

USA

Federal Reserve Bank of Dallas / 2001 Annual Report

# Taking Stock in America

Resiliency, Redundancy and Recovery  
in the U.S. Economy

## A LETTER FROM THE PRESIDENT

### The Economy in 2001

For a year that was eclipsed by the September 11 tragedy, the economy ended 2001 on a positive note. While the economy weakened in late 2000 and limped into 2001, overall growth was positive for almost nine months before the terrorist attacks soured the third quarter and turned it negative.

The good news is that the economic expansion lasted a record 10 years. The National Bureau of Economic Research put its peak at March 2001, which means the recession began in April when total employment turned down. Growth resumed in the fourth quarter—surprising most forecasters—which means the recession had only one negative quarter.

### Monetary Policy

The early recovery resulted largely from the most aggressive easing of U.S. monetary policy in history. The Fed pumped up money growth last year, cut the target federal funds rate from 6.5 percent to 1.75 percent and reduced the discount rate from 6 percent to 1.25 percent. While the recovery has already begun, its strength and durability remain uncertain. Inflation declined during the recession and seems poised to decline further as growth accelerates in an economy with considerable slack. Talk that monetary policy had become ineffective—and was like pushing on a string—subsided as fourth-quarter numbers came in. The lag in monetary policy makes it more like sipping vodka than pushing on a string.

### Paradigm Lost? Or Paradigm Regained?

We can't know yet whether the economy, once recovered, will get its mojo back and resume the enhanced growth rates of the late 1990s—the New Economy period—or whether growth will retreat to the glacial pace of the previous two decades. The hallmark of the New Economy was an acceleration in productivity growth that made other good things possible—faster output and employment growth and lower unemployment rates with less inflation.

Even during the recession, productivity continued to grow nicely, an encouraging sign for the future. Productivity increased about 2 percent last year on average and at a rate exceeding 5 percent in the fourth quarter. Aside from its favorable implications for our standard of living in the long



run, productivity growth in the near term reduces unit labor costs and should help restore the profitability needed for a sustained recovery without stoking inflation.

If the new economic paradigm was lost—which I doubt—I expect it to be regained. My new-paradigm frog, the unofficial mascot of the New Economy, may be in hibernation, but it hasn't croaked. Looking toward the future, let me just say that I'm up to my hip boots in tadpoles.

### The Fed in the Payments System

In addition to easing monetary policy, the Federal Reserve helped sustain the nation's payments system in the crucial days following September 11. With the other Fed governors traveling, Vice Chairman Roger Ferguson exercised leadership that would have made Walter Bagehot proud. Bagehot's 1873 book, *Lombard Street*, recommended lending freely at high interest rates when the central bank needed to act as lender of last resort. We improved on that by lending freely at low interest rates and by pushing rates down further.

In addition to providing substantial reserves through open market operations, the Fed opened the discount window to keep large-dollar payments flowing despite some firms' tem-



porary inability to make payments because of physical damage to the payments infrastructure.

Donning my Reserve Bank hat, however, I am proudest of the Fed's decision to credit banks for deposited checks based on normal schedules despite our inability to deliver and collect those checks while the airports were closed. The substantial increase in check float that resulted must be recovered through check service fees and is a financial burden to us. But it illustrates the benefits of central bank participation in the payments system with a public service goal more important than the bottom line.

### **The Dallas Fed in 2001**

The Dallas Fed had another good year. Services to banks, other financial institutions and the Treasury grew, and the banks we supervise remain healthy and viable. We believe our research, public information and education activities continue to make valuable contributions to economic education and financial literacy and will aid in the public understanding and support of sound economic policies. On the management side of things, I didn't gain much ground in my lonely campaign for the use of larger fonts within the bank—especially in e-mails to me.

### **The Essay**

The swift recovery from the economic repercussions of September 11 demonstrates once again the vitality and resilience of the U.S. economy and the American people. That resilience and some of the reasons for it are the theme of this year's annual report essay, "Taking Stock in America: Resiliency, Redundancy and Recovery in the U.S. Economy."

### **A Personal Footnote**

2001 was a good year for me personally. I came out of the closet as an aspiring drugstore cowboy poet. I made new friends, and since September 11, I've changed my attitude toward New York City. It is now one of my favorite places. I like our renewed sense of patriotism and am delighted that wearing and displaying the American flag is no longer politically incorrect.

I met two Texas cowboy-poet icons last year, Red Steagall and Alan Damron, and my personal honky-tonk hero, Billy Joe Shaver. Billy Joe had a heart attack but is still packing them in. His buddy Waylon Jennings died recently of complications from diabetes, a malady I share. I also have a personal interest and stake in a couple of others. This has focused my mind more on the biotech industry than it might otherwise have been. Biotech is the great hope of the future and will likely play the same role in this decade that information and communications technology played in the last. So, let's get going, biotech. Time's a'wasting!

I've decided that Alan Damron speaks for many of us old boys in the large-font stage of life:

"... for the bleached blondes and the broncos, we try to stand tall."

Amen to that.



Robert D. McTeer, Jr.

# Taking Stock in America

## Resiliency, Redundancy and Recovery in the U.S. Economy



So much changed on September 11.

America sustained a terrible shock as a foreign enemy struck on U.S. soil for the first time since Pearl Harbor. Families mourned for lost parents, siblings, sons and daughters. The military went to war. Security tightened at home. The economy, already wobbly after a 10-year expansion, reeled as spending faltered and job losses piled up.

We suffered.

And we endured.

A diverse nation came together through outrage, mourning and recovery. Within months of the attacks, the nation was back on its feet, fighting a war on terrorism while everyday life moved toward normal. Leadership, national character and military might helped the United States rebound.

The economy played a central role, too. It hasn't gotten as much attention as political and military factors, but it shouldn't be underestimated. At a time of crisis, the most powerful economy on earth continued to function, adapting to changing circumstances and providing the resources to handle our national emergency.



The terrorists didn't put America out of business. Most people didn't miss a day of work. Consumers returned to the mall. Within two months, the stock market had recovered all its losses. The economy bent but didn't break. Indeed, it started to stabilize and regain strength within weeks. Despite all that had occurred, GDP managed to grow at a 1.7 percent annualized rate in fourth quarter 2001.

Today, the U.S. economy is more resilient than ever—better able to take a blow and bounce back. Our ability to handle adversity stems from several economic strengths that most of us take for granted. Size adds to stability and durability. Diversification, redundancy and decentralization help keep the system functioning even when key sectors are under stress.

American capitalism is vibrant, never stagnant. Like a living organism, it possesses a powerful instinct, even in adversity, to mutate, survive and grow. Free markets, relying on the clear signals sent by shifts in supply and demand, can adjust to new realities on a daily—no, hourly—basis. Without central direction, the system renews and refreshes itself. It recycles resources. It innovates. Entrepreneurs and highly skilled, well-educated workers strive to give Americans what they want.

The U.S. economy delivers—and not just when it comes to consumer goods and conveniences. It also provides the resources and know-how to increase our security and safety, areas of greater concern now. A free enterprise economy and democratic political system let the people, not a few bureaucrats, choose how to balance the material aspects of our living standards against our desire to reduce risk.

We, as Americans, can take this comfort in the wake of September 11: Our economy is our strength—one of the most powerful protections we have against our enemies.

EXHIBIT 1. **Strength in Numbers**

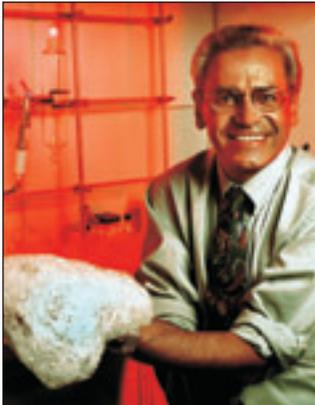
Annual GDP, Consumption and Defense Spending per Capita

Years	Period	Real GDP	Real defense spending	Real consumption
1776	Revolutionary War	\$ 1,449	n.a.	n.a.
1917–19	World War I	\$ 6,039	\$ 538	\$ 5,425
1941–45	World War II	\$ 11,724	\$ 3,381	\$ 6,213
2000	Today	\$ 34,996	\$ 1,050	\$ 23,743

All amounts in 2000 dollars.



America fought World War II on an average annual gross domestic product of \$1.6 trillion (measured in today's dollars). Today's economy—a \$10 trillion behemoth—is more than six times larger. Scaling the view down to the personal level, our GDP per capita is three times that of 1941–45, and per capita consumption is 3.8 times greater. The nation has far more economic muscle with which to safeguard its citizens.



Scientists at Sandia National Laboratories have developed a nontoxic foam for neutralizing chemical and biological agents such as anthrax.

**A Resilient Economy**

Every day, 135 million Americans report to work, striving to improve their living standards. Every day, 285 million U.S. consumers determine the pattern of employment and production through their spending on goods and services.

Americans make up just 5 percent of the world's population, but our \$10 trillion economy accounts for a quarter of global output. We own, consume and make more of nearly everything—from cars and houses to movies and sports events. We're among the world's leaders in just about every cutting-edge technology. We're the world's greatest trading nation—the biggest importer and the top exporter.

U.S. industrial production is six times larger than in 1950. Total output has expanded more than fivefold. So has the capital stock—a measure of the economy's capacity to produce goods and services.

It's foolhardy to pick a fight with a rich nation. The greater the economic power, the more a nation can sacrifice to fight its enemies while still attending to the needs and wants of its population.

The U.S. economy had a per capita income of \$34,996 in 2000. In the 1940s, the nation fought and won World War II, against a powerful, fully armed enemy, with just a third of today's economic power—\$11,724 per person, as measured in constant dollars. (*See Exhibit 1.*) Fighting the war against terrorism will cost billions of dollars. But with its huge economy, the United States can afford the tab.

Annual defense spending per capita during World War II was an inflation-adjusted \$3,381—or 29 percent of the nation's total production. Today, each American's share of the defense budget comes to \$1,050, just 3 percent of our total output. Military spending will go up over the next few years, but the country will still live comfortably while confronting its

EXHIBIT 2. **Strength in Diversification**  
A Broader Economy

	Percentage of GDP	
	1947	2000
Manufacturing	28.5	16.0
Retail trade	11.4	7.9
Agriculture	8.3	1.2
Federal government	8.2	3.4
Real estate	7.2	9.9
Transportation	5.7	2.8
State and local government	4.0	7.3
Construction	3.7	4.1
Mining	2.7	1.1
Electric, gas and sanitary services	1.5	2.0
Health services	1.5	4.8
Communications	1.3	2.5
Banking and finance	1.3	5.2
Insurance	1.0	2.1
Other	13.7	29.7



Since its founding, the nation has experienced numerous swings in economic activity. In the predominantly agrarian 1800s—even as late as the Dust Bowl era of the 1930s—weather conditions alone could alter the course of GDP. As America industrialized, farming became less dominant, and manufacturing grew in importance to sometimes balance (and other times amplify) agriculture’s cycle. Over time, factory output grew dominant and put its own stamp on GDP. As recently as 1947, manufacturing, retail trade and agriculture made up nearly half of GDP, together exerting a large influence on the business cycle.



America’s transportation sector accounts for just 2.8 percent of aggregate output—compared with 5.7 percent in 1947—0.8 percent being transportation by air. The economy works continuously to become more stable by developing substitute means of production and consumption—as it has, for example, with travel and transportation. The availability of road and rail transport helped soften the blow to the overall economy when U.S. air traffic was hard-hit after the terrorist attacks.

enemies. One way to look at it: The nation could *double* its military budget with just one year’s economic growth.

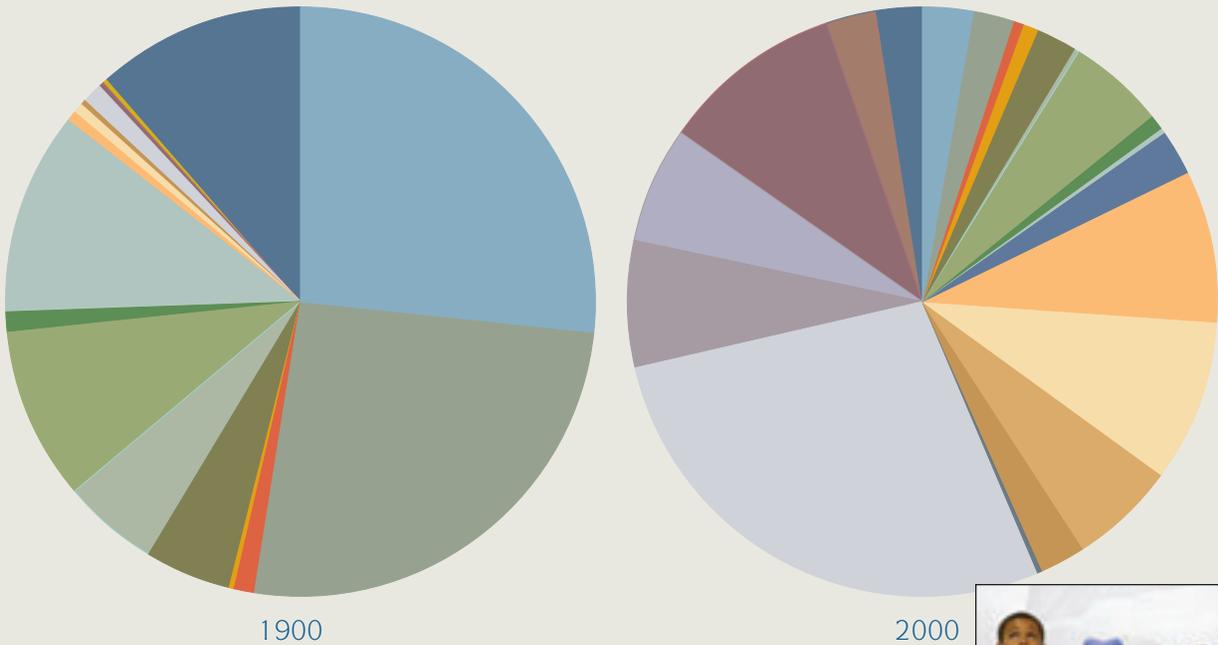
Throughout history, world powers have fallen because their economy couldn’t support their military. The latest, of course, was the Soviet Union, whose inefficient socialist economy couldn’t keep pace with the Cold War spending of the United States.

