—may start this month, depending on date of Easter Sunday. (National Easter Seal Society for Crippled Children & Adults, 2023 West Ogden Avenue, Chicago, Ill. 60612)

February's special weeks, with usual starting dates:

International Clergy Week, Sunday before February 3 (Civitan International, 115 North 21st Street, Birmingham, Ala. 35203)

National Children's Dental Health Week, first Sunday (American Dental Assn., 211 East Chicago Avenue, Chicago, Ill. 60611)

National Pay Your Bills Week, first Monday (American Collectors Assn., 4040 West 70 Street, Minneapolis, Minn. 55435)

National Electrical Week, week of Edison's birthday—February 11 (National Electrical Week Committee, Suite 600, 1 Memorial Drive, St. Louis, Mo. 63102)

Protect the Gagwriter Week, first Sunday (George Q. Lewis, Humor Societies of America, 342 Madison Avenue, New York, N.Y. 10017)

National Crime Prevention Week, week of Lincoln's birthday, February 12 (National Exchange Club, 3050 Central Avenue, Toledo, O. 43606)

Negro History Week, includes February 12 (Lincoln's birthday) usually, and February 14 (birthday of Frederick Douglass) always. (Assn. for Study of Negro Life & History, 1407 14th Street NW, Washington, D.C. 20005)

National Beauty Salon Week, second Sunday (National Hairdressers & Cosmetologists Assn., via Bozell & Jacobs, 120 South Riverside Plaza, Chicago, Ill. 60606)

Brotherhood Week, week of Washington's Birthday (National Conference of Christians and Jews, 43 West 57th Street, New York, N.Y. 10019)

Catholic Book Week, last full week beginning Sunday (Catholic Library Assn., 461 West Lancaster Avenue, Haverford, Penna. 19041)

Future Farmers of America Week, Saturday before February 22 (National Future Farmers of America Center, P.O. Box 15160, Alexandria, Va. 22309)

National Engineers Week, last full week beginning Sunday (National Society of Professional Engineers, 2029 K Street NW, Washington, D.C. 20006)

Sertoma International Freedom Week, week of February 22 (Sertoma International, 1900 East Meyer Boulevard, Kansas City, Mo. 64132)

Pencil Week, last full week beginning Sunday (Lead Pencil Manufacturers Assn., 60 East 42nd Street, New York N.Y. 10017)

National Salesman's Week, last full week beginning Sunday (Sales & Marketing Executives International, 630 Third Avenue, New York, N.Y. 10017)

National Office Products Week, last full week beginning Friday (Office Appliances, Business Press International, 288 Park Avenue, Elmhurst, Ill. 60128)

Variable dates within February:

Washington's Birthday, third Monday.

Chinese New Year, January or February.

Ash Wednesday, start of Lent.

Mardi Gras or Shrove Tuesday.

Gasparilla Pirate Invasion, Tampa, Fla., starts first or second Monday.

Quebec Winter Carnival, Quebec City, Canada, first half of month.

Dartmouth Winter Carnival, Hanover, N.H., second weekend.

Westminster Kennel Club show, New York, usually second Monday. (437 Fifth Avenue, New York, N.Y. 10016)

American Assn. of School Administrators meets in Atlantic City,

beginning on second or third weekend (1201 16th Street NW, Washington, D.C. 20036)

——FEBRUARY 1——

National Freedom Day—Commemorates President Lincoln's 1865 proposal of anti-slavery amendment (13th) to U.S. Constitution.

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1790—U.S. Supreme Court convened for first time, in New York City.
1862—Julia Ward Howe's "Battle Hymn of the Republic" was published in *The Atlantic Monthly.*
1892—Ward McAllister's list of 400 guests for Mrs. William B. Astor's society ball in New York City made "the 400" synonymous with high society.
1926—Col. Billy Mitchell, apostle of air power, resigned from the U.S. Army.
1946—Trygve Lie of Norway became first Secretary General of the United Nations.
1951—United Nations General Assembly named Red China as aggressor in Korea.
1958—United Arab Republic proclaimed in merger of Egypt and Syria under Gamal Abdel Nasser.

The day's birthdays:

Composer Victor Herbert 1859, Dublin; actor Clark Gable 1901, Cadiz, Ohio; single Hildegarde (Hildegarde Loretta Sill), Adell, Wis.; humorist S.J. Perelman 1904, Brooklyn, N.Y.; film director John Ford 1895, Cape Elizabeth, Me.; basso Feodor Chaliapin 1873, Kazan, Russia; singer Renata Tebaldi, Pesaro, Italy.

Quotation of the day:

"America cannot be an ostrich with its head in the sand."—Woodrow Wilson, February 1, 1916

——FEBRUARY 2——

Groundhog Day—Legend says that if the groundhog comes out today and sees his shadow it means six more weeks of winter.

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1653—New Amsterdam was incorporated as a city.
1819—In Dartmouth College case, U.S. Supreme Court upheld sanctity of college charter as legal contract, against amendment by legislative action.
1848—Mexico and U.S. signed Treaty of Guadalupe Hidalgo, in which Mexico relinquished ownership of Texas, New Mexico, California and parts of other Western states.
1870—Cardiff Giant, "petrified" human figure "discovered" previous year on farm in Cardiff, N.Y., revealed as a hoax.
1876—Baseball's National League formed with teams from Chicago, Philadelphia, New York, Boston, Hartford, St. Louis, Louisville and Cincinnati.
1943—World War II siege of Stalingrad by Nazis ended after five months with surrender of German army of Field Marshal von Paulus in defeat that broke back of Hitler's Eastern offensive.
1961—Passengers aboard hijacked Portuguese liner *Santa Maria* landed in Recife, Brazil. (See January 22.)

The day's birthdays:

Violinist Fritz Kreisler 1875, Vienna; writer James Joyce 1882, Dublin; violinist Jascha Heifetz 1901, Vilna, Russia; writer Havelock Ellis 1859, Croydon, England; courtesan Nell Gwyn 1651, London; baseball's Red (Al) Schoendienst 1923, Germantown, Ill.

Quotation of the day:

"... beware of too much confidence in any man."—Thomas Jefferson, February 2, 1800

——FEBRUARY 3——

Four Chaplains Day—Commemorates heroic death in World War II of Rev. George L. Fox, Rabbi Alexander D. Goode, Rev. Clark V. Poling and Father John P. Washington in North Atlantic sinking of transport *Dorchester,* in 1943.

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1690–First American paper money was issued by Massachusetts to pay soldiers fighting in war with Quebec.
1865–Civil War peace-seeking conference was held secretly by President Lincoln with Confederate Vice President Alexander H. Stephens aboard a ship at Hampton Roads, Va.
1917–U.S. broke diplomatic relations with Germany; entered World War I two months later.
1919–Irish independence leader Eamon de Valera escaped from Lincoln Gaol, England, coming to U.S. by way of Ireland.

The day's birthdays:

Dr. Elizabeth Blackwell 1821, Bristol, England; editor Horace Greeley 1811, Amherst, N.H.; composer Felix Mendelssohn-Bartholdy 1809, Hamburg, Germany; writer Gertrude Stein 1874, Allegheny, Pa.; writer James Michener 1907, New York; artist Norman Rockwell 1894, New York; conductor Erich Leinsdorf 1912, Vienna; inventor Hudson Maxim 1853, Orneville, Me.

Quotation of the day:

"Is peace a rash system? Is it dangerous for nations to live in amity with each other?"–Charles James Fox, February 3, 1800

——FEBRUARY 4——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1789–Electoral College named George Washington as President of U.S.
1861–Confederate States of America organized in Montgomery, Ala.
1899–Philippine insurrection against rule of U.S. began, led by Emilio Aguinaldo.
1932–First Winter Olympic Games began in Lake Placid, N.Y.
1941–United Service Organizations, USO, founded to entertain U.S. armed forces.
1948–Ceylon Independence Day marks Asian nation's becoming independent member of British Commonwealth in 1948.

The day's birthdays:

Educator Mark Hopkins 1802, Stockbridge, Mass.; aviator Charles A. Lindbergh 1902, Detroit; painter Fernand Léger 1881, Argentan, France; actress Ida Lupino, London; feminist Betty Friedan, Peoria, Ill.

Quotation of the day:

"Experience makes fools wise."–Daniel O'Connell, February 4, 1836
"The issue between the Republicans and Democrats is clearly drawn. It has been deliberately drawn by those who have been in charge of twenty years of treason."–Joseph R. McCarthy, February 4, 1954

——FEBRUARY 5——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1531–Roger Williams arrived in America.
1818–Marshal Jean Bernadotte became King Charles XIV of Sweden.
1917–Mexican Constitution Day commemorates adoption of Constitution on this date.
1937–President Franklin D. Roosevelt proposed plan to enlarge Supreme Court, described by opponents as "court packing." Plan failed.
1962–The *National Observer* began publication as weekly newspaper.

The day's birthdays:

Actress Maxine Elliott 1871, Rockland, Me.; statesman Sir Robert Peel 1788, Bury, England; statesman Adlai E. Stevenson 1900, Los Angeles; baseball's Hank Aaron 1934, Mobile, Ala.; writer MacKinlay Kantor 1904, Webster City, Iowa.

Quotation of the day:

"Terror is nothing else than justice, prompt, secure and inflexible!"
–Robespierre, February 5, 1794

——FEBRUARY 6——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1693–College of William and Mary chartered in Williamsburg, Va.

1778–France and U.S. signed Treaties of Commerce and Alliance.
1788–Massachusetts became 6th state to ratify U.S. Constitution.
1840–New Zealand Day marks establishment of British rule in New Zealand under Treaty of Waitingi on this date.
1900–U.S. Senate ratified Treaty of Paris which ended Spanish-American War.
1933–Twentieth Amendment to U.S. Constitution, so-called Lame Duck Amendment providing for January start of President's and Congressional terms of office, went into effect.
1952–King George VI of Great Britain died and was succeeded on throne by his daughter, Queen Elizabeth II.

The day's birthdays:

Baseball's Babe Ruth 1895, Baltimore; actor Sir Henry Irving 1838, Somerset, England; Queen Anne of England 1665, England; Governor Ronald Reagan 1911, Tampico, Ill.; actress Zsa Zsa Gabor, Budapest.

Quotation of the day:

"It is said that God is always for the big battalions."–Voltaire, February 6, 1770
"Peace and justice are two sides of the same coin."–Dwight D. Eisenhower, February 6, 1957

——FEBRUARY 7——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1882–John L. Sullivan knocked out champion Paddy Ryan at Mississippi City, Miss. in 9th round to become the last bare knuckle world's heavyweight boxing champion.
1904–Fire destroyed most of business district of Baltimore, Md.
1936–Flag of the Vice President of the U.S. authorized.
1950–U.S. recognized Saigon government of Vietnam.

The day's birthdays:

Writer Charles Dickens 1812, Landport, England; writer Sinclair Lewis 1885, Sauk Center, Minn.; statesman Sir Thomas More 1478, London.

Quotation of the day:

"No attachments soothe the mind so much as those contracted in

——FEBRUARY 8——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1587–Mary, Queen of Scots, executed at Fotheringhay Castle, England.
1910–Boy Scouts of America chartered in Washington, D.C.
1915–*Birth of a Nation* had its world premiere at Clune's Auditorium, Los Angeles.
1949–Jozsef Cardinal Mindszenty sentenced to life imprisonment by Communist Hungary. (He took refuge in the U.S. Embassy in Budapest when he was released from jail in the Hungarian revolution of 1956.)

The day's birthdays:

General William Tecumseh Sherman 1820, Lancaster, Ohio; critic John Ruskin 1819, London; writer Jules Verne 1828, Nantes, France; actress Lana Turner, Wallace, Idaho; actor Jack Lemmon 1925, Boston.

Quotation of the day:

"The changes between wet and dry are much more frequent and sudden in Europe than in America. Though we have double the rain, it falls in half the time."–Thomas Jefferson, February 8, 1805

——FEBRUARY 9——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1825–In only such instance in U.S. history, the son of a living former President was himself elected President of U.S. when House of Representatives, voting because Electoral College had been unable to give any candidate a majority, elected John Quincy Adams.
1870–National Weather Service established as unit of U.S. Army.
1942–French liner *Normandie* caught fire at pier in New York while being converted for use as wartime troopship. Capsized following morning.
1943–Japanese evacuated Guadalcanal, ending epic World War II

The day's birthdays:

President William Henry Harrison 1773, Berkeley, Va.; actress Mrs. Patrick Campbell 1865, London; statesman Dean Rusk 1909, Cherokee County, Ga.; writer Brendan Behan 1923, Dublin; sportsman Bill Veeck 1914, Chicago; actress Gypsy Rose Lee 1914, Seattle; actor Ronald Colman 1891, Richmond, England.

Quotation of the day:

"Give us the tools and we will finish the job."–Winston Churchill, February 9, 1941

——FEBRUARY 10——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1763–Treaty of Paris ended French and Indian War, gave all Canada to British as well as all French holdings east of Mississippi except New Orleans, which went to Spain, ending French power in North America.
1862–In world's smallest marriage, P.T. Barnum's famous midget, General Tom Thumb, married fellow midget Lavinia Warren in New York.
1898–President McKinley signed peace treaty (Treaty of Paris) which Senate had ratified on February 6, ending Spanish-American War.
1933–Postal Telegraph Company delivered first singing telegram, in New York.
1936–Gestapo, Nazi secret police, given free hand to arrest Germans without trial, making Hitler's dictatorship absolute in Germany.
1942–Liner *Normandie* capsized at pier in New York. (See February 9.)
1967–Twenty-fifth Amendment to U.S. Constitution (Presidential Disability and Succession) went into effect.

The day's birthdays:

Writer Charles Lamb 1775, London; editor William Allen White 1868, Emporia, Kansas; tennis player William (Bill) Tilden 1893, Germantown, Pa.; comedian Jimmy Durante 1893, New York; statesman Harold Macmillan 1894, London; writer Bertolt Brecht

1898, Augsburg, Germany; singer Leontyne Price, Laurel, Miss.; actress Dame Judith Anderson, Adelaide, Australia.

Quotation of the day:

"The impersonal hand of government can never replace the helping hand of a neighbor."–Hubert H. Humphrey, February 10, 1965

——FEBRUARY 11——

National Science Youth Day–observed on birthday of Thomas A. Edison as part of National Electrical Week (see Variable Dates in February)

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1812–Governor Elbridge Gerry of Massachusetts devised redistricting with the state legislature to create artificial districts favoring his party; although practice was not new, it was given his name, as "gerrymander."
1861–President-elect Abraham Lincoln left Springfield, Ill. to go to Washington for his inauguration the following month.
1889–U.S. Department of Agriculture was raised to Cabinet status and first Secretary, Norman J. Coleman, took office.
1929–Roman Catholic Church and Italian government of Benito Mussolini signed Lateran Treaties which recognized Vatican City as independent state and ended status of Pope as "prisoner of the Vatican."
1968–New Madison Square Garden, third to bear the name, opened in New York.

The day's birthdays:

Inventor Thomas Alva Edison 1847, Milan, Ohio; boxer Max Baer 1909, Omaha, Neb.; writer Joseph Mankiewicz 1909, Wilkes-Barre, Pa.; King Farouk of Egypt 1920, Cairo.

Quotation of the day:

"The people are the masters."–Edmund Burke, February 11, 1780

——FEBRUARY 12——

Lincoln's Birthday–Holiday in some states marks Abraham Lincoln's birth in 1809, in Hardin (Larue) county, Ky.

Georgia Day—Commemorates landing of James Oglethorpe in 1733 at what is now Savannah, Ga.

Kosciusko Day—Marks birthday of Polish patriot Thaddeus Kosciusko, who fought in American Revolutionary War—in 1746, in Mereczowszczyno, Poland.

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1908—First around-the-world automobile race started in New York City. Winning car returned to New York on August 1.
1915—Cornerstone of Lincoln Memorial in Washington, D.C. was laid.
1924—Paul Whiteman and his Orchestra, with George Gershwin as soloist, brought a new kind of music to Carnegie Hall, New York, with the world premiere of "Rhapsody in Blue."
1965—Yalta agreement of President Roosevelt, Prime Minister Churchill and Marshal Stalin was announced, with no mention of Russian privileges in Asia in return for U.S.S.R.'s entry into the war against Japan.

The day's birthdays:

President Abraham Lincoln 1809, Hardin County, Ky.; scientist Charles Darwin 1809, Shrewsbury, England; clergyman Cotton Mather 1663, Boston; freedom fighter Thaddeus Kosciusko 1746, Mereczowszczyno, Poland; musician Roy Harris 1898, Lincoln County, Okla.; General Omar N. Bradley 1893, Clark, Mo.; actor Lorne Greene 1915, Ottawa; basketball's Bill Russell 1934, Monroe, La.; labor leader John L. Lewis 1880, Lucas, Iowa.

Quotation of the day:

"That nation has not lived in vain which has given the world Washington and Lincoln, the best great men and the greatest good men whom history can show."—Henry Cabot Lodge, February 12, 1909

—FEBRUARY 13—

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1635—Boston Latin School, Boston, Mass. was founded; oldest U.S. public school.

1689—William and Mary proclaimed King and Queen of England by Parliament.
1747—First magazine to be published in America, *The American Magazine*, was issued in Philadelphia by Andrew Bradford.
1795—First state university in U.S., University of North Carolina, opened in Chapel Hill, N.C.
1867—First public performance of "The Blue Danube" waltz, in Vienna.
1914—American Society of Composers, Authors and Publishers (ASCAP) was organized.
1960—France exploded its first atomic device in the Sahara.

The day's birthdays:

Artist Grant Wood 1892, Animosa, Iowa; writer Georges Simenon 1903, Liege, Belgium; statesman Talleyrand 1754, Paris; First Lady Bess Truman 1885, Independence, Mo.; singer Eileen Farrell, Willimantic, Conn.

Quotation of the day:

"The Revolution was effected before the war commenced. The Revolution was in the hearts and minds of the people . . . This radical change in the principles, opinions, sentiments, and affections of the people, was the real American Revolution."—John Adams, February 13, 1818

—FEBRUARY 14—

Valentine's Day—Traditional day for lovers, comic and affectionate greeting cards and gifts.

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1859—Oregon admitted to U.S. as 33rd state.
1865—Publication of first official Congressional Directory authorized.
1912—Arizona became 48th state admitted to U.S.
1929—Seven gangsters of group opposed to Al Capone were murdered in a Chicago garage, in case referred to as the Valentine's Day Massacre.
1945—Allied air raids created mass havoc in Dresden, Germany, in World War II.

The day's birthdays:

Comedian Jack Benny 1894, Waukegan, Ill.; economist Thomas R. Malthus 1766, Surrey, England; TV star Hugh Downs 1921, Akron, Ohio; singer Cesare Siepi 1923, Milan; Black leader Frederick Douglass 1817, Tuckahoe, Md.

Quotation of the day:

"... there are times when the insignificance of the accuser is lost in the magnitude of the accusation."–Henry Grattan, February 14, 1800

"Some persons who were intended by Nature to adorn an inviolable privacy are thrust upon us by paragraphers and interviewers, whose existence is a dubious blessing."–Sir Henry Irving, February 14, 1898

——FEBRUARY 15——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1764–St. Louis, Mo., established by Auguste Chouteau.
1842–First adhesive postage stamps in U.S. were introduced by a private mail service in New York.
1898–U.S. battleship *Maine* was blown up in harbor of Havana, Cuba.
1933–Mayor Anton Cermak of Chicago was killed by an assassin aiming at President-elect Franklin D. Roosevelt in Miami, Fla.
1942–British surrendered Singapore to Japanese in World War II.
1944–Allies bombed the abbey of Monte Cassino in Italy as a Nazi stronghold in World War II.
1961–Airplane carrying 34 members of U.S. figure skating team crashed near Brussels, Belgium; entire group was among 72 passengers and crew killed.
1970–In Chicago trial of seven accused of conspiracy to riot during 1968 Democratic Convention, defense lawyers were sentenced by Judge Julius Hoffman to prison terms for contempt, while jury deliberated.

The day's birthdays:

Astronomer Galileo Galilei 1564, Pisa, Italy; feminist Susan B. Anthony 1820, Adams, Mass.; inventor Cyrus Hall McCormick 1809,

Rockbridge County, Va.; statesman Elihu Root 1845, Clinton, N.Y.; explorer Sir Ernest Henry Shackleton 1874, Kilkee, Ireland; actor John Barrymore 1882, Philadelphia; actress Claire Bloom, London; songwriter Harold Arlen 1905, Buffalo; football coach Earl Blaik 1897, Detroit.

Quotation of the day:

"No people in a great emergency ever found a faithful ally in gold. It is the most cowardly and treacherous of all metals. It makes no treaty that it does not break. It has no friend whom it does not sooner or later betray."–John J. Ingalls, February 15, 1878

"The Republic never retreats. Its flag is the only flag that has never known defeat. Where that flag leads we follow, for we know that the hand that bears it onward is the unseen hand of God."–Albert J. Beveridge, February 15, 1899

——FEBRUARY 16——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1804–Lieutenant Stephen Decatur led a Navy crew into pirate harbor of Tripoli and destroyed warship *Philadelphia* which pirates had captured.
1862–Brigadier General U.S. Grant won nickname of "Unconditional Surrender" Grant by demanding those terms of Fort Donelson, Tenn. in Civil War.
1868–Benevolent and Protective Order of Elks founded in New York.
1918–Lithuanian Independence Day marks proclamation of independence for nation in 1918. It was later absorbed by U.S.S.R.
1945–U.S. forces landed on Japanese-held Corregidor island in Manila Bay in World War II; completed reconquest of island on March 3.

The day's birthdays:

Writer Henry Adams 1838, Boston; actress Katharine Cornell, Berlin; writer Van Wyck Brooks 1886, Plainfield, N.J.; ventriloquist Edgar Bergen 1903, Chicago; Judge Harold Medina 1888, New York.

Quotation of the day:

"While the people should patriotically and cheerfully support their

Government, its functions do not include the support of the people."—Grover Cleveland, February 16, 1887

——FEBRUARY 17——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1621—Miles Standish made military captain of the colony of Pilgrims at Plymouth, Mass.
1801—Thomas Jefferson elected President by House of Representatives on 36th ballot.
1864—Confederate submarine *Hunley* torpedoed and sank Union warship *Housatonic* in Charleston Harbor, S.C., in Civil War, in first successful wartime use of submarine. *Hunley* was lost after completing mission.
1897—National Congress of Parents and Teachers established as National Congress of Mothers in Washington, D.C.
1913—The Armory Show introduced modern art to U.S. public at 69th Regiment Armory in New York.
1944—Battle of Eniwetok Atoll in Pacific in World War II, February 17-22; resulted in U.S. victory.

The day's birthdays:

President's daughter Margaret Truman Daniel, Independence, Mo.; singer Marian Anderson, Philadelphia; sports announcer Red (Walter L.) Barber 1908, Columbus, Miss.; actor-ex-football star Jim Brown 1936, Manhasset, N.Y.; Dr. Alfred Adler 1870, Vienna.

Quotation of the day:

"Religious persecution may shield itself under the guise of a mistaken and overzealous piety."—Edmund Burke, February 17, 1788

——FEBRUARY 18——

Zodiac sign for the day: Aquarius, the water boy.
Zodiac birthstone for the day: Garnet.

The day in history:

1678—John Bunyan's *Pilgrim's Progress* was published in England.
1735—First opera performance in America, *Flora, or Hob in the Well,* by Colley Cibber, presented in Charleston, S.C.

1861—Jefferson Davis inaugurated as President of Confederate States of America in Montgomery, Ala.
1930—Planet Pluto discovered by Clyde W. Tombaugh at Lowell Observatory, Flagstaff, Ariz., as predicted by Professor Percival Lowell.
1951—Nepal National Day commemorates Asian nation's adoption of its constitution on this date.
1965—British West African colony of Gambia became independent.
1970—Chicago Federal Court jury acquitted seven defendants of conspiracy to incite riots at time of 1968 Democratic Convention, convicted five of them on other counts.

The day's birthdays:

Philanthropist George Peabody 1795, Peabody, Mass.; guitarist Andrés Segovia 1894, Linares, Spain.

Quotation of the day:

"All we ask is to be let alone."—Jefferson Davis, February 18, 1861

——FEBRUARY 19——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst

The day in history:

1864—Knights of Pythias founded in Washington, D.C.
1878—Thomas A. Edison received patent on the phonograph.
1945—U.S. Marines landed on island of Iwo Jima in bitter World War II battle against Japanese.

The day's birthdays:

Astronomer Copernicus (Nikolaj Kopernik) 1473, Torum, Poland; actor David Garrick 1717, Hereford, England; singer Adelina Patti 1843, Madrid; explorer Sven Hedin 1865, Stockholm; actress Merle Oberon, Tasmania; band leader Stan Kenton 1912, Wichita, Kans.; jockey Eddie Arcaro 1916, Cincinnati; actor Lee Marvin 1924, New York.

Quotation of the day:

"A thing may look specious in theory, and yet be ruinous in practice; a thing may look evil in theory, and yet be in practice excellent."—Edmund Burke, February 19, 1788
"Many college text-books which were a weariness and a stumbling

block when *studied,* I have since read a little in with pleasure and profit."–Henry D. Thoreau, February 19, 1854

——FEBRUARY 20——

John Glenn Day–Commemorates U.S. astronaut's orbiting the earth on this date in 1962.

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1938–Anthony Eden resigned as British Foreign Minister in protest against appeasement policies of Prime Minister Chamberlain toward Nazi Germany.
1942–Lt. E.H. O'Hare became first World War II naval aviation ace by shooting down five Japanese bombers and damaging a sixth in Pacific.
1946–Council of Economic Advisers established by U.S. to advise President.

The day's birthdays:

Actor Joseph Jefferson 1829, Philadelphia; artist Honoré Daumier 1808, Marseilles, France; singer Mary Garden 1877, Aberdeen, Scotland; actor Sidney Poitier 1927, Miami; U.S.S.R. Premier Alexei Kosygin 1904, Leningrad.

Quotation of the day:

"... there is something radically wrong with so-called 'free enterprise'."–Garfield Bromley Oxnam, February 20, 1958

——FEBRUARY 21——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1866–Lucy B. Hobbs graduated as first woman dentist from Ohio College of Dental Surgery in Cincinnati.
1885–Washington Monument in Washington, D.C. was dedicated.
1916–Battle of Verdun began in France in World War I.
1925–*The New Yorker* magazine began publication.
1954–U.S. Army accused Senator Joseph R. McCarthy (R. Wis.) of

browbeating Army personnel, starting case which ended with Senate censure of him.
1972–President Nixon visited Red China for talks with Mao Tse-tung and other Chinese officials, February 21-28.

The day's birthdays:

John Henry Cardinal Newman 1801, London; composer Leo Delibes 1836, St. Germain du Val, France; poet W.H. Auden 1907, York, England; President's daughter Tricia Nixon, Whittier, Calif.

Quotation of the day:

"When angry, count ten before you speak; if very angry, an hundred."–Thomas Jefferson, February 21, 1825
"Whoever suffers for truth and justice becomes august and sacred."
–Emile Zola, February 21, 1898

——FEBRUARY 22——

Washington's Birthday–Although George Washington was born on this date, according to the New Style calendar, in 1732 in Wakefield, Va., his birthday is now observed as a holiday on the third Monday of February.

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1630–Indians introduced Pilgrims to popcorn.
1819–Florida ceded to U.S. by Spain.
1879–First 5 and 10 cent store established by F.W. Woolworth in Utica, N.Y.

The day's birthdays:

President George Washington 1732, Wakefield, Va.; composer Frederic Chopin 1810, Warsaw; poet James Russell Lowell 1819, Cambridge, Mass.; poet Edna St. Vincent Millay 1892, Rockland, Me.; philosopher Arthur Schopenhauer 1788, Danzig, Poland; Boy Scout founder Lord Robert Baden-Powell 1857, London; labor leader David Dubinsky 1892, Brest-Litovsk, Poland; Senator Edward M. Kennedy 1932, Brookline, Mass.; actor Robert Young 1907, Chicago.

Quotation of the day:

"Few can be induced to labor exclusively for posterity. Posterity has done nothing for us."–Abraham Lincoln, February 22, 1842

——FEBRUARY 23——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1836–Siege of the Alamo began, San Antonio, Texas.
1886–Charles M. Hall invented electrolytic process for manufacture of aluminum.
1905–Rotary Clubs were founded in Chicago.
1945–U.S. Marines raised flag at Iwo Jima in famous photograph of World War II.
1954–First mass inoculations with Salk anti-polio serum began in Pittsburgh, Penna.
1970–Guyana, in South America, became a republic in British Commonwealth.

The day's birthdays:

Diarist Samuel Pepys 1633, Cambridgeshire, England; composer George Frederick Handel 1685, Halle, Germany; educator Emma Hart Willard 1787, Berlin, Conn.; Black scholar William E.B. DuBois 1868, Great Barrington, Mass.; writer William Shirer 1904, Chicago; actor Peter Fonda 1939, New York; baseball's Elston Howard 1930, St. Louis.

Quotation of the day:

"I'm as conservative as the Constitution, as liberal as Lincoln, and as progressive as Theodore Roosevelt."–George Romney, February 23, 1965

——FEBRUARY 24——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1803–In Marbury *v.* Madison, U.S. Supreme Court for first time ruled an Act of Congress unconstitutional.
1868–House of Representatives voted to impeach President Andrew Johnson.
1901–U.S. Steel Corporation incorporated in New Jersey.

1918–Estonia became independent of Russia, only to be absorbed again some 20 years later.
1942–Voice of America made its first broadcast.
1946–Juan Peron elected President of Argentina.
1966–Ghana President Kwame Nkrumah was overthrown by Army while he was visiting China.
1970–Mrs. Margaret Kienast of Liberty Corners, N.J. gave birth to three girls and two boys.

The day's birthdays:

Artist Winslow Homer 1836, Boston; Baseball's Honus (John Peter) Wagner 1874, Carnegie, Penna.; story teller Wilhelm Karl Grimm 1786, Hanau, Germany.

Quotation of the day:

"Whatever little we have gained we have gained by agitation, while we have uniformly lost by moderation."–Daniel O'Connell, February 24,1824
"High society is for those who have stopped working and no longer have anything important to do."–Woodrow Wilson, February 24, 1915

——FEBRUARY 25——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1601–Earl of Essex beheaded for plot against Queen Elizabeth of England.
1870–Hiram H. Revels of Mississippi became first Black member of U.S. Senate.
1908–First tunnel under Hudson River between New York and New Jersey opened (for railroad trains).
1913–Sixteenth Amendment to Constitution, authorizing U.S. income tax, was declared ratified.
1948–Czechoslovakia was taken over by Communists when President Benes was forced to appoint pro-Red Cabinet.
1956–Premier Khrushchev denounced late dictator Stalin's "cult of personality" in speech to Communist Party congress, U.S.S.R.

The day's birthdays:

Painter Pierre August Renoir 1841, Limoges, France; singer Enrico

Caruso, 1873, Naples; South American leader José de San Martín 1778, Yapeyú, Uruguay River; philosopher Benedetto Croce 1866, Pescasseroli, Italy; Beatle George Harrison 1943, Liverpool.

Quotation of the day:

"The extensive means of destruction invented by science, the crime against mankind that a nuclear war would constitute, compel us to make peace our first and permanent goal."—Georges Pompidou, February 25, 1970

——FEBRUARY 26——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1815—Napoleon escaped from Elba to begin his second, brief war in Europe.
1848—Second French Republic proclaimed.
1870—New York's first subway opened in downtown Manhattan; it failed.
1942—World War II naval aviator Donald F. Mason reported from Pacific: "Sighted sub, sank same."
1951—Twenty-second Amendment to Constitution, limiting Presidential tenure to two terms, was ratified.

The day's birthdays:

Writer Victor Hugo 1802, Besançon, France; "Buffalo Bill" (William Frederick) Cody 1846, Scott County, Iowa; baseball's Grover Cleveland Alexander 1887, St. Paul, Neb.; actor Jackie Gleason 1916, Brooklyn; actor Tony Randall 1924, Tulsa, Okla.

Quotation of the day:

"Justice has nothing to do with expediency."—Woodrow Wilson, February 26, 1916

——FEBRUARY 27——

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1700—Pacific island of New Britain discovered and named by William Dampier.

1844—Dominican Republic became independent.
1933—Reichstag building in Berlin was set afire; Nazis attempted to blame Communists.
1967—Antigua and St. Kitts became free West Indies states within British Commonwealth.

The day's birthdays:

Poet Henry Wadsworth Longfellow 1807, Portland, Me.; actress Dame Ellen Terry 1847, Coventry, England; writer John Steinbeck 1902, Salinas, Calif.; singer Lotte Lehmann 1888, Perleberg, Germany; writer James T. Farrell 1904, Chicago; writer Lawrence Durrell 1912, Julundur, India; actress Elizabeth Taylor, London; broadcasting's David Sarnoff 1891, Uzlean, Minsk, Russia; Supreme Court Justice Hugo L. Black 1886, Harlan, Ala.

Quotation of the day:

"You may call the people a mob, but do not forget that a mob too often speaks the sentiments of the people."—Lord Byron, February 27, 1812

"Let us have faith that right makes might, and in that faith let us to the end dare to do our duty as we understand it."—Abraham Lincoln, February 27, 1860

——FEBRUARY 28——

Bachelors Day—in non-Leap Years.

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1749—Henry Fielding's *Tom Jones* published in England.
1827—Baltimore and Ohio Railroad incorporated in Maryland.
1844—While President Tyler was visiting the warship *Princeton*, two members of his Cabinet were among the five people killed when a gun exploded.

The day's birthdays:

Dancer Waslaw Nijinsky 1890, Kiev, Russia; essayist Montaigne (Michel Eyquem) 1533, Bordeaux, France; artist Sir John Tenniel 1820, London; medical missionary Sir Wilfred Grenfell 1865, Cheshire, England; singer Geraldine Farrar 1882, Melrose, Mass.; writer Ben Hecht 1894, New York; scientist Linus Pauling 1901, Portland, Ore.; actor Zero Mostel 1915, Brooklyn; Stalin's daughter Svetlana Alleluyeva Stalina, Moscow.

Quotation of the day:

"... now and then a little difference do no hurt."—Samuel Pepys, February 28, 1665

——FEBRUARY 29——

Bachelors Day—in Leap Years.

Leap Year Day—The only years in which this date occurs are leap years (last two digits divisible by 4).

Zodiac sign for the day: Pisces, the fish.
Zodiac birthstone for the day: Amethyst.

The day in history:

1892—Britain and U.S. signed treaty on seal hunting in Bering Sea.
1932—Right-wing coup attempted in Finland, defeated in 3 days.
1956—Pakistan proclaimed itself an Islamic Republic, effective March 23.
1968—President's National Advisory Commission on Civil Disorders issued report condemning white racism for black violence in U.S.

The day's birthdays:

Composer Gioacchino Rossini 1792, Pesaro, Italy; General Marquis de Montcalm 1712, Nimes, France.

Quotation of the day:

"Our nation is moving toward two societies, one black, one white—separate and unequal."—President's National Advisory Commission on Civil Disorders, February 29, 1968

March

IN THE ANCIENT CALENDAR, March was the first month of the year, until 46 B.C. In England it was the first month until the calendar reform of 1752. It draws its name from the Roman god of war, Mars. As the month when spring arrives, it has been traditionally a time of beginning—noticeably longer days, primal urges among man and beast.

The Lenten season is usually at its height in March, and Holy Week, late in the month if not in early April, serves as a reminder of the eternal mysteries; but in March we need not look beyond our own American history to recall human martyrdom. It was in this month that the shadow of the American Revolution was first cast by the Boston Massacre, and that some generations later an outnumbered group of defenders gave us cause to remember the Alamo.

March is when New York City hired a rainmaker, the White House had its first wedding and a pioneer of new frontiers in science was born, a man named Albert Einstein. Also among the March birthday entries is that towering genius of the arts, Michelangelo. And it was in this month that Robert Koch discovered the tubercle bacillus, Alexander Graham Bell perfected the telephone and the first man walked in space. Economists remember the 1933 March bank holidays and hapless letter writers may recall the month for the 1970 postal strike.

March's birthstone: Bloodstone or aquamarine.
March's flower: Daffodil or jonquil.

Quotations about March:

"March comes in like a lion and goes out like a lamb."—English Proverb, 17th Century

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THE ALMANAC OF DATES

EVENTS OF THE PAST FOR EVERY DAY OF THE YEAR

LINDA MILLGATE

Harcourt Brace Jovanovich New York and London

Full Moon - Snow Moon
Beaver Round-up Month at Dillingham, Alaska
California gray whales migrate to Mexico calving grounds
First weekend - Cordova, Alaska Iceworm Festival
First week - Bears born
2nd Friday - Start of annual Alaskan fur rendezvous at Anchorage
2nd weekend - Dartmouth College Winter Carnival (Hanover, N.H.)
3rd Monday - Washington's Birthday observance (as of 1971)
Start of British Industries Fair (11 days in London and Birmingham)

February 1st

St. Brigid (or Bride) Day, Irish abbess
National Freedom Day (U.S.)
Feast of St. Ignatius of Antioch/Theophoros, martyred by the lions of Rome

772 AD Adrian I elected Pope
1328 Charles IV, "the Fair," King of France, died
1553 First fair at Lyme Regis, Dorsetshire, England
1691 Pope Alexander VIII died
1733 Augustus II, "the Strong," King of Poland died
1790 First meeting of the U.S. Supreme Court (New York City)
1793 First fugitive slave law in the U.S. passed
1814 Lord Byron's "The Corsair" published and 10,000 sold
1840 First U.S. college of dentistry chartered (Baltimore)
1859 Denver's first hoel, The Eldorado, opened
1861 Texas seceded from the Union
1865 Abolishment of slavery bill signed
1887 Harry Scherman, founder of the Book-of-the-Month Club, born
1901 Clark Gable, actor, born
1904 S.J. Perelman, author, born
1908 King Carlos I and the Crown Prince of Portugal assassinated
1918 French ship LaDive torpedoed in the Mediterranean
1944 Piet Mondrian, Dutch artist, died
1952 U.S. named Communist China the aggressor in Korea
United Arab Republic (Egypt and Syria) formed
1970 Frontier Days and Rodeo at Homestead, Florida
Swamp-buggy races at St. Petersburg, Florida
1973 Mt. Asama volcano erupted (Japan)

February 2nd

Candlemass
Groundhog Day (especially in Punxsutawney, Pennsylvania)
Purification (Protestant Episcopal)

962 AD Otto II, King of the Lombards, crowned Holy Roman Emperor
1208 James I, "the Conqueror," King of Aragon, born
1389 Last date for English Guilds to send particulars of their organization to the Royal Council
1440 Frederick IV crowned German King
1461 King Edward IV of England defeated his Earls at Mortimer's Cross (2nd Battle of St. Albans)
1494 Columbus founded the West Indian slave trade
1509 Battle of Div (Portuguese destroyed the Moslem fleet)
1534 Swabian League expired
1558 Lutheran University of Jena opened
1640 St. Joan of Lestonnac died (Feast Day)
1651 Nell Gwyn, actress and mistress of King Charles II of England, born
1653 New Amsterdam became the first American city to receive a charter of self-government (New York City)
1709 Alexander Selkirk, the real Robinson Crusoe, rescued
1769 Pope Clement XIII died of a stroke
1780 France decided to support the American Revolution
1801 First Parliament of England and Ireland met

1804 George Walton, signer of the Declaration of Independence, died
1831 Mauro Capellari elected Pope Gregory XVI
1848 Treaty of Guadalupe Hidalgo (Mexico and U.S.) gave U.S. Texas, Arizona, and California
1854 Stephen H. Horgan, inventor of half-toning, a means of printing pictures, born
1859 Havelock Ellis, physician-psychologist-writer, born
1876 Baseball's National League formed with 8 teams
1879 Monroe Doctrine invoked to settle a boundary dispute between Venezuela and British Guiana
1882 Geoffery O'Hara, composer of "K-k-k-katy," born
Knights of Columbus, Catholic fraternal organization, founded
James Joyce, author, born
1893 First close-up movie taken (of a sneeze) in Thomas Edison's studio
1894 Kearsarge wrecked on Roncatof Reef
1901 Army Nurse Corps organized as part of the medical department
Jascha Heifetz, violinist, born
1910 Joan Bennett, actress, born
1919 Ann Fogarty, fashion designer, born
1922 James Joyce's novel Ulysses published in Paris
1932 Reconstruction Finance Corp. began operation
1934 Export-Import Bank of Washington created
1939 Japanese submarine, I-36, sank in Bungo Channel
1942 Swedish ship Amerikaland sank off Cape Hatteras
1943 Germans surrendered at the Battle of Stalingrad
1959 Black and white students first shared classrooms in public schools in Virginia
1969 Boris Karloff, actor, died
1970 Underwater Film Festival at Santa Monica, California
Buffalo Dance at San Filipe Pueblo, New Mexico
Bertrand Russell, philosopher, died
1971 Start of the Carrot Carnival at Holtville, California
Natosat II, military communications satellite launched

February 3rd

Feast of St. Werburgh, daughter of King Wulfhere of Mercia (england)
Feast of St. Ia
316 AD St. Blaise martyred (patron of wool weavers carvers and builders: invoked against wild beasts, coughs, goiter, and throat diseases) Feast Day
590 Pope Gregory I, "the Great," elected to office
619 St. Lawrence of Canterbury, 2nd bishop, died (Feast Day)
1116 Koloman, King of Hungary, died
1468 Johann Gutenberg, pioneer printer, died
1472 York Cathedral reconsecrated (England)
1518 Silence imposed on Augustine monks by the Pope
1521 Magellan discovered Shark Island in the Pacific
1679 Jan Steen, Dutch artist, died
1690 Masachusetts Colony began issuing its own bills of credit
1809 Illinois became a U.S. territory
Felix Mendelssohn, composer, born
1811 Horace Greeley, journalist, born
1821 Elizabeth Blackwell, first woman doctor, born
1831 Revolt of the Papal States began
1848 British claimed Orange Free State, South Africa
1853 Hudson Maxim, inventor of smokeless gunpowder, born
1865 Hampton Roads Conference (U.S. Civil War)
David Lawrence Pierson, originator of Constitution Day (September 17th), born
1867 Prince Mutsuhito became Emperor of Japan at age 15
1874 Gertrude Stein, author, born
1882 Meteorite rain fell near Mocs, Transylvania
1894 Norman Rockwell, artist, born
1895 Nick Kenny, columnist-lyricist, born
1898 National Biscuit Company incorporated
1907 James A. Michener, author, born
1911 California adopted its state flag
1916 Daljin Maru sank in the Pacific
1917 U.S. severed diplomatic relations with Germany
Housatanic steamship sunk by a German submarine
1923 Lassen Peak volcano erupted (Califonria)
1924 Woodrow Wilson, 28th President of the U.S., died
1943 Troopship Dorchester torpedoed and sunk (Four Chaplains' Day)
1945 Yalta Conference began
U.S. forces recaptured Manila, Philippines

1947 Snag Airport, Yukon, reported record cold for North America of minus 81 degrees
1951 Chapel dedicated to the Four Chaplains at Philadelphia
1954 Queen Elizabeth II became the first reigning British monarch to visit Australia
1963 Tanker Marine Sulphur Queen vanished in the Gulf of Mexico
1965 OSO 2, solar study satellite, launched
1972 Winter Olympics opened in Sapporo, Japan

February 4th

Feast of St. Phileas
Feast of St. Andrew Corsini
Ceylon Independence Day
47 BC Battle of Thapsus
211 AD Septimius Severus, Roman military dictator, died
846 St. Joannicius died (Feast Day)
900 Louis, "the Child," crowned King of Germany
1189 St. Gilbert of Sempringham founder of the only English order, Gilbertines, died (Feast Day)
1498 Antonio Pollaivolo, sculptor of Papal tombs, died
1505 St. Joan of France, deposed Queen, died (Feast Day)
1693 St/ John de Britto, missionary to India, martyred (Feast Day)
1764 Topsham, Maine, incorporated
1783 Southern Italy and Sicily rocked by an earthquake
1797 Peru and Ecuador shaken by an earthquake
1809 Louis Braille, inventor, born
1810 Illinois Territorial Seal first used
1861 Confederate States of America organized (Montgomery, Alabama)
1868 "Greenback" paper money discontinued in the U.S.
1889 Philippines declared war on the U.S.
French courts dissolved the bankrupt Panama Canal Company
1897 Ludwig Erhard, German statesman born
1899 Philippine guerrilla war for independence began
1900 MacKinley Kantor, novelist, born
1902 Charles Lindbergh, flyer, born
1916 National Bank of the Philippines chartered
1917 U.S. troops withdrew from Mexico (Mexican Revolution)
1941 United Service Organizations founded
1943 Solar eclipse
1948 Griffith O. Ellis, publisher, died
1953 Ben Ames Williams, novelist, died
1970 Sert II satellite launched
1971 Rolls-Royce, Ltd., went bankrupt
1973 Start of the Chinese year 4671

February 5th

Constitution Day, national holiday in Mexico
251 AD St. Agatha died in prison (patron of Catonia, Sicily, nurses, and bell-makers; invoked against breast disease and fire) (Feast Day)
1265 Guy Foulques elected Pope as Clement IV
1597 Christian missionaries in Japan killed by the governor at Nagasaki (Feast of Martyrs in Japan)
1699 Joseph Ferdinand, ruler of Bavaria, died of smallpox
1723 John Witherspoon, signer of the Declaration of Independence, born
1725 Bering expedition set out from St. Petersburg, Russia
1788 Sir Robert Peel, British statesman, born
1818 Charles XIII, King of Norway and Sweden, died
1826 Millard Fillmore married Abigail Powers
1838 Abram Joseph Ryan, "Poet of the Confederacy," born
1840 John Boyd Dunlop, pioneer of the pneumatic rubber tire, born
1850 Bishop Rock Lighthouse, almost complete, destroyed by a storm (England)
1861 Sellers patented his kinematoscope, a basic motion picture device
1870 The Press Association, British news agency, began functioning
1873 Maritime Association of the Port of New York founded
1884 Grolier Club, organization of New York book-lovers, founded
1887 Verdi's Othello first produced
1892 Temperature in Siberia reached 94 degrees below zero
1906 Allan Seager, author, born
John Carridine, actor, born
1911 Missouri's 2nd state capitol destroyed by fire
1918 British ship Tusconia torpedoed off Ireland
1931 Campbell set a speed record of 246,086 mph in a Napier-Campbell car
1934 Hank Aaron, baseball player, born

1970 Start of Cambridge, Maryland, Muskrat-skinning Championship
1972 Marianne Moore, poet and baseball fan, died
1913, 1940, 2008 Shrove Tuesday

February 6th

Feast of St. Dorothy, martyr
Feast of St. Photius, patriarch of Constantinople
Feast of St. Titus, first missionary to Crete
Feast of St. Vaast (Gaston), patron of children who are slow to walk
Kannokura ("Where the Gods Live"), festival of the Shinto religion
337 AD Julius I became Pope
679 St. Amand of Maastricht, missionary-bishop, died (Feast Day)
1519 Sir Walter Raleigh left England to explore Guiana, S. America
1564 Christopher Marlowe, English playwright, born
1665 Queen Anne of England born
1670 Frederick III, King of Denmark and Norway, died
1682 LaSalle sighted the Mississippi River
1685 King Charles II of England died
1704 Pope Clement XII died
1756 Aaron Burr, U.S. vice-president, born
1778 French-American treaty signed for aid against England
1788 Massachusetts ratified the Constitution
1833 Otto, German-born king of Greece, arrived in his kingdom
1838 Zulu warriors massacred Dutch settlers in Natal, S. Africa
1862 Fort Henry fell to Union forces
1873 Peru and Bolivia signed a mutual-defense agreement
1895 Babe Ruth, baseball great, born
1899 Congress ratified the treaty ending the Spanish-American War
1904 Russo-Japanese War began
1911 Ronald Reagan, actor-politician, born
1922 Limitation of Armaments Conference ended (Washington, D.C.)
1936 Start of Garmisch-Partenkirchen, Germany, Olympics
1951 Train wreck at Woodbridge, New Jersey
1952 King George VI of England died
1954 Kashmir acceded to India
1968 Winter Olympics becan at Grenoble, France
1970 Chinese Year of the Dog, 4668, began
1971 Central Italy rocked by an earthquake
1913, 1940, 2008 Ash Wednesday, beginning of Lent
1951. 2035, 2046 Shrove Tuesday

February 7th

Feast of St. Romuald
Feast of St. Theodore the General
1478 AD Sir Thomas More, English statesman, born
1639 French Academy began its great dictionary of the French language
1799 Ch'ing Lung, Chinese emperor, died
1804 John Deere, steel-plow inventor, born
1812 Great North American earthquake
Charles Dickens, author, born
1837 King Gustavus IV of Sweden died in exile
1863 Orpheus wrecked off New Zealand
1864 Housatanic, (Union) sunk by H.L. Hunley (Confederate), 1st warship sinking by a submarine
1878 Pope Pius IX died
1885 Sinclair Lewis, novelist, born
1894 Mississippi adopted its state flag
1901 Queen Wilhelmina of Holland married Henry, Duke of Mecklenburgh-Schwerin
1904 Baltimore business district fire
1915 First wireless message sent from a moving train to a station
1929 Christina, Queen Regent of Spain, died
1950 U.S. recognized South Viet Nam
1970 Final Day of the Muskrat-skinning Championship at Cambridge, Maryland
1951, 2035, 2046, Ash Wednesday
1967, 1978, 1989, 2062, 2073 Shrove Tuesday

February 8th

Feast of St. Cuthman
Feast of St. John Matha
1250 Ad 7th Crusade rested at Mansura, Egypt, and fought a battle
1587 Mary, Queen of Scots, beheaded
1601 Earl of Essex attempted a rebellion against Elizabeth I, Queen of England
1643 Start of the first Fair at Irbit, Russia
1690 French and Indians attacked Schenectady, New York
1693 William and Mary College, 2nd in U.S., chartered
1792 Mrs. Hannah Snell, a deserter from the army and who was wounded as a sailor, died insane

1793 U.S. Presidential salary set at $25,000 per year
1800 Ceremony held at Church of the Invalides, Paris, to mourn the death of George Washington
1802 Inventor Simon Willard patented the banjo clock
1807 Naopleon defeated the Russians at Eylau
1825 Harriet J. H. Robinson, suffragist, born
1828 Jules Verne, author, born
1837 Alexander Pushkin, Russian poet, wounded in a duel
1849 Roman National Assembly divested the Pope of all governing power and proclaimed a Republic
1853 Children's Aid Society founded
1861 Henry W. Leonard, inventor, born
1863 Nathan Hale, journalist-author, died
1865 Prizefighting made illegal in Missouri
First black major in the U.S. Army commissioned
1881 First regular skiing tournament held in U.S. (Redwing, Minn.)
1888 Dame Edith Evans, actress, born
1893 Trinacria wrecked off the coast of Spain
1908 $8 million fire destroyed Paterson, New Jersey
1910 Boy Scouts chartered in the U.S.
1915 Movie Birth of a Nation premiered
1920 Lana Turner, actress, born
1921 Peter A. Kropotkin, Russian geographer, died
1931 Riverside Church in New York City dedicated
1937 Spanish insurgents captured Malaga (Spanish Civil War)
1949 Cardinal Mindszenty convicted of treason and espionage (Hungary)
1960 Surname of the English Royal Family became Mountbatten-Windsor
1962 Tiros IV, weather satellite, launched
1971 Sun Pageant at Narvik, Norway, celebrating sun's return
1967, 1978, 1989, 2062, 2073 Ash Wednesday
1910, 1921, 2005, 2084 Shrove Tuesday

February 9th

Feast of St. Apollonia (patron of dentists; invoked against toothache)
Feast of St. Nicephorus of Antioch
Feast of St. Teilo
444 AD St. Cyril of Alexandria died (Feast Day)
720 Umar II, Moslem caliph, died
1098 Ridwan failed to relieve the Crusader's siege of Antioch
1119 Pope Calixtus II crowned in France
1458 Mathias I, King of Hungary, married Catherine of Bohemia
1507 Santa Appollonia Island discovered by Pereira
1588 Dunke of Medina-Sidonia appointed to head the Spanish Armada though he was not a sailor and was prone to seasickness
1670 Christian V became King of Norway and Denmark
1674 New Jersey returned to England by treaty with Holland
1770 Bostonians organized against drinking tea until the tax was removed
1773 William Henry Harrison, 9th President of the U.S. born
1789 Franz Gabelsberger, calculating-machine inventor, born
1797 First white men, shipwrecked, landed in Victoria, Australia
1814 Samuel Tilden, New York governor and presidential candidate, born, (won popular, lost by 1 in Electoral College)
1822 American Indian Soceity organized
1865 Robert E. Lee made Commander in Chief of Confederacy
1870 U.S. Weather Bureau established
1874 Amy Lowell, poet, born
1893 Verdi's Falstaff opera first produced
1904 Russian cruisers Variag and Korietz sunk off Korea by the Japanese
1909 Dean Rusk, U.S. statesman, born
1910 French Gen. Chanzy wrecked off Minorca
1911 Lincoln Memorial building approved by Congress
1913 Great meteor shower seen over Canada
1914 Gypsy Rose Lee, performer, born
1933 Lowest temperature, 66 degree below zero, in the U.S. recorded at Yellowstone Park, Wyoming
Oxford Union voted itself a pacifist group (England)
1942 France's Normandie burned at the pier in New York City
"War Time" effected, setting clocks ahead one hour
1955 First subway in Rome, Italy opened
1969 First closing of New York State Thruway due to weather
1970 Start of two-day Pike Festival at Hillman, Michigan
1971 Southern California rocked by an earthquake
1910, 1921, 2005, 2084, Ash Wednesday
1932, 1937, 2016, 2027, 2100 Shrove Tuesday

February 10th

St. Paul's Shipwreck (Holiday in Malta)
543 AD St. Scholastica, twin sister of St. Benedict, died (Feast Day; invoked against storms)
1471 Frederick II, the "Iron," of Brandenberg died
1480 Japanese Emperor Go-Tsuchimikado, having reigned 12 years, finally occupied his palace in Kyoto
1519 Cortez sailed from Cuba for Mexico
1567 Lord Henry Darnley, husband of Mary, Queen of Scots, was strangled
1675 Lancaster, Massachusetts, sacked by Indians
1696 A plot to assassinate William of Orange, ruler of England, failed
1722 British man-of-war Swallow captured the pirate ship Royal Fortune
1733 James Oglethorpe founded Savannah, Georgia
1763 France ceded Canada to England at the Peace of Paris, ending the French and Indian War
1792 Japan rocked by an earthquake
1829 Pope Leo XII died
1840 Queen Victoria of England married Albert of Saxe-Coburg-Gotha
1849 The Harbinger, a weekly magazine, ceased publication
1854 Millard Fillmore married Caroline C. McIntosh
1855 Biddeford, Maine, incorporated
Rights of U.S. citizenship granted to offspring born abroad (of citizens)
1863 Tom Thumb married Lavinia Warren
1870 Young Women's Christian Association founded (New York City)
1893 Jimmy Durante, comedian, born
1894 Harold Macmillan, British statesman, born
1890 Boris Pasternak, author, born
1899 Herbert Hoover married Lou Hanry
1912 Dr. Joseph Lister, pioneer English surgeon, died
1913 Merriman Smith, author-journalist, born
1916 Germany classified armed merchantmen as warships
1918 Abdul Hamid II, "the Great Assassin" (of Armenians), Sultan of Turkey, died
1923 Wilhelm Roentgen, X-ray inventor, died
1933 First singing telegram delivered
1939 Pope Pius XI, libertarian and mountain-climber, died
1942 Alice H. Rice, author of Mrs. Wiggs and the Cabbage Patch, died
1947 Italy signed a peace treaty with Britain, U.S., France, and USSR
Russia signed a peace treaty with Finland, Hungary, Rumania, and Bulgaria
U.S. signed a peace treaty with Hungary, Bulgaria, and Rumania
1954 U.S. farm surpluses decreed unsalable to Communist countries
1960 Cardinal Stepinac, Primate of Yugoslavia, died
1961 Niagara Falls hydroelectric project began producing power
1962 Gary Powers, U-2 pilot and convicted spy, traded to U.S. by USSR for Rudolf Abel, their spy
1964 Australian destroyer Voyager involved in a Pacific collision
1971 Apollo 14 splashed back from the moon
1973 An earthquake rocked Colima, Mexico
1932, 1937, 2016, 2027, 2100 Ash Wednesday
1948, 1959, 1970, 2032, 2043, 2054, 2065 Shrove Tuesday

February 11th

Japanese Founding Day
Feast of St. Cecilia, a sufferer in Africa during the persecution of Diocletian
660 BC Jimmu became ruler of Japan
731 AD Pope Gregory II died
821 St. Benedict of Aniane died (Feast Day)
824 St. Paschal I, Pope, died
1115 Holy Roman Empire's army defeated at Welfesholz
1252 Ottakar II, King of Bohemia, married Margaret, widow of King Henry VII of Germany
1398 The English translation of De proprietatibus rerum encyclopedia completed
1466 Elizabeth of York, wife and queen of Henry VII, King of England, born
1503 Elizabeth of York, queen to Henry VII of England, died
1531 English clergy henceforth to regard the ruler as the head of the church
1554 Lady Jane Grey, claimant to the English throne, beheaded
1628 Special tax levied in England for a fleet to defend against the French
1802 Lydia Child, novelist-abolitionist, born
1815 News of peace with England reached New York (War of 1812)
1828 DeWitt Clinton, New York governor, died
1847 Thomas A. Edison, inventor, born
1858 Bernadette had her first vision of Our Lady of Lourdes

1879 Honoré Daumier, French artist, died
1881 Phoenix, Arizona, incorporated as a city
1887 The Epoch, a literary magazine, founded in New York
1893 Naronic vanished having left Liverpool for New York
1895 Georgetown became part of Washington, D.C.
1901 Milan Obrenovic IV, deposed king of Serbia, died
1907 Colorado River flow to Salton Sink again closed
1908 Sir Vivian Fuchs, Antarctic explorer, born
1909 Max Baer, boxer, born
1916 Bandelier National Monument established
1920 First business session of the League of Nations met (London)
1922 Naval limits treaty signed by U.S., England, France, Italy, and Japan
1927 Opening of Tutankhamen's mummy began
1929 Vatican City, Rome, became a sovereign state
1945 Yalta Conference ended
1948 Meteorite landed near Norton, Kansas
1965 Titan-3A rocket launched for testing
1948, 1959, 1970, 2032, 2043, 2054, 2065 Ash Wednesday
1902, 1964, 1975, 1986, 1997, 2059, 2070, 2081 Shrove Tuesday

February 12th

Feast of St. Julian the Hospitaller (patron of violinists, jugglers, clowns, shepherds, pilgrims, hotel-keepers, ferrymen, travelers needing lodging)
Feast of St. Marina, female monk
Feast of the Seven Founders
1111 AD Henry V, uncrowned Holy Roman Emperor, kidnapped the Pope
1242 Henry VII, King of Germany, died
1424 King James I of Scotland married Jane Beaufort
1541 Santiago, Chile, founded
1542 Catherine Howard, 5th wife of England's King Henry VIII, beheaded
1736 Maria Theresa of Austria married Francis of Lorraine
1742 Charles VII crowned Holy Roman Emperor
1771 King Adolphus Frederick of Sweden died
1775 Louisa Johnson Adams, wife of John Quincy, 6th President of the U.S., born
1789 Ethan Allen, American patriot, died
Times and Patowmack Packet, first Washington, D.C. newspaper, founded
1809 Charles Darwin, naturalist, born
Abraham Lincoln, 16th President, born
1832 Ecuador annexed the Galapagos Islands
1834 Bangor, Maine, incorporated as a city
1849 Chicago, Burlington and Quincy Railroad Co. incorporated
1869 Start of a four-day storm that sank fishing fleets off Newfoundland
1873 Gold dollar became the U.S. currency standard
1875 Meteorite rain fell near Homestead, Iowa
1880 John L. Lewis, eyebrowed labor leader, born
1884 Alice Lee Roosevelt Longworth, daughter of Teddy, born
1885 German East Africa Company chartered
1904 Ted Mack, "Original Amateur Hour" host, born
1906 Island of Formosa rocked by an earthquake
1907 Larchmont sank off Long Island, New York
1908 National Association for the Advancement of Colored People formed
1912 Republic of China formed
1915 Cornerstone of Lincoln Memorial laid (Washington, D.C.)
1919 DePalma set a land-speed record of 149.875 mph, in a Packard
1929 Lily Langtry, actress, died
1932 Princess Astrid of Norway born
1953 Earthquake rocked eastern Iran
1961 Venus probe launched
Sputnik 8, Russian satellite, launched
1971 James C. Penney, merchant, died
1902, 1964, 1975, 1986, 1997, 2059, 2070, 2081 Ash Wednesday
1907, 1918, 1929, 1991, 2002, 2013, 2086, 2092, 2097 Shrove Tuesday

February 13th

Ides of February
1014 AD King Sweyn I of Denmark died
1476 French laid siege to Granson, Switzerland
1566 St. Augustine, Florida, founded
1570 Ivan the Terrible's massacre of Novgorod, Russia, ended
1590 St. Katherine de'Ricci died (Feast Day)
1619 Peace of Deulina signed by Russia, Sweden, and Poland
1633 Galileo arrived in Rome, as ordered by the Inquisition
1635 First public school in America opened in Boston
1660 King Charles Gustavus of Sweden died
1668 Spain recognized Portugal as an independent country
1683 Giovanni Piazzetta, Italian artist, born

1689 William and Mary proclaimed joint rulers of Britain
1692 Massacre of the MacDonalds at Glencoe, Scotland
1741 First magazine in the U.S. published
1772 Desolation Island discovered
1836 Cornplanter, Seneca Indian chief, died
1883 Richard Wagner, composer, died
1885 Bess (Mrs. Harry S.) Truman, First Lady, born
George M. Johnson, western novelist, born
1895 Lumieres got a French patent on their motion-picture projector
1904 Panama's constitution adopted
1919 "Tennessee Ernie" Ford, humorist, born
1960 France exploded its first atomic device (Sahara desert)
1907, 1918, 1929, 1991, 2002, 2013, 2086, 2092, 2097 Ash Wednesday
1923, 1934, 1945, 2018, 2024, 2029 Shrove Tuesday

February 14th

Feast of St. Cyril (Orthodox)
(Ex-St.) Valentine's Day (patron of engaged couples; invoked against plague, epilepsy, and fainting)
27 BC Beginning of the Augustan Era
270 AD Roman priest, Valentine, martyred
433 St. Maro, hermit, died (Feast Day)
842 "Strasbourg Oaths" Sworn
1009 St. Bruno of Querfurt and party massacred by the Lithuanian heathens
1014 Henry II, "the Saint," crowned Holy Roman Emperor
1130 Innocent II elected Pope
1432 Henry VI, King of England and France, entered London
1571 Benvenuto Cellini, Italian goldsmith, died
1676 John III crowned King of Poland
1764 Site chosen for trading post, first building at St. Louis, Missouri
1768 Ivan Krylov, Russian fable author, born
1779 Captain Cook killed by the natives in Hawaii
1780 Sir William Blackstone, English jurist, died
1838 Edwin Ginn, founder of Ginn Brothers publishers, born
1844 Alice (Mrs. Theodore) Roosevelt, died
Fremont's Rocky Mountain expedition reached the Sierra Madre
1846 The National Press home journal founded
1859 Oregon became a state
1876 Elisha Gray filed for a patent on his telephone a few hours after Alexander Graham Bell did
1894 Jack Benny, comedian, born
1896 Boris, heir to Bulgaria, received into the Orthodox faith
1905 Thelma Ritter, actress, born
1911 Studebaker Corporation incorporated
1912 Arizona became a state
1913 Mel Allen, sportscaster, born
1927 Wyoming state flag again adopted
1929 Gangland massacre in Chicago killed seven
Puerto Rico's legislature first met in the capitol
1933 Michigan's banks ordered closed
1934 Solar eclipse
1939 German warship Bismarck launched
1946 The Bank of England went public
1949 Chaim Weizmann elected first President of Israel
1956 20th Communist Party Congress began
1970 Salt Grass Trail Raid at Brenham, Texas
1972 Start of the Chinese Year of the Rat, 4670
1923, 1934, 1945, 2018, 2024, 2029 Ash Wednesday
1956, 1961, 2040, 2051 Shrove Tuesday

February 15th

Feast of Lupercalia honoring the Roman god Pan
Anniversary of the Death of Buddha
Feast of St. Sigfrid, missionary to Sweden
494 AD Roman sacrifices of Lupercalia last held
1145 Pope Lucius II died and Eugenius III elected
1152 Conrad III, King of Germany, died
1288 Jerome Maschi elected Pope as Nicholas IV
1368 Sigismund, King of Hungary and Bohemia, Holy Roman Emperor, born
1386 Wladislas II crowned King of Poland
1502 Amerigo Vespucci set sail for South America
1564 Galileo, astronomer, born
1637 Ferdinand II, Holy Roman Emperor, died
1645 British standing army founded
1726 Abram Clark, signer of the Declaration of Independence, born
1763 Treaty of Hubertusburg ended Seven Years' War
1809 Cyrus McCormick, harvester inventor, born
1812 Charles L. Tiffany, founder of the jewelry company, born
1820 Susan B. Anthony, suffragist, born (Minnesota holiday)
William Ellery, signer of the Declaration of Independence, died
1854 Pennsylvania Railroad opened Philadelphia-to-Pittsburgh line
1862 Union ship, the ironclad Monitor, completed

1863 Speke and Grant reached Gondokora sailing down the Nile
1869 Chatham, New York, incorporated
1874 Sir Ernest Shackleton, Antarctic explorer, born
1879 Rival princes for Burmese throne massacred, a standard practice for the new king
1898 Maine battleship exploded in the harbor at Havana, Cuba
1907 Cesar Romero, actor, born
1912 Yuan Shik-K'ai elected first president of the Republic of China
1917 Caranza called a constitutional convention (Mexico)
1937 American elm became the state tree of Nebraska
1954 Two Frenchmen descended 13,284 feet in the Atlantic in a bathyscaph
1956, 1961, 2040, 2051 Ash Wednesday
1972, 1893, 1994, 2056, 2067, 2078, 2089 Shrove Tuesday

February 16th

309 AD St. Elias and companions martyred (Feast Day)
St. Pamphilus died
1001 Roman barons put the Pope and Holy Roman Emperor to flight
1220 Bokhara fell to the Mongols
1486 Maximilian I chosen King of Germany
1579 Gonzalo Jimenez de Quesada, explorer of Colombia, died
1779 New Jersey Journal founded, first in the state
1786 James Monroe married Elizabeth Kortright
1804 Stephen Decatur burned the U.S. frigate Philadelphia in Tripoli harbor 4 months after Tripoli pirates captured it
1805 Octave Henri Marie Mirbeau, French dramatist-journalist, born
1812 Henry Wilson, born Jeremiah J. Colbath, Vice-President of the U.S., born
1814 King Christian VIII of Denmark elected Regent of Norway
1823 Li Hung Chang, Chinese statesman, born
1846 Battle of Sobraon ended First Sikh War in India
1862 Fort Donelson fell to Union forces
1866 Honduras adopted its national flag
1868 The Jolly Corks reorganized, becoming the Benevolent and Protective Order of Elks
1869 The harbor at Boston, Massachusetts, froze over
1878 Silver dollar became legal U.S. money
1895 Alabama adopted its state flag
1898 Katherine Cornell, actress, born
1900 American Samoa officially became American Samoa
1903 Edgar Bergen, ventriloquist, born
1910 Yucatan struck an iceberg, was beached, and sank
1913 Evidence discovered in South Dakota of an early French try for the Northwest Passage
1917 Octave Henri Marie Mirbeau, French dramatist-journalist, died
1923 First radio-telescope news messages transmitted from U.S. to England
1936 Closing ceremonies ending the Garmisch-Partenkirchen Olympics
1945 Bataan recaptured by American forces
U.S. reoccupation of Corregidor began
1956 Last of the Third Avenue Elevated Railroad removed in New York City
1958 Great blizzard buried New England
1959 Fidel Castro became Premier of Cuba
1961 Explorer I launched
1965 Pegasus I launched
1966 From now on, Lenten fasting is limited to Ash Wednesday and Good Friday
1972 Islamic year 1392 began
1972, 1983, 1994, 2056, 2067, 2078, 2089 Ash Wednesday
1904, 1915, 1926, 1988, 1999, 2010, 2021, 2083, 2094 Shrove Tuesday