Guns or butter? Yesterday’s economic lessons focused on the consumer hardship caused when military spending sapped production of civilian goods and services. As the wealthiest nation in history, we have the ability to produce both guns *and* butter.

The U.S. economy hasn’t only grown larger. It’s also become more diversified. In 1947, three sectors—manufacturing, retail trade and agriculture—made up nearly half the U.S. economy. Over the past half-century, those industries have shrunk to a quarter of output. At the same time, the economic pie has expanded with the birth of whole new industries—such as computers and biotechnology—that add more to the mix. (*See Exhibit 2.*) Transportation now makes up less than 3 percent of total output. The airline industry, one of the

Today these sectors make up but a quarter of output. We’ve also developed numerous new sectors—such as computers, the Internet and biotechnology—and expanded yesterday’s small ones—entertainment and health services, for example—thereby diversifying and stabilizing output.

EXHIBIT 3. **We Are the World**  
Foreign-Born Population in the United States



- Key**
- Canada
  - British Isles
  - Germany
  - France
  - Portugal and Spain
  - Southern Europe
  - Austria and Switzerland
  - Eastern Europe
  - Europe (not elsewhere classified)
  - Scandinavia
  - Africa
  - Eastern Asia
  - South Eastern Asia
  - South Central Asia
  - Asia (not elsewhere classified)
  - Australia, New Zealand and Pacific Islands
  - Mexico
  - Other Central America
  - South America
  - Caribbean
  - Region or country not reported

sectors hardest hit after the terrorist attacks, accounts for less than 1 percent of the economy.

America’s employment base shows a similar increase in breadth. The 15 most common occupations, including farming and carpentry, made up two-thirds of all employment in 1900. Today, the top 15 jobs include computer operators and engineers, but together these jobs account for less than a third of all employment.

When it comes to personal investing, financial gurus preach diversification as a way to reduce risk. What’s good for investors is good for nations as well. In today’s economy, jobs are spread more evenly among a wide variety of industries, none of them overly dominant. Trouble in one or two sectors doesn’t create waves that swamp the economy as a whole.

Our immigrant population has become more varied along with our economy. In 1900, during an earlier wave of newcomers, more than half the foreign-born came from two countries, the United Kingdom and Germany. Now, as then, America’s prosperity, openness and freedom are magnets for people from other nations. But today’s foreign-born population comes from almost every part of the globe. (*See Exhibit 3.*) We are the world.

Immigration opponents might worry that we’re inviting potential enemies into the country. America, though, has grown



America is largely a nation of immigrants, or descendants thereof. Our strength lies not only in the size and diversification of our economy but also in the diversity of our people. A hundred and fifty years ago, immigrants from the British Isles and Germany made up more than 80 percent of our melting pot. In 1900, that figure was still more than half. Today, the scope of America’s foreign-born population gives much of the human race an interest in our well-being. Spoken by such a great variety of people, the words “I am an American” resonate strongly around the world.



In 2001, two of America's greatest cities—New York and Washington—came under attack. More than 3,000 lives were lost, and a substantial amount of property was destroyed. At one time, targeting such major population centers would have crippled the United States. But the growth of new centers from border to border and coast to coast gives us strength in numbers.

EXHIBIT 4. **Border to Border, Coast to Coast**  
More Population Centers,  
Spread Out Nationally

MSA population	1950	1970	2000
1,000,000+	12	33	50
500,000+	25	65	82
250,000+	49	125	147
100,000+	119	217	260
50,000+	157	243	280
Rural population	54,478,981	53,886,996	52,229,070

rich and powerful as a nation of immigrants who create human bridges to other nations. People from other parts of the world can learn firsthand about us, and we can learn about them.

We're more decentralized as well as more diverse. With each decade, America's population has dispersed across the continent, evening out the distribution of economic activity and thereby making the country less vulnerable to disruption.

In 2000, the United States had 50 metropolitan statistical areas (MSAs) of more than 1 million. In 1950, we had just 12. The number of MSAs with 100,000 people rose from 119 to 260 over those five decades. The decentralization makes it harder to cripple the nation. *(See Exhibit 4.)*

The rise of new population centers has been accompanied by a dispersal of economic activity. In 1950, a narrow swath of the country—from New England through the Great Lakes—produced 55 percent of the nation's income. By 2000, the region was down to 41 percent. Over the past 50 years, jobs and businesses spread south and west, with the sprawling Sunbelt rising from 36 percent of income to 53 percent.

Decentralization isn't only a matter of geography. Our transportation assets are widely distributed, with interstate highways crisscrossing the country, north to south, east to west. The number of interstate highway miles jumped from 32,000 in 1970 to 46,000 today. All told, we have nearly 4 million miles of roads.

Seeing interstates as security as well as economic assets isn't new. The system, designed in the 1950s, gave us a way to move military personnel and equipment and evacuate cities. It even provided a place for emergency aircraft landings. Just over a decade later, national security gave the impe-



In 1950, America had only 12 MSAs of 1 million people or more. Today we have 50, including such recent arrivals as Phoenix, Atlanta, Denver, Miami, Dallas and San Diego. The rural population has remained essentially the same since 1950.



## The Fed's Response

The Federal Reserve moved quickly to help keep the nation's financial and payments systems running smoothly after the September 11 attacks. Among the actions the Fed took:

- The New York Trading Desk injected an unusual amount of liquidity into the economy through repurchase agreements, called *repos*.
- The Fed lent money directly to banks through the discount window. The \$45 billion in discount loans outstanding on Wednesday, September 12, dwarfed the \$59 million average of the previous 10 Wednesdays.
- The Federal Reserve—along with the comptroller of the currency—urged banks to work with customers affected by the events. The Fed stood ready

with additional funds to assist in restructuring loans.

- Because the grounding of aircraft prevented the timely clearing of checks, the Federal Reserve extended almost \$23 billion in check float on September 12—about 30 times the average float over each of the previous 10 Wednesdays.
- The Fed established or extended swap lines with foreign central banks. Such arrangements enable central banks to temporarily exchange currencies to meet liquidity needs in foreign currencies. For example, the Fed and the European Central Bank agreed on an arrangement that allowed the ECB to draw up to \$50 billion in dollar-denominated deposits in exchange for an equivalent amount in euro.

The dollar deposits were available to European banks whose U.S. operations were affected by the events of September 11.

- The Federal Open Market Committee reduced the federal funds rate target by half a percentage point, to 3 percent, on Monday, September 17, just before the New York Stock Exchange reopened. The Fed's action was seen as an effort to boost confidence in the economy. In announcing the rate cut, the Fed noted that it

would continue to supply unusually large volumes of liquidity to the financial markets “until more normal market functioning is restored.”

Deposits at Federal Reserve Banks give us a picture of the liquidity pumped into the economy. On September 12, deposits totaled nearly \$103 billion, more than five times the average of the previous 10 Wednesdays.

Adapted from C.J. Neely, “September 11, 2001,” *Monetary Trends*, Federal Reserve Bank of St. Louis, November 2001.

## A Monetary Snapshot

	Repos	Discount window lending	Float	Deposits at Federal Reserve Banks
Wednesday averages 7/4–9/5/01	\$27,298	\$ 59	\$ 720	\$ 19,009
9/12/01	\$61,005	\$45,528	\$22,929	\$102,704
9/19/01	\$39,600	\$ 2,587	\$ 2,345	\$ 13,169

Millions of dollars

tus to what would become the Internet, a worldwide information network that's everywhere, with no central location.

Like diversification, decentralization strengthens the economy by making it less vulnerable to major disruptions. Even with much of New York, a key financial center, hobbled after September 11, only a tiny portion of America's economic assets were out of commission. Most disruptions were brief. We benefited not only from backup and emergency systems but also from the know-how to get commerce up and running again.

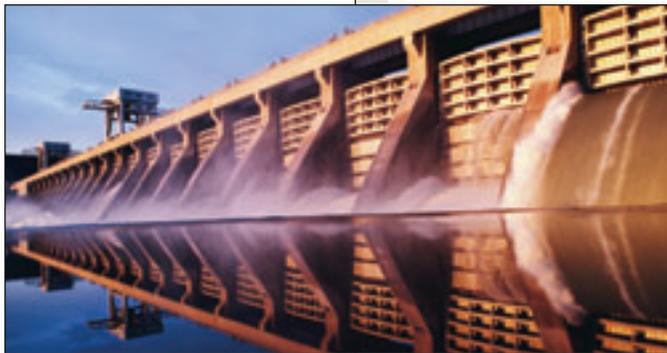
As it turned out, we received an unintended dividend from the intensive preparations for Y2K, when, many experts warned, a software glitch could shut down computers at the start of the new millennium. Valuable knowledge, once acquired, wasn't lost. Our open, competitive system put it to good use in reducing the economy's vulnerability to shock.

Financial markets functioned well in a time of crisis, providing a virtually uninterrupted flow of money and credit. The Federal Reserve did its part by settling accounts and bolstering confidence, keeping the payments system working smoothly. (See “*The Fed's Response*.”)

Our banking system found strength in redundancy. Commerce is less likely to grind to a halt in a crisis because we've developed ready alternatives to trips to the bank. The nation now operates 273,000 automated-teller machines, offering



EXHIBIT 5. **A Wealth of Resources**  
Our National Infrastructure



The nation's infrastructure is constantly growing, as businesses seek profit and government invests in public projects. The United States has nearly 4 million miles of roads and highways, more than 590,000 bridges and 77,000 dams, over 19,000 airports and nearly 12,000 utility companies. Natural gas pipelines have almost doubled since 1970 and now crisscross more than 2 million miles.

	1970	Current
Miles of interstate highway	32,000	46,000
Miles of public road	3,730,082	3,932,017
Number of dams	48,000	77,400
Number of bridges	571,936	590,153
Square miles of inland water area	138,319	138,989
Number of airports	11,261	19,098
Miles of fiber-optic cable	0	39,000,000
Number of utility companies	6,256	11,662
Number of cellular sites	0	114,059
Number of cellular towers	0	104,000
Number of Internet web sites	0	31,299,592
Number of web hosts	13	109,574,429
Number of U.S. satellites in orbit	n.a.	700
Number of ATM terminals	1	273,000
Miles of petroleum pipeline	176,000	157,000
Miles of natural gas pipeline	1,121,178	2,039,173

access to cash 24 hours a day. In 1970, the main office of Chemical Bank in New York had the country's only ATM, so customers of other banks had to conduct their business during office hours. (See Exhibit 5.)

We can continue spending with less cash in our pockets. Just 16 percent of American families had a general-purpose credit card in 1970. Today, nearly 70 percent do. On top of that, the number of point-of-sale terminals, which process transactions without cash, jumped to nearly 2.4 million in 2000, up from 53,000 a decade ago.

All across the economy, we have more than the bare minimum of what we need.

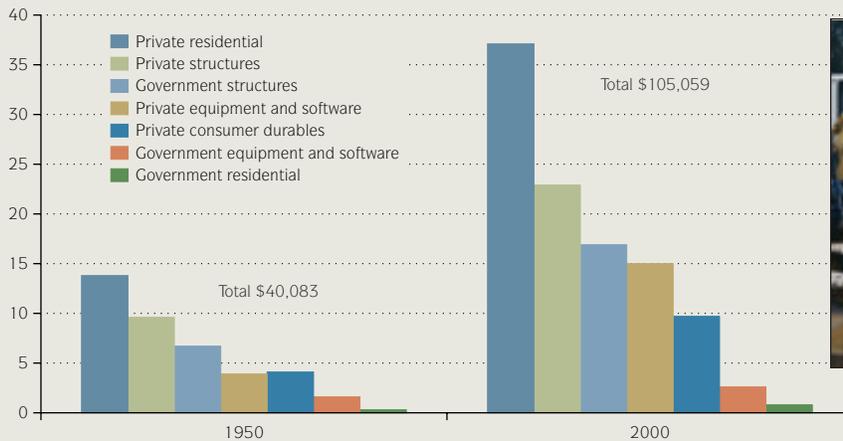
Until the early 1970s, delivering messages usually involved one of two means of communication—a telephone monopoly or the U.S. Postal Service. In today's economy, the channels are proliferating. In the past two decades, an innovative marketplace has added fax machines, electronic mail, Internet chat rooms and wireless handheld devices. We have a multitude of choices for telecommunications services. Business is booming for private alternatives to the post office—such as FedEx Corp.—that provide door-to-door service.



In 1970 we had no fiber-optic cable in place, no cellular sites or towers, no Internet sites, one lone ATM, no point-of-sale terminals and only a handful of satellites. Today these tools abound, making commerce easier, faster and more reliable.

## Capital Stock per Person

2000 dollars (in thousands)



The greater a nation's capital stock, the greater its capacity to produce and to endure loss. In 2000, the value of the nation's capital stock reached a record \$30 trillion, five times 1950's level, measured in constant dollars. As devastating as the property loss was on September 11, it represents just 0.05 percent of national real wealth.

One measure of national wealth is the stock of real capital—residential and commercial buildings, dams, roads and bridges, factories, equipment and software, consumer durables and the like. At \$105,059, our stock of real capital per person is more than 2.5 times greater than in 1950.



The largest component of real wealth is our housing stock, at over \$37,000 per person (an average of nearly \$150,000 for a family of four). The fastest growing component of our capital stock is private equipment and software, which increased more than sevenfold over the past half century, nearly fourfold per capita.

Television also employs a growing variety of delivery systems. In addition to the traditional broadcasting towers, signals arrive in our homes via cable, satellite and computer modem. Satellite radio, introduced in 2001, offers listeners myriad news, weather, sports and music stations and reliable service no matter where they travel.

A telephone in the pocket or purse has become an everyday convenience, with 128 million Americans owning cell phones. The number is continuing to rise rapidly as many of us seek the peace of mind that comes with portable communications. A cell phone is no longer a pricey luxury. The average bill fell from an inflation-adjusted \$160 a month in 1985 to \$46 in 2001.

With landlines in parts of Manhattan out of commission or inaccessible, cell phones gave those affected by the World Trade Center attack a way to reach out to family and friends. Many New York City firms turned exclusively to mobile communications to conduct business.

Overlapping and competing systems provide the protection of redundancy. If one method or location fails, substitutes can keep the wheels of commerce turning.

Our infrastructure runs deeper and broader than ever. Since 1970, the miles of natural gas pipelines have nearly doubled, as has the number of electric utility companies. The number of airports has nearly doubled since 1970 to 19,098, with more flights providing options for travelers. Nearly 40 million miles of fiber-optic cable stitch the nation together. In the heavens above, 700 U.S. satellites provide a mobile communications infrastructure impervious to attack from all but the most advanced nations.

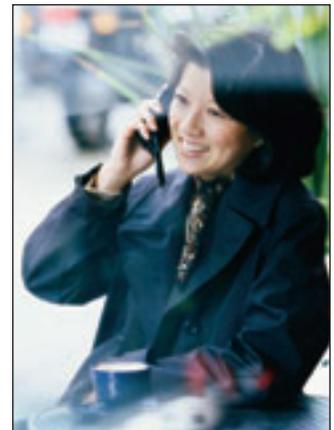




EXHIBIT 6. **Knowledge Is Power**

	1950	1970	2000
High school education	34.3%	55.2%	84.1%
College education	6.2%	11.0%	25.6%
Number of degrees conferred:			
Master's	58,183	208,291	398,000
Doctoral	6,420	29,866	45,200
Professional	15,191	26,948	57,688
Computer in the home	0%	0%	57.6%
Households with Internet access	0%	0%	41.5%
Patents issued	47,800	67,700	175,500
Median age of population	30.2	28.1	35.3

In 1950, only 6.2 percent of the U.S. population age 25 and older was college-educated. Today, the figure is more than four times that, at 25.6 percent, the highest of any nation. Since 1950 the number of master's degrees and doctorates conferred annually has jumped sevenfold, while professional degrees awarded are up from just 15,191 to nearly 58,000 a year.

## Human and Technological Wealth

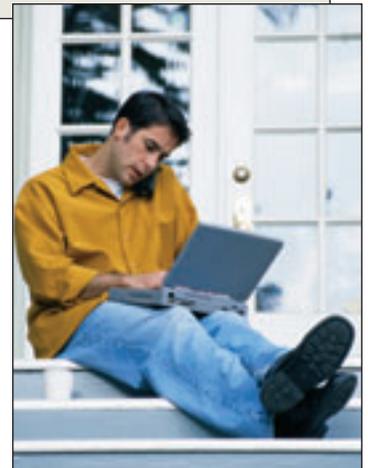
The nation is smarter than it used to be—both in its human capital and in its infrastructure.

The United States leads all other nations with a quarter of its population college-educated in 2000, up from just 6.2 percent in 1950. Roughly 400,000 master's degrees are awarded each year, nearly seven times the number in 1950 and double the 1970 rate. Doctorates and professional degrees have been rising, too. (See Exhibit 6.)

Knowledge isn't just a matter of formal education. It's also experience. The median age climbed to 35 in 2000, the highest ever. By comparison, the figure for 1900 was 23; for 1950, it was 30. If age is a proxy for accumulated know-how, both on the job and off, an older population should be better equipped to solve problems.

What's more, knowledge isn't just the province of humans in today's world. It's embedded in the machines we use, thanks to the spread of increasingly powerful computer chips over the past quarter century.

The signature invention of our times, the microchip spawned important technology spillovers. It started in the 1970s with the birth of the personal computer industry. The 1980s brought "smart" products as companies incorporated chips into cell phones and other devices. The 1990s emerged as the decade of the Internet, with e-mail, e-commerce and e-entertainment.



To leverage our education, Americans routinely use superfast computers that can tap more than 31 million web sites. The United States has over a third of the world's computing power, 66 percent of us have access to computers at home, business or school, and 54 percent use the Internet.



Aside from a handful of mainframe computer operators, few Americans in 1970 had access to a computer, and the Internet's forerunner—the ARPANET (Advanced Research Projects Agency Network)—linked just a few researchers. By one count, the number of U.S. scientists and engineers engaged in research and development today exceeds 3 million, double that of the 1970s.

America controls nearly two-fifths of the world's computing power. We've stored trillions of lines of computer code. Our stock of business equipment and software is 20 times higher than in 1950. It represents a store of "canned" knowledge that simplifies operation, saves time, enhances reliability, reduces human error, and works day in and day out.

Smart products are all around us. Nearly every American family enjoys a wide variety of them—microwave ovens, VCRs and remote controls, to name a few. As amazing as these products are, the impact of the microprocessor goes far beyond household conveniences. In the business world, bar-code scanners and robotic devices lower costs and speed distribution. Important systems, such as communications, can operate with less human intervention, a factor that allows them to continue functioning in times of stress. Data-storage technology makes it easier and cheaper to duplicate records and store reams of information in more than one place.

The Internet, which became a staple of businesses and homes in the 1990s, is revolutionizing our lives. It provides instant access to information, making Americans better informed than ever. Consumers have a 24-hour global marketplace at their fingertips. Companies can interact with suppliers and customers to better manage their inventories. By linking sales to inventories and suppliers, modern technology is reducing unanticipated accumulation of unsold goods, often a source of economic instability. Point-of-sale scanners connect to warehouse databases and suppliers, so orders for new stock can match sales.

The inventory-to-shipments ratio hovered at 1.7 months from 1957, when data collection began, to the early 1990s. With the advent of supply-chain management, the ratio consistently declined in the 1990s and fell to a low of 1.3 months at the start of this decade.

With the Internet's power to communicate, employees are increasingly freed from the commute to the workplace. The number of U.S. telecommuters reached 28.8 million in 2001, an eightfold increase in 10 years' time. Many of us can work from home—or just about any other place—so maintaining the nation's production depends less on gathering employees at particular places.

Telecommuting isn't the only way modern technologies keep Americans working when a shock jolts the economy. If shifting forces lead to layoffs, the unemployed can turn to more than 300 online job-search engines, a service that



Whether the goal is fighting world hunger, preserving the environment, developing new vaccines to thwart bioterror or tracking global flows of terrorists' funds, knowledge is power—and no nation forges knowledge better than the United States.



EXHIBIT 7. **Winning the War**



**Military Deaths**

War	Deaths
World War I	116,516
World War II	405,399
Korean War	36,516
Vietnam War	58,198
Gulf War	148
1980–2000	563



More than 405,000 U.S. military personnel lost their lives in World War II; 58,198 were lost in Vietnam. Including the Gulf War, fewer than 600 military personnel have died since 1980 serving their country, testimony to a wealthy nation's ability to substitute spending and technology for the lives of its citizens. Smart bombs, night vision, military satellites, laser targeting devices, stealth fighters and much, much more—the strength and intelligence of America's military reflects that of our economy.

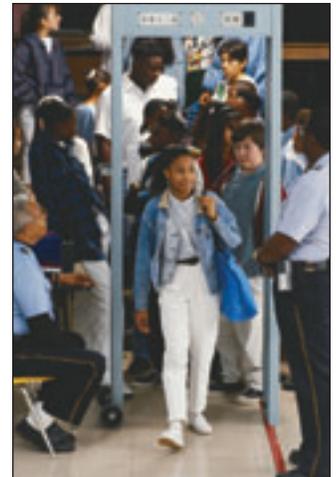
didn't even exist in 1990. What keeps us working keeps us stronger.

The country's world-class technology was on display in the precision bombing in Afghanistan. So-called smart bombs combine computer chips, laser guidance systems and global-positioning satellites to deliver ordnance on target and minimize civilian casualties. Unmanned drones, controlled from thousands of miles away, can return video feeds or drop bombs. Spotters on the ground use handheld computers and satellite telephones to provide real-time battlefield information.

Advances in battlefield technology are reducing the risks for America's fighting men and women. Including terrorist attacks, U.S. military personnel killed or missing in all hostile action from 1980 to 2000 total fewer than 600, a triumph of technology and tactics. *(See Exhibit 7.)*

In the wake of September 11, technology will help improve security at home. Sensors in public buildings and transport will help secure us against chemical or biological attack. Technology allows us to track the flow of money and freeze the assets of our enemies.

When it comes to increasing the safety of air travel, antiterrorist measures will go well beyond the metal detectors and X-ray machines now used in most terminals. Airports are starting to deploy explosives detectors that use medicine's CT technology to scan luggage. New identification technologies





Authorities used a Percussion-Actuated Nonelectric (PAN) Disrupter, developed by Sandia National Laboratories, to disarm shoe bombs that made it aboard a trans-Atlantic flight. The bomb-disabling tool is an example of how techno-wizardry is used to ensure our nation's security.

## Defense Spending

Percent of GDP



are capable of reading fingerprints, palms and facial features. With just a puff of air, a particle blaster can detect explosive residue on passengers' clothes and carry-ons.

Aboard aircraft, security could be increased with surveillance cameras and silent alarms that could be tripped by flight attendants. The technology exists to prevent planes from flying into specified zones or to take control of an aircraft from the ground.

On the ground, technology provides alternatives for many of the traditional ways of doing business. For example, teleconferencing has become an option for American business executives reluctant to travel. Malls are safe, but anyone who worries about the risks of crowded shopping areas can now buy just about anything online.

A complex, interconnected economy might seem more open to attack because communications, banking and other key systems are easily accessible. With technology making the world a small place, disruptions could ripple through the global economy. The response to September 11, though, shows that our economy isn't easily destabilized.

Technology can't eliminate all risks. New devices often have to overcome obstacles in cost, convenience and reliability. Even so, the market will do what it has always done—innovate. New safety features will help reduce the anxiety that might slow economic activity, allowing us to raise incomes and maintain jobs, even in a more dangerous world.

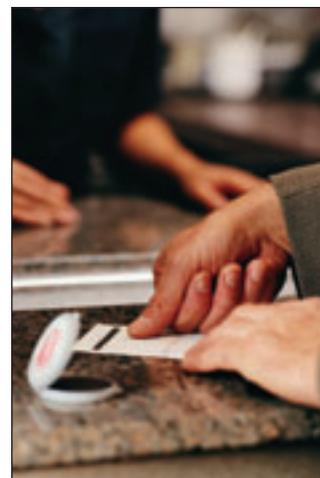


EXHIBIT 8. **Ten Steps Forward, One Step Back**  
Economic Downturns

25-year moving average



The U.S. economy has endured many blows in its 225 years—wars with foreign powers, our own Civil War, the Great Depression, the assassination of four presidents, stock market crashes, racial strife and more.



Nonetheless, the country has survived, learned and emerged stronger. Our stability is reflected in the economy, which today takes more steps forward and fewer steps back than at any time in history. A 25-year moving average of expansion versus contraction shows that for nearly a century—until the 1940s—the economy was in recession 40 to 50 percent of the time, taking one step back for nearly every step forward. From 1940 to 1982, our performance improved, and the frequency of recessions fell to an average of about 15 percent. More recently, the economy has shown even more stability, marching forward up to 90 percent of the time.



### A Stable Economy

As the nation recovers from the September 11 shocks, we're seeing how our economy handles hard times. A big, sprawling economy, with decentralized production, redundant systems and a deep storehouse of knowledge, runs with a dynamism that just won't quit.