February 17th

Roman ceremony honoring Mars, God of War (Quirinus)
364 AD Jovian, Emperor of the Roman Army, died
603 St. Fintan of Cloneenagh died (Feast Day)
661 St. Finan died (Feast Day)
1247 Henry Raspe, King of Germany, died
1317 French Inquisition set against Spirituals, an offshoot of the Franciscan friars
1387 Heathen religions banned in Poland
1400 Richard, deposed king of England, murdered
1405 Tamerlane, Oriental conqueror, died
1461 First Battle of St. Albans in the War of the Roses (England)
1490 Charles, Duke of Bourbon, born
1621 Miles Standish appointed military commander of Plymouth Colony
1673 Molière, French dramatist, died
1692 Charter granted for founding first American postal system
1754 English began a fort of the site of Pittsburgh, Penna.
1771 Bath, Maine became the first town to incorporate under U.S. authority
Rene Theophile Laennec, stethoscope inventor, born

1854 Frederick Krupp, arms manufacturer, born
1855 Right to construct a telegraph from the Mississippi to the Pacific granted
1856 Frederick E. Ives, inventor of photographic half-tones, born
1857 Samuel S. McClure, organizer of the first newspaper syndicate, born
1865 Confederates evacuated Columbia and Charlestown, South Carolina
1867 First ship passed through the Suez Canal
1880 An assassin blew up the Czar's dining room (Russia)
1888 First telephone exchange in California opened at San Francisco
1890 British ship Duberg wrecked in the China Sea
1897 National Organization of Mothers, the beginning of the Parent-Teachers Association, founded
1908 Red Barber, sportscaster, born
1909 Geronimo, Apache Indian chief, died
1924 Margaret Truman Daniels, daughter of the President, born
1934 King Albert I of Belgium killed while mountain climbing
1936 Jimmy Brown, football player-actor, born
1958 St. Clare of Assissi proclaimed patron of television
1959 Vanguard II launched
1967 Start of 6 days of floods in Rio de Janeiro
Chemical plant explosion in Hawthorne, New Jersey
1969 Start of the Chinese year of the rooster, 4667
1904, 1915, 1926, 1988, 1999, 2010, 2021, 2083, 2094 Ash Wednesday
1931, 1942, 1953, 2015, 2026, 2037 Shrove Tuesday

February 18th

Bursting Day in Iceland (when the sea-ice crumbles)
449 AD St. Flavian of Constantinople died
676 St. Colman of Lindisfarne died (Feast Day)
1386 King Wladislaus II of Poland married Jadwiga of Hungary
1478 George, Duke of Clarence and brother of King Edward IV of England, executed for treason by drowning in a barrel of wine
1493 Columbus reached the Azores
1516 Queen Mary I ("Bloody Mary") of England born
1546 Martin Luther, German religious leader, died
1562 Huguenot colonists left France for Florida
1564 Michaelangelo, Italian artist, died
1622 English-Persian seige of Portuguese at Hormuz began
1653 English defeated Dutch fleet at Portsmouth
1678 Pilgrim's Progress published
1685 LaSalle made the first white settlement in Texas
1688 First vote against slavery recorded in U.S. (Germantown, Penna.)
1784 Nicolo Paganini, Italian violinist, born
1795 Lewiston, Maine, incorporated
1828 Echigo, Japan, rocked by an earthquake
1849 First scheduled steamship from New York arrived in San Francisco, by way of Cape Horn
1851 Six members of the Oatman family massacred by Arizona Indians
1857 Max Klinger, German artist, born
1861 Jefferson Davis sworn in as President of the Confederacy
1890 Adolphe Menjou, actor, born
1892 Wendell Willkie, Presidential candidate, born
1898 Frances Willard, temperance supporter, died
1902 Charles L. Tiffany, founder of the jewelry company, died
1915 Harry W. Leonard, inventor, died
Germany began blockading England with submarines
1919 Jack Palance, actor, born
1930 Planet Pluto discovered
1932 Manchuria became Manchukuo, a Japanese puppet state
1939 Golden Gate International Exposition opened (San Francisco)
1942 Albert Payson Terhune, author, died
U.S. destroyer Truxton and cargo ship Pallus ran aground off Newfoundland
1947 Gallitzin, Pennsylvania, train wreck
1956 First monorail system in the U.S. made a trial run (Houston)
1968 End of the Winter Olympics at Grenoble, France
1972 World Prayer Day
1931, 1942, 1953, 2015, 2026, 2037 Ash Wednesday
1947, 1958, 1969, 2042, 2048, 2053 Shrove Tuesday

February 19th

439 AD St. Mesrop died (Feast Day)
607 Boniface III became Pope
1473 Copernicus, astronomer, born
1594 Sigismund III, King of Poland, crowned King of Sweden

1717 David Garrick, English actor, born
1778 Daniel W. Harmon, author-explorer, born
1797 Peace of Talentino settled differences between France and the Vatican over the Papal States
1803 Ohio became a state
1817 King William III of Holland born
1843 Adeline Patti, singer, born
1861 Emancipation Act freed the Russian serfs
1864 Knights of Pythias, fraternal organization, founded
1865 Sven Hedin, explorer of Asia, born
1873 John H. Fahey, publisher, born
1893 Sir Cedric Hardwick, English actor, born
1912 Ceil Chapman, fashion designer, born
Stan Kenton, bandleader, born
1916 Eddie Arcaro, jockey, born
1923 William H. Goodyear, author-archaeologist, died
1936 Billy Mitchell, aviator, died
1945 U.S. invasion of Iwo Jima began
1970 Molniya 1/13, Russian communications satellite, launched

1947, 1958, 1969, 2042, 2048, 2053 Ash Wednesday
1901, 1920, 1980, 1985, 2064, 2075 Shrove Tuesday

February 20th

Feast of St. Ulrich (or Wulfric) of Haselburg
342 AD St. Shahdost, Persian bishop, martyred (Feast Day)
1431 Pope Martin V died
1437 James I, King of Scotland, stabbed to death
1500 Charles I, King of Spain, born
1513 Pope Julius II, creator of the Swiss Guard, died
1546 Edward VI crowned King of England
1680 La Voisin, French sorceress, executed
North Yarmouth, Maine, incorporated
1777 King Joseph of Portugal died
1790 Joseph II, Emperor of Austria and the Holy Roman Empire, died
1792 U.S. federal post office system established
1808 Honore Daumier, French artist, born
1815 U.S.S. Constitution captured by H.M.S. Cyane and Levant
1854 Livingston's party reached Lake Dilolo, Africa
1857 North German Lloyd Steamship Company founded
1864 Confederates were victorious at Olustee, Florida
1865 Cape Fear River forts captured by the Union forces
1872 Metropolitan Museum of Art opened (New York City)
1878 Vincenzo Gioacchino Pecci elected Pope, Leo XIII
1889 Maritime Canal Company of Nicaragua incorporated
1895 Cuban Revolution resumed
1914 John Daly, television personality, born
1915 Panama-Pacific International Exposition opened in San Francisco
1920 Robert E. Peary, Arctic explorer, died
1927 Sidney Poitier, actor, born
1943 Paracutin volcano's birth buried all of Parangaricutiro, Mexico, except the church bell tower
1962 John Glenn made 3 earth orbits in a Mercury capsule
1965 Ranger 8 photographed and then landed on the Moon
1967 daVinci's "Ginevra de Benci" bought by the National Gallery of Art (Washington, D.C.)
1970 Lantern Festival, marking the end of the Chinese New Year celebrations

1901, 1920, 1980, 1985, 2064, 2075 Ash Wednesday
1912, 1917, 1996, 2007, 2080, 2091 Shrove Tuesday

February 21st

1198 AD Pope Innocent III was ordained as a priest
1508 Michelangelo's "Pope Julius" put in place
1598 Boris Godunov elected Czar of Muscovy
1613 Michael Romanov elected Czar of Russia
1630 Rubens, Flemish artist, knighted in England
1728 Peter III, Czar of Russia, born
1730 Pope Benedict XIII died of influenza
1779 Captain Cook was buried at sea
1795 Santa Anna, Mexican revolutionary, born
1807 Martin Van Buren married Hannah Hoes
1808 Russia declared war on Sweden
1851 Mary W. Shelley, author of Frankenstein, born
1853 $3 gold pieces authorized in the U.S.
1878 First telephone directory issued (New Haven, Connecticut)
1904 National Ski Association of America founded
1907 British ship Berlin sank off the Hook of Holland
1916 Battle of Verdun
1919 Worcester, Massachusetts, art museum bought a Gainsborough
1924 First official Alaskan air mail flight
1937 Crown Prince Harald of Norway born

1940 Federal Hall, New York City, became a national monument
1963 Northeast Libya rocked by an earthquake
1967 Canadian trawler Cape Bonnie wrecked in Halifax harbor
1968 Four British teams set out with dogsleds from Alaska to Norway over the North Pole
1969 Volcano on Deception Island, Antarctica, erupted
1970 Speckled Perch Festival at Okeechobee, Florida
1973 Southern California rocked by an earthquake
1912, 1917, 1996, 2007, 2080, 2091 Ash Wednesday
1928, 1939, 1950, 2012, 2023, 2034, 2045 Shrove Tuesday

February 22nd

Arbor Day in Texas
Ancient Romans held family reunions
606 AD Pope Sabinian died
1072 St. Pietro Damiani died
1276 Pope Innocent V crowned
1297 St. Margaret of Cortona died (Feast Day)
1371 David II, King of Scotland, died
1403 Charles VII, King of France, born
1440 Ladislas, King of Bohemia and Hungary, born
1649 Westminster Assembly first met (London)
1690 Charles Le Brun, French artist, died
1732 George Washington, 1st President, born
1776 Boston Newsletter, first regularly published American newspaper, ceased publication
1778 Rembrandt Peale, artist, born
1784 First U.S. ship to sail to China left New York City
1798 Durham, Connecticut, began the installation of the first public water system
1810 Frederick Chopin, composer, born
1812 Hazard and Caledonia fought a naval battle
1813 British captured Ft. Presentation, New York
1819 Spain ceded Florida to the U.S.
James Russell Lowell, poet-diplomat, born
1821 First Order of Odd Fellows group in the U.S. formed (Maryland)
1827 Charles Wilson Peale, portrait artist, died
1837 Michigan's state flag first flown
1847 Battle of Buena Vista began (U.S. against Mexico)
1851 Kirkwood ran aground in New Jersey, having mistaken the Smith Hotel for a vessel that wouldn't return its signal
1875 Jean-Baptiste Corot, French artist, died
1876 John Hopkins University formally opened
1879 F. W. Woolworth opened his first store (Utica, New York)
1885 Washington Monument dedicated
1888 Washington Monument opened
1889 Dakota Territory made into 2 states
1892 Edna St. Vincent Millay, poet, born
1895 Latham exhibited his motion-picture projector
1901 Rio de Janeiro wrecked at San Francisco
1906 Achilles asteroid discovered
1932 Edward Kennedy, Massachusetts senator, born
1933 Campbell, in a Napier-Campbell, set a land-speed record of 272.109 mph
1947 Harry K. Thaw, slayer of architect Stanford White, died
1963 Northern Libya rocked by earthquake
1965 Felix Frankfurter, Supreme Court Justice, died
1928, 1939, 1950, 2012, 2023, 2034, 2045 Ash Wednesday
1944, 1955, 1966, 1977, 2039, 2050, 2061, 2077 Shrove Tuesday

February 23rd

Feast of St. Mildburga
155 AD St. Polycarp, bishop of Smyrna, martyred by fire
687 Pepin of Heristal arrived in France
1011 St. Willigis died (Feast Day)
1072 St. Peter Damian died (Feast Day)
1305 A sermon preached in Italy mentioned spectacles
1421 Catherine, queen to King Henry V of England, crowned
1440 Mathias I, King of Hungary, born
1447 Pope Eugenius IV died
1505 Columbus was granted a license to ride a mule in Spain
1516 Ferdinand, King of Spain, died
1685 George Frederick Handel, composer, born
1781 George Taylor, signer of the Declaration of Independence, died
1784 Rhode Island legislature authorized the freeing of slaves
1785 New York Morning Post and Daily Advertiser, first New York daily newspaper, founded
1791 John Wesley, founder of Methodism, died
1792 Sir Joshua Reynolds, English artist, died
1799 First U.S. national quarantine legislation passed
1815 Robert Fulton, steamboat inventor, died
1821 Poet John Keats died of consumption
1822 Boston, Massachusetts, incorporated as a city

1847 U.S. defeated Mexico at Buena Vista
1848 John Quincy Adams, U.S. President, died
1869 The state legislature authorized the building of Nevada's capitol
1886 Commercial production method for aluminum invented
1887 Importation of opium from China forbidden (U.S.)
1905 First Rotary Club founded (Chicago)
Sally Victor, hat designer, born
1913 Francisco Madero, President of Mexico, assassinated
1916 Ministry of Blockade created in England
1917 Federal Board of Vocational Education created in U.S.
1920 First wireless telephone broadcast (Chelmsford, England)
1927 Federal Radio Commission established in U.S.
1942 A Japanese submarine fired on an oil refinery at Santa Barbara, California
1945 U.S. flag raised on Iwo Jima
1946 Gen. T. Yamashita, Japanese commander in the Philippines, hanged
1954 Salk polio vaccine first used for mass inoculation (Pittsburgh)
1960 Prince Naruhito Hironomiya of Japan born
1965 Stan Laurel, of Laurel and Hardy comedy team, died
1967 End of 6 days of flooding in Rio de Janeiro
1968 Fannie Hurst, novelist, died
1969 Saud, deposed king of Arabia, died
1944, 1955, 1966, 1977, 2039, 2050, 2061, 2077 Ash Wednesday
1909, 1971, 1982, 1993, 2066, 2072 Shrove Tuesday

February 24th

Feast of St. Matthias (patron of carpenters, tailors, and reformed drunks; invoked against smallpox)
259 AD Sts. Montanus and Lucius martyred (Feast Day)
303 First Roman edict for persecution of Christians published
1389 Albert of Mecklenburg, unpopular king of Sweden, captured
1446 Lottery drawn in Bruges, Belgium is the earliest known
1509 Papal Bull issued against duels
1525 Charles V, Holy Roman Emperor, crushed the French at Pavia and captured King Francis I
Richard de la Pole, pretender to the English throne, died
1530 Last imperial coronation of a Holy Roman Emperor
1557 Mathias, Holy Roman Emperor, born (never crowned)
1577 Eric XIV, deposed king of Sweden, died of poison
1582 Gregorian calendar reform completed
1587 Miguel de Cervantes Saavedra, author of Don Quixote, excommunicated
1619 Charles Le Brun, French artist, born
1653 New York's first city hall opened, in a tavern
1827 Augusta chosen the capital of Maine
1836 Winslow Homer, artist, born
1855 Cavalry destroyed a Mescalero Apache village in New Mexico
1863 Arizona became a U.S. Territory
1868 President Andrew Johnson impeached
1903 U.S. acquired the Guantanamo Naval Station in Cuba
1905 Simplon Tunnel completed between Switzerland and Italy
West Virginia state flag adopted
1907 Imperatrix, an Austrian ship, wrecked
1909 Maine adopted its state flag
New Hampshire adopted its state flag
1918 Florizel wrecked near Cape Race, Newfoundland
Flag of Estonia adopted
1922 Chinde, Portuguese East Africa devastated by a cyclone
1932 Campbell, in a Napier-Campbell, set a land speed record of 253.96 mph
1942 First broadcast made of The Voice of America
1949 Israel and Egypt signed a general armistice agreement
1966 Iwame Nkrumah, President of Ghana, overthrown
1970 Flag Day, a national holiday in Mexico
Start of Holi (Festival of Color) in Nepal
Conrad Nagel, actor, died
1909, 1971, 1982, 1993, 2066, 2072 Ash Wednesday
1903, 1914, 1925, 1998, 2004, 2009, 2088, 2093, 2099 Shrove Tuesday

February 25th

138 AD Antoninus Pius was adopted by Emperor Hadrian as the successor to Rome
493 Negotiations opened between the Roman army, besieged at Ravenna, and the Osgoths
616 St. Ethelbert, King of Kent, died (Feast Day)
779 St. Walburga died (Feast Day)

1601 Earl of Essex, leader of a foiled rebellion, beheaded in England
1634 Wallenstein, German noble and general, murdered
1643 The governor of New York started an Indian war with an attempt to remove the tribes on the west bank of the Hudson River
1713 Frederick I, first king of Prussia, died
1723 Sir Christopher Wren, English architect, died
1728 Peter II crowned Czar of Russia
1778 Jose De San Martin, South American liberator, born
1779 Fort Sackville, Indiana, captured by the Americans
Vincennes, Canada, fell to American forces
1807 Slavery ended in England
1825 Peru adopted its national flag
1836 Samuel Colt got a patent on his revolver
1841 Auguste Renoir, French artist, born
1847 Pennsylvania Railroad got its letters patented
1848 Edward Harriman, financier, born
1862 Congress approved the issuance of "greenbacks"
1863 National Bank Act passed, allowing their free formation
1870 Hiram R. Revels, a black, took the oath as a U.S. senator
1873 Enrico Caruso, singer, born
1881 Phoenix, Arizona, incorporated
1888 John Foster Dulles, U.S. statesman, born
1894 Steele Mackaye, folding theater-seat inventor, died
1901 United States Steel incorporated
1908 Frank G. Slaughter, physician-author, born
1913 Sixteenth Amendment passed, authorizing income tax
1916 Germany captured Fort Dovaumont
1925 Glacier Bay National Monument established (Alaska)
1932 Adolf Hitler became a German citizen
1948 Czechoslovakia joined the Communist bloc
1954 President Adibal-Shishakli of Syria resigned after an army uprising
1956 Communist Party Congress proclaimed peaceful coexistence with the West
1964 Cassius Clay knocked out Sonny Liston for the heavyweight boxing title
1903, 1914, 1925, 1998, 2004, 2009, 2088, 2093, 2099 Ash Wednesday
1936, 1941, 2020, 2031 Shrove Tuesday

February 26th

Feast of St. Porphyry of Gaza
747 BC Beginning of the Era of Nabonasser
364 AD Valentinian became Emperor of the Roman army at Nicaea
493 Romans in Ravenna surrendered to the Osgoths
1154 Roger II, King of Sicily, died
1266 Battle of Benevento
Manfred, King of Sicily, died
1361 King Wenceslaus of Germany born
1564 Christopher Marlowe, English playwright, baptized
1802 Zebulon Pike's expedition captured by the Spanish (Western U.S.)
Victor Hugo, French author-playwright, born
Esek Hopkins, first commodore of the U.S. Navy, died
1815 Napoleon escaped from Elba
1846 William F. ("Buffalo Bill") Cody born
1848 Second Republic proclaimed in France
1855 First public school system in the South established (Nashville, Tennessee)
1861 Ferdinand, King of Bulgaria, born
1869 Nadezhda Krupskaya, wife of Lenin, born
1870 New York City's first subway supposedly opened, but none really functioned before 1904
1903 Richard Gattling, machine-gun inventor, died
1909 Austro-Hungary and Turkish treaty signed, annexing Bosnia and Herzogovinia
1915 First really successful use of a flamethrower by the Germans at Verdun
1916 Jackie Gleason, comedian, born
French cruiser Provence sank in the Mediterranean
1917 President requested Congress to order the arming of U.S. merchant ships
1919 Grand Canyon became a national park
1922 Margaret Leighton, actress, born
1925 Oregon state flag adopted
1961 Mohammed V, King of Morocco, died
1970 Eve of Iduladha, a Moslem festival
1971 Islamic year 1391 began
Start of the Parade of Chariots at Limassol, Cyprus
1936, 1941, 2020, 2031 Ash Wednesday
1952, 1963, 1974, 2036, 2047, 2058, 2069 Shrove Tuesday

February 27th

Roman ceremony honoring Mars, god of war
Feast of St. Leander

288 AD Constantine born
1458 George of Podebrad chosen King of Bohemia
1545 Scots defeated the English at Ancrum Moor
1776 Battle of Moore's Creek, North Carolina
1807 Henry Wadsworth Longfellow, poet, born
1812 Lord Byron, English poet, made his maiden speech in Parliament
1847 Illinois legislature brought into being the Chicago, Rock Island, and Pacific Railway
1860 Abraham Lincoln gave his "Cooper Union Address"
1862 St. Gabriel Possenti died (Feast Day)
1869 Genealogical and Biographical Society of New York founded
1872 Thanksgiving held at St. Paul's in London for King Edward VII's recovery from typhoid
1881 Battle of Majuba, Dutch victory over the English in the Boer War
1900 England's Labour Party founded
British forces captured Pieter's Hill, South Africa
1902 Marian Anderson, opera signer, born
John Steinbeck, novelist, born
1905 Montana adopted its state flag
1906 Samuel Phangley, astronomer, died
1917 Arizona adopted its state flag
Mount Union, Pennsylvania, train wreck
1921 Porter, Indiana, train wreck
King George II of Greece married Elizabeth of Rumania
1923 Tanana River railroad bridge completed (Alaska)
1930 George H. Putnam, publisher, died
1932 Elizabeth Taylor, actress, born
1936 Ivan Pavlov, psychologist and dog experimenter, died
1939 Nadezhda Krupskaya, Lenin's wife, died
1972 Statehood Day Celebration (Nevis, St. Kitts, Anquilia, British West Indies)

1952, 1963, 1974, 2036, 2047, 2058, 2069 Ash Wednesday
1906, 1968, 1979, 1990, 2001, 2063, 2074, 2085 Shrove Tuesday

February 28th

Funeral Service for Sardines at Curiepe, Venezuela
Feast of St. Romanus (invoked for cure of insanity and protection from drowning)
Kalevala National Day, Finland
Feast of the Martyrs of the Plague at Alexandria

591 AD Gregory I became Pope
992 St. Oswald of Worcester died (Feast Day)
1258 Tatars burned Baghdad
1476 Beseiged Granson, Switzerland, surrendered to the French
1572 Catherine of Austria, third wife of Sigismund II of Poland, died
1638 Battle of the Rheinfelden, Germany
1648 Christian IV, King of Denmark and Norway, died
1704 Deerfield, Massachusetts, attacked by Indians
1781 Richard Stockton, signer of the Declaration of Independence, died
1785 Horea, self-styled emperor of Rumania, broken on the wheel for treason
1791 French National Guard turned back the attack on Vincennes
1824 Blondin, French tightrope-walker, born
1827 Baltimore and Ohio Railroad chartered
1832 Portland, Maine, incorporated
1837 Illinois state capital moved to Springfield
1845 Texas was invited to join the U.S.
1851 Compagnie Des Messageries Maritimes, French steamship company, founded
1854 U.S. Republican Party formed
1861 Colorado became a U.S. territory
1868 Louis I, King of Bavaria, died
1894 Ben Hecht, novelist-playwright, born
1901 Linus Pauling, biochemist, born
Jupiter's south tropical disturbance first observed
1911 Elizabeth Tunnel, part of the Los Angeles aqueduct system, completed
1916 Henry James, novelist, died
1917 Germany tried to get Mexico to declare war on the U.S.
1941 King Alphonso XIII of Spain died in exile
1942 Japanese landed on Java
1951 Preliminary report made by Kefauver's Senate Crime Committee
1956 Swampscott, Massachusetts, train wreck
1959 Maxwell Anderson, playwright, died
1961 "Lone Tree" became a Washington State Monument
1969 Scheduled Apollo 9 flight postponed due to astronauts' colds
1970 Finals of All-Northwest Barbershop Ballad Contest at Forest Grove, Oregon

End of Festival of the Pines at New Plymouth, New Zealand
1973 Kuril, Japan, rocked by an earthquake
Earth tremor shook midAtlantic U.S. coast
1906, 1968, 1979, 1990, 2001, 2063, 2074, 2085 Ash Wednesday
2096 Shrove Tuesday (Leap Year)
1911, 1922, 1933, 1995, 2006, 2017, 2090 Shrove Tuesday

February 29th

Leap Year Day
468 AD Pope St. Hilarus died
992 Oswald, Archbishop of York, England, died
1288 It was made legal in Scotland for women to propose to men
1634 Wallenstein, Austrian general, murdered
1704 40 killed, 100 carried off by Indians from Deerfield, Massachusetts
1712 General Montcalm, hero of the French and Indian War, born
1756 Christian F. Hansen, Danish architect, born
1804 Orders given for construction of the first lighthouse on the Great Lakes
1808 Charles Pritchard, British astronomer, born
1864 Jan Svatopluk Macher, Czech poet, born
1922 Teachers' Registration Council established (England)
1944 British and Indian troops drove the Japanese from Burma
1960 Agadir, Morocco, hit by an earthquake, tidal wave, and fire
1972 Tokyo rocked by an earthquake
2096 Ash Wednesday
2028 Shrove Tuesday

Full Moon - Lenten Moon; Worm Moon
Roman festival of Anna Perrena, goddess of the year
First Sunday after Easter - Quasimodo or Low Sunday

March 1st

Golden Shears International Sheep Shearing Championships at Masterton, New Zealand
Feast of St. David (or Dewi), patron of Wales
Town Meeting Day in Vermont
Tree Festival in Iraq
154 BC Until now, this was New Year's Day to the Romans
49 Caesar's command in Gaul expired
293 AD Constantinus the Pale, father of Constantine, named Caesar
1389 St. Antoninus born
1562 French Protestants (Huguenots) massacred at Vessy
1638 First Swedish settlers, inventors of the log cabin, arrived in America
1642 York, Maine, incorporated, first settlement to do so
1780 First U.S. bank, that of Philadelphia, chartered
First act to abolish slavery passed by Pennsylvania
1790 First U.S. census (recorded 17 states, 3,929,214 people) authorized
1792 Leopold II, Holy Roman Emperor and ruler of Austria, died
1803 Ohio became a state

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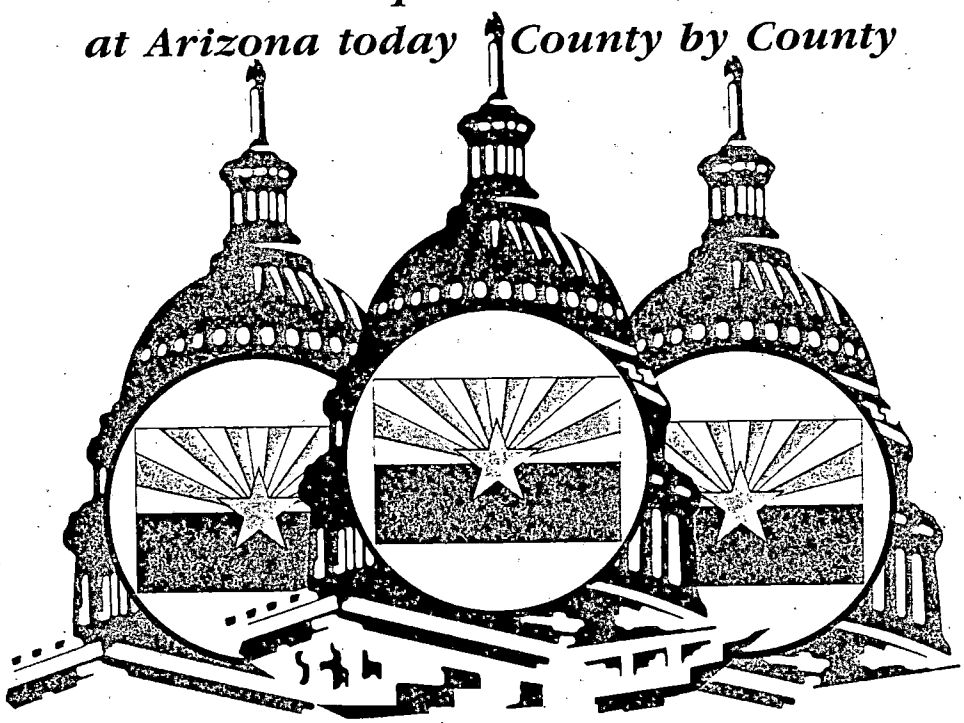
More Than An Almanac

ARIZONA FACTS

A Comprehensive look at Arizona today County by County



Flying the Colors

by
JOHN CLEMENTS

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ARIZONA TODAY

More than 400 years ago, the land that was to become Arizona was a disappointment. It was not, after all, the site of the fabled Seven Cities of Cibola envisioned by Francisco Coronado. The Spanish explorer and his followers left the land with their dreams of golden wealth unrealized. Today, the wealth of Arizona is a palette of many colors, the dark blue forests along the Mogollon Rim, the green depths of rivers and lakes bringing precious water to parched areas, the rich red in the rocks of the Painted Desert and in Oak Creek Canyon, in the black and white canopy of a cold, crisp night sky. The gold is there, too, in the burnished promise of the future. Arizona is a colorful creation wrought of nature's whimsy and man's dedication and vision, a powerful, vibrant state sculpted from equal parts of a storied past, a unique land and a hard-working people. To the casual observer, Arizona is a burning, blazing desert where a bleached skull points the way to a dry creekbed. Or, it's the Grand Canyon with its deep, desolate gorges and its forbidding cliff faces. The modern Arizona is a singular mix of the Old West and the New West where traditional values walk in lockstep with progress and achievement. It's as new as the Phoenix Cardinals and as old as the blowing desert sands. Arizona is a ghost town and a boom town; an arid lowland and a 13,000-foot mountaintop; the vestige of a "town too tough to die" and the reality of a Phoenix, risen not from ashes, but from fires stoked by a wondrous climate and a desire to excel. Arizona's offerings are as diverse as a breathtaking rafting trip down the Colorado or a serene sail on Lake Havasu where the resurrected London Bridge squats in Old World charm; as contemplative as a trek to ancient Indian ruins or as cosmopolitan as a night on the town in Phoenix or Tucson; as frenzied as a Suns basketball game or as peaceful as a backwoods fishing trip. From north to south and from east to west, Arizona reveals itself in a gradual display of change, sometimes abrupt, sometimes gradual. In the south and west are the desert areas sprawling between uplifts, forbidding, barren and beautiful. They give way northward to the plateau country-arid mesas and clefts culminating at the Grandest Canyon of them all. Between is a land of transitional mountains wedding the deserts and plateaus in a ceremony of color and contour. Through it all is the sunshine, an all encompassing constant that makes Arizona unique in the nation, if not the world. Sunshine and the hand of man have joined forces to make Arizona not only an ideal vacation and retirement site, but a manufacturing and industrial force as well. The clean, crisp, sparkling oases of glens and glades, canyons and parks stand in restful contrast to the modern, functional lines of new businesses and industries taking advantage of Arizona's progressive tax structure and open, friendly Southwestern approach to progress. Arizona is the unique and exciting result of a partnership built on the climate, the people and an abundance of natural riches in place but unseen more than 400 years ago.

THE LAND

Although the magnificent Grand Canyon—one of the world's seven natural wonders—is the geological focal point of the state, Arizona is a unique amalgam of desert, mountain and plateau regions which encompass many other dramatic physical features. The state is 390 miles long, 335 miles wide and ranks sixth in land area behind Alaska, Texas, California, Montana and New Mexico. Mexico forms Arizona's southern border; New Mexico is the border to the west. The northeastern corner of Arizona touches the southwestern corner of Colorado. The average elevation is 4,000 feet above sea level, and the state's highest point is Humphrey's Peak, north of Flagstaff, with an elevation of 12,670 feet. The lowest point is where the Colorado River enters Mexico at an elevation of 70 feet. The present-day configuration of the Arizona landscape is the result of tumultuous pre-historic volcanic activity, geological uplift, faulting and erosion, which have given rise to dozens of mountain ranges and canyons. Although geologically complex, Arizona's topography can best be conceptualized by a simplistic division of the state into three basic areas—the Plateau to the north, the Basin and Range to the south and west and the Mountain region in a band across the middle. The state can also be pictured as tilting down toward the southwest. The Colorado River and its tributaries make their way to this area, delivering 90 percent of the state's drainage. The plateau region occupies approximately one-third of the state in the north and northeast. The area is a part of the Colorado Plateau, which extends into Utah, Colorado and New Mexico. Elevations here range between 4,300 and 9,000 feet except for deep canyons and valleys cut by rivers and streams. The plateau was uplifted by geological forces and displays horizontal layers of sedimentary rock, mostly from the Paleozoic and Mesozoic ages. The southern border of the plateau region is defined by the precipitous Mogollon Rim (pronounced muggy-own), a nearly vertical cliff of 1,000 to 2,000 feet which marks an old fault line. Above the Rim are the flat sedimentary rocks of the plateau, and to the south are the greatly deformed rocks that make up the mountain region.