Recessions still occur, of course. In the modern era, though, they're shorter and shallower than they were during much of the nation's history. From 1879 to the start of World War II, a moving average of the previous 25 years shows that the United States was in recession more than 40 percent of the time. Since 1953, the time has been reduced to less than 20 percent. In the past quarter century, the economy has been in recession less than 10 percent of the time. *(See Exhibit 8.)*

Since 1960, the average recession has lasted 11 months. Before 1940, only one in seven recessions was over within 11 months; a third of them hung on for at least 23 months. Between 1887 and 1950, recessions meant an average decline of 13 percent in industrial production. Since 1960, the toll has been reduced to 7 percent.

If history plays out, our current recession should be relatively brief. The National Bureau of Economic Research, the arbiter of the economy's ups and downs, has decreed that the 10-year expansion, the longest in U.S. history, ended in



Today's workers have more than 300 job-search engines they can access 24/7. What keeps us working keeps us stronger.

March 2001. As we went into 2002, though, the economy was showing signs of revival in rising stock prices, declining job cuts and improving consumer confidence.

Hard times always mean lost jobs, but our country's capacity to recover quickly from recession makes unemployment a short-term pain for most workers. After the previous recession, an eight-month interval that ended in March 1991, we made up all the job losses in the first year of recovery. Then we went on to create jobs for an additional 17 million workers.

In this recession, we worry about the 1.8 million Americans who lost their jobs in 2001. What past business cycles teach us, though, is that this economy can rapidly recycle workers from declining to expanding industries.

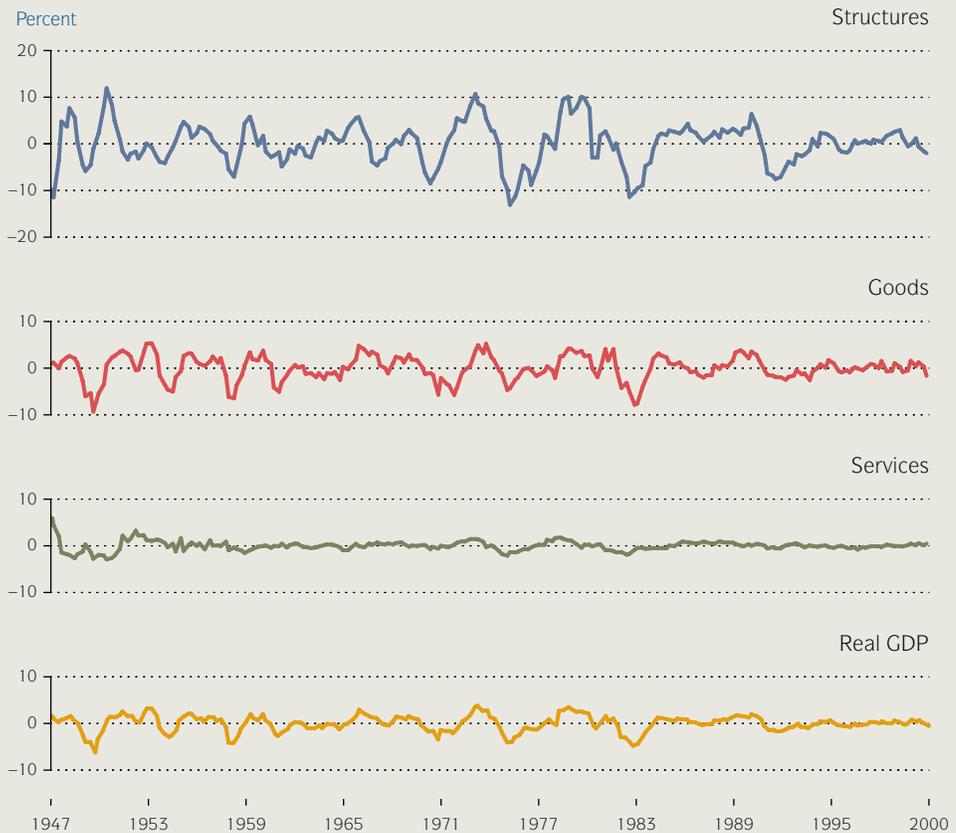
Our recessions are shorter and milder than they once were because boom-to-bust industries—such as farming, mining, manufacturing and construction—no longer dominate the economy. The volatile sectors are not only smaller slices of the pie, but they've also been offset by more stable pieces, especially services. Since 1947, goods-producing activities have fallen from 57 percent to 37 percent of total output. At the same time, service industries have increased their share of the economy from 34 percent to 54 percent.



The Commerce Department divides gross domestic product into three sectors—goods, services and structures. The most volatile sector is structures; the least, services. At 1.1 percent, the standard deviation from trend growth in services output is less than one-fourth that of structures (4.6 percent) and less than half that of goods (2.7 percent).

Two factors have helped make GDP growth more stable. First, the variation in each GDP component has declined. Second, the share of the economy owing to services has increased. In 1947, GDP was roughly 57 percent goods, 34 percent services and 9 percent structures. Today the shares are 37, 54 and 9 percent, respectively.

EXHIBIT 9. **Steady as She Goes**  
Deviations from Trend Real Growth



Over the business cycle, services exhibit less than half the volatility of goods and about a quarter of the instability of construction. (*See Exhibit 9.*)

Smoother business cycles aren't just the result of a shifting industrial base. Wealthy nations can maintain their spending in hard times with savings, credit and social spending. They can also afford more and better economic analysis, which should lead to sounder policies.

We've learned from past mistakes. Bad policies worsened the Great Depression of the 1930s. But with the financial shocks of 1987 (the stock market crash) and 1998 (the Asian crisis), as well as the aftermath of September 11, steady, experienced policymakers helped contain the damage and promote recovery.

Less severe recessions are proof of the economy's increased resilience. Confidence in our ability to bounce back should reduce anxiety, even if attacks or threats temporarily disrupt our economic lives. Being able to see beyond the fear and uncertainty bolsters consumer and business confidence, further enhancing our economic security.



America is on the go. We drive over 2.6 trillion miles per year, 6.5 times more than in the late 1940s. We fly 630 billion miles per year, nearly 80 times as much as back then. But travel isn't our only interest—safety is, too. Advances in auto safety have cut deaths per billion miles driven from an annual average of 82.7 in 1946–50 to 15.9 in 1996–2000, a reduction of over 80 percent.

**EXHIBIT 10. We Get Around**

**Transportation: Scope and Safety**

U.S. Annual Averages	1946–50	1966–70	1996–2000
Billions of miles driven	398	1,020	2,624
Motor vehicle fatalities	32,966	54,318	41,755
Deaths per billion miles driven	82.7	53.3	15.9
Billions of miles flown	8	110	630
Airline fatalities	140	145	90
Deaths per billion miles flown	16.7	1.3	0.14



The advance in airline safety is even more impressive. Including all causes—from engine failure to bad weather to terrorist acts—deaths per billion miles flown by commercial aircraft were down from 16.7 in 1946–50 to 0.14 in 1996–2000. That's a reduction of over 99 percent. With a death rate less than 1 percent that of travel by car, air travel is by far the safest form of transportation yet.



**A Balanced Life**

Amid headlines about terrorist attacks, it's easy to forget how far the United States has come in making life safer and more secure.

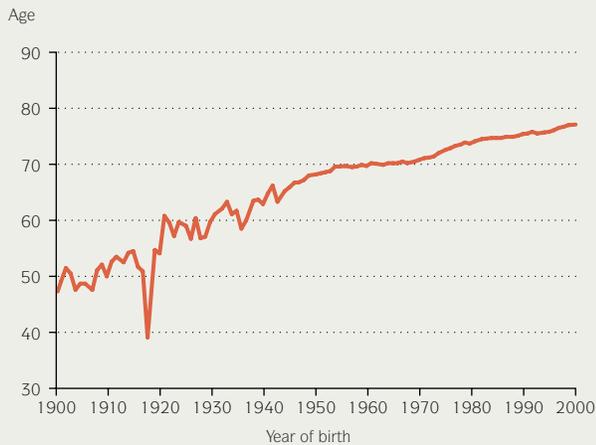
In the five-year period ending in 2000, deaths on American roads averaged 15.9 per billion miles driven, compared with 53.3 in the five years ending in 1970 and 82.7 for the immediate post-World War II period. *(See Exhibit 10.)* The skies have been getting safer, too. The five-year average for deaths per billion passenger miles flown fell from 16.7 in 1950 to 1.3 in 1970 to 0.14 in 2000.

The toll of death and disease has been dramatically reduced. Annual deaths per 1 million people are at an all-time low. The age-adjusted death rate has fallen by 40 percent since 1950. And since 1900 it's dropped by two-thirds, evidence of the steady progress we've made. Fatalities from nearly all major diseases have declined sharply from their peak rates. *(See Exhibit 11 on the following page.)*

The rate of fatalities due to natural causes fell from 1,349 per 100,000 people in 1950 to 826 in 1999, the most recent data available. Accidents and deaths are declining both at home and on the job. So are fatalities associated with natural disasters.

## EXHIBIT 11. A Matter of Life and Death

### Life Expectancy



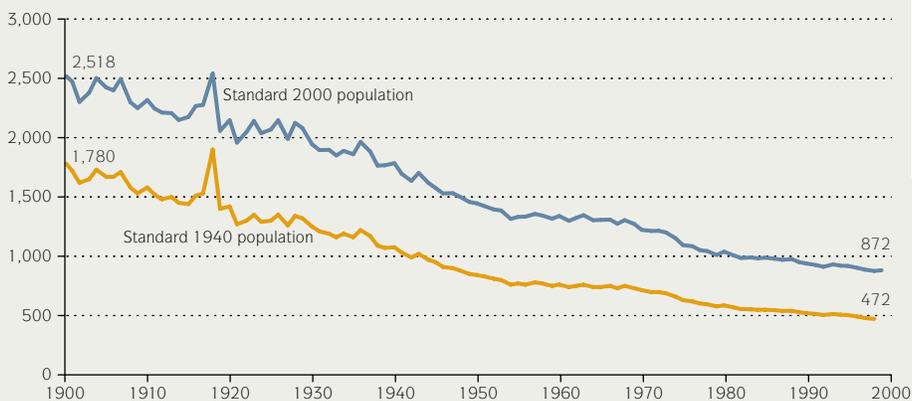
### Deaths Due to Natural Causes

Per 100,000 people



### Age-Adjusted Death Rates

Per 100,000 people



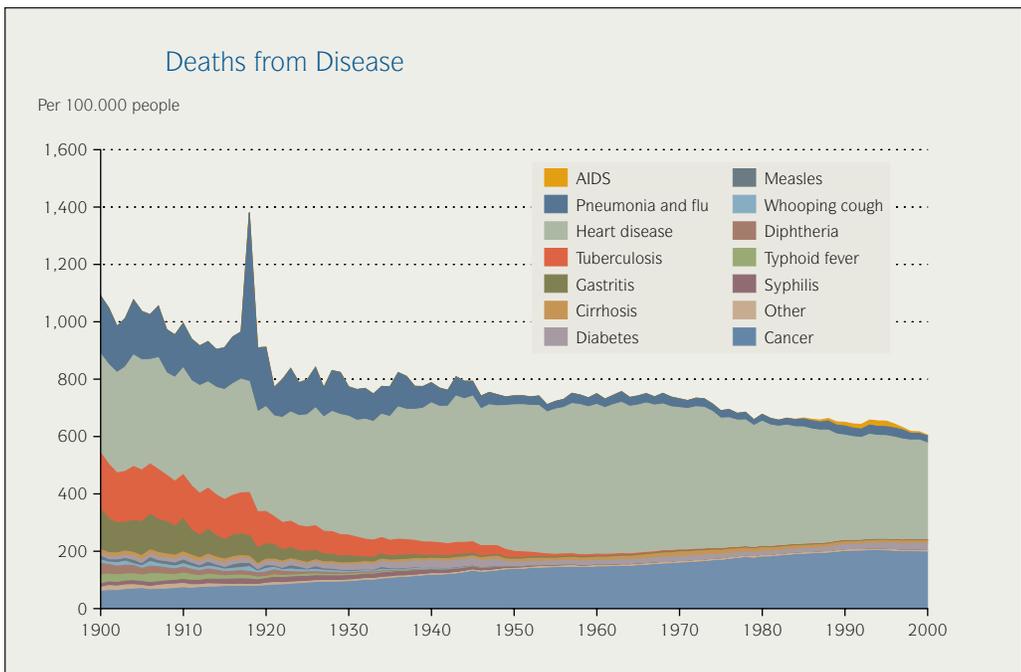
When she died in 1999 at age 119, two days short of the millennium, Sarah Clark Knauss (shown above with her great-great-great grandchild) was the oldest American ever. When Sarah was born in 1880, average life expectancy in the United States was 43. For the child born today, it's 77.1 years. Midrange projections put U.S. population growth at roughly 50 percent over the first half of this century, whereas the number of centenarians is expected to grow by more than 1,000 percent.

Virtually every component of the age-adjusted death rate has fallen. Death by natural causes is down 40 percent since 1950. Accidental death rates have plummeted. Since 1928, fatalities on the job are down 91 percent, those at home down 57 percent. The age-adjusted rate for homicide is at its lowest since 1964—declining from 10.5 per 100,000 in 1980 to 5.8 in 2000.