The plateau is composed of three distinct regions, which include the Grand Canyon Region, Black Mesa and Volcanic Plateau. The Grand Canyon Region consists of the Grand Canyon, the Colorado River as it meanders across the plateau and all the land to the north. North of the Colorado River is a vast isolated area approximately the size of New Jersey known as the "Arizona Strip." Fredonia and Colorado City are the only towns in this area, which is cut off from the rest of the state by the Grand Canyon. Residents are forced to conduct most of their business in Utah, which in fact, has attempted to annex the area on several occasions. The Grand Canyon is a massive trench, 200 miles long, 5,000 feed deep in places and five to 10 miles wide, which was formed by the Colorado River over the course of 10 million years. As the plateau was uplifted, the river cut downward through layers of rock. The cutting action is still going on, but has been slowed considerably by more resistant Precambrian rock at the bottom of the canyon. Cutting is now proceeding at the rate of approximately one foot every 2,000 years. North of the Grand Canyon, the Colorado River flows through Marble Canyon, a very narrow and steep-sided canyon. Between Marble Canyon and the Utah border lies the only natural crossing of the Colorado in the state. The crossing, known as Lee's Ferry, was the major route used by the early Mormons and others entering the state from the north or west. Marble Canyon forms the western boundary for the Black Mesa Region of the plateau, which is situated in the northeastern part of the state. This landform extends into Utah, Colorado

and New Mexico, and is often referred to as the Four Corners region. The region is also called Navajo Country because it encompasses ancient tribal lands and is mostly contained within the borders of the 14 million-plus acre Navajo Indian reservation. Perhaps the most striking feature of the Black Mesa Region is the haunting Monument Valley, which sits astride the border with Utah. This broad, silent valley, bitten by millennia of erosion, is guarded by tall isolated spires and mesas. These monoliths of red sandstone tower as high as 1,000 feet above the valley floor and invoke the mystery and romance of this ancient land. Monument Valley shares the Utah border with the massive volcanic Navajo Mountain. The southwestern boundary of the Black Mesa Region is marked by the Painted Desert, which is a bright palette of colored rocks including many shades of red, yellow, orange, brown and green. The variation in colors is the result of various stages of oxidation of iron in the rock. The Hopi Buttes and the Petrified Forest are also a part of the Black Mesa Region. Other features of the Black Mesa Region include Black Mesa Plateau, Chinle Valley and Defiance Plateau, which was the last retreat of the Navajo from Kit Carson in the 1860s. That portion of the Colorado Plateau south of the Grand Canyon and Black Mesa regions is the Volcanic Plateau Region. This region is marked by two major volcanic features, the White Mountains and the San Francisco Plateau. The White Mountains occupy the eastern edge of the Volcanic Plateau Region, and spill onto the mountain region. The eminent peak of this range is the 11,590-foot Baldy Peak. Immediately north of Flagstaff is the San Francisco Plateau, upon which sits the majestic San Francisco Mountains, Arizona's "islands in the sky."

An extraterrestrial contribution to the Arizona landscape is Meteor Crater. Located near the town of Winslow, this gigantic bowl was caused by the impact of a nickel-iron meteor centuries ago, which destroyed all life for miles around the area. Prospectors' attempts to mine the crater for its metal have met with failure because shafts were dug straight down into the center of the crater. Recent theories suggest that the meteor struck the earth at an angle, and that the metallic mass of the projectile lies beneath the rim of the crater. Arizona's deserts are located within the Basin and Range Province, which covers the western edge and southern third of the state. Although it is designated as a "basin" and "range" area, dozens of mountain ranges are found throughout the region which account for approximately five percent of the total area in the western desert and 20 percent in the southeast. Mountain ranges in this region are generally long and narrow and trend from north to south. They are separated by large, open basins which contain great quantities of alluvial material. Most of the mountains are under 4,000 feet, with the exception of those in the southeastern part of the state. The Santa Catalina Mountains near Tucson tower 9,000 feet above the desert floor and the Pinaleno Mountains rise to 10,000 feet. The fourth divisions which comprise Arizona's desert include the Mohave Desert, the Colorado Desert, the Gila Semi-Desert and the Mexican Highlands. The Mohave and Colorado desert areas are very similar, and are characterized by flat, dry expanses broken by jagged mountain ranges. The Mohave extends from the Utah border, south to the Bill Williams River and encompasses most of the western edge of the state. The Mohave is an extension of Nevada's desert areas and features the Joshua tree. The Colorado Desert, an extension of Mexico's Sonoran desert, joins the Mohave and covers the southwestern corner of the state. Similar to the Mohave in topography, the Colorado supports different vegetation. The mountains in this section are highly mineralized and have a history of mining activity. The desert cities of Phoenix and Tucson lie within the Gila Semi-Desert, as does a majority of the state's population, agriculture, business, industry and government. Situated in the south-central portion of the state, this region has a higher elevation and receives more rainfall than the Mohave and Colorado regions, which allows for thicker vegetation and agriculture. The Mexican Highlands comprise the southeastern corner of the state and have an even higher elevation. The mountains here are more numerous and taller. This region features wide grasslands, forests and streams, which prompt some to include it in the mountain region. The area is rich in minerals and contains the state's finest ranchlands. Arizona's desert and plateau areas are separated by a mountainous transition zone called the Central Mountain District. Though they are not particularly high, the mountains here are very rugged; they display no symmetry and do not occur in tiers as do other ranges in the state. Rocks of every type occur here, from sedimentary to volcanic to metamorphic. The mountains too, are of every type, some formed by faulting begun in later tertiary times, some by folding and others by volcanic activity. From east to west, the major groups include the Sierra Ancha, Mazatzal and Bradshaw Mountains. The mountains are heavily forested in parts and are separated by large valleys. Precipitation falling in this district flows southward to the Gila, Salt and Bill Williams rivers, bringing vital moisture to the agricultural areas near Phoenix in the Salt River Valley. The towns of Prescott, Globe and Payson are located within this region.

The distribution of flora and fauna in Arizona is largely a function of elevation and moisture. A wide variety of species finds a home within the state's great range of elevations which span more than 12,000 feet. Some plants, such as the senita cactus and the elephant tree, grow only in southern Arizona and Mexico. Canada geese and other northern waterfowl winter on the rivers and lakes of the state's desert, and more than a dozen species of hummingbirds migrate, north from Mexico to spend the summer in the mountains of southeastern Arizona. The animals and plants that call Arizona home year round can be categorized by the Merriam system of life zones. Each life zone can be expected to occur within a certain range of elevations. Most of the state's desert and plains fall within the Lower Sonoran Zone, which includes areas under 4,500 feet in elevation. Cultivation is possible here when irrigation is provided, and successful crops include vegetables, citrus and cotton. The vegetation trademark of the state, the cactus, thrives here in many varieties, including the giant saguaro whose white blossoms are the state flower. Other cacti include the prickly pear, cholla and barrel. Resilient desert shrubs and small trees, such as palo verde, ocotillo, creosote, mesquite and ironwood abound in this zone. Although the desert buzzes with insect and bird activity during the day, the majority of animals siesta during daylight hours when ground temperatures can reach 150 °F. Desert animals emerge from their burrows in the late afternoon and night to forage and hunt. They include kangaroo rats, several kinds of squirrels and

mice, cottontail and jackrabbit, skunks, foxes, ringtail cats, javelina, bighorn sheep, coyote and the rare mountain lion. Common birds include the cactus wren (Arizona's state bird), Gambell's quail, Gila woodpecker, roadrunner, hawks, eagles, owls and ravens. Reptiles include sidewinder and diamondback rattlesnakes and numerous lizards, including the rare poisonous Gila monster. Other denizens of the Lower Sonoran Zone include spiders, centipedes and scorpions. The Upper Sonoran Zone, found at 4,500 to 6,500-foot elevations, occurs in widely scattered areas throughout the state. These areas get more precipitation and can support grasslands or brushy areas featuring juniper, pinyon, pine and oak. Many of the Lower Sonoran Zone animal species also live here. It is the favorite haunt of rattlesnakes. Black bear, desert mule, whitetail and pronghorn deer also inhabit this zone. Above the Sonoran Zone is the 6,500 to 8,000-foot elevation Transition Zone, which is characterized by the ponderosa pine. This is the zone which supports most of the state's commercial logging industry. The greatest expanse of Transition Zone is located along the southern Colorado Plateau, from Williams in north central Arizona eastward into New Mexico. Gambel oak, juniper and Douglas fir are scattered among the ponderosa. Squirrels and chipmunks chatter on the forest floor, arguing over pine cones. Rabbits, skunks, fox, coyote, deer, elk, black bear and mountain lions also live here. Birds include wild turkeys, Stellar's jay, owls, hummingbirds, juncos and ravens. At this altitude, most snake species are non-venomous. Canadian Life Zones occur between 8,000 and 9,500-foot elevations. In Arizona, these zones are covered with cool, wet forests of Douglas fir interspersed with Engelmann and blue spruce, white and subalpine fir, and quaking aspen. Grasses and wildflowers grow in lush meadows amid the forests. Canadian Zone forests are found on the Kaibab Plateau of the Grand Canyon North Rim, the San Francisco Peaks, the White Mountains and a few other high peaks. Squirrels are present in this zone, and it is the highest zone in which deer and elk are prevalent. The Hudsonian Zone occurs at elevations between 9,500 and 11,500 feet. Strong winds and cold weather stunt the growth of trees, and snowfall here occurs at twice the volume of lower zones. Major species include Engelmann and blue spruce, subalpine and corkbark fir, and bristlecone pine. This zone can be found in Arizona only atop the highest mountains. The zone can be quite pleasant in the summer, and is often visited by birds and animals from lower zones. But few can survive the bitter winters. The Alpine Zone in Arizona occurs only on the San Francisco Peaks north of Flagstaff. Temperatures can dip to well below freezing even in the summer. Some 80 species of plants manage to survive in this inhospitable zone, including many found in arctic areas. A few hardy species of flowers and birds vacation here in the summer. Stewardship of Arizona's spacious lands is dividing among a number of agencies and groups. The U.S. Forest Service owns 15 percent of the state's land; the U.S. Bureau of Land Management owns 17 percent; Indian Reservations comprise 28 percent; the State of Arizona owns 13 percent; 17 percent is owned by individuals or corporations; and the remaining 10 percent is under the jurisdiction of other government agencies.

CLIMATE With the possible exception of Florida, no other state in the Union has combined the presence of a moderate climate with a dynamic, progressive approach to growth and prosperity than Arizona. In the years before double-digit growth rates, Arizona was world-famous for its temperate climes—particularly the mild, dry, cool winters. At first blush, the Arizona climate appears simple: hot, dry summers and mild, dry winters. It's much more than that, however. An extreme diversity of topographical features ensures varying weather patterns and a wide range of climatic conditions. The densely forested Mogollon and Coconino plateaus, for instance, offer an average annual temperature as much as 25 ° lower than may be found in the desert plains in the southwestern part of the state. Annual precipitation levels on the deserts may be as much as 20 inches less than the plateau region in the north-central part of the state. The wide variances are caused mainly by differences in elevation in a state which ranges from around 100 feet above sea level in Yuma County in the southwestern desert to nearly 13,000 feet in the rugged mountain country north of Flagstaff. The state is roughly divided into several climatic zones, including the northeast, northwest, plateau, central, southwest and southeast, though additional divisions and subdivisions may be made. The examination of climate in Arizona includes such components as precipitation, temperature, humidity and sunshine. The former three vary across the state; the latter is something of a constant, regardless of elevation or time of year. About half the state receives less than 10 inches of precipitation a year, including virtually all of the northeast and southwest sections and part of the southeast section. The driest part of Arizona is in the southwest corner of the state, running south along the Colorado River to Yuma and northeast along the Gila River to Gila Bend. It is a rare year when the area around Yuma receives more than three inches of rain in a 12-month period. By contrast, some regions in the southeast, central and plateau sections regularly get more than 25 inches a year. Some of the higher peaks and lower elevations on the western and southern sides of mountains receive more than 30 inches of rain a year.

Unlike many states, Arizona has two "rainy seasons," one in late summer and the other in the December to mid-March period. Nearly half the total annual precipitation in the southeast occurs in July and August. The winter wet season is more noticeable in the western and central portions of the state. Generally, the eastern half of the state receives the majority of its rain in the summer, while the western half is "wetter" during the winter months. Oddly enough, the sere southwestern region is not the most arid part of the state throughout the year. During the winter, the northeast section with its desolate plateaus, high elevations and low temperatures rarely receives heavy winter precipitation. The months of May and June generally are the driest in the state and the southwest section may go three years without precipitation in those months. Autumn, generally considered the finest season, also is dry in Arizona, particularly in October in the southern half of the state and in November in the northern half. Rainfall amounts in Arizona are not excessive, though thunderstorms can occur, occasionally drenching a small area with several inches of rain in a short time. Times of peak rainfall vary across the state, too. In the northwest and plateau sections, summer storms almost always occur during the daylight hours, usually in the afternoon. Summer precipitation in the dry southwest section may occur at any time, though most areas have a nighttime peak. Showers in the central section occur

most frequently in the late afternoon hours. In the southeast and northeast areas, most rain showers occur in the late afternoon or early evening hours. Although Arizona cannot match some of its neighboring states in snowfall amounts and frequency, some regions do receive considerable amounts during the winter months. In the higher elevations of the plateau region, eight to 11 feet of snow annually is not unusual. In the northeast section, as much as 50 percent of winter precipitation may fall as snow, but accumulations are usually insignificant because of the dry nature of the area. Elevations above 7,000 feet in the southeast, central and northeast sections normally receive four to five feet of snow. Snow is a rarity in the southwest section, while one to six inches is not uncommon in the higher desert valleys of the southeast region. Just as precipitation levels vary greatly across the state, so do the temperatures. Comparisons in January and July demonstrate marked differences in the various sections. In January, average temperatures of 20 to 25 ° along the Kaibab Plateau and the White and San Francisco mountains stand in contrast to the 55 ° readings on the lower Gila River. In July, the same areas record temperatures of 55 ° and 95 °, respectively. The differences occur mainly because of elevation, though latitude also plays a part.

Winters in the plateau and northeast sections can be extremely cold, especially at elevations above 7,000 feet. Temperatures below freezing in those areas are not uncommon from mid November until late April. The chilly average winter temperatures of those two regions are contrasted by average readings of 45 to 50 ° in the southwest and southeast sections. The mildest winters occur along the lower Colorado and Gila rivers, as well as on the Santa Cruz River and in the Salt River drainage basin. Average January temperatures are above freezing across most of the desert floor and on the slopes of valleys near the mountainous section of eastern Arizona. Between January and July, average temperatures in most sections of the state climb 35 to 40 °. Except for the desert-like floor of the Grand Canyon, average daytime temperatures are under 75 °, with maximums only rarely above 90 ° and minimums usually above 40 °. Most of the state is warm to hot during the summer, with average daily maximums usually pushing past 90 ° at the lower elevations. In the southwest, temperatures usually exceed 100 ° during the afternoon. Highest temperatures recorded have been 127 ° at Fort Mohave and Parker. The southeast section is not as hot during the summer where temperatures often are below 90 ° in the afternoons. The northeast region is cooler than the southeast area, and the nights usually offer temperatures in the low 60s. Summers are pleasant, as well, in the areas above 5,000 feet in the northwest and central sections where elevation and cloud cover combine to keep readings down. The last week of June and the first two weeks of July usually are the warmest times across the state, due mainly to the presence of dry air and few clouds. During the fall and spring, Arizona is extremely pleasant, marked by little precipitation, clear skies and significant temperature changes from morning to afternoon. Relative humidity and the "heat index," the combination of temperature and humidity, play a major role in Arizona's climate. The highest humidities across most of the state occur in August, traditionally the wettest month of the year. Then, moist tropical air from the Gulf of Mexico covers much of the state. Average relative humidities of 75 percent or higher are prevalent in the plateau region fron early July until mid September and in the northeast in Augus and from December through February. Except for th southeast section, humidities in the late afternoon generall are higher in the winter than in the summer. All parts of th state are driest in May and June, and humidity readings a low as two percent have been noted in Yuma and Tucson In general, sunshine is a constant in Arizona. The southwes part of the state receives considerably more sunshine thar any other portion of the United States. In fall and spring the cloud cover is practically non-existent, and there is littl dust or water vapor to filter the sunlight. Yuma and othe sites at low elevation annually receive more than 90 percen of the possible sunshine, and Tucson and Phoenix receive onl slightly less. The cloud cover in Arizona is greatest durin the winter months, but the measure is relative. Clear day in Yuma during January average 15 with nine cloudy day and seven partly cloudy days. Even the central and northern sections of the state generally receive more than 70 percen of the possible sunshine. Arizona differs from most of the rest of the country in another way: the infrequency of storm and violent weather systems. During the winter, most of the storms that move eastward across the country pass to the north of the state or begin east of the Rocky Mountains. Consequently, Arizona seldom feels the impact of the weather systems. Storm systems that do cross the state or pass close enough to affect temperature, precipitation and humidity occur only occasionally. Storm sequences arriving every three or four days may hold sway for a week of two before being replaced by several weeks or a month of calm, placid conditions during the winter. Cyclonic type weather systems rarely occur in Arizona during the summer, though locally heavy thunderstorms dot the state during July and August.

ENVIRONMENT Although most of the state retains its pristine natural beauty, Arizona's largest metropolitan areas have serious pollution problems, which officials have vowed to contain and reverse. With the enactment of the Environmental Quality Act of 1986, the Legislature and citizens of Arizona signaled a greater awareness and higher priority for environmental issues. The Department of Environmental Quality (DEQ) created by the act, came into existence July 1, 1987. Environmental protection efforts center on three principal areas: air quality, water quality and waste management. Bringing Phoenix and Tucson into compliance with federal standards for carbon monoxide is a major priority of the DEQ. These areas have recorded pollution levels that are among the most severe of any American cities. The state has made some progress in correcting the situation. In spite of dramatic growth of vehicle traffic, the number of violations of carbon monoxide standards has declined in recent years. Improvements are attributed to the stringent auto emission controls on newer cars and the state vehicular emission testing program. The major new strategy for carbon monoxide reduction is the use of oxygenated fuels. Arizona became the nation's second state, after Colorado, to pass a bill mandating the use of alternative fuels during the winter when carbon monoxide violations are common. Fuels that contain higher amounts of oxygen have been available for several years, but their potential air quality impacts have gone unnoticed by the regulatory community until recently. Arizona's alternative fuel program is expected to result in a 13 to 18 percent

reduction in carbon monoxide levels. Technological solutions are only part of the answer. Long-term solutions depend upon new traffic management techniques as well. One strategy would require large employers to encourage car pooling and the use of public transportation systems. Officials estimate that a combination of those strategies, improved emissions testing and trip reduction ordinances would allow the Phoenix area to meet federal standards for carbon monoxide by the end of 1991. Because groundwater is the source of drinking water for about 65 percent of Arizona's population, it is the focus of a number of protective measures. As of July 1987, 537 contaminated wells had been detected throughout the state. The groundwater quality protection program is designed to prevent future and correct past contamination. An aquifer protection program is being developed to ensure strict controls.

Specific areas of concern include protection against groundwater pollution due to underground storage tanks, industrial activities and landfills, and hydrogeologic support in correcting groundwater problems stemming from such activities. In addition to emphasizing groundwater protection, other steps taken to ensure that public systems deliver safe water include review and approval of facility design and construction of wastewater treatment and supply facilities and certification of several thousand wastewater treatment plant operators each year for appropriate levels of skill and experience. As businesses and people continue to move to Arizona, the amount of waste generation requiring proper management and disposal will continue to increase dramatically. The improper management and disposal of these solid and hazardous wastes potentially endanger public health and threaten to cause serious harm to Arizona's land and water resources. In responding to this challenge, the Office of Waste Programs (OWP) administers a comprehensive program to monitor, control and properly manage waste disposal including a "cradle to grave" regulatory system for hazardous waste. OWP programs are aimed at the prevention of improper waste disposal and the cleanup of contaminated sites where problems have occurred. The department's activities involve the permitting and inspection of solid waste landfills and hazardous waste treatment, storage and disposal facilities, the regulation of hazardous waste transporters through a manifest system and enforcement of the state's solid and hazardous waste statutes. Priority efforts are directed toward dealing with hazardous material incidents or environmental hazards. Site cleanups are accomplished through enforcement/compliance actions, use of the State Water Quality Assurance Revolving Fund or access to the federal EPA Superfund. Arizona enjoys a unique partnership between the state and private sector to meet hazardous waste disposal requirements. The need for a properly sited, designed and operated hazardous waste disposal facility became apparent many years ago. In 1981, with legislative guidance, Arizona began siting such a facility and by 1984 had acquired a one-square-mile site southwest of Phoenix. Currently, 21 miles of paved road improvements are being constructed from Maricopa to the site location six miles west of Mobile. In 1986, the state entered into a 10-year renewable contract with ENSCO Inc. to design, finance, construct and operate the waste management facility. The initial facility will consist of incineration, fixation and landfill capacity at an estimated cost of $29 million and was expected to be in full operation by 1989. The facility will provide for safe waste management and disposal services.

THE PEOPLE

Despite a two-year pause in the late 1980s, Arizona remains one of the nation's fastest growing states. Its 1988 estimated population of 3,605,700 made it the country's 25th largest. Between 1980 and 1987, only the states of Alaska and Nevada grew faster. Projections estimate that, by 1990, Arizona will have passed South Carolina and Kentucky in population. Though the growth rate slowed from the 53 percent jump between 1980-87, estimates are that Arizona will be home to more than four million residents by 1991. Unlike many states, Arizona's population is concentrated in just two areas—Maricopa and Pima counties and their respective cities of Phoenix and Tucson. More than 75 percent of the people reside in those two counties, with more than 57 percent in Maricopa County alone. State estimates put the 1988 Maricopa County population at 2,069,400, followed by Pima County with 685,300, Pinal County with 110,300 and Cochise County with 102,400. The smallest county is Greenlee with 9,500. Phoenix is the largest city in the state with a 1988 estimated population of nearly 955,000. Tucson ranked second with 412,590, and it was followed by Mesa with 278,590, Tempe with 145,629, Glendale with 143,127 and Scottsdale with 126,218. Across the state, the population density in 1988 was 31.8 people per square mile. The density figures ranged from a high of nearly 227 people per square mile in Maricopa County to a low of just 3.2 people per square mile in La Paz County. Despite a reputation as a retirement center, Arizona's population is younger than the national average. In 1988, the Arizona median age was 31, more than a year below the national figure of 32.1. As well, the proportion of residents younger than 25 is 39 percent, compared to 37 percent nationally. The state's proportion of those older than 65 is slightly less than the 12.23 percent figure across the nation. More than nine percent of Arizona's population is in the 25-29 age group, and less than four percent comprise the 55-59 age group. The state's racial makeup varies from national numbers, too. While the proportion of White residents is comparable—both at 83 percent—the percentages of Blacks, American Indians and those of Spanish origin are at a variance. In Arizona, Blacks comprise 2.73 percent of the population, compared to 11.69 percent nationally. American Indians, on the other hand, make up 5.68 percent of the state population, compared to less than one percent nationwide. Those of Spanish origin make up 16.34 percent of the Grand Canyon State's population, compared to 6.45 across the nation. A great deal of Arizona's population growth in the early and mid 1980s was due to migration from other states, led by Illinois, Michigan, Ohio, California and New York. In the flow of residents from state to state, Arizona gained 33,710 from Illinois, 24,299 from Michigan, 19,783 from Ohio, 17,912 from California and 14,878 from New York. Of the 50 states, Arizona lost population in significant numbers only to New Mexico and Texas with 10,301 and 5,441 respectively. The state lost smaller numbers to Alaska, Nevada, Oklahoma, Georgia and Arkansas.

VOTER PARTICIPATION Arizona voters followed suit with a majority of Americans on November 8, 1988 when they favored Republican George Bush over Democrat Michael

Dukakis in the presidential election. Of the 1,204,175 ballots cast, 702,541, or 58.3 percent, voted for the Bush-Quayle ticket. The Dukakis-Bentsen entry received 454,029, or 37.7 percent. The Libertarian party ticket, represented by Ron Paul and Andre V. Marrow, got 13,351 votes, or one percent of the total. The remaining votes were divided among the New Alliance, American Populist and Independent parties. The general election turnout amounted to 67 percent of the state's 1,797,714 registered voters. That compared to a 56 percent voter response in the 1986 general election. Across the state, registered Republicans make up 45.3 percent of the electorate, with registered Democrats accounting for 42.9 percent. The majority of registered voters in the state, 56.3 percent, reside in Maricopa County. Pima County accounts for 21.4 percent of the state's registered voters, and the remaining 22.3 percent are divided among Arizona's 13 other counties. In March 1988, there were 897,280 registered voters in Maricopa County, while Pima County had 341,309. The fewest voters are found in Greenlee County which had 4,525. Fifty-one percent of the voters in Maricopa County were listed as Republicans in March 1988, while 37 percent were Democrats. The remaining 12 percent were affiliated with other parties. In Pima County, however, Democrats outnumber Republicans. The March 1988 tally showed that 47 percent were Democrats and 38 percent were Republicans. In the 1988 race for the United States Senate, Democrat incumbent Dennis De Concini held off a challenge by Republican Keith Green. De Concini received 641,402 votes, 56 percent, to Green's 478,060 votes, or 42 percent. Republicans fared better in the races for seats in the U.S. House of Representatives, winning four of the five elections.

In District 1, Republican John J. Rhodes III received 184,639, or 72 percent, of the vote, while Democrat John M. Fillmore received 71,388 votes. The only successful Democrat candidate for the lower chamber was long-time representative Morris K. Udall of District 2. He received 99,895 votes, or 73 percent, to the 36,309 garnered by Republican Joseph D. Sweeney. In District 3, Republican Bob Stump received 174,453 votes, or 69 percent, of the vote, while Democrat Dave Morr received 29 percent. Republican Jon Kyl overwhelmed Democrat Gary Sprunk in the race for the District 4 seat. Kyl received 206,248 votes, or 87 percent, to Sprunk's 30,430. In District 5, Republican Jim Kolbe got 164,462 votes, or 68 percent, while Democrat Judith E. Belcher received 78,6115 votes. Republicans also captured the only two statewide offices on the ballot. In the race for State Mine Inspector, Republican Douglas K. Martin received 606,300 votes, or 58 percent, to 439,630 for Democrat Bert C. Romero. Republican Dale Morgan was elected Corporation Commissioner, getting 541,146 votes, or 52 percent, to 469,840 votes for Democrat Kate Lehman. Rick Fowler of the Libertarian Party received 37,119 votes. Arizona voters also elected more Republicans than Democrats to the state Legislature. In the Senate, Republicans won 17 of the 30 seats, while voters sent 35 GOP members to the 60-seat House of Representatives. Eight propositions also appeared on the ballot and voters approved four and rejected four. Those passing were: a concurrent resolution proposing an amendment to the constitution relating to the Commission on Judicial Conduct; a concurrent resolution proposing an amendment removing a requirement that a person must be a male to be eligible for a state office; a concurrent resolution relating to the executive department, suffrage and elections and removal from office; and an initiative measure proposing amendment to the constitution providing that English is the official language of the state. Those rejected were: a concurrent resolution proposing an amendment repealing the limitation on the number of terms of the state treasurer; a concurrent resolution proposing an amendment repealing the provision relating to the method used by the Corporation Commission to determine the value of public service corporations; a concurrent resolution proposing an amendment prescribing purposes for which a city or town may incur additional, voter approved debt; and a recommendation of the Commission on Salaries for Elective and Judicial Officers as to legislative salaries.

THE ECONOMY

After stellar performances in the late 1970s and mid 1980s, the Arizona economy returned in 1988 to a path of more modest growth. Although the prospect of steady growth at lower levels arouses less fervor than spectacular growth at higher levels, the Arizona economy is fundamentally sound. It is in a position to take advantage of the declining dollar and the basic economic undercurrents of the restructuring of the American economy toward services and high-technology manufacturing. For the 20 years from 1967 to 1987, the Arizona Gross State Product (GSP) grew faster than the nation's Gross National Product (GNP), and all sectors of the state grew faster than their national counterparts. From 1982 to 1986, the Grand Canyon State led all western states in rate of growth of GSP and was second only to New Hampshire nationally. The recent boom extended from 1982 to 1987 and saw Arizona lead the nation in percentage of new jobs created for three consecutive years, the only state ever to do so. Historically, agriculture and mining have been the dominant components of the state's economy. Arizona continues to lead the nation in copper mining, producing 61 percent of the country's supply, and the state is a leading producer of five agricultural commodities, with pima cotton as its largest cash crop. But in recent years, the pre-eminence of these extractive and agricultural industries has been overshadowed by the rise of manufacturing, services, finance, insurance and real estate. Concentrated in Phoenix and Tucson and their surrounding areas, the growth of high-technology manufacturing, corporate relocations, brisk migration to the Sun Belt, and increases in defense spending allocated to Arizona defense contractors combined to set the rapid pace of expansion in the Arizona economy during the mid 1980s. Major electronics, aeronautics and defense employers such as Motorola, Garrett, Honeywell/Sperry and McDonnell Douglas prospered in Phoenix and in Tucson and spurred growth in the communities around them. The accompanying boom in construction, real estate and finance further bolstered the economic health of the area and attracted more migration, investors and speculators and encouraged more developers and businesses to build and expand. Based on the criteria of new business "birth rate," new job creation and young company growth rates, *Inc. Magazine* rated Arizona the number one state in the nation in a 1988 ranking of business climates. With more than 75 percent of the state's population living in the two counties that include Phoenix and Tucson (Maricopa and Pima), it is not surprising that the magazine also included Phoenix and Tucson in the top five of its ranking of cities. Much of the state's economic activity is

concentrated in these two areas. But the rise encountered a ceiling by 1988, as a number of aggressively solicited corporate relocations and the highly touted Superconducting Super Collider were won by other states. The efforts of American corporations to become "lean and mean" resulted in employment reductions at a number of major aeronautics and electronics employers, and IBM announced it would close its Arizona manufacturing facilities. As job creation slowed in the late 1980s, the influx of migration also decreased and the overbuilt construction industry entered a slump in 1987, with an eight percent employment loss in that sector. Millions of square feet of commercial and residential real estate stood vacant in 1988 and will have to be absorbed before the industry can recover. The expected increase in interest rates could further impede recovery. Employment in the finance, insurance and real estate sector also suffered a small decline in 1988 as the boom subsided. By late 1988, Arizona had fallen from 16th in the nation in job creation to 37th. Still, the state's diversified economic profile correlates with the evolving strengths of the American economy, and after a few market corrections have time to work themselves out, the Grand Canyon State holds excellent prospects for long-term growth. In 1988, services and wholesale and retail trade represented the largest employment sectors in the state. Many of these businesses are closely related to Arizona's strong tourism industry, which attracts more than 20 million visitors each year. The largest employment gains in the service and trade sector in 1988 were recorded in business services, health services, and hotels and lodging—especially in resort and convention hotels. Business and pleasure travel continued to contribute to the economy, with two major airport expansions under way in 1988. Air passenger traffic has increased steadily, tripling at Phoenix Sky Harbor International Airport from 1977 to 1987, and doubling at Tucson International during the same period. The second largest employment sector in 1988 was government enterprises, which, in addition to federal, state and local administrative personnel, included the public schools and universities and 10 military institutions.

Manufacturing comprises the third largest employment sector. Until 1988, manufacturing—especially of electronics—had been the fastest growing area of employment in the state, increasing at a rate of 7.5 percent per year since 1960. But 1988 saw a retrenchment of that growth, down to an increase of only one percent, as manufacturing industries realized a smaller increase in demand than they had expected from the declining value of the dollar. This disappointment aside, the relatively high concentrations of services and manufacturing employment are projected to propel Arizona's economic growth forward at a rate exceeding the nation's over the next few years. Although the Arizona economy was not the pace car for the country in 1988, there were some bright spots. The copper industry responded well to increases in copper prices and added 700 jobs in the first half of the year. Service industries increased employment by six percent, transportation, communications and public utilities by five percent and trade by three percent. Still animated from the rapid pace of the mid 1980s, Arizonans are eager to build the remaining echos of the recent boom back into a continuing resonance of economic vibrancy. The Arizona Department of Commerce has launched a number of programs to nurture existing businesses and industries and to encourage new ones. National marketing representatives seek out corporate clients from out-of-state who might be interested in relocating or establishing satellite operations. In 1988, the staff was working with 43 companies that held the potential for bringing 4,600 jobs to the state. The Business Retention and Expansion (BRE) staff offers already established Arizona companies counseling in organization, finance, operation and expansion. The Small Business Development Center creates a network with the Department of Commerce, the Small Business Administration and the community college system to provide small businesses with technical assistance and training activities. The BRE also operates a Natural Resource Utilization and Commercialization arm that works with agricultural and resource producers to increase productivity, quality and markets. A Technology Transfer program facilitates the application of ideas and technology developed in area universities to commercial and industrial environments in order to minimize the lag time between conceptualization and implementation. The Office of Motion Picture Development works hand-in-hand with production companies and provides a "one stop" office for the motion picture and television production industry. The office has been directly involved in assisting in many television and feature film projects, including "Dudes," "Spaceballs," "St. Elsewhere," "Probe" and "The Highwayman." The International Trade section within the Department of Commerce is moving aggressively to promote international trade and investment with Arizona and has opened an Arizona Trade Office in Taipei, Taiwan. Community development, energy conservation and solar energy also are cultivated with divisions devoted to their support. As the Arizona economy regrouped on the verge of a new decade, a 1988 Federal Reserve study on what makes economies grow rates the Grand Canyon State above the national average in every category of industry composition and economic climate.

AGRICULTURE Although agricultural production contributes only three percent to Arizona's Gross State Product (GSP), agriculture is still big business in the Grand Canyon State. Agriculture as a percent of GSP declined from a high of 18 percent in the first half of this century to its more modest current portion less as a result of contraction in the agricultural sector than from the expansion of other sectors around it as the young economy matured. Arizona agriculture was not sacrificed on the altar of progress. In 1987, vegetables and other farm and ranch products generated $1.73 billion in sales. Although the agricultural sector constitutes a relatively small component of the state economy, Arizona leads the nation in production of high-quality Pima cotton. Pima County was named for the Pima Indians living in southern Arizona, and pima cotton was named for Pima County, the county in the United States that is the largest producer of this natural fiber. Pima cotton is a very strong, medium-staple cotton developed from selected Egyptian cottons. Arizona is the second largest producer of lettuce, cauliflower and lemons, and is the third largest producer of oranges, tangerines, grapefruits, honeydews and broccoli. Overall, Arizona ranks 30th in the nation in agricultural production. Through the 1980s, the number of farms in Arizona remained relatively constant, beginning the decade at 8,200, increasing to 8,600 in 1986, and dipping to 8,400 in 1987. The amount of farmland decreased somewhat, from 38 million acres in 1980 to 37 million acres in 1987, and correspondingly, the average size of farms decreased

from 5,080 acres in 1980 to 4,405 acres in 1987. The total value of farmland and buildings declined from $11 billion in 1982 to nine billion dollars in 1987, for an average value per acre of $242, less than half the national farm average of $548. Although the value per acre of Arizona farm property is less than the national average, Arizona farmers maintained a debt/asset ratio of only 17 percent in 1986, compared to a national average of 21 percent, and much better than ratios in the 30 percent range common among Corn Belt states. The net farm income/debt ratio for Arizona farmers in 1987 was 23 percent, about the same as the national average. The state's agricultural activities are concentrated in Maricopa, Pima, Pinal and Yuma counties, with field crops grown throughout the balance of the state, with the exception of the mountainous northwest where there is little farming. Field crops are Arizona's leading agricultural commodity, and cotton producers enjoyed another year of record high yields in 1987. The bounty was all the fuller because harvested acres and market prices both increased for the year. A total of 380,000 acres produced 1.1 million bales of cotton valued at $368 million. Hay growers enjoyed a similar year of record high yields on increased acreage, as 190,000 acres produced 1.4 million tons of hay valued at $116 million. Wheat production was down on fewer acres harvested, as 89,000 acres yielded 240,000 tons valued at $24 million. Other field crops of lesser importance grown by Arizona farmers in 1987 included barley ($4.8 million), corn ($8.3 million) and sorghum ($3.4 million). In the latter half of the 1980s, the acres harvested, production and value of those crops declined.

Vegetable crops comprise the second largest component of agricultural production. In 1987, the total area under cultivation for the principal crops increased six percent over 1986 as Arizona produced the third greatest harvest of vegetable crops in the country. Iceberg lettuce remained the most significant vegetable crop in Arizona, accounting for nearly 54 percent of the total value of production for all vegetables in 1987. The production of vegetables received increased emphasis, with total vegetable production up 13 percent in 1987 over 1986 levels and up 33 percent from 1985. Much of the increased value resulted from increased planting of principal crops, but the total value also was bolstered by significant price increases in 1987 for a number of crops, including "other" lettuce (59 percent), potatoes (44 percent) and onions (133 percent). Miscellaneous vegetables produced in 1987 were valued at an additional $46 million, with the largest percentages deriving from romaine and leaf lettuce, greens and green onions. Fruit and nut crops contributed another $109 million to Arizona's agricultural economy in 1987. Lemons are the single largest component of the citrus crop and the 14 million cartons produced in 1987 were valued at $29 million. The lemon harvest of 1987 represents a clear depiction of the perennial issue that bedevils the farmer. On fewer harvested acres, farmers succeeded in reaping a yield that was more than twice the previous year's. But the plentiful supply brought market prices down and farmers received 40 percent less for more than twice as many cartons of lemons than the previous year. Farmers had better luck with the orange crop in 1987, however, as fewer acres harvested produced 30 percent more oranges (6.3 million cartons) valued at 21 percent more ($19 million) than in 1986. Nearly one-fourth of Arizona's grape crop was left unharvested in 1987 because of poor market conditions, but the 31,000 tons produced brought $21 million to the state economy. Most of the grapes produced in Arizona are for fresh use, but there are increasing varieties planted each year for a growing Arizona wine industry. Apple production in Arizona was a record 605,000 cartons in 1987, but the market value of $3.3 million was $1.1 million less than the previous year's crop because of the scourge of plenty. Other tree fruits grown in Arizona include apricots, nectarines, peaches, plums and figs, which, combined, covered 1,056 acres in 1987. Another 18,224 acres of nut trees grow in Arizona, including 14,118 acres of pecans, 1,306 of pistachios and 2,800 of almonds. Arizona also is well suited for ranching and raising livestock, with 80 percent of its land area providing good natural pasture. Nearly half of all agricultural output comes from livestock production, which totaled $787 million in 1987. Since 1967, the cattle and calf inventory in Arizona has exceeded one million in every year except 1984 and 1988. In 1987, a total production of 580 million pounds of livestock and 789 million pounds of marketings produced gross income of $488 million, an increase of 15 percent over 1986. Arizona had 20 feedlots in operation during 1987, down from 22 the previous year. The average number of cattle on feed was 296,000 head, an increase of three percent from 1986. In spite of a 1986 Dairy Buyout Program implemented to reduce the size of dairy herds on a national level, the number of milk cows in Arizona actually increased in 1987 due to expansion of existing dairies and the introduction of new operations. Milk production per cow reached a record high in 1987, as 90,000 cows produced an average of 15,911 pounds of milk each for a total of 1.4 million pounds valued at $183 million. The production and sale of hogs and pigs raised in Arizona were down in 1987 from 1986 levels, but a four percent increase in price per hundredweight resulted in a slight increase in gross income, which totaled $33.6 million for the year. The sheep and lamb inventory increased slightly during 1987, to 284,000 head. Although the 19.3 million pounds marketed in 1987 represented a 14 percent decline from 1986, cash receipts almost doubled, to $10.4 million, as a result of prices per hundredweight increasing to $21.40 for sheep and $74.80 for lambs. Wool production also decreased to 1.9 million pounds in 1987. But as price per pound increased 30 percent to 69 cents, the total value of wool production increased 22 percent to $1.3 million. In the poultry area, the prices of chickens and eggs both declined in 1987, and Arizona farmers correspondingly reduced their inventories and production. The total value of chickens and eggs sold in Arizona in 1987 was $3.5 million, a 35 percent decrease from 1986. Much of Arizona's agricultural production finds its way to foreign markets, but because all of the exports that originate in Arizona do not leave from Arizona departure points, exact figures are impossible to determine. The official value of Arizona agricultural exports provided by the United States Department of Commerce in 1987 was $61 million. But the true total value is somewhere between $250 and $400 million. Beef exports not only go to Mexico, but also to Japan and West Germany, and Arizona's cotton exports circle the globe.

BUSINESS Until the early years of the twentieth century, business in Arizona was like the water supply—hard to find but precious nonetheless. In a sense, those two commodities have tracked each other from Arizona's days as a territory

through the explosive growth of the 1980s. In the beginning, the state's economy was land-based with the majority of business endeavor involving farming and ranching tied closely to the various river valleys. As the population began to grow in the early nineteenth century, the economy with its business base began to expand and diversify as well. New residents translated to first the construction of, and then the maintenance of homes, schools and businesses. By the time Arizona became a state in 1912, mining had become a big business and an employer of note. As the population grew in the ensuing years, however, the structure of the business framework changed. As late as 1930, nearly 18 percent of the Gross State Product (GSP) came from agriculture and more than 16 percent from mining. Those figures compared in 1987 to three percent and less than three percent, respectively. The manufacturing sector, meanwhile, doubled between those years and businesses engaged in finance, insurance and real estate went from 3.5 percent of the GSP to more than 18 percent. Today, Arizona is concentrating on the changes and adjustments needed to accommodate alterations in the economy. An example of that approach is the "technology transfer legislation" that allows university faculties and researchers more opportunity to develop ideas in the private sector, thus providing incentive for more research while fostering a spirit of cooperation between the business community and academia.

The Arizona business climate is generally regarded as one of the best in the nation. The state ranked number one in the country in a 1988 *Inc. Magazine* report. Phoenix and Tucson were ranked among the top five cities nationwide based on the factors of new job creation, new business "birth rate" and young company growth rates. Another report, issued in 1987, cited Arizona as having the best availability and productivity of resources in the nation, as well as the seventh best manufacturing business climate. The factors that make Arizona a profitable location include competitive wage rates, high productivity, moderate tax structures, education and training programs, a favorable labor regulatory climate, steady economic expansion and the cost and availability of industrial, commercial and residential sites. The business climate is further enhanced by several other factors, including a young and well-educated labor force, a central location in the Southwest and a sophisticated transportation network capable of delivering goods and products to the West Coast, Mexico, the Pacific Rim and other regional growth markets. Readily available and inexpensive energy and water resources further enhance the business environment. As well, Arizona's investment in education has made Phoenix, Tucson and Flagstaff leading centers for the training of the scientists and engineers needed for the rapidly expanding high technology sector. The only state ever to do so, Arizona led the nation in three consecutive years (1984-86) in new job creation. Between 1980 and 1987, some 420,000 new jobs were created, an increase of 36 percent. Forecasters predicted that another 87,000 jobs would be added in 1988 and 1989. Between 1976 and 1986, the number of business establishments increased by 53 percent, from 42,559 to 80,264. Between 1980 and 1986, the number of businesses grew from 52,753 to 80,264, a 66 percent increase. The number of employees in those business grew by 74 percent between 1980 and 1986, and the annual payroll went up by 54 percent. Business establishments with one to nine employees totaled 59,969 in 1986, followed by 16,575 with 10 to 49 workers. Those with 50-99 employees totaled 2,205, there were 1,379 with 100 to 499 employees, and those with 500 or more numbered 136. Sixty-two percent of the businesses in Arizona are located in Maricopa County. Its 80,264 establishments in 1986 provided employment for more than 755,000 workers, or 69 percent of the state work force. Pima County in 1986 was home to 14,783 business establishments, more than 18 percent of the state total. Those businesses had nearly 18 percent of the state's labor force total. The Phoenix metropolitan area has a well developed and diverse economic base with service industry businesses providing more than 24 percent of total employment. Wholesale and retail trade comprise more than 25 percent of the total, and manufacturing accounts for another 15 percent. Among the nation's major electronics centers, Phoenix ranks third. Phoenix also is a major regional finance center and, in 1988, was home to 43 state and national banks, 45 credit unions and 20 savings and loan offices. Likewise, education impacts the business climate in the Phoenix area. In addition to 55 school districts, 40 parochial schools and 40 private schools, Arizona State University—the state's largest—employs some 7,000 full-time, part-time and support staff personnel. In Tucson, manufacturing businesses are a major economic factor, and employment more than doubled between 1978 and 1988, due mainly to location and expansion of high technology firms. Major businesses include Hughes Aircraft, IBM, National Semiconductor, Gates Learjet and Environmental Air Products, Inc. Businesses involved in serving the tourist industry also are a major economic factor. Wholesale and retail trade make up some 23 percent of the employment base. The largest single employer is the University of Arizona with more than 10,000 personnel. Other counties, the number of establishments and employee totals are: Apache, 405 and 4,874; Cochise, 1,662 and 14,176; Coconino, 2,101 and 21,120; Gila, 770 and 7,410; Graham, 378 and 2,659; Greenlee, 96 and between 1,000 and 2,499; Mohave, 1,827 and 15,362; Navajo, 1,196 and 9,893; Pinal, 1,517 and 17,985; Santa Cruz, 772 and 7,010; Yavapai, 2,633 and 18,734; and Yuma, 2,257 and 23,962.

INDUSTRY The recent history of industry in Arizona has been one of phenomenal growth, leavened only slightly by the national economic slide of the early and mid 1980s. And, while the Grand Canyon State's economy was growing by leaps and bounds, it was at the same time changing its emphasis and texture. In its formative years, Arizona was a state with industry and business grounded in agriculture and mining. While those two sectors still are basic and important to the economy, the industrial framework now is buttressed by manufacturing, services and finance, insurance and real estate. In 1987, finance, insurance and real estate accounted for more than 19 percent of the state's industrial output to become the largest component of the economy. The addition of services and manufacturing to the sector of finance, insurance and real estate results in a sum accounting for more than 50 percent of total economic output. While Arizona still has a smaller proportion of manufacturing output than the nation as a whole, the sector is a rapidly growing one. Since 1960, manufacturing has grown an average 7.5 percent annually, consistently one of the best performances in the country. Though the mining and agriculture sectors have become smaller parts of the industrial and economic whole, their

output remains well above the national average. The mining industry employs more than 11,000 persons in Arizona, the nation's leader in non-ferrous metal production. The value of all mineral production in the state in 1987 was more than $2 billion. Arizona has led the nation in copper production in every year since 1910, and in 1987 produced 1.7 billion pounds valued at $1,370,942,000. The copper produced amounted to 61 percent of the nation's total. In 1986, 223 mining establishments had an annual total payroll of more than $366 million. The average annual wage in 1987 was $29,297. Arizona also ranks first in the nation in gemstone production and is among the leaders in gold, silver, uranium and molybdenum. Other mineral products include cement, stone, perlite, pumice, gypsum, clay, salt, lime and coal. Although agriculture represents only a small part of total employment, it nevertheless is big business in the state. Temperate weather and a long growing season in many parts of the state helped make the agriculture industry a $1.73 billion component of the economy in 1987. Among states producing the commodities, Arizona in 1987 ranked second in lettuce, cauliflower and lemons, fourth in cotton and sixth in grapes. Cotton is the top cash crop and the state produces more Pima cotton than any other in the nation. In 1986, more than 1,200 agriculture/forestry businesses employed 11,657 persons with an annual payroll of $123,245,000. Arizona's agriculture industry also produces apples, barley, hay, sorghum grains, wheat, potatoes, cantaloupes, maize, cottonseed and various forest products. The real growth industry in Arizona is manufacturing which, in 1987, accounted for 188,600 jobs, or more than 13 percent of non-agricultural employment. The manufacturing sector generated 16 percent of the state's personal income and more than 22 percent of all wages and salaries. An integral part of the sector and its growth is high technology manufacturing.

Arizona has been one of the nation's most successful states in attracting high-tech industries, and nearly half of all manufacturing jobs—nearly 90,000—are in that component. Nationwide, high-tech manufacturing accounts for only about 15 percent of the industry sector. Between 1970 and 1987, manufacturing employment increased by 120 percent, and projections are that nearly 150,000 new manufacturing jobs will be created in the state by the year 2000. In the high-tech area—where most of the growth will occur—Arizona outproduces the national average in computers, electronic components and aerospace products. Manufacturing is a major contributor to the economy of the Phoenix area with nearly 15 percent of total employment. The Phoenix area ranks third nationally among major electronics centers. In Tucson, manufacturing employment doubled between 1977 and 1987, due mainly to the rapid increase of high-tech firms expanding their operations or locating there. Hughes Aircraft, which makes missiles and components, employed more than 7,500 persons in 1987, and IBM had more than 5,000 workers employed in the manufacture of computer products. In 1986, manufacturing employed more than 173,500 persons statewide at 3,812 establishments. The 1986 annual payroll was nearly $4.3 billion. There were nearly 2,600 manufacturing firms in Maricopa County, or 68 percent of the state total. Pima County had 617 firms, 16 percent of the state total. The services sector in Arizona is the largest single component of the state's industrial engine. Alone, it generates more than 24 percent of all jobs with more than 353,000. Many of the jobs are directly related to tourism which annually pumps about $5 billion into the state's economy, generates 80,000 jobs and contributes $250 million in state tax revenues. There were more than 26,000 firms in the services sector in 1986, providing an annual payroll of $4,826,998,000. Wholesale and retail trade added another 350,000 jobs in 1986 to nearly 27,000 business establishments, and the annual payroll for both sectors topped $4.7 billion. The construction industry in Arizona provides nearly seven percent of total employment, and the sector has grown steadily, pushed along by the state's population and building boom. Between 1977 and 1987, employment in the industry grew from 52,200 to nearly 98,000. The value of construction contracts grew from $3.1 billion in 1980 to nearly $6.6 billion in 1985. The value in 1987 was more than $5.6 billion, 56 percent higher than in 1980. In 1986, more than 8,300 contract construction firms had more than 111,000 employees and an annual payroll of almost $4.3 billion. The transportation and utilities sector in 1986 provided more than 56,000 jobs at 2,426 establishments with an annual payroll of $1.4 billion. More than half the jobs in transportation and utilities occur in Maricopa County. The finance, insurance and real estate sector also tracks Arizona's growth and is expected to continue growing in direct relation to the state's population increase and the expansion into the state by out-of-state financial institutions. In 1986, there were more than 8,000 firms in the sector, with a total annual payroll of nearly $2 billion and more than 85,000 employees. Of the 8,050 firms in 1986, nearly 67 percent were located in Maricopa County. Pima County accounted for 19 percent. Arizona's booming economy has produced an emphasis on industrial access location and expansion, and buildings ranging from special-purpose structures to general warehouse space are available. When buildings are not available immediately, the state's year-round construction industry can usually provide a turn-key plant in as few as 90 days. And, construction costs in Arizona generally are lower than the national average. The state's year-round clear weather and wide-open spaces also have led to the development of numerous airport industrial parks. An important component of Arizona industry is the maquiladora, or in-bond assembly plant, which links the state to Mexico. Maquiladoras are plants which manufacture, process, assemble and/or repair raw materials and components imported into Mexico on a temporary basis. Instead of a customs duty, a small bond is paid on the temporary imports. The bond generally represents one and a half percent of the duty normally paid if the materials remained in Mexico permanently. The finished or partly finished products are exported back to the state, usually through a shipping/receiving operation on the Arizona side of the border. Arizona's free port status also offers excellent opportunities for the warehousing and distribution of the finished products destined for locations across the country. With its ever diversifying and expanding economy, projections are that Arizona will continue to outpace most of the other states in the Union well into the next century.

EMPLOYMENT In recent years, Arizona has gained popularity among retirees as an ideal environment in which to optimize their golden years. But far from being a retirement village, Arizona led the nation in the rate of growth of non-farming employment from 1977 to 1987, with a total increase

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of 71 percent. As the state created more than 574,000 new jobs, the capital city of Phoenix became the second-fastest growing city in the country and is projected to continue as such through the year 2000. The restructuring of the American economy that led to pink slips in the industrial northeast led to building permits in the Grand Canyon State. Through most of the 1980s, Arizona benefited from the trends in the national economy away from comparative advantage in basic industries and toward comparative advantage and consequent increases in the service sector and in high technology manufacturing and information management. The state had little reliance on basic industries to overcome and thus the gains Arizona made in services and manufacturing were not reduced by losses in other sectors. With development concentrated in the metropolitan areas of Phoenix and Tucson, Arizona was building the foundation for an economy tied to the specifications of the future. Through 1987, employment soared in services, electronics manufacturing, defense industries, construction, and finance, insurance and real estate. As Phoenix and Tucson were taking on the shape of the future, the non-metropolitan areas in the balance of the state relied more on tourism and its attendant retail trade and other services for employment. But by 1988 the rush to the future slowed in manufacturing employment, construction, and finance, insurance and real estate. As job creation stalled, the low unemployment rates of below six percent that were typical of Arizona in the mid 1980s gave way to higher numbers that exceeded the national average in 1988. Unemployment peaked at seven percent in July of 1988 before recovering to 6.6 percent by the end of the year. Unemployment rates vary radically from county to county. Employment is strongest in the metropolitan counties of Maricopa (Phoenix) and Pima (Tucson), which each had a relatively low unemployment rate of 5.4 percent in late 1988. The non-metropolitan counties, however, experienced higher unemployment rates, with Yuma county reporting the highest rate at 22.8 percent. Although the exhilarating growth Arizonans experienced through most of the 1980s has slowed, modest growth continues. Overall job growth through 1993 is projected to increase by 25 percent over 1988 levels and to add more than 597,000 new jobs, for a net increase of more than 374,000 jobs.

The philosopher's stone which Arizonans hope will make their economy golden is the manufacturing sector, especially its high technology component. More than 3,400 manufacturers operate in the state, with companies like Motorola, IBM, Honeywell, McDonnell Douglas, Hughes Aircraft and Mountain Bell providing a gilt edge to the economy. Manufacturing industries employed 190,000 people in 1988 and constituted 14 percent of non-farm wage and salary employment. Although less than the percentage manufacturing comprises of national total employment, 50 percent of Arizona's manufacturing jobs are in high technology industries, as opposed to only 15 percent nationally. With the greater promise inherent in high technology manufacturing, Arizonans have high hopes that this sector will serve as the catalyst to economic growth in the state and to create by itself another 150,000 jobs by the year 2000. An indication of the resilience of the manufacturing sector in Arizona is that in spite of significant cutbacks in employment by a number of major manufacturers in the state in 1988, manufacturing employment still managed a small increase for the year. In 1988, 25 percent (356,000) of Arizona's non-farm wage and salary workers were in service industries and another 24 percent (343,000) were in retail and wholesale trade. Much of the employment in both the services and trade sectors is related to tourism, which includes conventions and business-related travel. Hotels and other lodging establishments accounted for 11 percent of service industry employment in 1988, while eating and drinking establishments accounted for 36 percent of the employment in retail trade. Seasonal influences cause employment to fluctuate during the year. With the substantial role tourism plays in the employment picture of the Grand Canyon State, payroll rosters grow significantly around September as service and retail establishments gear up for the winter tourism season. The winter months also bring the holiday season, which prompts retail businesses to increase their staffs. Although tourism impacts the services sector in general, the largest single contributors to employment in the services are health services, with 26 percent of the total in 1988, and business services, with 22 percent. After services and trade, the largest employment sector in Arizona is the government. Of the 244,000 employed in government in 1988, 47 percent were in education, a field in which Arizonans take great pride. The relatively high levels of education achieved by the Arizona population and the access the state provides to higher and continuing education are two of the factors that have led to the state's high business rating. Educational employment constitutes another seasonal influence that causes total employment to increase in September. Another 14 percent of the government workers in Arizona were affiliated with the 10 military installations located throughout the state. The other sectors of the Arizona economy contribute significant, but lesser, numbers of jobs.

Construction in 1988 employed 96,000 Arizonans, for 6.8 percent of total non-farm employment. Despite the slump in construction in late 1987 and 1988, this sector still accounts for a significantly larger percentage of total employment in Arizona than it does nationally. Finance, insurance and real estate also reduced employment rolls in 1988, but still accounted for 91,000 jobs (6.5 percent). Transportation, communications and public utilities employed 73,000 (5.2 percent) in late 1988 and reflected a small decrease from 1987. Although utilities and communications employment fell, transportation employment increased, especially in aviation. This rise reflected seasonal increases for tourism and holiday travel as well a airport facilities expansions to accommodate the growing demands of travel and trade industries. The agricultural sector in Arizona employed more than 40,000 in 1987, for 2.7 percent of total employment. Maricopa County leads the state in agricultural employment as well as in non-agricultural employment. More than 62 percent of the state's entire labor force lives in the Phoenix metropolitan area. In spite of the relatively small numbers employed in agriculture, Arizonans still produce a wider variety of commodities than most other states. The mining industry in the state is similarly productive. Less than one percent of the employed Arizonans work in mining, yet they produce 61 percent of the nation's copper. Mining employment declined during the mid 1980s and rebounded slightly in 1987-88, but was not expected to continue as a growing industry. The occupations expected to add the most jobs between 1988 and 1993 are retail sales (12,800), waiters and waitresses (9,700), general managers

and top executives (8,700), food preparation and service workers (8.226), and general office clerks (7,527). Occupations that are expected to increase by the greatest percentages between 1988 and 1993 are food service managers (32 percent), cooks (31 percent), busboys and barbacks (31 percent), professional sales representatives (31 percent), mechanical engineers (30 percent) and mechanical engineering technicians (30 percent). Among self-employed people, the greatest increases between 1988 and the year 2000 are projected for executive retail sales (71 percent), general managers and top executives (65 percent), lawyers (65 percent), sales managers and supervisors (64 percent), retail sales (60 percent), other managers and administrators (59 percent) and physicians and surgeons (50 percent). Small reductions are projected in mining, timber and logging industries.

UNIONS To the casual observer, Arizona seems an unlikely location for labor union struggles and confrontations between management and labor. While the Arizona of today is a right-to-work state with relatively small union membership numbers, its past contains occasional episodes of strife. The union's first form in Arizona was the *sociedad mutualistar* (mutual aid society) of the 1880s created by Mexican Americans who felt they were victims of discrimination in the state's copper mines. Mexican Americans also were important in the development of the transportation, agriculture and cattle ranching industries and other similar societies soon formed, including the *ligas protectoras* which were political, educational and fraternal in nature. The labor union itself was boosted in 1904 when a large number of Mexican progressives entered the state as exiles and went to work in the mines and fields and on the railroads, becoming union members in the process. The mining industry, however, was the only place where organized labor was able to entrench itself. In the early years of the twentieth century, numerous local chapters of the Western Federation of Miners could be found in various mining towns. The presence of some members of the Industrial Workers of the World (Wobblies) led many to brand all union members as radical. Though there was no evidence or indication of union inspired violence, many Arizonans believed radicals were conspiring with Germany to ruin the state's copper industry. The situation culminated on July 10, 1917 when vigilantes in Jerome deported numerous Wobblies. Two days later, more than 2,000 members of the Bisbee Workman's Loyalty League and the Citizen's Protective League rounded up 2,000 persons deemed "undesirable," released those who recanted the union philosophy, and shipped nearly 1,200 to New Mexico in boxcars. Some 200 Bisbee residents later were tried for kidnaping, but all were acquitted. In large measure, the unions in Arizona were broken, though they later would regain some numbers and strength. Arizona today has the third lowest unionization percentage in the country. Only about 66,000 of the state's more than 1.6 million workers are union members. Between 1982 and 1987, unionization decreased five percent in the state. Arizona became a right-to-work state in 1946 when Article XXV was approved by the voters after the amendment was initiated by the people.

IMPORTS AND EXPORTS Owing largely to its shared border with Mexico and its proximity to major port facilities on the West Coast, Arizona has enjoyed a growth in its exports to a 1987 level of $2.538 billion. Although Arizona has the nation's 25th largest population and its 26th largest gross state product (GSP), the state ranks 20th in export volume. By calculating export value in per capita terms and as a percentage of GSP, the rankings rise to 15th and 12th respectively. A number of factors account for Arizona's foreign trade growth. An excellent transportation system provides timely delivery of goods to California's ports. A variety of export services are available to Arizona businesses to facilitate their entry into foreign countries. Freight-forwarding companies, customs-house brokers and other services expedite shipments bound for international markets. Arizona exports accounted for 4.45 percent of the GSP and are believed to have generated approximately 139,090 jobs statewide in 1987. Of the three product sectors, manufactured goods accounted for 94 percent of total exports; followed by agriculture, with four percent; and minerals, with two percent. Each of the three categories is characterized by a single dominant product or group of products. High technology goods (defined as electronic components, computers, and aerospace equipment) represented more than 86 percent of the manufacturing sector's exports. Cotton accounted for 65 percent of all agricultural exports and copper made up 50 percent of all mineral exports. The top 10 countries buying Arizona products accounted for $2.07 billion (82 percent) of all exports in 1987. Those countries include Mexico, with $572.9 million; Canada, $240.8 million, Japan, $200 million; Korea, $199.2 million; United Kingdom, $197.8 million; France, $183.6 million; Malaysia, $176.1 million; West Germany, $147.4 million; Hong Kong, $77.6 million; and Taiwan, $75.3 million. Nearly 40 percent of Arizona's exports leave the country through ports in California, nine percent through New York, three percent through Massachusetts, and two percent each through Texas and Illinois. Approximately 21 percent of the goods are shipped directly to a foreign nation from Arizona. Aside from exports to Mexico over a shared border, more than 50 percent of the state's exports leave the country by air, with 39 percent passing through Los Angeles International Airport. Other leading points of departure, in order, include Nogales; Douglas; Long Beach, California; JFK International Airport, New York; Springfield, Massachusetts; Buffalo-Niagra Falls, New York; O'Hare International Airport in Chicago; Dallas-Fort Worth International Airport; and Miami International Airport. Between January and November 1988, approximately $2,577.3 billion worth of foreign goods were imported in Arizona.

FINANCIAL INSTITUTIONS Arizona's financial institutions have been a major factor in the state's strong, steady surge as a national economic force. Through their own resources and by active national participation, the Grand Canyon State's banks, savings and loans and credit unions have accommodated private and commercial borrowers during a period of unparalleled growth. And, because of the state's Interstate Banking statute which went into effect in 1986, national financial concerns have become a part of Arizona's financial portfolio. Many of the state's larger banks have been acquired by major national banking companies which provide an increased lending capacity. In June 1988, Arizona was home to 47 state and national banks with 776 branches, 12 state and federal savings and loans associations with 310 branches and 92 credit unions. The state's banks in June 1988 had total assets of more than $27.4 billion, total liabilities of nearly $25.7 billion and total capital of more than $1.7 billion.

Total assets of the savings and loan associations amounted to some $28 billion, while liabilities totaled more than $26.9 billion. Total deposits of credit unions in 1987 amounted to more than $2.3 billion. In 1987, nearly 65 percent of the state's bank deposits were in Maricopa County institutions, while Pima County banks held more than 15 percent. The financial arena also offers local, regional and national investment banking firms which provide alternative financing opportunities for various municipal, industrial and commercial projects. The state also is home to a broad-based venture capital industry which finances a wide range of business, particularly in the growing high technology field. The Arizona State Banking Department oversees the finance industry in the Grand Canyon State, examining each institution annually.

CONSTRUCTION/HOUSING The construction and housing industries that raced in Arizona in the mid-1980s were laboring on feet of clay by late in the decade. The factors that converged in the early 1980s to start the race had run their course by 1988. The tax advantages granted to owners of income-producing property in the early years of the Reagan administration were lost in the tax reforms of 1986. The surge of pent-up demand for housing that was released as interest rates were lowered from the prohibitive levels of the late 1970s had tapered by the late 1980s. The magnetism of rapidly expanding high-tech manufacturing and defense industries which drew migrants from around the country began to wane as employers scaled back employment to increase efficiency and in response to lower than expected demand and flattening defense budgets. The speculation, overbuilding and flagging absorption rates of 1985-87 left the Grand Canyon State with a yawning gap of millions of square feet of vacant commercial and residential real estate. New housing permits authorized in 1987 fell 35 percent below 1986 and the value of residential construction contract awards fell by 20 percent. But comparisons to record years cast the moderate success of the post-boom years in a less favorable light than they deserve. Increases in the areas of non-residential and heavy engineering construction resulted in a total value of building permits that fell by only five percent. And the disappointing level of building in 1988, for which the first three quarters was valued at 11 percent below that of 1987, reflected only a 4.4 percent decline in actual real estate sales from the average level of the preceding five boom years. A few areas managed to sustain momentum into 1988. East Phoenix, Scottsdale, Paradise Valley, Carefree, and Fountain Hills showed a 5.2 percent increase and construction in the southeast valley increased 24 percent. The metropolitan areas were faring much better during the 1988 slowdown than were the non-metropolitan areas. Construction in Maricopa County, which includes Phoenix, Scottsdale, Mesa, Chandler, Tempe, Peoria, Gilbert and Glendale, registered significantly less construction activity in 1988 than in 1987, but the county increased its share of the state total from 75 to 78 percent. Pima County, which includes Tucson, showed a 75 percent decrease in construction in the first half of 1988, but claimed eight percent of the state's total construction activity. The only unincorporated area with a significant percentage of Arizona's construction in 1988 was Yavapai County with three percent. The city of Prescott was another welcome bright spot in 1988, with total sales of existing homes up 33 percent and dollar volume up 54 percent. Resales in Prescott Valley rose 95 percent with an increased dollar volume of 106 percent. The silver lining to the cloud of Arizona's construction slowdown was that affordability remained favorable for residential housing, as well as for commercial and industrial sites. Although the number of new building permits was down in the Greater Phoenix area in 1987, residential real estate sales were strong. The average price of a home in Phoenix in 1987 was $78,000, but that figure was likely to fall in a slower-paced 1988 market. The number of single-family building permits in Maricopa County declined to 3,865 in the third quarter of 1988, down from 4,347 in the previous quarter and from 4,472 in the third quarter of 1987. Still, in the face of reduced building activity, the average permit value of a new home increased from $95,195 in 1987 to $100,600 in 1988. Only the cities of Phoenix and Avondale reported greater levels of activity over 1987. In Tucson, the average home price in 1987 was $75,000 with new homes in the $90,000 range. But in 1988, single-family residential construction declined countywide by 31 percent and in Tucson by 41 percent. The average value of a single-family permit in Pima County in late 1988 had declined to $67,350. The non-metropolitan areas of the state followed a similar pattern, declining both in number and value of permits, ending the third quarter of 1988 with 1,266 permits for single-family units with an average value of $67,235. This represented a nine percent decline in permits and a six percent increase in average value from the previous year, but a two percent decline from the previous quarter. The leading areas of single-family construction activity in the non-metropolitan areas were Lake Havasu City (205 permits), unincorporated Navajo County (78 permits) and Flagstaff (63 permits).