As a wealthy nation, we can afford to spend time and money to reduce life's risks, both economic and physical. We can put burglar alarms on our homes and cars. We can buy insurance on our property and our lives. We can reduce the financial risks of illness and old age by taking part of our pay in health benefits and retirement savings.

Today, we have investment opportunities available to only the wealthiest people even two decades ago. In 2000, nearly half of Americans owned mutual funds, and there were more than 8,200 funds to serve them. The diversification of investments makes individual Americans, and the country as a whole, less vulnerable to economic disruption.

Making America a safer place owes much to advances in engineering and technology. Divided highways, better roads,

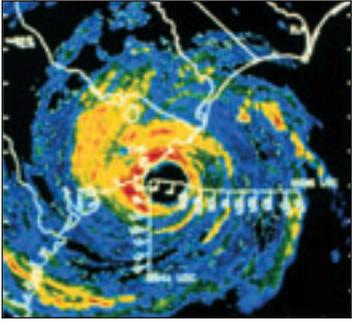
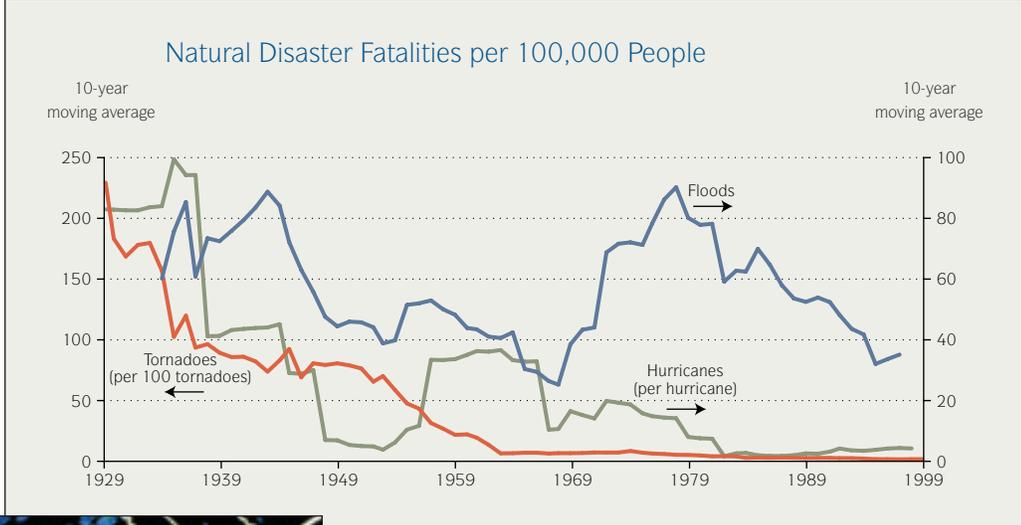


Americans today enjoy longer, healthier and more active lives than ever. We've come a long way.

Cholera, typhoid fever, bubonic plague, tetanus, polio, smallpox, typhus, leukemia, influenza, pneumonia, tuberculosis, measles, anthrax, leprosy, scarlet fever—the Centers for Disease Control and Prevention lists roughly 120 illnesses that have plagued the population. The overall death rate from 13 major illnesses is down by 45 percent over the century.

Death rates from heart disease—historically the largest killer—peaked at 527.3 per 100,000 in 1963 and are down by over a third to 339.3. Even the death rate from cancer has declined in recent years, albeit slightly.

Influenza and pneumonia, which killed nearly 600 people per 100,000 in 1918, claimed just 24 in 2000. U.S. death rates from the world's newest dread disease—AIDS—peaked in 1995 at 19.3 per 100,000 and subsequently declined by five-sixths to 3.2 in 2000.



Digitized radar warns the public of threatening weather. As a result, weather-related deaths have fallen drastically.

antilock brakes, radial tires and air bags are reducing the highway death toll. Sophisticated weather-forecasting gear provides warnings of severe weather, so we can take refuge in time. New medicines and treatments have reduced the incidence of fatal diseases.

Greater safety and security didn't come about by accident. It's what we, as a people, want. We put a high value on our lives and physical well-being, and we'll pay to protect ourselves against the sometimes unpleasant facts of life.

Safety and security are part of a balanced life. As our nation has grown richer, we've asked our economic and political systems to deliver a wide range of benefits. As a society, we can trade off some of one benefit to get more of another—for example, give up material goods for more



It's true that certain illnesses, such as Alzheimer's, have persistently increased. It's also true that biological weapons are of growing concern. But markets and government are winning civilization's long-term battle to extend and improve life.

leisure, pay raises for better working conditions. If after September 11 we want more safety and security, we have the luxury of being able to afford it.

We might, for instance, give up some convenience or leisure time to go through the additional passenger screenings that will make flying safer. We can reduce individual consumption—by accepting higher government spending—to bolster our national defense. In fact, that's already happening. In the weeks and months following the attacks, Congress provided more than \$60 billion for economic recovery and responding to the threats to our nation—five times the previous year's antiterrorism spending. In President Bush's proposed budget for 2003, outlays for defense and national security would increase by 14 percent from their present levels.

Like all aspects of economic life, the pursuit of security involves trade-offs. What we want is a balanced life, where we don't pay large prices for small gains. In the emotional atmosphere of national tragedy, the temptation lies in sacrificing all on the altar of security. That's not how we, as consumers and workers, live our lives. We accept a degree of risk every day—just by driving a car, for example. Even after September 11, workers are still reporting to jobs in skyscrapers, implicit proof that they consider the risks low relative to the rewards.

The private sector makes trade-offs as a matter of routine. Indeed, that is the function of prices—to reveal the cost of one good versus another. The market also allows us to make individual choices. Those who want more home security can spend extra money on motion detectors and laser beams, sacrificing the consumption of other goods and services. Those who fear flying can travel by car.

When it comes to public goods, governments encounter neither the discipline of relative prices nor the ability to accommodate individual preferences. The danger lies in increasing security in ways that sacrifice too much freedom, unduly penalize exporters, unnecessarily destroy jobs or ignore excess costs. We could, for example, make traveling safer by doubling or tripling passenger screenings—then doubling or tripling them again. At some point, the cost will outweigh the benefit.

Life is inherently risky. Misfortunes and tragedy occur far too often, and protecting ourselves must be weighed against cost and convenience. We'll never achieve a perfect safety record. Nor will the threat of terrorism disappear. We as Americans face a future in which we'll need to be more vigilant, examining our security systems and behaviors to reduce the risk.



Engineers design and test safer cars; forensic scientists discourage crime by solving 30-year-old cases; and scientists seek cures for disease, armed with knowledge of the human genome.



Vaccines under trial offer promise of eliminating AIDS and thwarting bioterror.



## A Secure Future

The U.S. economy is shock-resistant, not shockproof.

Surprise attacks that shut down transportation systems, frightened consumers and created political uncertainty dealt an undeniable blow. After September 11, however, our worst fears never materialized. We avoided the cascade of economic calamities some had envisioned. Our economy had the strength and flexibility to prevent a day of infamy from becoming an assault on the majority of Americans' livelihoods.

Terrorism striking on our own soil may have initially made the United States appear vulnerable. Our response, with military might overseas and economic muscle at home, reinforced America's status as the world's greatest power.

As a nation, we've launched not only a war on terrorism but also a war to protect our way of life. The tactics and the battleground differ from those of the past. But the fight does not. It's a fight we'd already been winning.

A dozen years ago, what happened on September 11 would have been celebrated in the capitals of the Communist bloc. Now, these former totalitarian nations want to be like us. Thirty years ago, American forces retreated from Vietnam, failing to defeat an enemy on the battlefield. Yet a modernizing Vietnam now looks forward to forging a future as a capitalist country. Sixty years ago, Germany and Japan might have



fought on the terrorists' side to destroy America. Today, they've joined nearly every nation in backing our campaign.

America today has more friends around the world and fewer enemies. The world marches to the beat of a culture that sets the pace in music, movies and consumer goods. Around the globe, nations are trying to emulate our economic and political systems. The Heritage Foundation's Index of Economic Freedom for 2002 shows a high tide for democracy and capitalism.

The terrorist strikes were an attack on our system. The immediate targets were the World Trade Center, a symbol of economic power, and the Pentagon, the center of military strength. The larger goal was to destroy our system of democratic capitalism. It won't succeed. America is too big, its people too free, its economy too strong and too flexible—in short, too resilient.

Time and again, America has been tested, either by crises at home or by enemies overseas. No matter what the challenge—the Great Depression, the autocratic forces of Germany and Japan in World War II, the communist foes in the Cold War—we have risen above it.

And we will again.

—W. Michael Cox and Richard Alm



**Acknowledgments**

"Taking Stock in America" was written by W. Michael Cox and Richard Alm. The essay is based on research conducted by Cox, senior vice president and chief economist, Federal Reserve Bank of Dallas. Sonja Kelly provided important research assistance throughout the course of the project. Also helping with research were Charlene Howell and Fanying Kong.

**Exhibit Notes and Data Sources**

**Exhibit 1 Annual GDP, Consumption and Defense Spending per Capita**  
 GDP: *Introduction to Macroeconomics*, Alan C. Stockman (Fort Worth: Dryden Press, 1996); "The Estimation of Prewar Gross National Product: Methodology and New Evidence," Robert J. Gordon and Nathan S. Balke, *Journal of Political Economy*, February 1989; Bureau of Economic Analysis (BEA).  
 Defense: *Historical Statistics of the United States: Colonial Times to 1970*, Census Bureau, 1975; Office of Management and Budget (OMB); Census Bureau.  
 Personal Consumption: *Historical Statistics*; BEA.  
 Population: *Historical Statistics*; Census Bureau. 1776 GDP was converted from 1994 dollars to 2000 dollars using the chain-weighted price deflator for GDP. Data before 1929 are GNP; after 1929, data are GDP. 1900–30 defense data are national security spending as a percentage of GNP, calendar year basis. 1940–2000 defense data are on a fiscal year basis.

**Exhibit 2 A Broader Economy**  
 BEA.

**Exhibit 3 Foreign-Born Population in the United States**  
 Census Bureau; *Historical Statistics. Canada* includes Canada, Bermuda and Northern America, not elsewhere classified. *British Isles* includes England, Scotland, Wales, Great Britain not elsewhere classified, Northern Ireland and Ireland. South Eastern Asia data are estimated.

**Exhibit 4 More Population Centers, Spread Out Nationally**  
 Census Bureau.

**Exhibit 5 Our National Infrastructure**  
 Interstate highways: *Statistical Abstract of the United States*, 1989, 2000.  
 Public roads: Federal Highway Administration.  
 Dams: U.S. Army Corps of Engineers.  
 Bridges: Federal Highway Administration.  
 Inland water: *Statistical Abstract*, 1977, 2000.  
 Airports: *Statistical Abstract*, 2000; Bureau of Transportation Statistics.  
 Fiber-optic cable: "How the Fiber Barons Plunged the Nation into a Telecom Glut," *The Wall Street Journal*, June 18, 2001.  
 Utility companies: County Business Patterns, 1970, 1999.  
 Cellular sites: Cellular Telephone Industry Association.  
 Cellular towers: Micrologic Research estimate.  
 Web sites and hosts: Hobbes' InternetTimeline, www.zakon.org/robert/internet/timeline.

**ATM terminals:** <http://inventors.about.com/library/inventors/blatm.htm>; www.cardforum.com/html/news/071700\_1.htm.  
**Petroleum pipeline:** *Statistical Abstract*, 1972, 2000.  
**Natural gas pipeline:** Department of Transportation. Earliest data for bridges are for 1983. A cellular site is a configuration of antennas that support service; site data are as of June 30, 2001. Data are the most recent available and vary from 1998 to 2001.  
**Capital Stock per Person**  
 BEA; Census Bureau.

**Exhibit 6 Knowledge Is Power**  
 High school and college education: Census Bureau.  
 Master's, doctoral and professional degrees: National Center for Education Statistics.  
 Home computer and Internet access: Census Bureau.  
 Patents: U.S. Patent and Trademark Office.  
 Median age: Census Bureau. *Professional degrees* includes D.D.S or D.M.D., M.D., and LL.B. or J.D. degrees. 1950 LL.B. and J.D. degrees are estimates based on data trends; 1955 number was 8,209.

**Exhibit 7 Military Deaths**  
 Defense Department.  
**Defense Spending**  
*Historical Statistics*; OMB.

**Exhibit 8 Economic Downturns**  
 National Bureau of Economic Research. Data end in March 2001 because of questions about how to measure the economy's performance for the remainder of the year.

**Exhibit 9 Deviations from Trend Real Growth**  
 BEA. Deviations are derived by applying a Hodrick–Prescott filter to the log of each (inflation-adjusted) series under observation—structures, goods, services and GDP.

**Exhibit 10 Transportation: Scope and Safety**  
 Motor vehicle travel: *Historical Statistics*; Federal Highway Administration.  
 Air travel: *Historical Statistics*, Air Transportation Association; Census Bureau.

**Exhibit 11 Life Expectancy at Birth**  
 Centers for Disease Control and Prevention (CDCP); *Statistical Abstract*, 2000.  
**Age-Adjusted Death Rates**  
*Historical Statistics*; Census Bureau; CDCP.  
**Deaths Due to Natural Causes**  
 CDCP.  
**Natural Disaster Fatalities per 100,000 People**  
*Statistical Abstract*, various years; *Historical Statistics*.  
**Deaths from Disease**  
*Historical Statistics*; *Statistical Abstract*, various years; CDCP.