In the commercial construction sector, permits for apartment units stood at 4,838 for the first three quarters of 1988, a decline of 1,528 units (24 percent) from the same period in 1987. The total value of permits for the third quarter of 1988 was $59 million, a total reduction of $112 million (65 percent) and a per unit reduction of $8,484 (20 percent) from the third quarter of 1987. The primary areas of apartment development were Phoenix (720 units), Gilbert (296 units) and Scottsdale (165 units). In 1988 in Phoenix and Tucson, an unfurnished two-bedroom apartment generally rented for more than $350 per month. In contrast to the sluggishness in residential construction, retail construction enjoyed a record-setting quarter in 1988, with 326 permits authorized with a total valuation of $164 million. Phoenix, alone, claimed nearly half ($78 million) of the total and the rest of Maricopa County claimed another $57 million. In the third quarter of 1988, retail construction retracted in Maricopa County, but increased in Pima County to $7 million. Tucson claimed the lion's share ($5.5 million) of the Pima County total. The construction of office, bank, medical and professional buildings declined by almost 50 percent between the third quarters of 1987 and 1988, and yet remained relatively strong with 88 permits authorized with a total valuation of $67.3 million. Again, Phoenix had the largest share, with 18 permits valued at $48 million. Tucson accounted for $1.3 million and unincorporated Pima County accounted for $2.3 million. In the balance of the state, only unincorporated Yavapai County recorded new construction activity in excess of $1 million. The hotel/motel sector administered the city of Phoenix an economic booster shot in the third quarter of 1988 with $11 million in permits to add 262 rooms. Industrial construction activity fell 54 percent

between the third quarters of 1987 and 1988. In Maricopa County, Chandler led the field with 23 permits valued at $7 million, followed by Phoenix with 13 permits valued at $5 million. The entire county of Pima had less than $1 million of industrial construction permitted. Among the non-metropolitan areas, Yuma County led with three permits valued at $2.1 million, followed by Casa Grande with three permits valued at $17 million. Special categories of construction that contributed to the industry were the $100 million Sky Harbor airport expansion and two public parking garages valued at $13 million in Phoenix, $28 million for new educational facilities and $24 million for new health care facilities. The outlook for the construction industry relies heavily on how long it takes for the current and future growth rates to absorb the excess capacity which bogged down the industry in the late 1980s. Most analysts familiar with the Arizona market predict with little reservation that the rosy glow of economic vitality will return to the Grand Canyon State's construction industry. The question is how soon. The state is doing its part to help. Under the auspices of the Arizona Department of Commerce, the Housing Section seeks to facilitate financing for affordable housing. To this end, the board reviews the general plans of metropolitan areas for issuance of tax-exempt mortgage revenue bonds, issues tax-exempt mortgage revenue bonds for non-metropolitan areas, and reviews multi-family projects financed with tax-exempt bonds. During 1987, the board originated $2 million in loans for its single-family program. The Department of Commerce also oversees the Community Development Block Grant Section (CDBG), which awarded $5.5 million received from the federal Department of Housing and Urban Development (HUD) to enhance life in rural communities by improving housing stock, upgrading infrastructure and expanding economic opportunities. All CDBG activities are intended to benefit low and moderate income persons whose incomes are at or below 80 percent of the county median. Communities within Maricopa and Pima counties and Indian tribes also receive CDBG funds, but they receive them directly from HUD. In the Executive Budget for fiscal year 1990, the governor recommends $50,000 for the State Office of Housing to contract for a study on affordable housing needs, current program availability to meet those needs, and recommendations for closing the gap between needs and availability. The study will serve to form the basis of a state housing development program. New businesses are sought to relocate or expand in Arizona by the Business Recruitment Section. The Business Retention and Expansion Section works to improve the business environment and to promote growth among basic industries. The Community Development and Finance Division administers the Arizona Main Street Program, which seeks to revitalize economies through progressive marketing and management practices to attract jobs and investments into the downtowns of the Arizona Main Street communities. In 1986-87, five communities generated more than $3.5 million by the private sector and $212,000 by the public sector, rehabilitated 62 buildings and built three new ones.

NATURAL RESOURCES Although natural beauty is the most obvious manifestation of the Grand Canyon State's abundance, a treasure house of minerals and other important resources lies beneath the surface. Mineral production is the state's fourth greatest source of income, netting approximately $1.8 billion in 1987. In 1986, the state rose from fourth t third place in the value of non-fuel mineral output. Althoug a number of minerals are produced through the state, coppe is the most abundant and valuable, accounting fo approximately three-fourths of the mineral production Arizona produces 61 percent of the nation's copper. Eigh of the leading copper-producing mines in the nation ar located in Arizona in Greenlee, Pinal, Yavapai, Pima and Gil counties. In addition to copper, Arizona is the nation's leadin producer of gemstones. Arizona is the second greates producer of molybdenum, contributing 31 percent of th national total. The state is the fourth greatest silver produce and is 11th in gold. In the industrial minerals group, the leadin commodities, in descending order of value, were constructio sand and gravel, Portland cement, crushed stone and lime Industrial commodities increasing in value between 1985 an 1986 were Portland cement, pumice, salt, construction san and gravel, and crushed stone. Employment in the fuels an non-fuels mineral industry dropped from a 1976 high of 26,90 to 10,900 in 1986. The number of workers engaged in th exploration and production copper industry averaged 9,30 in 1986, down eight percent from the 1985 average. The Western Economic Analysis Center at Marana reported tha weekly earnings in the copper industry averaged $538 in 1986, compared to $581 for all mining, and the total copper industry payroll was about $260 million, compared to more than $441 million for all mining in the state. Non-fuel mineral production in the state is supplemented by much smaller deposits of oil, natural gas and coal. Apache County, in the northern part of the state, produced approximately 130,726 barrels of crude oil and some 184,927,000 cubic feet of natural gas in 1987. The state produced approximately 10,481,000 short tons of coal in 1987. Because Arizona lacks the massive reservoirs of oil and natural gas found in most of its neighboring Southwestern states, it is perhaps the most aggressive state in the region in the development of alternative energy sources. In fact, a vibrant subset of Arizona's booming high tech business community specializes in products aimed at conserving energy and exploiting alternative energy sources. The Arizona Energy Office of the Department of Commerce provides a number of support services to this sector and has published a directory of firms specializing in products such as heat recovery systems, enhanced insulation systems, photovoltaics, skylites, solar products, windmills and wind generators.

Perhaps the greatest push has been in the area of solar power. The Arizona Solar Office works within the Energy Office of the Department of Commerce to promote the integration of solar power into the mainstream of the business community. Arizona has declared the goal of becoming a "Solar Capital" and maintains that it possesses an abundance of the only two necessary ingredients for success—sunlight and high-tech talent. The state's location in the heart of the Sun Belt is particularly well suited to the exploitation of solar energy because the area gets about 80 percent of the possible maximum sunshine annually. The Solar Office gained national respect for its Solar Strategy Conference in October 1987 and its wide variety of innovative programs. A five-year plan has been developed with an ambitious agenda. The Solar Village in Tucson will be the first solar community in Arizona. Funding has been provided for this project which will be a showcase of solar technologies and planning. It is an excellent

example of partnerships between the state and local governments with participation by the State Solar Energy Office, the Solar Advisory Council, the State Land Department, Pima County, the City of Tucson and Tucson-Pima County Metropolitan Energy Commission, which will administer a $210,000 grant. The U.S. Department of Energy, Solar Energy Research Institute, Sandia National Laboratory and National Association of Homebuilders are exploring ways to help. The Solar Home Program has received enthusiastic participation by homebuilders. Thirty subdivisions in the Phoenix area are including solar energy in their new home sales. Demonstrations of solar energy are being conducted in six smaller communities which will have photovoltaic-powered outdoor lighting. In all, more than $1 million is being devoted to promote solar energy in half a dozen demonstration projects. Two other resources are of such value to the state that they are treated extensively in other sections of this volume. See AGRICULTURE and WATER RESOURCES. Though a relatively small percentage of Arizona's total area is under cultivation, irrigation, provided by the prudent management of the state's water resources, has made agricultural production the state's third greatest income-producing segment, contributing some $1.7 billion in 1987. In addition to its contribution to agriculture, Arizona's water resources provide a crucial link in the development of the state's economy. The phenomenal growth of the state's desert cities such as Phoenix and Tucson would be stunted considerably without adequate water supplies. The premier legislation dealing with Arizona water issues is the Arizona Groundwater Management Code, and the major water management project is the Central Arizona Project (CAP). This federal reclamation project will bring an annual average of 1.5 million acre-feet of Colorado River water to the cities, farms and Indian tribes of central and southern Arizona. The CAP will reduce dependence on groundwater by providing a new surface water supply.

TOURISM Tourism injects into the Arizona economy some $5 billion to $6 billion each year, generates more than 80,000 jobs and supports an additional 132,000 indirectly. Second only to manufacturing, tourism and travel expenditures generate approximately twice the income of agricultural and mineral production combined (the state's third and fourth major sources of income). Arizona offers an array of natural and man-made attractions. Visitors can enjoy urban luxury and excitement in Arizona's modern cities. Phoenix, the nation's second fastest growing city, offers the epitome of gracious Southwestern living. Surrounded by a necklace of smaller cities, each with its own personality, the greater Phoenix metropolitan areas is often called the Valley of the Sun. In 1987, an estimated 71 first-class hotels offered 17,740 rooms at an average daily rate of $75.06. These facilities maintained an occupancy rate of approximately 60 percent of their capacity. Equally modern and dynamic, but more noticeably Spanish and western, Tucson generated more than $1 billion in tourism expenditures. Tucson's 31 first-class hotels offered 6,562 rooms at an average daily rate of $64.61 in 1987. As in Phoenix, the occupancy rate was about 60 percent of capacity. Approximately 27 percent of Phoenix's first class hotels were classified as resorts, compared to 16 percent in Tucson. The non-metropolitan areas of the state are more dependent on tourism than Phoenix and Tucson because of proximity to natural attractions and less diverse economies. The crown jewel of Arizona tourist attractions, Grand Canyon National Park, attracted nearly four million visitors in 1987. The Grand Canyon heads a list of 23 national parks distributed throughout the state, including Petrified Forest National Park, Saguaro National Monument, Montezuma Castle National Monument and Sunset Crater National Monument. Approximately 10.6 million tourists visited Arizona's national parks in 1987. Because of the overwhelming size of the state and its hundreds of vacation destinations, Arizona often is divided into more manageable distinctive regions to help visitors conceptualize the myriad recreational opportunities. The state's seven regions include The Golden Corridor, Old West Country, High Country, Indian Country, Canyon Country, Central Territory and River Country. The names of these regions are descriptive of their tourist offerings. The cities of Phoenix and Tucson grace the Golden Corridor. Old West Country, in the southeast corner of the state, affords tourists a number historical and cultural attractions featuring a western theme. The High Country, Arizona's mountain region, offers a number of ski resorts and other outdoor recreational opportunities. The High Country's Mogollon Rim, the escarpment that separates the northern plateau country from the low country to the south, rises to more than 8,000 feet in places. Zane Grey wrote western novels at a cabin he built in the Rim's shadow. Indian Country occupies the northeastern corner of the state, and features rugged vistas that should seem familiar to visitors. One of the most photographed regions in the United States, the red sandstone buttes that rise hundreds of feet in the air have served as a dramatic backdrop for everything from famous western movies to automobile commercials. Navajo National Monument, a collection of the largest and most intricate of Arizona's known prehistoric cliff-dwellings, is one of Indian Country's most popular attractions. Visitors to Canyon Country often make their base camp at Flagstaff, elevation 7,000 feet. In addition to the imposing Grand Canyon, the red rocks at Sedona in Oak Creek Canyon draw thousands of tourists. Arizona's Central Territory is filled with frontier history, including ghost towns, Indian ruins and the picturesque towns of Jerome and Prescott. The dominant theme of River Country, on Arizona's western edge, is water. Defined by the majestic Colorado, River Country offers swimming, sailing, fishing, boating and water-skiing. Modern Arizona also offers a full range of cultural opportunities including theater, ballet, opera, symphony concerts, art exhibits and museums. One manifestation of Arizona's amazing urban growth is the state's emergence as a center for spectator sports. Enthusiasts can choose from a line-up of professional basketball, football, golf and tennis, Pacific Coast League baseball, major league baseball spring training camps, intercollegiate athletics at three major universities, and thoroughbred and greyhound racing. Facilities are available year-round for such fitness activities as golf, tennis, horseback riding, bicycle riding and hiking. Arizona is home to a number of well-know and highly-regarding artist colonies, which have contributed to the cool, understated Southwestern style of painting and design fashionable throughout the art world. Visitors can see artists at work in Bisbee, Jerome, Sedona, Lakeside and Tubac. Arizona celebrates its western heritage at countless rodeos, Pioneer Day observances and Indian ceremonies and festivals. Tourists can also experience Old West atmosphere at a number of ghost towns,

lost mines and guest ranches. More than a half million foreign tourists made their way to Arizona in 1986. The greatest numbers of foreign tourists came from Canada, the United Kingdom, West Germany and Japan.

GAMBLING Legal gambling in Arizona consists of games of chance offered by the Arizona Lottery and wagering on horses and greyhounds at a number of race tracks and county fair race meets throughout the state. In fiscal year 1987-88, lottery-generated revenues totaled $172.8 million and the state's commercial race tracks reported a pari-mutuel handle of $249,362,391. The opening of Tucson's Rilito Downs in November 1988 raised the number of commercial horse racing facilities to three. Though figures are not yet available for Rilito, the established tracks at Prescott Downs and Turf Paradise in Phoenix posted a combined pari-mutuel handle of $82.3 million in 1987-88. The two tracks hosted a total of 2,042 races on 181 racing days before an aggregate audience of 727,368. Their average daily handle was $454,725 and their state pari-mutuel revenue totaled $857,417. These facilities returned approximately $65.4 million to the public and paid a total of $7,580,666 in purses. In addition, all counties conducted horse racing meets during fiscal 1987-88 at their respective fairs. La Paz county conducted a regional meet with Yuma County in Yuma, and Pinal County conducted a regional meet with Pima County in Tucson. County fair race meets mounted a schedule of 702 races on 65 racing days, generating a mutuel handle of approximately $8.3 million, a 49.8 percent increase over the previous year. Of that total, $6,480,307 was returned to the public, and $1,572,390 was paid in purses.

The state's four commercial greyhound race tracks shared in the gambling prosperity, posting a combined pari-mutuel handle of approximately $167 million in fiscal 1987-88. Nearly 1.5 million spectators flocked to see the speedy canines in 1,122 performances on 835 race days. The greyhound tracks returned an aggregate $134,821,876 to the public and paid purses valued at $6,264,647. Two of the facilities are located in Phoenix, one is in Yuma and the fourth is in Tucson. Between July 1, 1987 and June 30, 1988, the Arizona Department of Racing collected mutuel commissions, license fee and fine revenues totaling $10,256,689. These revenues were deposited into seven separate funds including the General Fund, $6,273,996; Arizona's Breeders' Award Fund, $971,937; Arizona County Fairs Racing Betterment Fund, $767,209; County Fairs Racing Fund, $358,031; Administration of the Arizona County Fairs Racing and Breeders' Award Funds, $51,148; Agriculture Promotion Fund, $1,227,534; and Arizona Coliseum and Exposition Center Fund, $613,767. The Arizona Lottery completed its seventh year in fiscal 1987-88, generating a record-breaking $172.8 million. The lottery returned $65,151,630 to the public, which was divided into three separate funds including the County Assistance Fund, $7.65 million; the Local Transportation Assistance Fund (LTAF), $23 million; and the State General Fund, $34.5 million. Lottery monies appropriated to the County Assistance Fund are distributed to each of the 15 counties. Through each county's general fund, these monies support mandated services for departments such as law enforcement, county attorney, parks and recreation, education and health care. In fiscal 1987-88, every county but two received $550,035. Maricopa and Pima each received $249,772. Eighty-one Arizona cities shared in the Local Transportation Assistance Fund in fiscal 1987-88. LTAF funds are distributed on the basis of population. In Phoenix and Tucson, those funds must be used for mass transit. Phoenix applied its monies to such projects as "Reserve-a-Ride" and improvements on buses, other equipment and passenger shelters. Tucson used its share for Sun Tran, the city's public transit program. Other communities used the funds for general street maintenance and repair, for residential street lighting, traffic control signals, street signs, and for sidewalk, curbing and drainage projects. In addition to transportation projects, each incorporated city and town had the option to use 10 percent of its LTAF funds, when matched with private funds, for socio-cultural programs. Thus, a variety of educational, historical, cultural, and recreational programs also benefited. Benson, Bisbee, Douglas, Casa Grande, Clifton, Show Low and Wilcox funded historical projects. Parks and recreational programs received LTAF funds in Bullhead City, Clarkdale, Eager, Florence, Gila Bend, Hayden, Show Low, Sierra Vista, and Yuma. Casa Grande, Cottonwood, Douglas, Jerome, Nogales, Patagonia, Prescott, Winkelman and Winslow used LTAF funds for a variety of Artsrelated programs. The elderly and handicapped benefited from LTAF monies in the communities of Douglas, Kearney, Parker, Prescott, Prescott Valley and Superior. The lottery's $34 million contribution to the State General Fund is appropriated by the legislature to pay for important needs in education, health, welfare and safety across the state. In June 1987, the Arizona Lottery officially moved into a new, centrally located headquarters building in Phoenix. From the day it opened, the $2.9 million facility was paid in full. The new building enabled the Lottery to consolidate its operations at one location. Prior to the completion of the building, administrative offices, winners' claims center, and warehousing operations were housed in three separate leased locations. The 26,000 square feet of office space and 12,000 square feet of warehouse space allows the lottery to perform more efficiently. By law, 47.5 percent of every $1 ticket sold is returned to the players in the form of prizes. More money is allocated to third and fourth prize levels compared to the second prize level, because they are easier to win and must be divided more ways.

The most popular lottery game is "The Pick," a game in which players indicate six numbers between one and 39 on a selection slip available at lottery retail locations. Participants can choose their own numbers or request numbers randomly assigned by the retailer's terminal. Each ticket allows up to five sets on numbers. Each set costs $1, and it is possible to play each set of numbers for up to six drawings in advance. For example, if two sets of numbers are played for five drawings at $1 per set, the ticket will cost $10. Tickets may be purchases at designated Pick retailers between 6 a.m. and 11 p.m., except Wednesday and Saturday, when Pick terminals close at 9:30 p.m. for that night's drawing. Each Wednesday and Saturday at 10 p.m., The Pick drawing is televised live on Phoenix and Tucson television stations. A specially-designed machine mixes 39 precision-matched balls and randomly draws six winning numbers and a "Bonus" number. Players who match four, five or six numbers in any order, with the numbers drawn share the prize money in that category. Players matching six out of the first six numbers drawn win or share the Pick Jackpot of at least $1 million. If only one person matches

the six winning numbers, that person wins the entire jackpot. But if two or more people match all six winning number, all will share the prize equally. The same is true for second, third and fourth prizes. Matching five numbers and the bonus number wins the player the second price, which ranges from $10,00 to $90,000. The Bonus number can be used only if the player has already matched five out of the first six numbers drawn. Matching five out of six numbers and four out of six, without using the Bonus number, results in third and fourth prizes, respectively. The odds of winning the jackpot are 1:3,262,623, second prize odds are 1:543,771, third prize odds are 1:16,993, fourth prize odds are 1:412, and overall odds are 1:402. Winning numbers are published in major Arizona newspapers, broadcast on local television and radio stations and posted at Pick retail outlets. Players can also call for a recorded announcement of winning numbers in Phoenix and Tucson. All prizes must be claimed within 180 days of the drawing. In addition to the Pick, a number of "instant games" are offered, in which players purchase a ticket entitling them to one chance in a drawing. There are many variations on this game, which bear such names as Match Two, Aces High, Holiday Cash, Fortune Wheel, Luck of the Draw and Tic Tac Two.

ALCOHOLIC BEVERAGES The sale and consumption of alcoholic beverages in Arizona amounted to a nearly $44 million industry in fiscal year 1987-88, with almost 94 percent of that total produced by the state's luxury tax. Of the $40.9 million generated, 42 percent was produced by the levy on spirituous liquor and 38 percent by taxes on malt beverages such as beer. The remainder was produced by the tax on wines. The tax income to the state in 1987-88 was only slightly higher than during the two previous fiscal years, but was 62 percent greater than during 1983-84. The state tax on spirituous liquors is $3 per gallon, while malt liquor is taxed at the rate of 16 cents per gallon. Vinous liquors of more than 24 percent alcohol are taxes at $4 per gallon, while the tax on those of less than 24 percent is 84 cents per gallon. As of September 1988, liquor licenses in Arizona totaled 8,175, with more than 63 percent issued in the counties of Maricopa and Pima. License totals ranged from a low of 37 in Greenlee County to a high of 3,814 in Maricopa County. In addition, 795 special event licenses were issued in 1987-88 for one- or two-day charitable or fundraising events. Nearly half those were issued in Maricopa County. The Department of Liquor Licenses and Control (DLLC) received 1,651 applications for licenses during 1987-88. The DLLC also revoked 21 licenses, suspended 122 others for a total of 734 days and collected more than $389,000 in fines. In Arizona, three types of licenses are designated as "quota licenses" which are issued based on a formula tied to population increases. Those licenses are: bar license, on-sale all liquors; beer and wine bar, on-sale beer and wine; and liquor store license, off-sale all liquors. During 1987-88, quota licenses were available only in Maricopa and Pima counties. There were 19 of each type available in Maricopa County and four of each available in Pima County. The quota licenses are sold at market value to eliminate speculation. In 1987-88, the DLLC collected revenues of $3,109,773, of which nearly $2.4 million was in the form of license fees. Of the total revenues, $2,169,000 went to the state's general fund and the remaining $2,895,300 was disbursed to the counties. Maricopa and Pima counties—the largest revenue producers—received $329,900 and $123,500, respectively. The DLLC is responsible for the enforcement of liquor laws and regulations, screening license applicants, inspecting existing licenses, liaison with local law enforcement agencies, and investigation of complaints pertaining to licenses from law enforcement agencies and the public. Sections within the department include Compliance, Hearing, Investigations and Licensing. The DLLC is administered by a seven-member board whose members are appointed by the governor. The department has a staff of 59. The Compliance Section was implemented in 1985 as an alternative dispute resolution technique to augment the hearing process. The section reviews cases to determine what action the department will take on cases before it. The section also works closely with taxing authorities and receives the payments of fines resulting from consent agreements and administrative and board hearings. The section has four full-time employees. The Hearing Section in 1987-88 held 258 hearings and made 241 reports and recommendations on 270 complaints received. The section has five employees. The Investigations Division is responsible for: receiving and investigating complaints of liquor law violations; receiving and reviewing reports from all police agencies in the state related to alcohol beverage licenses; concentrating on the control of sales to and consumption by under-age persons; providing training and liaison to all police agencies in the state; and investigating applicants for licenses, managers of alcohol outlets and related corporations and partnerships. The division is also responsible for: auditing restaurant and hotel/motel licenses; responding to inquiries of a technical or legal nature; serving process or posting suspension/revocation actions; inspecting licensed premises; and testifying and case presentations. The division has 23 employees. During 1987-88, the division received 1,311 complaints, of which 1,205 were investigated and 106 were referred to other agencies. The Licensing Division has several units including licensing, renewals, records, data processing and receptionist. The division has 18 employees. The alcoholic beverage industry was affected by several actions of the 1988 legislative section, one of the more significant of which made beer and wine bar licenses transferable. The action was taken to alleviate the problem of the lack of license availability for hotels to sponsor hosted cocktail receptions when lacking enough food sales to support a restaurant license. Another piece of 1988 legislation allows the DLLC superintendent to issue "wine festival licenses." Lasting up to two days, the license authorizes the sampling of domestic wine products at wine festivals, county fairs and other special locations. Legislation also was passed which permits a restaurant patron to carry out a partially filled bottle of wine if the wine was purchased with a meal. Before the patron leaves the restaurant, however, the cork must be inserted flush with the top of the bottle. The legislation also contained a separate section which authorized state universities having hotel management courses to hold liquor licenses. A new law prohibits the consumption of spirituous liquor at unlicensed business establishments or business premises where: food or beverages are sold; entertainment is provided; a membership fee or a cover charge for admission is required; a minimum purchase or rental requirement for goods or service is charged.

STATE DEFENSE Through its Department of Emergency and Military Affairs, Arizona seeks to anticipate all manner

of crises and disasters, both natural and man-made, and to provide trained units and qualified personnel for federal military service in time of war or national emergency. Arizona's Army National Guard and Air National Guard are under the direction of the Division of Military Affairs. The Division provides for the safety and welfare of Arizona citizens by training personnel and providing serviceable equipment in the event of mobilization or response to state emergencies. In fiscal 1988, the division had 8,407 total personnel, which were divided into three categories, including 324 full-time employees of the state, 204 Army and 120 Air; 1,811 full-time military technicians, including Federal Civil Service and Active Guard/Reserve, 777 Army and 1,034 Air; and 6,272 traditional guard members, commonly referred to as M-Day Soldiers/ irmen and women, 4,565 Army and 1,707 Air. M-Day soldiers and airmen normally participate in military training one weekend a month and 15 additional days each year. In fiscal 1988, the National Guard of Arizona had total expenditures of $131,506,000, including $68,668,000 for the Army National Guard and $62,838,000 for the Air National Guard. Pay and allowances to personnel totaled $83,842,000, including approximately $40.5 million for the Army and $43.3 million for the Air National Guard. Operating costs totaled $37,035,000, including approximately $20.4 million for the Army and $16.6 million for the Air National Guard. Military construction projects totaled $10,629,000, including approximately $1.9 million for the Army and $8.8 million for the Air National Guard. Major activities of the Army National Guard in fiscal 1988 included 30 search and rescue missions utilizing 139 man-days and 162 flying hours at a total cost of $13,900; two severe weather emergencies utilizing 170 mandays and 118 flying hours at a total cost of $15,800; and four forest fire missions utilizing 457 mandays at a cost of $30,100. The Air National Guard is required by its mission statement to provide trained units and qualified personnel for federal military service in time of war or national emergency. The Air National Guard is headquartered at Papago Park Military Reservation in Phoenix. Also stationed at Papago Park are the 107th Tactical Control Squadron and the 111th Air Traffic Control Flight. The 161st Air Fueling Group is stationed at Sky Harbor International Airport in Phoenix, and the 162nd Tactical Fighter Group is stationed at the Tucson International Airport with 2,768 personnel, the Air National Guard stands at 97 percent of its authorized strength and includes 308 officers, 2,470 enlisted men, 400 women and 764 minorities.

Air National Guard personnel were deployed to a number of far-flung locations for training exercises in fiscal 1988, including Germany, California, Florida, Honduras, Guam, Hawaii, Texas, Minnesota, Panama and other sites. The federal agency that supports the Arizona National Guard by providing funds, supplies, equipment and services is the U.S. Property and Fiscal Office. Federal funds distributed to the National Guard in fiscal 1988 included $51.4 million for the Army National Guard and $83.5 million for the Air National Guard. The civilian branch of the Department of Emergency and Military Affairs is the Division of Emergency Services. The Division serves as the central point of contact within the state for all emergency management activities, and provides the foundation for the federal, state and local partnership required when disaster strikes. Major programs of the Division include hazardous materials training and the coordination of search and rescue operations. The Division was budgeted $4,082,900 in fiscal 1988, including $2,108,800 in state appropriations and $1,974,100 in federal funds.

FEDERAL DEFENSE A number of factors make Arizona an attractive location for conducting military activities, including vast, empty desert stretches for survival training and gunnery practice, a high percentage of optimal flying weather and a dynamic high tech manufacturing and research and development community. Each of the four military branches maintain facilities in Arizona, which are staffed by a total of 35,165 personnel, including 24,693 active-duty military personnel and 10,472 civilian employees. The Air Force operates 13 facilities in the state, seven of which are auxiliary training fields, gunnery ranges or production facilities with no full-time personnel. The other six installations are manned by a force of more than 13,500 military personnel and 4,378 civilian employees. Luke AFB in Litchfield Park is the home of the 832nd Air Division. It occupies 5,396 acres and is staffed by 5,703 military and 1,229 civilian personnel. The 836th Air Division is stationed at Davis Monthan AFB in Tucson. Its contingent consists of 5,197 military and 1,312 civilian personnel. The sprawling 2,674-acre facility at Gila Bend accommodates the Gila Bend Air Force Station and Luke WRG Air Force Range. It serves as an auxiliary training field and range. Williams AFB in Chandler is home to the 82nd Flying Training Wing, and is staffed by 2,631 military and 693 civilian personnel. The Air National Guard's 161st Air Refueling Group is headquartered at Sky Harbor International Airport and Air Guard Station in Phoenix. The Air National Guard's 162nd Tactical Fighter Group is stationed at Tucson International Airport and Air Guard Station. The Army maintains six facilities within Arizona's borders, but only Fort Huachuca in Sierra Vista supports a large contingent of personnel. The Fort serves as a Communications Command and Intelligence School and has 6,259 military and 3,698 civilian personnel, the largest complement of any Arizona military installation. Yuma Proving Ground, with its 412 military and 718 civilian personnel, is the other manned Army base. It is situated on 1,010,966 acres and serves as a research and development test center. Facilities near Wilcox and Gila Bend are used for various research and development, training and exercise purposes. The Army also maintains a large storage facility near Flagstaff. The Navajo Army Depot Activity occupies 28,205 acres. The Marine Corps Air Station in Yuma is the lone Marine presence in the state. It covers 2,930 acres and is staffed by 4,272 marines and 448 civilian employees. Yuma specializes in jet training and tactical aviation. Although Arizona is a landlocked state, the Navy maintains an installation. The Navy's Arizona Facility covers 1,166 acres in Maricopa County and serves as a test center. Arizona's contributions to national defense include much more than providing land for bases and other installations. The state's military contracting firms have developed crucial defense equipment and have brought billions in prime contract awards to the area. The General Motors Corporation is the state's largest military contractor, garnering contracts of more than a billion dollars. Other major contractors include McDonnell Douglas Corporation, $975,155,000; Motorola, Inc., $458,775,000; Allied-Signal, Inc., $166,477,000; and Litton Industries, Inc., $58,263. The major areas of work completed by Arizona's

military contractors are in guided missiles and aircraft rotary wings, which fulfilled contracts worth $934,561,000 and $923,087,000, respectively. Other contract areas include guided missile components, $112,707,000; gas turbine/jet engines excluding aircraft, $60,564,000; and night vision equipment, $55,262,000. The Department of Defense recorded expenditures of approximately $4.5 billion in Arizona in fiscal 1987, including expenditures in every county. Approximate defense expenditures by county included $1.5 million in Apache, $421 million in Cochise, $11 million in Coconino, $6.7 million in Gila, $1.7 million in Graham, $371,000 in Greenlee, $23 million in La Paz, $2.5 billion in Maricopa, $10 million in Mohave, $5.7 million in Navajo, $1.4 billion in Pima, $18.1 million in Pinal, $2.5 million in Santa Cruz, $14.9 million in Yavapai and $176 million in Yuma. The Department of Defense paid salaries and wages to Arizona residents in every county except La Paz in fiscal 1987. Approximate payments by county included $261,000 in Apache, $273 million in Cochise, $3.9 million in Coconino, $328,000 in Gila, $248,000 in Graham, $6,000 in Greenlee, $279 million in Maricopa, $556,000 in Mojave, $1.7 million in Navajo, $175 million in Pima, $734,000 in Pinal, $77,000 in Santa Cruz, $906,000 in Yavapai and $116 million in Yuma.

VETERANS In 1988, Arizona had 411,000 veterans, a ratio of 168.4 veterans for every 1,000 civilian adults in the state. The total number of veterans includes 325,000 wartime and 86,000 peacetime veterans. Two thousand Arizona veterans served during World War I, 153,000 during World War II, 75,000 during the Korean Conflict and 130,000 during the Vietnam Era. Peacetime veterans include 43,000 who served during the post-Vietnam Era, 39,000 who served between the Korean Conflict and the Vietnam Era and 5,000 who served during other times of peace. Included in the veteran total are 22,200 women, of whom 14,500 served during wartime and 7,700 served during times of peace. The most beloved symbol of Arizona veterans does not lie within the borders of the Grand Canyon State, but thousands of miles away in Pearl Harbor, Hawaii. A majestic memorial marks the spot where the battleship *U.S.S. Arizona* was sunk by the Japanese during the infamous attack on Pearl Harbor, on December 7, 1941, killing 1,177 crewmen. The memorial is in the shape of an enclosed bridge which spans the remains of the *Arizona* without touching any part of the ship. The memorial is divided into three sections, including a museum room, an assembly area which can accommodate 200 people for ceremonies, and a shrine room which contains a marble wall listing the names of the crewmen killed in the attack. The *Arizona's* massive ship's bell was salvaged from the wreck and presented to the state of Arizona, but in 1966, Gov. Paul Fannin returned the bell to the Navy and it was subsequently installed in the museum room of the *Arizona* memorial. Another artifact of the *Arizona*, its gigantic 19,585-pound bow anchor, serves as the centerpiece of a memorial honoring the ship's crewmen. Dedicated on December 7, 1976, this memorial is located on the grounds of Arizona's state capital in Phoenix. Veterans and their families are accorded a number of rights and privileges by Arizona law including burial and headstone allowances, free copies of public records and notary services, deferred tuition and fee payment, and emergency relief funds. In addition, Arizona veterans are given employment preference for positions in the civil service, fire departments and the Highway Patrol. Veterans can find support from the Arizona Veterans Service Commission, a state agency with regional offices located throughout the state. The Commission provides direct assistance in all matters pertaining to rights, benefits and privileges of veterans, their dependents and survivors. Four divisions comprise the Arizona Veterans Service Commission, including the Veterans Service Division, Conservatorship/Guardianship Division, Education and Training Division and Veterans Memorial Cemetery of Arizona. The Veterans Service Division assists veterans, their dependents, and/or survivors in filing claims for Veterans Administration benefits from federal or state government. This division has four regional offices in Flagstaff, Phoenix, Tucson and Yuma. Veterans Service officers travel to more than 60 communities in the state on a monthly basis to offer assistance to the veteran population. Veterans' benefits are not automatic, but must be applied for in accordance with federal and state laws, rules and regulations. In most instances, veterans need the services of a Veterans Service Officer to provide advice and counsel and assist them with their individual claims. The Veterans Conservatorship/Guardianship Division is responsible for incapacitated veterans and their dependents who are in need of someone to manage their finances and, in some cases, their physical well-being. An incapacitated veteran is any veteran who is impaired by reason of mental illness, mental deficiency, mental disorder, physical illness or disability, advanced age, chronic use of drugs to the extent that he or she lacks sufficient understanding or capacity to make or communicate responsible decisions concerning his or her person. The Veterans Education and Training Division of the Arizona Veterans Service Commission is designated by the governor as the State Approving Agency, responsible for approving and supervising all institutions and establishments in Arizona which offer education and training to veterans. The State Approving Agency insures that schools and institutions maintain acceptable standards so that eligible veterans or dependents who attend may receive educational assistance from the Veterans Administration. This includes all public and private schools and training establishments offering apprenticeships and other on-the-job training. The Arizona Veterans Service Commission was designated on December 9, 1978 to be responsible for the development and operation of a cemetery in accordance with the regulations and criteria prescribed by the Veterans Administration for operation of the National Cemetery System. The Veterans Memorial Cemetery of Arizona consists of 225 acres of land and endeavors to preserve the natural desert environment inherent to the tradition and climate of the Southwest. The responsibility of the Veterans Memorial Cemetery is to provide burial space to honorably discharged veterans, their spouses, and minor children under the age of 18 and, in some cases adult children if they become permanently incapable of self-support because of physical or mental disability before attaining the age of 18 years. This also includes members of the armed forces dying on active duty.