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# The Year in Review

The Federal Reserve Bank of Dallas embarked upon the 21st century with renewed optimism and enthusiasm for the future of America. Although 2001 brought unprecedented challenges, the nation's citizens, institutions and economy showed remarkable strength and determination in the face of adversity. The Eleventh Federal Reserve District's economy is resilient and rebounding, and its financial institutions are strong. The Dallas Fed looks forward to a second century of providing efficient services and ensuring sound banking principles in a thriving New Economy, while remaining prepared for any challenge.

## Economic Overview

Ten years of economic expansion came to an end in 2001. Economic activity in the Eleventh District slowed throughout 2000 and turned negative in spring 2001, dragged down by the national and Mexican recessions and by the shock of September 11. However, the region's diverse economy shows signs of rebounding in 2002.



*Had it not been for the attacks on 9/11, the U.S. and Eleventh District economies would likely have avoided recession. However, the resiliency we have seen since the attacks demonstrates that America's economic system cannot be derailed by terrorists.*

**Harvey Rosenblum**  
Senior Vice President and Director of Research, who was at the World Trade Center on the morning of September 11

Recent sources of economic strength—high tech, trade with Mexico, energy and construction—became sources of weakness in 2001. The high-tech sector began to slow after Y2K and started shedding jobs in early 2001. The Mexican economy contracted, weakening export opportunities for Texas. The energy industry suffered as prices fell.

The region was hard hit by the economic impact of September 11. As the hub for several major airlines, Texas was particularly exposed to the downturn in the transportation sector. Tourism contracted. Oil prices shifted down in response to sharply lower world demand. Increased security provisions made trade with Mexico more costly by increasing border delays.

As the various props were knocked out from under the regional economy, measures of aggregate economic activity soured. By year's end, the seasonally adjusted Texas unemployment rate had climbed to 5.7 percent, up from 3.7 percent in December 2000. All the jobs gained in the subpar growth of the first quarter were lost by midyear. December over December, job losses in the Eleventh District were comparable with those in the nation as a whole.

However, despite the downturn, the region's long-term advantages remain in place. Diverse industries, central access to trade corridors, natural resources, affordable housing, proximity to Mexico, limited government and a favorable regulatory environment will continue to attract residents and firms alike. As the nation recovers from recession, the region should grow in 2002.

## Financial Services

The Bank's responsiveness allowed the Dallas Fed to provide uninterrupted services to customers following September 11. The Bank rose to the challenge, ensuring delivery of checks, access to cash and continued support of Fedwire operations.

To overcome the interruption of air service across the United States, the Dallas Fed immediately secured ground transportation to deliver checks. In a few cases, when ground transportation was unavailable, Bank employees used their own vehicles to ensure delivery.

The Bank experienced a higher than usual number of calls as customers became increasingly concerned about currency orders and the availability of armored carriers. Personnel were on 24-hour call and prepared to fill any emergency order. In the end, however, the September 11 attacks did not prompt an unusual increase in demand for cash.

As a result of disrupted communications, the main clearing bank for securities transfers experienced difficulty sending and receiving wires. Since the Fedwire system is critical to the liquidity of banks and other institutions, its hours were extended to meet the industry's needs.

Dedication to customer service did not begin September 11. It was in place throughout 2001.

The Federal Reserve System continued its effort to streamline the way it processes and delivers check services to financial institutions. The check modernization initiative is the largest automation project the System has ever undertaken. The efforts include a standard check-processing environment for all Reserve Banks, an enterprisewide system for check adjustments, redesign of the current image-processing infrastructure based on a single platform, and remote electronic access and delivery of check services over the Internet. As part of the national effort, the Dallas Fed coordinated the development and implementation of a suite of software programs that allows banks to access check services via the Internet.

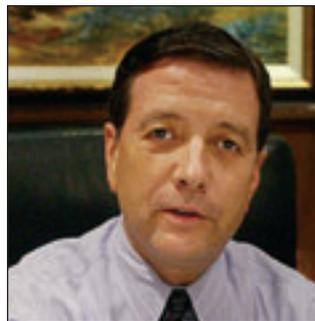
In addition to checks, the Fed is making the transition to other web-based services. Using FedLine® for the Web, the Dallas Fed began offering cash and savings bond ordering to District banks. Expanded services will be available in 2002. With FedLine for the Web, products and services will be more readily available and accessible to customers nationally.

The Dallas Fed provided leadership for the Federal Reserve System in the implementation of standard software for cash services. This software will be used by Federal Reserve Banks across the nation to serve their customers.

The Bank processed record volumes of currency. Receipts of notes from financial institutions were up 5 percent from 2000, and deliveries rose 12 percent. As a result, the Bank added currency processing capacity. The Dallas Fed and its Houston Branch completed auxiliary coin vault areas to store large volumes of coin.

Additionally, the Bank began serving as the telephone-based help desk for the U.S. Treasury's Pay.gov web site, which allows businesses and individuals to make payments to federal agencies via the Internet.

The Dallas Fed continued to provide other services to the Treasury Department. The Bank is one of three Reserve Banks that administer the *TreasuryDirect* program, which allows the public to purchase securities at auction and hold them directly with the Treasury. The Bank also manages the



*We did what we had to do to maintain stability in the nation's payments system.*

**René Gonzales**  
Vice President  
Payments Services  
Houston Branch



*During a time of extraordinary national confusion, fear and financial quandary, our team held fast, stayed focused and did what we do best—serve our country through our customers.*

**Bill Morse**  
Assistant Vice President  
Cash Department

Electronic Transfer Account (ETA<sup>SM</sup>) program, which provides a low-cost bank account for federal payment receipts.

To ensure continued quality service, the Dallas Fed enhanced communication with customers. For example, the Bank conducted information sessions for customers on check modernization initiatives. The Dallas Fed also used focus groups to better understand how customers use Bank products and services.

In an ongoing effort to reduce customers' costs, automated clearinghouse operations in Dallas were centralized to the Federal Reserve Bank of Minneapolis. As a result of restructuring across the Federal Reserve System, the price for ACH services has been lowered. Dallas Fed food coupon operations were consolidated to the Federal Reserve Bank of St. Louis' Memphis Branch.

## **Banking Supervision; Discount and Credit**

September 11, a slowing economy and rapidly declining interest rates created a challenging environment for Eleventh District banks. Yet through it all, they remain financially sound and well capitalized.

The Dallas Fed's role as a bank supervisor is to promote a sound financial system through fair and competent supervision of state member banks, bank holding companies and foreign agencies operating within the Eleventh District. The Bank also fosters consumer confidence in the banking sys-

tem by enforcing consumer compliance laws and reviewing the performance of state member banks in meeting their communities' credit needs.

Throughout the year, the Bank continued to refine the examination process, improving the timeliness of providing feedback to management and boards of directors. Bank examiners completed 125 on-site reviews and processed reports in an average of 26 days, a 20 percent reduction from the previous year.

Additionally, the Dallas Fed continued to inform the banking community on supervisory issues by providing speakers and panel participants to banking schools and trade associations. The Bank also conducted sessions on the roles and responsibilities of board members for District financial institutions.

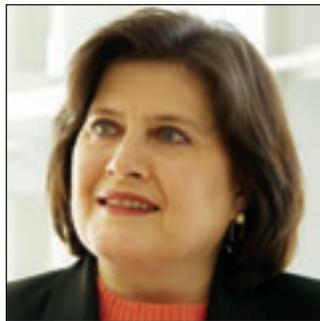
The Bank's contributions to supervision activities were not limited to the Eleventh District. Dallas Fed staff contributed greatly to System initiatives, educational efforts, work groups and task forces. The Bank also hosted major conferences for the System's regional and community bank and compliance examiners.

Dallas Fed staff worked closely with depository institutions following the September attacks to meet funding needs. During the crisis period, the Bank maintained communication with institutions to understand the effect events were having on their operations and to assist them in accessing the discount window if necessary.



*Events such as 9/11 highlight the importance of being abreast of local banking conditions to support Federal Reserve System efforts in maintaining financial stability.*

**Earl Anderson**  
Vice President  
Banking Supervision



*Our main objective was to let financial institutions know that we were fully operational and would do what was necessary to provide needed liquidity.*

**Ann Worthy**  
Assistant Vice President  
Discount and Credit

Throughout 2001, the Dallas Fed sought to educate District financial institutions on the use of the discount window, particularly the merits of the Bank's seasonal lending program. Discount window activity was down from 2000 levels, a reflection of the liquidity of District institutions during much of 2001.

The Dallas Fed played a key role in various System groups in the discount and risk areas. For example, the Bank converted the loan system used by Reserve Banks to a central system run and administered out of Dallas.

The Bank also implemented a new system to provide financial institutions a quicker and more efficient method to obtain account information, utilizing daily e-mails and faxes. Implementing this system reduced the number of mailings by about 600 per day.

The Dallas Fed worked with financial institutions and other Reserve Banks to reduce payments system risk.

## Research and Public Affairs

The border economy, economic education and economic analysis of key areas, including high tech and biotechnology, were among the many noteworthy public policy issues the Dallas Fed explored in 2001 through research, public information, publications and conferences.

Substantial resources also were directed to understanding the economic impact of the September 11 events and to discussing important topics such as e-commerce, energy deregulation, 2001 tax cuts and economic conditions in Argentina.

Bank publications during 2001 provided professional insight and free-market perspective on a wide range of public policy issues and economic trends. Articles in *Economic and Financial Review* focused on the changing nature of domestic capital markets and economic issues relating to Mexico. *Southwest Economy* included articles on energy deregulation, e-commerce and banking competition in the New Economy.

The Bank's 2000 Annual Report included the ninth in a series of essays discussing linkages between free enterprise, technological change and economic growth. Titled "Have a Nice Day! The American Journey to Better Working Conditions," the essay generated many speech requests from business and community groups.

The Dallas Fed published a special monograph, *The Border Economy*, highlighting the unique and dynamic Texas-Mexico border region. The publication, available on the Bank's web

site, contains compelling articles on such topics as the impact of education on border income, the outlook for affordable housing along the Rio Grande and the link between NAFTA and maquiladora growth.

The Bank made a particular effort in 2001 to post to its external web site timely essays on important economic topics and updates on current economic conditions. The web site includes analyses of regional and national conditions updated every six weeks and charts on the U.S. economy updated weekly.

The Dallas Fed's Center for Latin American Economics presented a roundtable on U.S.–Mexican issues for the news media. Bank economists offered information on their latest areas of research, including Mexico's fiscal reform, synchronization of the U.S.–Mexican business cycles, and immigration and trade issues.

The Dallas Fed also organized a San Antonio conference on Texas border trade in which experts addressed transportation challenges created by NAFTA. The conference brought together experts to discuss the importance of transportation infrastructure, methods to improve border efficiency and optimal investment levels for Texas' trade corridors.



*Immediately following September 11, we directed resources to discovering how the attacks affected the region's economy. We are now encouraged that the Texas economy is bouncing back and see signs that high tech is on the mend.*

**Mine Yücel**  
Assistant Vice President  
and Senior Economist  
Research Department



*Our immediate response provided highly visible reassurance to both employees and customers that the Bank was secure as it remained open for business.*

Domingo Castillo  
Captain  
Protection Department

The Community Affairs office provided information on prevailing community development topics, such as strategies for developing affordable housing, financial literacy and access to credit for small businesses. The Bank cosponsored a national research conference on how changing financial markets have affected community development, as well as a regional conference on how technological innovations have made financial services more accessible to low- and moderate-income people.

The Dallas Fed continued its traditional efforts to reach teachers and students through its popular economic education programs. The Bank sponsored a summer conference at the San Antonio Branch on financial literacy, targeting high school educators.

Additionally, the Bank hosted a conference for high school advanced placement economics teachers. This "A.P. Summit" focused on the New Economy as well as immigration, energy and high-tech issues. "Trade, Growth and the New Economy" was the subject of another conference for university and community college faculty.

The Dallas Fed worked with other Reserve Banks to develop and test an interactive Federal Reserve education web site ([federalreserveeducation.org](http://federalreserveeducation.org)). This innovative new site equips educators with teaching activities, curriculum material, quizzes—and much more.

Partnering with other organizations, the Bank cohosted a speaker series with the National Center for Policy Analysis, featuring thought-provoking presenters. These policy forums are continuing joint projects between the Bank and the NCPA.

## Security

Protection of operations, personnel, assets and facilities remains a top priority at all Federal Reserve facilities. The terrorist attacks clearly demonstrated the need to continue emphasizing security. In addition to strengthening protection strategy, the Dallas Fed's security professionals have remained in contact with local, state and federal authorities to ensure the Bank is well-informed and prepared to respond quickly to any threat. The Bank is committed to taking all necessary steps to ensure continuous and uninterrupted operations and service.