FEDERAL EXPENDITURES Although Arizona ranks 25th among the states in terms of population, it ranked 13th in the amount of federal expenditures in fiscal 1987. The federal government distributed more than $12.5 billion within the state, an amount equal to $3,709.62 per capita. Components of this total include grants to state and local governments, $1.2 billion; salaries and wages, $1.7 billion; direct payments for individuals,

$5.6 billion; procurement expenditures, $3.8 billion; and other programs, $289 million. The state ranked 44th among the states in federal grants to state and local governments, a per capita share of $350.58. This category includes a number of government agencies and programs. The Department of Agriculture received $151,879,000, which was divided among a number of programs including $3.3 million for the cooperative State Research Service; $2.6 million for the Extension Service; $249,000 for mutual and self-help housing; $27,000 for rural community fire protection; $86,00 for rural development; $1.4 million for rural water and waste disposal; $53.7 million for child nutrition programs; $21 million for commodity distributions; $4.7 million for food donations; $21.3 million for the food stamp program; $219,000 for the special milk program; $29.5 million for the special supplemental food program, $531,000 for temporary emergency food assistance; $470,000 for the Food Safety and Inspection Service; $6.4 million for the national forests fund; $128,000 for state and private forestry; $6,000 for resource conservation and development; and $6.1 million for watershed and flood prevention operations. The Department of Commerce received $2.2 million which was divided among a number of programs including almost $1.6 million for economic development assistance programs; $437,000 for the National Oceanic and Atmospheric Administration; and $198,000 for the National Telecommunications and Information Administration. Arizona's share in Corporation for Public Broadcasting funds totaled $1.6 million. Grants of $2.2 million went to Army National Guard centers for construction purposes.

The Department of Education received $178 million which was divided among a number of programs, including $4 million for bilingual education and minority language affairs; $34.2 million for compensatory education for disadvantaged; $3.5 million for Indian education; $2 million for libraries and learning technologies; $62.7 million for school assistance in federally affected areas; $7.8 million for special programs and populations; $1.2 million for the Office of Post Secondary Education; $23.5 million for education for the handicapped; $30.6 million for rehabilitation services and handicapped research; $8.2 million for the Office of Vocational and Adult Education; and $99,000 for other programs. The Department of Energy awarded more than $1.1 million in grants. The Environmental Protection Agency distributed $17 million in grants among three programs, including $3.3 million for abatement control and compliance; $13.4 million for construction of wastewater treatment works; and $308,000 for hazardous substance response trust funds. The Equal Employment Opportunity Commission distributed $411,000 in grants. The Federal Emergency Management Agency distributed $17.8 million among two programs, including $16.3 million for disaster relief and $1.5 million for emergency planning preparedness and mitigation. The Department of Health and Human Services received $227.9 million, which it distributed among a number of programs, including $9.9 million for the Alcohol, Drug Abuse, and Mental Health Administration; $2.4 million for centers for disease control; $97.4 million for the Health Care Financing Administration (Medicaid); $10.4 million for the Health Resources and Services Administration; $4.4 million for family social services; $22.1 million for human development services; $35 million for social services block grant; $1.3 million for work incentives; $30.4 million for family support payments (AFDC); $3.7 million for community service block grants; $8.4 million for low income home energy assistance; $2.1 for refugee assistance; and $82,000 for the Social Security Administration's supplemental security income program. The Department of Housing and Urban Development awarded nearly $176.6 million in grants to fund a number of projects and operations, including $35.6 million for community development; $132,000 for solar energy and conservation bank; $111,000 for fair housing assistance; $88.5 million for public housing, $33.6 million for housing payments section eight; $134,000 for college housing payments; $16.1 million for low rent housing operating assistance; $1.5 million for rental housing rehabilitation and development; $550,000 for urban development action grants; and $31,000 for other programs. The Institute of Museum Services received $32,000.

The Department of Interior received $22 million, which it distributed among a number of programs, including $7.2 million for the Bureau of Indian Affairs; $8.4 million for the Bureau of Land Management for payments in lieu of taxes; $4.1 million for the Fish and Wildlife Service; $526,000 for the Minerals Management Service; $1.1 million for land and water conservation; $315,000 for preservation of historic properties; and $219,000 for shared revenues. The Department of Justice received $767,000 for its Office of Justice Assistance. The Department of Labor received $75.5 million, which it distributed among a number of programs, including $26 million for state unemployment insurance and employment service operations; $48.5 million for the Job Training Partnership Act; $150,000 for the Mine Safety and Health Administration; and $737,000 for the Occupational Safety and Health Administration. The National Endowment for the Arts distributed $605,000 in grants in Arizona. The Department of Transportation received almost $311.4 million, which it divided among a number of programs, including $345,000 to the Coast Guard for boating safety programs; $22.1 million for the Federal Aviation Administration's airport and airway trust fund; $267.2 million for the highway trust fund; $4,000 for interstate transfer grants; $7,000 for safer off-system roads; $180,000 for other highway programs; $83,000 for the Federal Railroad Administration; $1.4 million for the National Highway Traffic Safety Administration; $318,000 for the Research and Special Programs Administration; and almost $19.6 million for the Urban Mass Transportation Administration. Arizona ranked 24th among the states in federal expenditures for salaries and wages. Those salaries and wages totaled $1,677,852,000, representing $495.53 per capita. The Department of Defense allocated $851.7 million in wages and salaries, including $504.3 million for active military personnel; $62.7 million for inactive military personnel; and $284.5 million for civilian employees of the department. Postal service wage and salaries totaled $328.7 million and all other federal wage and salaries totaled $497,448,000. The federal government made direct payments to individuals in Arizona totaling $5,604,293,000, the 13th greatest amount disbursed in any state. Direct payments in Arizona equaled $1,655.14 per capita. Three kinds of Social Security payments were made to individuals in the Grand Canyon State, including $13,743,701,000 in retirement insurance payments, $3,572,922,000 in survivors insurance payments and $1,905,144,000 in disability insurance payments. Medicare payments in the state included

$5,360,702,000 for hospital insurance payments, and $4,071,827,000 for supplementary medical insurance payments. Federal retirement and disability payments included $2,717,643,000 for ex-military personnel and $2,739,848 for ex-civilian personnel. Other federal programs making direct payments to Arizona residents included $160.5 million for veterans compensation for service connected disability; $26.5 million for veterans pensions for non-service connected disability; $38.8 million for veterans dependency and indemnity compensation for service connected death; $9.6 million for pensions to veterans' surviving spouses and children (widows pension); $18.6 million for veterans educational assistance (G.I. Bill); $7.4 million for other veterans benefit programs; $120.9 million for food stamps; $95.8 million for supplemental security income payments; $97.3 million for social insurance payments for railroad workers; $39.8 million for national guaranteed student loan interest subsidies; $21.5 million for excess earned income tax credits; $22.1 million for federal workers compensation; $2 million for coal mine workers' compensation; $2.6 million for special benefits for disabled coal miners; $4.8 million for federal payments for unemployment compensation; and $15 million for other direct payment programs. Arizona ranked 10th among the states in the amount of federal procurement contracts awarded in fiscal 1987. These contracts totaled $3,801,133,000, and amount to a per capita figure of $1,122.60. Department of Defense contracts totaled $3,207,894,000; Postal Service contracts totaled $41.7 million; and all other federal procurement contracts totaled nearly $551.5 million. The federal government also made direct payments other than for individuals, as well as grants to a number of other programs. These expenditures totaled $289 million, and included $36.5 million for Department of Health and Human Services research programs; $17.7 million for the National Science Foundation; $8.2 million for the National Aeronautics and Space Administration's (NASA) space program research grants; $504,000 for the National Endowment for the Arts; $1 million for the National Endowment for the Humanities; $1.1 million for the ACTION program; $10.5 million for other grants; $3.6 million for feed grain production stabilization payments; $6.1 million for wheat production stabilization payments; $231,000 for commodity purchases price supports; $94.9 million for cotton production stabilization payments; $109,000 for crop insurance claims and payments; $14.3 million for other agricultural programs; $36 million for federal employees life and health insurance programs; $24.6 for the Postal Service; $110,000 for national flood insurance claim payments; $4.7 million for Legal Services Corporation grants; and $27.3 million for other direct payments.

COMMUNICATIONS

Arizonans receive important information and entertainment via a well-developed communications network that blankets the state. The state has 22 television stations, including nine in the Phoenix metropolitan area and eight in the Tucson area. Arizona's airwaves are home to 145 radio stations, 73 of which are AM stations and 72 are FM. The Phoenix area alone offers 19 AM and 18 FM stations featuring a wide variety of program formats. Twenty daily newspapers and 53 weekly newspapers bring citizens news and information in print. The state's largest daily newspaper, *The Arizona Republic*, has a morning circulation of 304,662 and a Sunday circulation of 483,375. The Republic's sister publication, *The Phoenix Gazette*, enjoys an evening circulation of 99,532.

TRANSPORTATION

Utilizing an efficient network of highways, airports and rail, Arizona has met the challenge of transporting its people and goods over the relatively greater distances between markets in the Southwest. Although the Sunbelt population is not clustered as densely as in other regions, the area is far from deserted. The six adjacent states which Arizona defines as its primary market have more than 38.5 million people who account for more than 15.5 percent of the national labor force and more than 17 percent of the income. Transportation provides a crucial link in making these markets accessible to Arizona business. The Arizona Department of Transportation (ADOT) is the coordinating body for the state's transportation system. ADOT is charged with constructing and maintaining all interstate and state highways in Arizona and providing financial assistance to public airports for airport development projects. Its mission is to provide a transportation system, together with the means of revenue collection, licensing and safety programs, which meets the needs of the citizens of Arizona. ADOT was organized in 1984 by combining the Arizona Highway Department and the Arizona Department of Aeronautics. The seven-member Arizona State Transportation Board became its governing body.

ROADS AND STREETS The complexion of Arizona's roads and highways throughout the 1980s and 90s can be characterized by one word—construction. The state is in the process of augmenting its 6,000 miles of roads, highways and freeways with a $3 billion highway construction program. Approximately half of these funds will go toward the centerpiece of this program—an overhaul of the Phoenix area road system which will add 233 miles of freeways and expressways to the city, making it the largest urban highway construction program in the nation. Other major allocations include: interstate rehabilitation, $500 million; state-funded statewide highway construction, $350 million; federally-funded non-interstate pavement preservation, $200 million; state-funded pavement preservation, $100 million; and Pima County controlled access highway, $170 million. The Arizona Department of Transportation is financed from three primary sources: federal highway trust funds, state highway user revenues and transportation excise tax monies. Transportation excise taxes, which are new to Arizona and so far have been enacted only in Maricopa County, provide a substantial sum for freeway and expressway construction in the Phoenix metropolitan area. Major interstate routes traversing Arizona include I-10, I-40, I-8, I-19, I-17 and U.S. 60. They account for the highest percentage of trucking activity. Deregulation of the trucking industry in 1981 eliminated state regulations concerning exits, entries and rates. Truck lines provide overnight delivery to Los Angeles, San Diego, Albuquerque, Las Vegas, El Paso and Guaymas, Mexico. The lucrative markets of San Francisco, Salt Lake City and west central Texas can be reached the second morning. Greyhound and Continental Trailways provide both inter- and intrastate service. Other bus lines also provide intrastate schedules. Arizona's sophisticated highway network evolved from humble origins in the mid 1800s when two rough roads were carved across the northern and southern parts of the territory. The southern route was popular with those in

search of gold; the northern route was used by hunters, trappers and military units. The Legislature formed the Arizona Highway Department and established the Arizona State Highway Commission in 1927. *Arizona Highways* Magazine made its debut in 1925 to document the progress of the fledgling Arizona Highway department, as well as the beauty of the state's landscape. The first issue contained 26 pages of features and black and white photos. *Arizona Highways* blossomed, along with the state's highway system, into one of the nation's most popular travel periodicals. Today the full-color, high-quality publication is received by 410,000 in every state and in 127 foreign countries.

PUBLIC TRANSIT The economic and population boom in Arizona has resulted in a heightened awareness of public transportation facilities, particularly in the metropolitan areas of Phoenix and Tucson. A wealth of historic, cultural and leisure-time opportunities has produced modern, extensive public transit systems in those two cities. The regional transit service in Phoenix covers 500 square miles of the metropolitan area, and fixed bus routes follow the major streets. Operating Monday through Saturday, the system has routes extending to the communities of Avondale, Chandler, Fountain Hills, Glendale, Guadalupe, Mesa, Peoria, Scottsdale, Sun City and Tempe. The cities of Mesa, Scottsdale and Tempe operate local fixed route bus systems, and Peoria and Surprise offer peak-hour fixed route connections to bus routes. The area also features "dial-a-ride" services throughout the area which often connect with buses. Local service buses, those which stop at every bus stop, generally run every 30 minutes throughout the day and every 10-20 minutes during peak traffic hours. Express bus service, designed to accommodate the needs of rush-hour commuters, runs at various peak-hour times and buses on those routes stop only at designated pick-up and drop-off points. Dial-a-Ride provides demand response, shared ride transportation services. Phoenix Dial-a-Ride service is available to the general public throughout the city on Sundays and holidays. On weekdays, the Dial-a-Ride system serves a portion of north Phoenix, connecting that area to regional bus routes. Public dial-a-rides in El Mirage, Glendale, Peoria, Sun City and Surprise connect with regional buses Monday through Friday. Mesa and Sun City dial-a-rides also operate on Saturdays and Sundays. The Tempe/Scottsdale Dial-a-Ride is operated by the Regional Public Transportation Authority and provides service to senior citizens and to disabled persons. It operates Monday through Friday. Numerous taxi companies also serve the area, and because the transportation industry is unregulated, fares are negotiable. In Tucson, Sun Tran is the city-wide public bus system. Fares are 60 cents on the system operated by the Tucson Transit Management. There also are numerous taxi, limousine and private bus companies serving Tucson and Pima County. Two interstate bus companies serve many communities in the state, and most of the larger cities operate municipal bus systems. Expenditures for public transportation in Arizona were slated to rise dramatically between 1988 and 1989. Nearly $57,000 was budgeted in fiscal 1988, while the fiscal 1989 budget estimate called for the expenditure of nearly $258,000, an increase of more than 200 percent. The budgeted amount for 1990 was almost $268,000, another four percent increase.

RAIL In 1986, seven railroads operated either in or through Arizona with total track mileage of approximately 1,988. Most of the mileage—1,539—was in main line track with the remaining 449 in branch lines. The Atchison, Topeka and Santa Fe Railway Company operates on more than 737 miles through the state, and nearly 700 miles of that total is on the main line. The Southern Pacific Transportation Company operates on more than a thousand miles of track, 597 of that main line and nearly 411 branch line. The remaining railroads are Arizona based, and they include the Apache Railway Company in Snowflake with 61 main line miles; the Tucson, Cornelia and Gila Bend of Ajo, 44.3 miles; the San Manuel Arizona Railroad, 29.4 miles; the Magma Arizona Railroad of Superior, 28.1 miles; and the Black Mesa and Lake Powell Railroad, 80 miles. The state of Arizona exercises no jurisdiction over rates, classifications, rules or practices of rail carriers. The state in 1986 planned to relinquish control over intrastate rail rates in the move toward deregulation. The state's intent was to allow free pricing in the transportation industry regarding rates and tariffs.

AVIATION Arizona utilizes a system of 184 airports and 76 heliports to connect the state's far-flung communities with cities throughout the region and the United States. Fifty-nine key airports comprise a primary system which provides service to 87 percent of the population. Forty-seven of the 59 primary system airports are publicly owned, seven are on Indian reservations and five are privately owned. The metropolitan areas of Phoenix and Tucson are currently emerging as transportation hubs for the Southwest, much as Atlanta became a hub for the Southeast in the 1970s. Phoenix and Tucson are served by approximately 14 major airlines providing non-stop and direct flights to more than 50 major markets coast to coast. Phoenix's Sky Harbor International Airport is projected to become one of the busiest airports in the country within a few years. By 1990, traffic is expected to triple from 1980 levels to 20 million passengers per year, and almost double again with 36 million passengers by the year 2000. Weather and the remoteness of much of Arizona have provided an ideal market for additional air services. Several air cargo companies provide service to airports both inside and outside the state. Commuter charter service demand also is expected to increase dramatically in the next decade. A total of 6,150 aircraft were registered in the state in early 1988, producing $1.3 million in revenue. Additional income came from aviation fuel taxes, $282,000; a new Airline Flight Property Tax, $3.3 million; and miscellaneous revenues, $360,000. The State Aviation Fund totaled $5.3 million. Two new aviation laws were passed in the 1988 session of the Legislature. One requires that a person renting an aircraft to another individual must provide a written notice of insurance stating the nature and extent of coverage for aircraft damage and liability. The second prohibits any person who is under the influence of intoxicating liquor, a narcotic or other drug, or marijuana from operating or being in control of an aircraft. The Arizona Department of Transportation in 1988 provided $3.2 million in financial assistance to 34 airports. Projects included pavement construction and preservation, lighting aids, security fencing, land acquisition and master planning. The department prepared a five-year, $193.6 million statewide airport development program for the State Transportation Board in 1987-88. The program includes 141 projects at general aviation and air carrier airports for the 1989 through 1993

fiscal years. ADOT's Aeronautics Division is responsible for the safe and orderly development of aviation in Arizona. The division is charged with registering and licensing all general aviation aircraft, conducting a statewide Airport Development Grant Program, promoting aviation as an economic and safe mode of transportation and representing the state at air service hearings.

COMMUNITY SERVICES

EDUCATION Arizona has taken a number of decisive steps which demonstrate its commitment to quality education, the most dramatic of which is the funneling of almost two-thirds of all state monies into education. Public education in Arizona was funded in 1987-88 by some $2.4 billion. Officials recognize the increasing need for well-educated workers to fuel the state's blossoming economy, which is based largely on manufacturing and sophisticated high technology. Major educational reforms are now in place which are designed to raise standards, to require discipline, and to expect achievement. Arizona students are now required to attend school through the 10th grade. In addition, high school graduation requirements have been made more stringent, requiring longer periods of study in English, math and science. Arizona has put in place measures designed to return better performance from teachers and to reward them with better pay. Arizona public schools were staffed by 27,186 teachers in 1987-88, who earned an average annual salary of $27,500. Approximately 594,800 students attend public schools in 217 school districts. This figure includes 387,312 elementary students and 168,879 high school students. The state's public schools are positioned within easy commuting distance of major job centers. Arizona guarantees that all children will have equal access to a high quality education regardless of socioeconomic conditions. Several school districts have won national recognition for individual schools and principals, and all schools within these districts perform above national norms. Some 53,000 students are enrolled in special education programs for the handicapped. The State Department of Education supports a number of initiatives for handicapped students including efforts to place all handicapped youth in the least restrictive environment, the integration of handicapped youth into the community, efforts to introduce handicapped students into the world of work, and the expansion and refinement of preschool programs for the handicapped. Since 1980, school districts have been required by law to provide special programs for gifted students as well as for the learning disabled, and in 1986, Arizona became one of only 12 states to require specialized training for all teachers of the gifted. To support this initiative, all three state universities offer graduate programs in the training of teachers of the gifted. Gifted programs offer a range of choices for more able learners, including self-contained programs, flexible pacing and concurrent enrollment in college classes. In 1988, achievement tests Arizona students scored higher than the national average in almost every category. Arizona's board of education is the body charged with promulgating rules and regulations concerning primary and secondary education in the state. The board consists of the superintendent of public instruction and eight members appointed by the governor for four-year terms. The department of education is administered through the state board of education. Its responsibilities include a variety of regulatory and service functions for public elementary, high school and unified school districts. The Education Commission of the States establishes and maintains close cooperation and understanding among states' executive, legislative, professional, educational and lay leadership under the national compact for education.

HIGHER EDUCATION Arizona institutions of higher learning are training the future work force and performing vital research to keep the state on the cutting edge of economic expansion through high technology innovation. Arizona's commitment to excellence in education is evidenced by its budgeting priorities. The proposed budget for fiscal year 1990 sets aside 57.3 percent of the general fund for education, a larger percentage than any other state. Funding for Arizona's K-12 education, universities and community colleges represent the budget's first, second and eighth largest components respectively. At the heart of Arizona's scholarly community are the three state universities, located at or near the three major population centers: Northern Arizona University in Flagstaff; Arizona State University in central Arizona at Tempe; and the University of Arizona to the southeast in Tucson. Arizona's universities were appropriated more than $477 million in 1989, a 16.4 percent share of the general fund. The Grand Canyon State's largest institution, Arizona State University (ASU), is a member of the Pac-10 Conference of large, prestigious western universities. Ten colleges comprise the university, which has an enrollment of nearly 43,000 students. The College of Business Administration is one of the largest in the nation, with a 1987 enrollment of more than 10,600 students in its eight departments. The dramatic growth of the College of Business Administration since its founding in 1955 is due to the high degree of support it enjoys from the business community. Business leaders confer regularly with the college to insure that the courses and programs are of maximum benefit to the community. ASU's College of Engineering is also in the forefront of innovation and works closely with the state's technology industries in curriculum development and technology transfer. Six key areas of concentration include solid-state electronics, computers and computer science, energy systems, computer-aided processing, thermosciences and transportation. The ASU Research Park provides research and development firms access to the university's resources and expertise in a campus-like setting. ASU offers interactive television courses at numerous sites throughout the community. ASU was allocated $198,919,500 in the 1990 recommended budget, representing an increase of $18,750,800 over the previous year's budget. The University of Arizona enrolls 33,000 students in its 14 colleges. The institution is an internationally recognized leader in the fields of astronomy, optical sciences, geology, scientific instrumentation and electronics. The university is the state's major research institution and is among the top 20 state universities in research funding. Area industry is frequently consulted regarding curriculum development and research priorities. The College of Engineering offers courses at industry sites throughout Arizona and the nation over an interactive television system, and industry employees have special access to university equipment and services, short courses and institutes. Resident students specialize in computeraided engineering, scientific instruments, and solid-state microelectronics. The fiscal 1990 budget recommended an allotment of $239,571,300 for the University of Arizona, an increase of $9,543,600 over the previous year's level.

ARIZONA TODAY

Northern Arizona University (NAU) is a multi-purpose institution with an enrollment of more than 13,000 students. Undergraduate and graduate degrees are currently offered in 129 program areas at eight colleges. The university houses the Center for Vocational Education, which conducts research in the area of vocational education, develops curricula for both vocational education teachers and students, and provides inservice training for vocational education teachers throughout the state. A mobile unit operated by the Center brings inservice training opportunities to vocational teachers in rural Arizona. NAU is rapidly increasing its commitment to electrical/electronic and computer engineering programs. This includes a recently developed interdisciplinary research center making state-of-the-art scientific instruments. NAU was appropriated $65,997,800 in the 1990 recommended budget, an increase of $4,497,800 over 1989 levels. Arizona's state universities are supplemented by a handful of excellent private colleges and universities, whose total enrollment in 1987 was 13,952. American Graduate School of International Management is an internationally recognized institution, located northwest of Phoenix in Glendale. It is the only graduate school in the nation devoted exclusively to training individuals for international careers. Students graduate with a master's degree in International Management, and 15,000 graduates are presently employed around the world.

A dual program has been implemented with Arizona State University, combining the masters in International Management and M.B.A. degrees. Embry-Riddle Aeronautical University was established in 1926 as a flight school. The institution now offers degree programs in many fields, including aeronautical engineering, aeronautical science, aviation administration, aviation management and computer science. The western campus of this distinguished university is part of the only accredited totally aviation oriented university in the world. DeVry Institute of Technology is located in Phoenix. It specializes in electronics and offers three levels of programs: Electronics Technician Diploma, Associate of Applied Science in Electronic Engineering Technology, and Bachelor of Science in Electronics Engineering Technology. Grand Canyon College is a liberal arts college which offers bachelor's degrees in business and education and is the first college in the nation to offer an undergraduate degree in Training and Development. Ottawa University offers a special "college without campus" program which offers a degree completion alternative for persons whose job, location or family responsibilities make traditional residential programs impractical. Prescott College is a private, accredited four-year college which offers bachelor's degrees in liberal arts and the humanities. The college also has an excellent adult degree training program built on individualized independent study rather than structured classes. The program is designed for people who cannot attend a regular college program because of work and/or home responsibilities. Western International University is affiliated with World University in San Juan, Puerto Rico. It is an interdisciplinary university which offers graduate and undergraduate degrees in management, accounting and transportation. The Arizona Community College System is an extensive educational network containing nine districts, 15 colleges, two education centers, 27 campuses, three skill centers and hundreds of instructional sites spread throughout all of Arizona's 15 counties. Its mission is to provide occupational education—defined as training other than a four-year college degree that prepares individuals for immediate employment, advancement or job and career changes—to Arizona residents. Community colleges were funded with $75,204,400 of general fund monies in 1989. Community colleges annually account for approximately 43 percent of the state's full-time students. Students may train for more than 1,400 job titles through 250 vocational programs approved by the State Community College Board. Enrollment has increased dramatically in recent years and more than one in four adults has taken a course at an Arizona community college in the last decade. Arizona's community colleges have a record of responding to the training needs of their communities. Post-secondary occupational education is constantly in motion, and this movement is not without direction. The State Community College Board has committed to an emphasis on training for economic development. Community colleges work with business and industry to recruit a work force, provide special training programs, provide technical assistance, and maximize resources by linking with other public agencies, federally funded training programs and private schools. Another area of emphasis by the board is advanced and technical training. Community colleges continue to improve in their ability to satisfy this need. One example typical of the effort is the Automotive Technician Seminars conducted for master mechanics by Glendale Community College in cooperation with General Motors, Ford Motor Co., the Independent Automotive Service Association, the Service Station Dealers of Arizona, Automotive Service Council and Industry Training Services. A major goal of the community college system is the retraining and upgrading of the state's work force. Today's community college student is older and likely working while developing new knowledge and skills for a promotion, new career, or continued employment in an industry of rapid technological change. Arizona's community colleges utilize numerous non-traditional methods to meet the needs of an ever-changing and more demanding job market. Often, maximum accessibility is achieved through training at the employer's place of business or through the use of telecommunications. The time factor has been conquered to the advantage of the student and business needing a tailored course. Through "open entry/open exit" and "short term" course modes, training may be started by any time during the calendar year and completed, and credits awarded as soon as the student can prove competency. Training can be as immediate, accessible, and innovative as demanded by the employer.

The community college system has invested a great deal of effort in developing linkages with business and industry. Frequent interaction and long-term partnerships with business and industry are critical to ensure that occupational training serves the current and future needs of the work force. Community colleges meet regularly with representatives of business, industry and government through local advisory groups and organizations such as the Arizona Association for Industrial Development, chambers of commerce and private industry councils. One example of a linkage for the sharing of resources is the machining program conducted by Cochise College in a classroom provided by Inland Motors Co. at its Sierra Vista plant. Arizona's training services are geared to meet the specific and unique needs of individual

companies and products. The Industry Training Services (ITS) of the Departments of Education and Economic Security offer quick-start, short-term training for employees looking for entry-level positions or trying upgrade their status. This program shares the cost of training through a 50-50 matching funds commitment (up to $20,000 per project). State-of-the-art, in-plant instruction on actual operating equipment can be provided at little or no expense to the company when ITS monies are combined with additional funding sources. One unique feature of these "colleges without walls" is that staff are hired temporarily from industry to teach the skills. ITS funding is available for new and/or expanding Arizona companies. Assistance in recruiting and screening job candidates is also available. There are more than 200 proprietary schools operating within the state. According to the Arizona Commission for Postsecondary Education, the number of graduates from technical and trade schools has increased significantly over the last few years, with 30,177 graduating in 1987. In addition to the variety of classes offered in business, public service, agriculture and trade occupations through secondary schools, continuing education courses are available for adults wanting training or retraining. Funds specifically for vocational education at the secondary school level are included in each year's budget and are mandated by state statute. Arizona also has many active apprenticeship programs. All of these factors add up to one important asset for business: recently, Arizona ranked sixth in the nation in percent of the population enrolled in vocational training.

LIBRARIES Arizona has committed considerable resources to assure the continued growth of an already impressive, modern library system. Arizona's 95 public libraries and 58 branch libraries provide service for all Arizona citizens, and offer a collection of some five million volumes. This figure represents 1.49 volumes per capita. In 1986-87, the total public library circulation was approximately 17.6 million, representing a 5.33 circulation per capita. Public funds for libraries in 1986-87 totaled $39.2 million, federal grants totaled approximately $1.1 million, and general state aid totaled $550,000. Arizona is building new libraries at a rate appropriate to the nation's third fastest growing state, and is incorporating bold architectural designs to reflect the state's dynamic growth and southwestern artistic heritage. In 1987, four major library buildings opened their doors in Flagstaff, Glendale, Mesa and Scottsdale. An additional four smaller libraries were opened in Apache Junction, Arizona City, Globe and South Tucson. Concerned with more than providing receptacles for books and manuscripts, officials commissioned designs that reflect the libraries' natural settings. Use of native stone and timber suits Flagstaff's alpine locale, while the exterior colors and massing of Scottsdale's Mustang branch harmonize with its Sonoran desert surroundings. Even in highly urban areas, Mesa's Dobson branch has been fitted into its park site with precision, and the new Glendale building reflects the motion and growth of the city. In addition, large new central libraries are planned for Chandler, Phoenix, Tempe and Tucson. In 1987, a long-range plan for Arizona libraries, prepared for the Arizona Statewide Library Planning Council and the Arizona Department of Library, Archives and Public Records, was submitted and approved. The plan is the culmination of many years of effort by numerous groups and individuals, and represents a distillation of the profession's collective wisdom in Arizona. The plan is designed to assist the state library agency, local public libraries, and a wide range of educational institutions in planning and implementing programs to improve services to all Arizona residents. The mission statement and nine goals outlined in the plan focus on citizens and on their needs for information. The methodology used to develop this long-range plan was designed to build upon past planning efforts of Arizona's library community and to involve a wide variety of librarians from many types of facilities located in all parts of the state. The methodology consisted of two key activities: review and analysis of past statewide library studies and plans to identify a broad range of planning issues of interest to Arizona's library community; and structured group meetings with librarians throughout the state to provide extensive opportunities for consultation on validity, scope, and priority of issues identified from past studies and plans. The mission statement provides that all Arizona residents are entitled to secure information and materials in a form that can be used and understood. Arizona libraries fulfill their purpose to the extent that they meet the informational, educational and recreational needs of their clientele. Nine goals were presented to support this mission: 1) a statewide network of public, school, academic, and special libraries will support the needs of Arizona residents for quality library service, information and materials; 2) libraries will receive assistance in improving services to their clientele; 3) public libraries will operate under appropriate legislation and be supported adequately; 4) libraries will have or be able to obtain reference and circulating materials to meet the needs of their clientele; 5) residents of Arizona will be served by professionally trained, knowledgeable and competitively paid staff; 6) Arizona public libraries will have knowledgeable and concerned trustees and friends groups; 7) public library service will be provided to all residents of Arizona regardless of geographic location or economic conditions; 8) Arizona libraries will provide service to meet the needs of special populations; 9) long-range plans for public libraries and the Department of Library, Archives, and Public Records will be developed, used as a basis for ongoing decision-making and evaluated on an annual basis.

CHILD CARE Even though Arizona, like the rest of the nation, is experiencing a decline in childbearing and in the average family size, the advent of the working mother and single-parent household has increased the demand for affordable childcare facilities. More than 60 percent of mothers in the United States are working, primarily because of economic conditions and a desire of having a career outside the house. By 1990, it is estimated that 27 percent of all Arizona households will be headed by single parents because of increases in the divorce rate and the number of unmarried mothers. For many working parents, day-care is a necessity. In Arizona, there are 589 licensed day-care centers in 14 of the 15 counties and 1,133 family day-care homes. Maricopa County has the most day-care centers in the state with 339, followed by Pima County with 136. There are no centers in Greenlee County. Financial assistance for day-care is provided by the Arizona Department of Economic Security (DES), which is responsible for managing more than $1 billion annually to assist the unemployed, elderly, disabled and disadvantaged children and youth. The department's budget for day-care in fiscal 1987-88 was $12,748,300, up from

$11,697,600 in fiscal year 1986-98. The department served an average of 15,344 children and 9,156 families per month in fiscal years 1986-87. Day-care subsidies are based on a sliding fee schedule, and the maximum monthly income to be eligible for assistance for a family of three is $1,254. The subsidy for eight hours of child care for a family of three ranges from $8.25 for those with no income to $4.35 for those making less than the maximum amount.