Ms. Holcomb and Mr. McTeer

## SENIOR MANAGEMENT

Standing (from left):

**Robert Smith III**  
*Senior Vice President in Charge, Houston Branch*

**Sam C. Clay**  
*Vice President in Charge, El Paso Branch*

**J. Tyrone Gholson**  
*Senior Vice President*

**James L. Stull**  
*Senior Vice President in Charge, San Antonio Branch*

**Harvey Rosenblum**  
*Senior Vice President and Director of Research*

**W. Michael Cox**  
*Senior Vice President and Chief Economist*

**Millard E. Sweatt**  
*Senior Vice President, General Counsel, Ethics Officer and Secretary*

**Larry J. Reck**  
*Senior Vice President*

**Robert D. Hankins**  
*Senior Vice President*

Seated (from left):

**Robert D. McTeer, Jr.**  
*President and CEO*

**Helen E. Holcomb**  
*First Vice President and COO*

**Joel L. Koonce, Jr.**  
*Senior Vice President*



## DALLAS BOARD OF DIRECTORS

Standing (from left):

**Malcolm Gillis**

*President, Rice University*

**Julie Spicer England**

*Vice President, Texas Instruments*

**H. B. Zachry, Jr. (Chairman)**

*Chairman and CEO, H. B. Zachry Co.*

**Patricia M. Patterson**

*(Deputy Chairman)*

*President, Patterson Investments Inc.*

**Ray L. Hunt**

*Chairman and CEO,*

*Hunt Consolidated Inc.*

**Kenneth T. Murphy**

*Chairman, President and CEO,*

*First Financial Bankshares Inc.*

Seated (from left):

**Matthew T. Doyle**

*Vice Chairman and CEO,*

*Texas First Bank*

**Judy Ley Allen**

*Owner, Allen Investments*

**Dudley K. Montgomery**

*Director, The Security State Bank  
of Pecos*



## EL PASO BOARD OF DIRECTORS

Standing (from left):

**Ron C. Helm**

*Owner, Helm Cattle Co.*

**Beauregard Brite White**

*(Chairman)*

*Rancher, J. E. White, Jr. & Sons*

**James Haines**

*Vice Chairman*

*El Paso Electric Co.*

**James D. Renfrow**

*President and CEO, The Carlsbad*

*National Bank*

**Lester L. Parker**

*President and CEO, United Bank*

*of El Paso del Norte*

Seated (from left):

**Gail Darling**

*(Chairman Pro Tem)*

*President, Gail Darling Inc.*

**Melissa W. O'Rourke**

*President, Charlotte's Inc.*



## HOUSTON BOARD OF DIRECTORS

Standing (from left):

### Lupe Fraga

*President and CEO,  
Tejas Office Products Inc.*

### Richard W. Weekley

*Chairman, Weekley Development Co.*

### Alan R. Buckwalter III

*Chairman and CEO, J.P. Morgan  
Chase Bank, Texas Region*

### Ray B. Nesbitt

*Retired President,  
Exxon Chemical Co.*

Seated (from left):

### Priscilla D. Slade

*President, Texas Southern University*

### Edward O. Gaylord

*(Chairman)  
Chairman, Jacintoport Terminal Co.*

Not pictured:

### Jeffrey K. Skilling

*(Chairman Pro Tem)  
President and CEO,  
Veld Interests Inc.*



## SAN ANTONIO BOARD OF DIRECTORS

Standing (from left):

### R. Tom Roddy

*Chairman, Clear Lake National Bank*

### Arthur R. Emerson

*Chairman and CEO,  
Groves Rojas Emerson*

### Daniel B. Hastings, Jr.

*President and Owner,  
Daniel B. Hastings Inc.*

### Ron R. Harris

*(Chairman Pro Tem)  
President and CEO,  
Pervasive Software Inc.*

Seated (from left):

### Mary Rose Cardenas

*Executive Vice President,  
Cardenas Motors Inc.*

### Patty P. Mueller

*(Chairman)  
Vice President/Finance,  
Mueller Energetics Corp.*

Not pictured:

### Marvin L. Ragsdale

*President, Iron Workers' District  
Council of the State of Texas*

**OFFICERS  
FEDERAL RESERVE BANK  
OF DALLAS**

**Dallas**

**Robert D. McTeer, Jr.**  
*President and CEO*

**Helen E. Holcomb**  
*First Vice President and COO*

**W. Michael Cox**  
*Senior Vice President  
and Chief Economist*

**J. Tyrone Gholson**  
*Senior Vice President*

**Robert D. Hankins**  
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**Joel L. Koonce, Jr.**  
*Senior Vice President*

**Larry J. Reck**  
*Senior Vice President*

**Harvey Rosenblum**  
*Senior Vice President and  
Director of Research*

**Millard E. Sweatt**  
*Senior Vice President,  
General Counsel,  
Ethics Officer and Secretary*

**Earl Anderson**  
*Vice President*

**Meredith N. Black**  
*Vice President*

**Gloria V. Brown**  
*Vice President*

**Lyne H. Carter**  
*Vice President*

**John V. Duca**  
*Vice President  
and Senior Economist*

**Billy J. Dusek**  
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**Robert G. Feil**  
*Vice President*

**William C. Gruben**  
*Vice President  
and Senior Economist*

**Evan F. Koenig**  
*Vice President  
and Senior Economist*

**Joanna O. Kolson**  
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**Kenneth V. McKee**  
*Vice President and  
General Auditor*

**Larry M. Snell**  
*Vice President*

**W. Arthur Tribble**  
*Vice President*

**Stephen P. A. Brown**  
*Assistant Vice President  
and Senior Economist*

**Terry B. Campbell**  
*Assistant Vice President*

**KaSandra Goulding**  
*Assistant Vice President*

**Donald L. Jackson**  
*Assistant Vice President*

**Johnny L. Johnson**  
*Assistant Vice President*

**Kathy K. Johnsrud**  
*Assistant Vice President*

**C. LaVor Lym**  
*Assistant Vice President*

**James R. McCullin**  
*Assistant Vice President*

**William C. Morse, Jr.**  
*Assistant Vice President*

**Dean A. Pankonien**  
*Assistant Vice President*

**John R. Phillips**  
*Assistant Vice President*

**Sharon A. Sweeney**  
*Assistant Vice President,  
Associate General Counsel  
and Associate Secretary*

**Gayle Teague**  
*Assistant Vice President*

**Michael N. Turner**  
*Assistant Vice President*

**Nancy Vickrey**  
*Assistant Vice President*

**Stephen M. Welch**  
*Assistant Vice President*

**Marion E. White**  
*Assistant Vice President*

**Bob W. Williams**  
*Assistant Vice President*

**E. Ann Worthy**  
*Assistant Vice President*

**Mark A. Wynne**  
*Assistant Vice President*

**Mine Yücel**  
*Assistant Vice President*

**Jeffery W. Gunther**  
*Research Officer*

**Lawrence E. Hall**  
*Director of Security Operations*

**Diane M. Holloway**  
*Operations Officer*

**Harvey R. Mitchell III**  
*Operations Officer*

**Lawrence G. Rex**  
*Audit Officer*

**Victor A. Schreck**  
*Automation Officer*

**El Paso**

**Sam C. Clay**  
*Vice President in Charge*

**J. Eloise Guinn**  
*Assistant Vice President*

**Javier R. Jimenez**  
*Assistant Vice President*

**Houston**

**Robert Smith III**  
*Senior Vice President in Charge*

**Robert W. Gilmer**  
*Vice President*

**René G. Gonzales**  
*Vice President*

**Luther E. Richards**  
*Vice President*

**Richard J. Burda**  
*Assistant Vice President*

**Daron D. Peschel**  
*Assistant Vice President*

**Donald N. Bowers II**  
*Operations Officer*

**San Antonio**

**James L. Stull**  
*Senior Vice President in Charge*

**Taylor H. Barbee**  
*Assistant Vice President*

**D. Karen Diaz**  
*Assistant Vice President*

**Richard A. Gutierrez**  
*Assistant Vice President*

Effective January 1, 2002

**SMALL BUSINESS  
AND AGRICULTURE  
ADVISORY COUNCIL**

**Frank M. Aldridge III**  
*President and CEO  
Circa Capital Corp.  
Dallas*

**Hattie Hill**  
*Chief Executive Officer  
Hattie Hill Enterprises Inc.  
Dallas*

**Johnny N. Cavazos**  
*Owner  
Cavazos Insurance Agency  
Brownsville, Texas*

**Paula Lambert**  
*Founder and President  
Mozzarella Co.  
Dallas*

**Ray Joe Riley**  
*Chairman and President  
Estacado Industries Inc.  
Dimmitt, Texas*

**Timothy A. Shell**  
*President  
ExecuTrain of Houston Inc.  
Houston*

**Steven R. Vandegrift**  
*General Partner  
Techxas Ventures  
Austin*

**FEDERAL ADVISORY  
COUNCIL MEMBER**

**Richard W. Evans, Jr.**  
*Chairman and CEO  
Frost National Bank  
San Antonio*

Effective December 31, 2001

February 14, 2002

To the Board of Directors of the  
Federal Reserve Bank of Dallas:

The management of the Federal Reserve Bank of Dallas (FRBD) is responsible for the preparation and fair presentation of the Statement of Condition, Statement of Income, and Statement of Changes in Capital as of December 31, 2001 (the "Financial Statements"). The Financial Statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System and as set forth in the Financial Accounting Manual for the Federal Reserve Banks, and as such, include amounts, some of which are based on judgments and estimates of management.

The management of the FRBD is responsible for maintaining an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements. Such internal controls are designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of reliable Financial Statements. This process of internal controls contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in the process of internal controls are reported to management, and appropriate corrective measures are implemented.

Even an effective process of internal controls, no matter how well designed, has inherent limitations, including the possibility of human error, and therefore can provide only reasonable assurance with respect to the preparation of reliable Financial Statements.

The management of the FRBD assessed its process of internal controls over financial reporting including the safeguarding of assets reflected in the Financial Statements, based upon the criteria established in the "Internal Control - Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, the management of the FRBD believes that the FRBD maintained an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements.



*President*

*Federal Reserve Bank of Dallas*



*First Vice President*

*Federal Reserve Bank of Dallas*

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors of the  
Federal Reserve Bank of Dallas:

We have examined management's assertion that the Federal Reserve Bank of Dallas ("FRB Dallas") maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the Financial Statements as of December 31, 2001, included in the accompanying Management's Assertion. The assertion is the responsibility of FRB Dallas management. Our responsibility is to express an opinion on the assertions based on our examination.

Our examination was made in accordance with standards established by the American Institute of Certified Public Accountants, and accordingly, included obtaining an understanding of the internal control over financial reporting, testing, and evaluating the design and operating effectiveness of the internal control, and such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assertion that the FRB Dallas maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the Financial Statements as of December 31, 2001, is fairly stated, in all material respects, based upon criteria described in "Internal Control-Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission.



March 4, 2002  
Dallas, Texas

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Governors of the Federal Reserve System  
and the Board of Directors of the Federal Reserve Bank of Dallas:

We have audited the accompanying statements of condition of the Federal Reserve Bank of Dallas (the "Bank") as of December 31, 2001 and 2000, and the related statements of income and changes in capital for the years then ended. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 3, the financial statements were prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System. These principles, policies, and practices, which were designed to meet the specialized accounting and reporting needs of the Federal Reserve System, are set forth in the "Financial Accounting Manual for Federal Reserve Banks" and constitute a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2001 and 2000, and results of its operations for the years then ended, on the basis of accounting described in Note 3.



March 4, 2002  
Dallas, Texas

## Statements of Condition (in millions)

	December 31, 2001	December 31, 2000
<b>ASSETS</b>		
Gold certificates	\$ 477	\$ 514
Special drawing rights certificates	98	98
Coin	128	91
Items in process of collection	202	334
Loans to depository institutions	—	4
U.S. government and federal agency securities, net	10,183	15,341
Investments denominated in foreign currencies	398	513
Accrued interest receivable	103	179
Interdistrict settlement account	4,041	—
Bank premises and equipment, net	164	168
Other assets	49	48
<b>Total assets</b>	<b>\$ 15,843</b>	<b>\$ 17,290</b>
<b>LIABILITIES AND CAPITAL</b>		
<b>Liabilities</b>		
Federal Reserve notes outstanding, net	\$ 14,378	\$ 9,754
Deposits:		
Depository institutions	695	939
Other deposits	3	3
Deferred credit items	350	298
Interest on Federal Reserve notes due U.S. Treasury	29	30
Interdistrict settlement account	—	5,829
Accrued benefit costs	54	53
Other liabilities	6	8
<b>Total liabilities</b>	<b>\$ 15,515</b>	<b>\$ 16,914</b>
<b>Capital</b>		
Capital paid-in	164	188
Surplus	164	188
<b>Total capital</b>	<b>\$ 328</b>	<b>\$ 376</b>
<b>Total liabilities and capital</b>	<b>\$ 15,843</b>	<b>\$ 17,290</b>

The accompanying notes are an integral part of these financial statements.