HEALTH CARE Health care planners in Arizona face a unique set of challenges in coming years. As the Phoenix and Tucson metropolitan areas continue their phenomenal growth, health care systems must expand to meet increasing urban needs. Typical big-city health problems such as a burgeoning population, teen pregnancy, shortages of qualified nurses, drug and alcohol abuse, crime and the AIDS threat will keep health officials busy. However, other states with large urban populations do not face the additional challenge of providing quality health care to far-flung rural areas as rugged and impoverished as some of those in Arizona. Compounding matters is the nationwide "greying of America," in which the proportion of elderly is growing as life expectancy increases through improved lifestyles and medical advances. This segment of the population requires the greatest amount of health care and will demand an even greater commitment in Arizona, which is one of the nation's premier retirement locations. Projections for 1980 through the year 2000 indicate that the 65-plus population segment will increase by 37.2 percent nationwide. During the same period, Arizona seniors are expected to multiply by a staggering 109.5 percent as retirees continue to flock to the state. Arizona hopes to accommodate the growing population requiring health care in its 94 hospitals which have a combined total of 14,377 beds. Federal hospitals, which include those in prisons, military bases, Indian reservations and other institutions, number 17 and offer 1,987 beds. Non-federal institutions account for the remaining 77 hospitals and 12,390 beds. Thirty-eight of Arizona's hospitals are classified as "rural" hospitals. On average, rural hospitals are one-third as large as their urban counterparts, have predictably lower occupancy rates and provide roughly one-quarter of inpatient services in obstetrics, surgery and general medical services. Rural counties are the ones most often under-served by health facilities and health providers. Arizona's rural areas have greater proportions of the poor, under-educated, substandard housing, elderly, the young and unemployed. Arizona's rural residents face additional difficulty in that they must travel greater distances for health care. In spite of inadequate facilities in many rural areas, hospital occupancy rates have been decreasing in Arizona and nationwide. In 1984, Arizona reported a 65.4 percent occupancy rate, below the national average of 69.7 percent. The national average has dropped more than 20 points from 89.8 percent in 1965. Lower occupancy rates result from many factors. Health Maintenance Organizations (HMOs), outpatient treatment and ambulatory surgery all have played a part in decreasing the average length of stay in hospitals. Low occupancy rates have resulted in decreased revenue and have forced administrators to re-evaluate their health care strategies. Some hospitals have opted for linking together into multi-hospital chains. National for-profit chains are represented in Arizona by Humana, Hospital Corporation of America (HCA) and National Medical Enterprises (NME). One of the first multi-hospital systems in the nation developed in Phoenix as Samaritan Health Services. In 1987, Arizona had 133 nursing care institutions which offered a combined total of 15,682 beds, including 961 in institutions categorized as personal care facilities, 2,606 in intermediate care facilities, 12,115 in skilled nursing care facilities and 1,191 Medicare certified. Nursing care institutions are a major segment of the state's long-term care efforts. Others include home health agencies and hospices.

Arizona had 65 licensed home health agencies in 1987, of which eight were government owned, 31 were owned by non-profit organizations, 26 were privately-owned, for-profit and 16 were affiliated with a hospital. Fifty-six of these agencies were Medicare certified. Home health agencies and hospices provide skilled nursing and rehabilitative services on an intermittent basis at the patient's residence. These services are designed to help patients achieve their highest level of independence while reducing the time spent in hospitals, nursing homes or other long-term care settings. Hospices are a kind of home health agency designed to care for terminally ill patients and their families and to provide an alternative to regular hospital care. Hospices in Arizona currently do not extend their care to include AIDS victims. There are five licensed hospices in the state, located in Cottonwood, Lake Havasu City, Phoenix, Tucson and Yuma. An additional nine hospices offer their services in Arizona, but are unlicensed. Another alternative to traditional health care is offered by Health Maintenance Organizations (HMOs). HMOs are essentially prepaid, organized systems for providing comprehensive health care within a geographic area to persons under contract. HMOs in Arizona grew more than 800 percent between 1981 and 1986. The state's largest HMOs include Maxicare-HealthAmerica, Patient's Choice, Intergroup Prepaid Health Services of Arizona, Inc. and Equicor. For mental health care Arizonans turn to the facilities and services offered by the Arizona Department of Health Services' Divisionof Behavioral Health Services. A number of alarming statistics prompted the Division of Behavioral Health Services to seek a record high budget of $18,509,000 for fiscal 1988-89. Arizona holds a national ranking of second in teen suicide, second in child abuse, seventh in divorce, fourth in per capita beer consumption and second in crime. In addition, the state is 52nd in the total of mentally disturbed patients treated, 51st in behavioral health funding, 43rd in outpatient admissions, 50th in state hospital funding and 46th in prevention service funding. In 1987, Arizona had 259 behavior health facilities, of which 164 offered outpatient care, 50 offered partial care and 74 offered residential programs. The department sponsors 144 alcohol programs, 134 drug abuse programs, 138 mental health programs, 24 domestic violence programs and four childrens' residential programs. In 1987, Arizona had 5,719 practicing licensed physicians (MDs), a ratio of 165 per 100,000 residents. Greenlee County had only two MDs and La Paz had five. The state had 567 licensed osteopathic physicians (DOs), a ratio of 16 per 100,000 residents. The prevention, care and alleviation of disease is the goal of both MDs and DOs. Both types of physicians use surgery, drugs and other accepted methods of medical care. Osteopathic medicine differs from allopathic medicine by emphasizing the importance of the normal body mechanics and manipulative methods of detecting and correcting faulty structure. In the United States, MDs far outnumber DOs, with

DOs representing approximately four or five percent of physicians. In Arizona, DOs represented nine percent of all physicians in 1987. The state had 2,604 primary care physicians (DO and MD) in 1987, a ratio of 75 per 100,000 residents. Primary care is the branch of medicine generally responsible for comprehensive patient care and is usually the first point of entry into the health care system. The field of primary care includes family practice, general practice and internal medicine, obstetrics and gynecology, and pediatrics. Of Arizona's 2,604 primary care physicians, 2,255 were MDs and 349 were DOs. Arizona is one of three states, along with Nevada and Connecticut, to license homeopathic physicians. Homeopaths use treatments which they claim stimulate the innate healing abilities of the body by administering small amounts of substances which cause symptoms similar to the disease. A homeopath must be a licensed MD or DO and have further training in homeopathy. There were 28 licensed homeopaths in Arizona in 1987, but only 16 of those actually practiced in the state. There were 155 licensed podiatrists in 1987, a ratio of four per 100,000 population. The state had 800 licensed psychologists in 1987, a ratio of 23 per 100,000 residents. The state had 7,832 licensed practical nurses (LPNs) in 1987, a ratio of 226 per 100,000 population. There were 26,431 registered nurses (RNs), a ratio of 762 per 100,000 population. Nurse practitioners (NPs) are registered nurses who have completed additional training in specialty areas and assume many routine tasks of a physician. In 1987, there were 488 NPs in the state, a ratio of 14 per 100,000 population. Arizona nurse practitioners are categorized according to their area of specialized certification, which in 1987 included 153 family NPs, 62 midwives, 73 adult, 68 ob-gyn, 12 school NPs, 71 pediatric and 49 neonatal. The state had 1,903 certified radiologic technologists, a ratio of 55 per 100,000 residents. In 1987, there were 890 licensed chiropractors practicing in the state, a ratio of 26 for every 100,000 residents. The state had 993 licensed dental hygienists, a ratio of 29 per 100,000 population. The state had a total of 1,815 licensed dentists, a ratio of 52 for every 100,000 residents. Greenlee County had only one dentist and La Paz had two. The state had 645 registered dieticians and public health nutritionists in 1987, a ratio of 19 per 100,000 population. The state had 6,500 certified emergency medical technicians, a ratio of 160 per 100,000 population. Emergency medical technicians (EMTs) are usually employed by ambulance services, rescue squads, fire departments and law enforcement agencies to respond to medical emergencies and provide immediate care to the critically injured or ill. The state had 330 licensed optometrists, a ratio of 9 per 100,000 population. There were 2,447 registered pharmacists in 1987, a ratio of 70 per 100,000 population. The state had 765 licensed physical therapists, a ratio of 22 per 100,000 residents. There were 215 licensed physician assistants, a ratio of six per 100,000 population.

CHURCHES Arizona had 343,863 communicant, confirmed church members and 1,073,012 total adherents, who accounted for 39.5 percent of the state's population, according to 1980 U.S. Census information. Owing to its large Hispanic population and its proximity to the Mexican border, as well as to a centuries-old mission presence, Catholicism is by far the state's most dominant religion. In 1980, more residents declared themselves to be Catholic than any other faith in all but two of the state's counties. The Church of Christ of Latter Day Saints (Mormons) is a rapidly growing faith, particularly in the Southwestern United States. Mormons comprise the second largest group of churchgoers in every county except Apache and Navajo, where it is first, and Pima and Cochise, where it is third and fourth, respectively. The Southern Baptist Convention accounts for the third largest religious segment in the state and in every county except Cochise, Pima, Pinal and Yuma, where it is second. Catholics, Mormons and Southern Baptists are the three largest groups in every county except Pima, where the United Methodists are among the top three. Other churches with substantial memberships include the Lutheran Church, Assemblies of God, the Episcopal Church, and Christian Churches and Churches of Christ. Not included in census reports are the religious practices of the state's various Indian tribes. Religious ceremonies are often an integral part of tribal life, and remain largely undocumented by official church statistics.

SOCIAL SERVICES The Arizona Department of Economic Security (DES), established in 1973, has as its goals lowering and preventing unemployment and dependency and reducing their economic and social impact on the person and the family. It provides opportunities, services and programs to help citizens with economic or social difficulties become self-sufficient. DES's budget for fiscal 1988 was $229,905,900, compared to $212,708,300 in fiscal 1987. Arizona ranks 46th in the nation for human services funding and federal funding is decreasing. Many state services have felt the pinch of budget cuts, while the demand for services increases. Arizona is growing, and as the population increases, so does the number of Aid for Dependent Children (AFDC) recipients. The number increased from 53,000 in 1980 to 86,000 in 1987, and more than 5,900 people a month are first-time AFDC applicants. In fiscal 1988, Arizona budgeted $35,547,800 for AFDC, an increase of nearly $4 million from the previous year. The funding level is expected to increase as the number of recipients rises. About 70 percent of the AFDC recipients in Arizona are children and 29 percent are women with children. Almost 40 percent of the recipients stay in the program less than one year. Twenty-two percent receive benefits for more than five years. The families that receive AFDC are generally small, with about 75 percent having one or two children. Ten percent of the recipient families have four or more children. Arizona ranks 34th in the nation in AFDC benefit levels. The average AFDC payment per recipient is $89.95 a month. The typical AFDC household does not receive child support and does not have earned income. About 40 percent of the recipients are Hispanic and nearly 30 percent are white. Females make up 99 percent of AFDC heads of households, and about 85 percent of them are divorced, separated, widowed or have never been married. In fiscal 1988, an average of 31,258 households and 91,109 people a month got AFDC. The total expenditures including state and federal monies, were about $97,524,960 for the year. In fiscal 1987, an average of 28,641 households and 82,439 people a month received AFDC. The total expenditures for that year were $90,088,500. Along with AFDC recipients, the number of food stamp recipients is climbing. The number rose from 196,000 a month in 1986 to about 240,000 a month in 1988. As eligibility requirements reduce the number of people who were formerly qualified for food stamps, the amount of people seeking emergency food assistance rises. Between 1984 and

1987, food banks increased distributions 272 percent. Three of five food stamp recipients are children, elderly or disabled. About half are younger than 15. A person receiving food stamps has an average total income, including food stamps, of $158.72 a month. The average food stamp benefits are $52.46 a month per person. About $160 in food stamps are given to each of nearly 80,000 households a month. The typical food stamp household has two members, does not receive child support and does not have an earned income. Thirty-five percent are married, and 65 percent are divorced, separated, widowed or have never been married. Thirty-two percent of the recipients are Indian, 31 percent are Hispanic and 31 percent are White. About $140 million dollars were spent on the food stamp program in Arizona in fiscal 1988, which is about one percent of the federal budget for food stamps. In fiscal 1987, an average of 65,978 households and 200,916 people a month got a portion of the $121 million in food stamps distributed that year. Of those in the state who receive food stamps, fewer than four percent receive child support payments. The same is true for those on AFDC. The DES and counties provide child support services to more than 61,000 families a year, involving about 113,000 children. About $23 million in child support was collected in fiscal 1987, with a portion of that intercepted from tax refunds. Collections for non-AFDC-related cases totaled $17,683,418, while $5,252,656 was collected for AFDC-related cases. These figures were up from the previous year's respective totals of $13,3477,762 and $4,716,971, and DES's goal is to continue to increase collections. Arizona budgeted $109,000 for child support enforcement in fiscal 1988, a sharp drop from $240,400 the previous year. The money is used by the DES to locate absent parents, establish paternity and collect past-due child support. More than 3,000 AFDC recipients a year are assisted in finding employment. The "Arizona Works" program offers tax credits to employers who hire welfare recipients. "Arizona Works" is a state initiative that improves the availability of and access to employment and training services for those receiving public assistance. The average "Arizona Works" yearly salary is $7,280 while the average yearly AFDC grant is $3,100. In fiscal 1987, 11,267 people were registered with "Arizona Works." Of those, 1,881 got jobs, resulting in an estimated welfare savings of $2,212,140. Arizona also offers a job service and an apprentice program. The Job Training Partnership Administration uses service delivery providers to train and employ economically disadvantaged adults and dislocated workers. Many coming out of the program were placed into unsubsidized employment. State funding in fiscal 1988 included $105,200 for the Work Incentive Demonstration Program and $52,000 for employment support services.

Disabled workers can also find state assistance. In fiscal 1987, 1,848 people with employment handicaps were placed in gainful employment. The average weekly wage before the support service was $31. This wage jumped to $192 after training and placement. Twenty-two percent went into clerical or sales positions, 21 percent went into services, 19 percent entered the professional, technical or managerial field and 10 percent got jobs in machine trades. A total of 12,255 people were served in the vocational rehabilitation program which is for people with a high potential of returning to the job market. The fiscal 1988 budget for vocational rehabilitation services was estimated to be $1,433,300. For every one dollar the state spends on the services, the federal government kicks in four dollars. Others receiving assistance include the blind, who get talking book and sight conservation services along with other vocational services. Of the 7,344 people receiving services from the Division of Developmental Disabilities in fiscal 1987, about 22 percent lived in community residences, while the rest lived at home. The state has many programs that fund different aspects of disability services. In fiscal 1988, $496,500 was in the budget for Comprehensive Services for Independent Living, which provides services to disabled persons who, with services, can become more independent. In the General Assistance budget, $8,877,300 was used for the disabled or those required to stay in the home to care for a disabled relative. There was also $269,500 budgeted for Assistance to Families to buy services needed to keep the developmentally disabled family member in the home. Overall, about nine percent of Arizona's working population are handicapped. While 182,000 handicapped people work, almost 100,000 do not because of severe disabilities. Social services also benefit the elderly, and the number of people aged 65 and older is expected to double in Arizona to 900,000 by 2010. DES programs for the elderly include home-delivered meals, congregate meals, transportation, adult day care, home care and socialization and recreation. Public/private initiatives that will increase programs for the elderly are Home Equity Conversion, Alzheimer's Advisory Committee and Inter-generational Activities.

The state's expenditure for Medicare Part B premiums in fiscal 1988 was $3,617,400 compared to $2,506,100 in fiscal 1987. According to federal figures, 51,000 people in Arizona were served by the Medicare Home Health Agency in 1984. Total charges were $10,930,000 and federal reimbursements came to $9,732,000. There were 3,043 Medicare Hospital Insurance beneficiaries who had their admissions to skilled nursing facilities covered. Covered charges totaled $7,410,000, while federal reimbursements amounted to $4,337,000 or 58.5 percent of the covered charges. Another group receiving state assistance is the homeless. There are 10,000 homeless in Arizona and by the year 2000 the number is expected to jump to 36,000. There was $240,900 budgeted for Emergency/Transition Shelter in fiscal 1988 compared to $163,700 in fiscal 1987. It is estimated that 13 percent, or 450,000 people, in the state live below the poverty level. Child abuse reports totaled 26,500 in 1987, an increase of 13.9 percent from 1985. Most victims of domestic violence are women and children. In 1987, 9,200 clients entered domestic violence programs, including emergency shelter, community and support services. Forty percent of those were the children of adult victims. Domestic violence shelters served 6,700 women and children while 2,800 children were turned away. In fiscal 1987, 14,911 Child Protective Services (CPS) reports were investigated, an increase from the fiscal 1986 total of 14,254. Adult Protective Services completed 4,833 investigations in fiscal 1986. From June 1985 through June 1986, the CPS received 25,978 reports of abuse, neglect or exploitation. Reports of adult and child abuse and neglect are increasing. Reports of sexual abuse of children have risen more than 60 percent. State budget expenditures for children's services in fiscal 1988 were $23,250,200. For adult services, the figure was $6,422,500. Of all the children helped through CPS, about 80 percent receive services inside

objectives of efficient returns processing, timely enforcement of tax statutes, and accurate valuation of property. Divisions include the director's office, administrative services, data management, tax enforcement, taxpayer support and education services, and property valuation and equalization. Numerous pieces of legislation regarding taxes were passed in 1988, originating in either the House or the Senate. One of the Senate bills established a municipal tax code commission chaired by the director of ADR and with a membership of two city mayors and two members of the public. It requires the adoption of the model sales tax code by cities and towns that impose the levy. Another bill conformed the filing requirements of informational returns to the same requirements as the federal government. Senate Bill 1125 provided for a tax court division to be established under the Maricopa County Superior Court to hear all Arizona tax related civil cases as well as tax disputes relating to political subdivisions. In addition, an omnibus tax bill scheduled to take effect in 1988-89 included revisions affecting sales, property and income taxes. In the area of sales taxes, the bill lowered the amount allowed a taxpayer on the accounting allowance to a maximum of $500 per month; increased the rate on hotels and motels from four percent to 5.5 percent; increased the rental of real property tax rate from 3.75 percent to five percent; and removed the exemption on expendable material for the semiconductor industry. Regarding property taxes, the legislation froze three property tax class assessment ratios at 1987 levels for 1988 and 1989; limited to $500 the homeowner's property tax reduction; set the unorganized school district tax rate of $4.72 on property; and increased the state property tax rate from 38 cents to 47 cents per $100 of assessed valuation. In the income tax arena, the bill eliminated the preferential corporate gains tax rate, and provided for a corporate alternative minimum tax of $50 if corporate income tax paid would be less than $50. One House bill recodified business classifications for the purpose of more easily understood language. Another law change conformed the state income tax treatment on corporate capital losses to the federal treatment, eliminating possible double deductions.

INSURANCE The Arizona Department of Insurance ventured into new frontiers in two areas in 1987. Acquired Immune Deficiency Syndrome (AIDS) guidelines regarding the testing and provision of benefits for AIDS were developed, and affected companies will follow guidelines until formal rules are adopted. Also, a special unit was created to deal with consumer complaints involving senior citizens. The department has four divisions, including Hearing, Corporation and Financial Affairs, Consumer Affairs and Investigations, and Rates and Regulations. The Hearing Division revoked or suspended the licenses of 36 agents in 1987. Fines totaling $60,978.86 were imposed on agents, and restitution and expenses of $40,232.11 were awarded in 1987. The Licensing Section of the Rates and Regulations Division issued 8,174 new life-type licenses and 2,741 property and casualty-type licenses during 1987. More than 24,000 renewal licenses also were issued by year-end, bringing the 1987 total to 31,132 resident and non-resident licensees. The Life and Disability Section of the Rates and Regulations Division supervises the life and disability market conduct examination program, which involved onsite review of claims and market activities. During 1987, 29 market conduct examinations were completed. Findings resulted in civil penalties totaling $15,000 imposed because of violations of the Unfair Claims Settlement Practices Act. A total of 32 companies were subject to Arizona regulatory action in 1987. Cash receipts and disbursements for the department each totaled $100,553,363 in 1987. Of the receipts, $98,100,615 were in premium taxes. Also experiencing a decrease in 1987 was the fund balance of the Arizona Life and Disability Insurance Guaranty Fund, a political subdivision of the state of Arizona. It had cash receipts in 1987 of $283,478 and cash disbursements of $1,621,787, dropping the fund balance from $4,163,928 at the start of the year to $2,825,619 on December 31. The Arizona Property and Casualty Insurance Guaranty Fund also suffered a loss. It had cash receipts in 1987 of $2,355,438 and cash disbursements of $4,513,641. The balance fell from $7,822,161 to $5,663,958 during the year. Good news for the state came in the form of a decrease in its unemployment insurance rate. The average unemployment tax paid by employers per worker in 1987 was $154, the fifth lowest rate in the nation and a four percent drop from 1986. Arizona also ranked fifth in the nation in average unemployment compensation benefits per unemployed worker in 1987. The state's average was $98.83 per week compared to the U.S. average of $197.19 per week. There was also good news for enrollees of Health Care Services Organizations (HCSO). Effective in April 1988, a law requires the HCSO industry to give a 60-day notice of its intention to cancel and prohibits cancellation of coverage because of age, sex, health status, national origin or frequency of utilization of basic health care services. The law requires a clear delineation of all terms under which an HCSO may cancel coverage or refuse to renew coverage. In addition, it requires a plan from each HCSO by which benefits are extended for 60 days or the period for which premiums have been paid, whichever is greater, in case an HCSO is declared insolvent.

RECREATION

Recreational activities abound in Arizona, covering the spectrum from natural to man-made wonders, big city sophistication to backwoods simplicity, and black-tie formality to blue jean comfort. Perhaps best known for the Grand Canyon and all the wild western grandeur it represents, Arizona welcomes tourists and residents alike to its 19 national parks and 21 state parks. Visitors can enjoy these rugged natural treasures in a number of ways, including hiking and backpacking, riding, camping, boating, skiing, fishing, hunting and others. When tired pilgrims make their way back to "civilization" full of the wonders of outdoors Arizona, they are greeted by the world of modern, urban Arizona. Phoenix and Tucson beckon with hotels, resorts and restaurants to suit every budget and taste. Music, dance, theater and visual arts of every kind await enthusiasts in Arizona's desert metropolises. History buffs can revel in Arizona's indigenous heritage as well as in its western roots at a number of museums. A variety of participatory and spectator sports offer fast-paced excitement and the state's fine zoos and botanical gardens offer educational recreation that is especially favored by families.

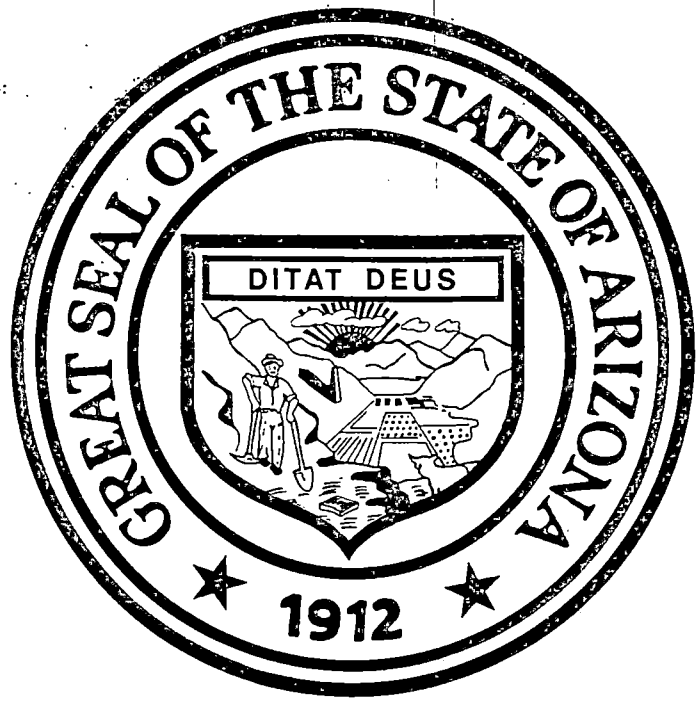
PROFESSIONAL SPORTS In keeping with the growth and dynamism exhibited by the state of Arizona in recent years, professional sports have become an increasingly visible part of the lifestyle in the Grand Canyon State. The population

base around Phoenix, along with the accommodating climate, makes Arizona an ideal site for sporting activities. Phoenix features professional football and basketball teams, and numerous major league baseball clubs fan out across the state for spring training in the Cactus League. Beautiful surroundings and meticulously kept golf courses have combined with the ideal climate to lure professional golfers to Arizona, and the men's and women's tennis tours make stops, as well. **FOOTBALL** The newest members of the Arizona sports community are the Phoenix Cardinals, who arrived in the Valley of the Sun in the spring of 1988. Competing in the Eastern Division of the National Conference of the National Football League (NFL), the Cardinals landed in Arizona after owner Bill Bidwell moved the team from St. Louis. The Cardinals have the distinction of being the oldest continuously operated professional football franchise. Coached by Gene Stallings, the Cardinals play their home games in Sun Devil Stadium in Tempe, which seats 72,000, and is also the home of Arizona State University. The Cardinals hold training camp each summer at Arizona University in Flagstaff. In their inaugural season in Arizona, the Cardinals opened slowly, made a bid for the division lead in the middle of the season and then finished at 7-9. Phoenix quarterback Neil Lomax led the NFL in passing in 1987 with more than 3,300 yards, and he was joined in the 1988 Pro Bowl by teammates Luis Sharpe, Vai Sikahema and Ron Wolfley. **BASKETBALL** The hoops have been a part of the Phoenix professional sports scene since 1968 when the Suns began play in the National Basketball Association (NBA). Competing in the Pacific Division of the Western Conference, the Suns play their home games at the Arizona Veterans' Memorial Coliseum. The facility seats 14,471 and was built in 1965. Phoenix games are carried on radio, television and cable, and game times are 7:35 p.m. Monday through Saturday and 7:05 p.m. on Sunday. The Suns began the 1988-89 season under the helm of coach Cotton Fitzsimmons, who replaced John Wetzel after the 1987-88 campaign. Fitzsimmons also coached the team from 1970-72. **BASEBALL** Arizona doesn't have a major league baseball team to call its own, but eight clubs call the state home during spring training. Because of climate and facilities, Arizona competes with Florida for the pre-season camps with its Cactus League. American League teams and their winter homes include the Cleveland Indians, Tucson; the Milwaukee Brewers, Chandler; the Seattle Mariners, Tempe; the California Angels, Mesa; and the Oakland Athletics, Phoenix. Annual National League visitors are the San Francisco Giants in Scottsdale; the Chicago Cubs, Mesa; and the San Diego Padres, Yuma. In early 1989, the Japanese Yakult Swallows also trained in Yuma. **GOLF** An appealing climate and an abundance of world-class courses make Arizona a popular site on the Professional Golf Association tour. In January 1988, the Phoenix Open was held on the Tournament Players Championship course in Scottsdale, and the tour returned to the Grand Canyon State in November for the Seiko Tucson Open played at StarPass. The Ladies Professional Golf Association made a pair of tour stops in 1988, too. The Circle K LPGA Tucson Open was played March 17-20 on the Randolph North course, and the Standard Register Turquoise Classic was played the following week at the Moon Valley Country Club in Phoenix.

HISTORIC PLACES The magnificence of the Grand Canyon attracts countless visitors each year to Arizona, but it's only one of numerous drawing cards, many of which are of historic significance. One of the seven natural wonders of the world, the canyon offers multi-colored walls carved by the Colorado River. Other breath-taking historical features abound in the Grand Canyon State, including the Petrified Forest, Painted Desert and Colossal Cave. The historic boom towns sprang up in the late 1800s when gold was discovered, and the Vulture Mine in Wickenburg yielded more than $20 million of the precious mineral. Some of the boom towns turned to ghost towns over the years, however, and they dot the landscape. "America's Largest Ghost Town" is Jerome, which produced a billion dollars worth of copper, gold and silver. It was designated "the wickedest town in the West" by a New York newspaper. Other historic towns include Bisbee, a copper-mining town, and Oatman, a gold-mining town that had its own stock exchange. Tombstone, Rawhide and Tortilla Flat are remnants of the gun-slinging past. Wyatt Earp, Bat Masterson and Doc Holliday garnered their reputations at Tombstone, where the Gunfight at OK Corral can be relived. Other attractions in "the town too tough to die" are Boothill Cemetery, the Bird Cage Theatre and the Crystal Palace Saloon. Reminders of the rugged Old West also can be seen in Arizona's mountains and cliffs. Montezuma Castle, a five-story apartment house built by the Sinagua Indians in 1250, was given its name by pioneers who discovered it. The castle, Fort Verde Historic Park and Tuzigoot National Park, home of more Indian ruins, are near Camp Verde in the Verde Valley. Fortaleza, an ancient fortification, petroglyphs and San Lucy, an Indian village, are near Gila Bend. Other Indian artifacts and cliff dwellings can be found at Navajo, Tonto, Walnut Canyon, Canyon de Chelly, Chiricahua, Casa Grande Ruins and Wupatki national monuments. Kinishba Ruins, Besh-ba-Gowah ruin, Homol'ovi II, Aravaipa Canyon and Prescott National Forest are homes of more Indian history. Cochise Stronghold, near Tucson, is a granite fortress used as a hideout by the Apache warrior. The famous Apache Trail, located east of Phoenix, was used by Apaches as a short-cut through the mountains to reach early Salt River Valley settlers. To protect the settlers, many cavalry posts were built. Fort Apache housed troops who battled the Apaches, and Fort Bowie was the scene of skirmishes with Indians led by Cochise and Geronimo. The fort, built southeast of Willcox in 1862, is the site of Geronimo's surrender. The nation's only active post is near Tucson at the Fort Huachuca Historical Museum, which is now the home of the U.S. Army Information Systems Command. Fort Yuma and the Yuma Territorial Prison were important to territorial development, and the St. Thomas Mission is located at the fort.

The state's most famous mission, the San Xavier del Bac Mission just south of Tucson, was built by Spanish missionaries 300 years ago and is used today as a spiritual center for the Papago Indians. Its domes, carvings, arches and flying buttresses distinguish it from other missions. The Mission San Jose del Tumacacori, located south of Tubac, was built by Franciscan friars and Indians in the early 1800s. Nearby is the Presidio de San Ignacio de Tubac, established by the Spaniards in 1752, where 50 cavalrymen were stationed to control the Indians and further explore the Southwest. The century-old Our Lady of Guadalupe Church and Shrine is in Graham County. Besides cave dwellings and forts, Arizona

ARIZONA GOVERNMENT



The reproduction of the state seal is only for the purpose of recognition and in no way implies that this book is a state publication. **STATE SEAL** The official seal was approved by Article 22, Section 20 of the Arizona State Constitution and adopted in 1911. The state's main enterprises are symbolized on the face of the state seal that includes a background of a range of mountains with the sun rising behind the peaks. To the right of the mountain range is a storage reservoir and a dam, below which, in the middle distance, are irrigated fields and orchards reaching into the foreground, at the right of which are grazing cattle. On the left, in the middle distance on a mountainside, is a quartz mill in front of which, in the foreground, is a miner with a pick and shovel. Above is the motto "Ditat Deus," which means "God Enriches." In a circular band surrounding the seal is inscribed: "Great Seal of the State of Arizona" and the year of admission to the Union—1912. **STATE FLAG** The flag was designed by Col. Charles W. Harris, Adjutant General from 1912-18 and from 1923-28. According to Harris, the suggestion that the state adopt a flag was made by members of the state's 1920 rifle team, which, unlike all other states represented at a national shooting match, had no emblem. The first flag was sewn by Nan D. Hayden. The lower half of the flag is a field of blue surmounted by 13 equal segments of alternating red and yellow rays. In the center of the flag is superimposed a copper colored five-point star. The flag represents the copper star of Arizona rising from a blue field in the face of the setting sun. **STATE GEM** Turquoise, the blue-green, waxy-surfaced stone used for centuries in Southwest Indian jewelry, is the state gem. It can be found throughout the Southwest and is composed of hydrous oxide of aluminum and copper. Adopted in 1984. **STATE BIRD** The cactus wren, a woody brown bird with a speckled breast. Adopted in 1931. **STATE TREE** The blossom of the saguaro cactus, a white, waxy flower that appears in garlands on the tips of the long arms of the cactus during May and June. Adopted in 1931. **STATE ANTHEM** "Arizona March Song" by Margaret Rowe Clifford and Maurice Blumenthal. Adopted in 1919.

CONSTITUTION OF ARIZONA

The history of government in Arizona dates to 1863 with the formation of the territorial government, and includes an arduous, 50-year struggle between political factions. Between 1863 and 1912—when Arizona became the 48th state—the trail to constitutional government and statehood was measured in fits and starts. When the Territory of Arizona was created in 1863, it had no schools, no churches, no libraries, no newspapers and no real cities. Between the time of the territory's creation and 1890, most Arizonans were concerned with developing those trappings of society and with such integral matters as developing mineral wealth, establishing towns, creating farms and ranches and securing railroads. By 1890, the territory was relatively secure and thoughts began to turn to self-government and the growing hue and cry for statehood. Under the administration of Gov. John Irwin, the territorial legislature in 1891 passed an act authorizing a constitutional convention, despite the fact that Congress had not passed an enabling act. The convention met in Phoenix and included 17 Democrats and five Republicans. After two months of work, the document was submitted to the voters who endorsed it by a two-to-one margin in December 1891. The constitution, however, ran into strong opposition in Washington because it declared silver as the legal currency for the payment of state debts. At that time, the money issue was a national issue with most congressmen believing that only gold should serve as currency.

A bill to admit Arizona to the Union won House approval, but died in the Senate. The next 16 years saw a succession of territorial governors and not much progress toward statehood, though Gov. Oakes Murphy in 1900 lobbied the Republican convention for just such a plank. He secured such a commitment, but hopes dwindled when President McKinley in 1901 toured the territory and made only vague promises of statehood. The assassination of McKinley propelled Theodore Roosevelt to the White House, and hopes for statehood were renewed when Col. Alexander Brodie was named governor. A statehood bill was quickly introduced, but opposition suddenly surfaced from another quarter when Sen. Albert Beveridge of Indiana introduced an amendment calling for Arizona and New Mexico to be admitted as a single state. In April, 1904, just such a bill was introduced, specifying that Santa Fe, New Mexico be designated the state capital. Arizonans were indignant at the proposal, and the territory's legislature in early 1905 passed a resolution protesting the bill. The resolution stated, "It threatens to fasten upon us a government that would be neither of, by, nor for the people of Arizona. It would be a government without the consent of the governed. We would rather remain forever a territory than to accept statehood under such condition." The ensuing battle resulted in the resignation of Brodie and the appointment of Judge Joseph Kibbey. By then, the skirmish for statehood was being fought in Washington as Beveridge pushed his plan for joint statehood. That debate finally quieted when Sen. Joseph Foraker of Ohio added an amendment proposing that both Arizona and New Mexico vote on the idea of joint statehood, with the proviso that if either rejected it, the issue would die. New Mexicans passed the proposal, but Arizonans rejected it by a five-to-one margin. The issue of joint statehood was dead, but Arizona was no further along in its quest to