## Statements of Income (in millions)

### FOR THE YEARS ENDED

December 31, 2001                      December 31, 2000

#### INTEREST INCOME

Interest on U.S. government and federal agency securities	\$ 637	\$ 1,098
Interest on investments denominated in foreign currencies	9	9
Interest on loans to depository institutions	—	1
<b>Total interest income</b>	<b>\$ 646</b>	<b>\$ 1,108</b>

#### OTHER OPERATING INCOME

Income from services	\$ 64	\$ 58
Reimbursable services to government agencies	12	14
Foreign currency losses, net	(40)	(46)
U.S. government securities gains (losses), net	6	(3)
Other income	2	2
<b>Total other operating income</b>	<b>\$ 44</b>	<b>\$ 25</b>

#### OPERATING EXPENSES

Salaries and other benefits	\$ 96	\$ 92
Occupancy expense	14	13
Equipment expense	11	10
Assessments by Board of Governors	14	17
Other expenses	33	55
<b>Total operating expenses</b>	<b>\$ 168</b>	<b>\$ 187</b>

#### Net income prior to distribution

<b>\$ 522</b>	<b>\$ 946</b>
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#### DISTRIBUTION OF NET INCOME

Dividends paid to member banks	\$ 10	\$ 12
Transferred to (from) surplus	(24)	100
Payments to U.S. Treasury as interest on Federal Reserve notes	536	834
<b>Total distribution</b>	<b>\$ 522</b>	<b>\$ 946</b>

The accompanying notes are an integral part of these financial statements.

**Statements of Changes in Capital  
for the Years Ended December 31, 2001,  
and December 31, 2000 (in millions)**

	<b>Capital Paid-In</b>	<b>Surplus</b>	<b>Total Capital</b>
<b>BALANCE AT JANUARY 1, 2000</b>			
<b>(4.2 million shares)</b>	\$ 211	\$ 211	\$ 422
Net income transferred to surplus	—	100	100
Surplus transfer to the U.S. Treasury	—	(123)	(123)
Net change in capital stock redeemed (0.4 million shares)	(23)	—	(23)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>BALANCE AT DECEMBER 31, 2000</b>			
<b>(3.8 million shares)</b>	\$ 188	\$ 188	\$ 376
Transferred from surplus	—	(24)	(24)
Net change in capital stock redeemed (0.5 million shares)	(24)	—	(24)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>BALANCE AT DECEMBER 31, 2001</b>			
<b>(3.3 million shares)</b>	<u><u>\$ 164</u></u>	<u><u>\$ 164</u></u>	<u><u>\$ 328</u></u>

The accompanying notes are an integral part of these financial statements.

**1. ORGANIZATION**

The Federal Reserve Bank of Dallas (“Bank”) is part of the Federal Reserve System (“System”) created by Congress under the Federal Reserve Act of 1913 (“Federal Reserve Act”), which established the central bank of the United States. The System consists of the Board of Governors of the Federal Reserve System (“Board of Governors”) and 12 Federal Reserve Banks (“Reserve Banks”). The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. Other major elements of the System are the Federal Open Market Committee (“FOMC”) and the Federal Advisory Council. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York (“FRBNY”), and, on a rotating basis, four other Reserve Bank presidents.

**Structure**

The Bank and its branches in El Paso, Houston, and San Antonio serve the Eleventh Federal Reserve District, which includes Texas and portions of Louisiana and New Mexico. In accordance with the Federal Reserve Act, supervision and control of the Bank are exercised by a board of directors. Banks that are members of the System include all national banks and any state-chartered bank that applies and is approved for membership in the System.

**Board of Directors**

The Federal Reserve Act specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors, and six directors are elected by member banks. Of the six elected by member banks, three represent the public and three represent member banks. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

**2. OPERATIONS AND SERVICES**

The System performs a variety of services and operations. Functions include formulating and conducting monetary policy; participating actively in the payments mechanism, including large-dollar transfers of funds, automated clearinghouse operations, and check processing; distributing coin and currency; performing fiscal agency functions for the U.S. Treasury and certain federal agencies; serving as the federal government’s bank; providing short-term loans to depository institutions; serving the consumer and the community by providing educational materials and information regarding consumer laws; supervising bank holding companies and state member banks; and administering other regulations of the Board of Governors. The Board of Governors’ operating costs are funded through assessments on the Reserve Banks.

The FOMC establishes policy regarding open market operations, oversees these operations, and issues authorizations and directives to the FRBNY for its execution of transactions. Authorized transaction types include direct purchase and sale of securities, matched sale–purchase transactions, purchase of securities under agreements to resell, and lending of U.S. government securities. The FRBNY is also authorized by the FOMC to hold balances of and to execute spot and forward foreign exchange (“F/X”) and securities contracts in nine foreign currencies; maintain reciprocal currency arrangements (“F/X swaps”) with various central banks; and “warehouse” foreign currencies for the U.S. Treasury and Exchange Stabilization Fund (“ESF”) through the Reserve Banks.

**3. SIGNIFICANT ACCOUNTING POLICIES**

Accounting principles for entities with the unique powers and responsibilities of the nation’s central bank have not been formulated by the Financial Accounting Standards Board. The Board of Governors has developed specialized accounting principles and practices that it believes are appropriate for the significantly different nature and function of a central bank as compared to the private sector. These accounting principles and practices are documented in the “Financial Accounting Manual for Federal Reserve Banks” (“Financial Accounting Manual”), which is issued by the Board of Governors. All Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the Financial Accounting Manual.

The financial statements have been prepared in accordance with the Financial Accounting Manual. Differences exist between the accounting principles and practices of the System and accounting principles generally accepted in the United States of America (“GAAP”). The primary differences are the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP, and the accounting for matched sale–purchase transactions as separate sales and purchases, rather than secured borrowings with pledged collateral, as is generally required by GAAP. In addition, the Bank has elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included as the liquidity and cash position of the Bank are not of primary concern to users of these financial statements. Other information regarding the Bank’s activities is provided in, or may be derived from, the Statements of Condition, Income, and Changes in Capital. Therefore, a Statement of Cash Flows would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

Effective January 2001, the System implemented procedures to eliminate the sharing of costs by Reserve Banks for certain services a Reserve Bank may provide on behalf of the System. Data for 2001 reflect the adoption of this policy. Major services provided for the System by this Bank, for which the costs will not be redistributed to the other Reserve Banks, include the Bulkdata Transmission Utility, Check Electronic Access and Delivery, Check Standardization, Centralized Loans Automated System, and National Examination Data System.

The preparation of the financial statements in conformity with the Financial Accounting Manual requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts relating to the prior year have been reclassified to conform to the current-year presentation. Unique accounts and significant accounting policies are explained below.

**a. Gold Certificates**

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks to monetize gold held by the U.S. Treasury. Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. These gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time, and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. Treasury’s account is charged and the Reserve Banks’ gold certificate accounts are lowered. The value of gold for purposes of backing the gold certificates is set by law at \$42-2/9 a fine troy ounce. The Board of Governors allocates the gold certificates among Reserve Banks once a year based upon average Federal Reserve notes outstanding in each District.

**b. Special Drawing Rights Certificates**

Special drawing rights (“SDRs”) are issued by the International Monetary Fund (“Fund”) to its members in proportion to each member’s quota in the Fund at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates, somewhat like gold certificates, to the Reserve Banks. At such time, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks’ SDR certificate accounts are increased. The Reserve Banks are required to purchase SDRs, at the direction of the U.S. Treasury, for the purpose of financing SDR certificate acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates amounts among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year. There were no SDR transactions in 2001.

### **c. Loans to Depository Institutions**

The Depository Institutions Deregulation and Monetary Control Act of 1980 provides that all depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in Regulation D issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Banks. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. Loans are evaluated for collectibility, and currently all are considered collectible and fully collateralized. If any loans were deemed to be uncollectible, an appropriate reserve would be established. Interest is accrued using the applicable discount rate established at least every 14 days by the boards of directors of the Reserve Banks, subject to review by the Board of Governors. Reserve Banks retain the option to impose a surcharge above the basic rate in certain circumstances.

### **d. U.S. Government and Federal Agency Securities and Investments Denominated in Foreign Currencies**

The FOMC has designated the FRBNY to execute open market transactions on its behalf and to hold the resulting securities in the portfolio known as the System Open Market Account (“SOMA”). In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System’s central bank responsibilities. Such authorizations are reviewed and approved annually by the FOMC.

Matched sale–purchase transactions are accounted for as separate sale and purchase transactions. Matched sale–purchase transactions are transactions in which the FRBNY sells a security and buys it back at the rate specified at the commencement of the transaction.

The FRBNY has sole authorization by the FOMC to lend U.S. government securities held in the SOMA to U.S. government securities dealers and to banks participating in U.S. government securities clearing arrangements on behalf of the System, in order to facilitate the effective functioning of the domestic securities market. These securities-lending transactions are fully collateralized by other U.S. government securities. FOMC policy requires FRBNY to take possession of collateral in excess of the market values of the securities loaned. The market values of the collateral and the securities loaned are monitored by FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA.

Foreign exchange contracts are contractual agreements between two parties to exchange specified currencies, at a specified price, on a specified date. Spot foreign contracts normally settle two days after the trade date, whereas the settlement date on forward contracts is negotiated between the contracting parties, but will extend beyond two days from the trade date. The FRBNY generally enters into spot contracts, with any forward contracts generally limited to the second leg of a swap/warehousing transaction.

The FRBNY, on behalf of the Reserve Banks, maintains renewable, short-term F/X swap arrangements with two authorized foreign central banks. The parties agree to exchange their currencies up to a prearranged maximum amount and for an agreed-upon period of time (up to 12 months) at an agreed-upon interest rate. These arrangements give the FOMC temporary access to foreign currencies that it may need for intervention operations to support the dollar and give the partner foreign central bank temporary access to dollars it may need to support its own currency. Drawings under the F/X swap arrangements can be initiated by either the FRBNY or the partner foreign central bank, and must be agreed to by the drawee. The F/X swaps are structured so that the party initiating the transaction (the drawer) bears the exchange rate risk upon maturity. The FRBNY will generally invest the foreign currency received under an F/X swap in interest-bearing instruments.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the Treasury, U.S. dollars for foreign currencies held by the Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury and ESF for financing purchases of foreign currencies and related international operations.

In connection with its foreign currency activities, the FRBNY, on behalf of the Reserve Banks, may enter into contracts that contain varying degrees of off-balance-sheet market risk, because they rep-

resent contractual commitments involving future settlement and counterparty credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

While the application of current market prices to the securities currently held in the SOMA portfolio and investments denominated in foreign currencies may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio from time to time involve transactions that can result in gains or losses when holdings are sold prior to maturity. However, decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, earnings and any gains or losses resulting from the sale of such currencies and securities are incidental to the open market operations and do not motivate its activities or policy decisions.

U.S. government and federal agency securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Interest income is accrued on a straight-line basis and is reported as “Interest on U.S. government and federal agency securities” or “Interest on investments denominated in foreign currencies,” as appropriate. Income earned on securities-lending transactions is reported as a component of “Other income.” Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Gains and losses on the sales of U.S. government and federal agency securities are reported as “U.S. government securities gains (losses), net.” Foreign currency-denominated assets are revalued daily at current market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as “Foreign currency losses, net.” Foreign currencies held through F/X swaps, when initiated by the counterparty, and warehousing arrangements are revalued daily, with the unrealized gain or loss reported by the FRBNY as a component of “Other assets” or “Other liabilities,” as appropriate.

Balances of U.S. government and federal agency securities bought outright, securities loaned, investments denominated in foreign currency, interest income, securities lending fee income, amortization of premiums and discounts on securities bought outright, gains and losses on sales of securities, and realized and unrealized gains and losses on investments denominated in foreign currencies, excluding those held under an F/X swap arrangement, are allocated to each Reserve Bank. Income from securities lending transactions undertaken by the FRBNY are also allocated to each Reserve Bank. Securities purchased under agreements to resell and unrealized gains and losses on the revaluation of foreign currency holdings under F/X swaps and warehousing arrangements are allocated to the FRBNY and not to other Reserve Banks.

Statement of Financial Accounting Standards No. 133, as amended and interpreted, became effective on January 1, 2001. For the periods presented, the Reserve Banks had no derivative instruments required to be accounted for under the Standard.

#### **e. Bank Premises and Equipment**

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from 2 to 50 years. New assets, major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts. Maintenance, repairs, and minor replacements are charged to operations in the year incurred. Internally developed software is capitalized based on the cost of direct materials and services and those indirect costs associated with developing, implementing, or testing software.

#### **f. Interdistrict Settlement Account**

At the close of business each day, all Reserve Banks and branches assemble the payments due to or from other Reserve Banks and branches as a result of transactions involving accounts residing in other Districts that occurred during the day’s operations. Such transactions may include funds settlement, check clearing and automated clearinghouse operations, and allocations of shared expenses. The cumulative net amount due to or from other Reserve Banks is reported as the “Interdistrict settlement account.”

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#### **g. Federal Reserve Notes**

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents to the Reserve Banks upon deposit with such agents of certain classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be equal to the sum of the notes applied for by such Reserve Bank. In accordance with the Federal Reserve Act, gold certificates, special drawing rights certificates, U.S. government and federal agency securities, tri-party agreements, loans to depository institutions, and investments denominated in foreign currencies are pledged as collateral for net Federal Reserve notes outstanding. The collateral value is equal to the book value of the collateral tendered, with the exception of securities, whose collateral value is equal to the par value of the securities tendered. The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. The Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes of all Reserve Banks in order to satisfy their obligation of providing sufficient collateral for outstanding Federal Reserve notes. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, as obligations of the United States, Federal Reserve notes are backed by the full faith and credit of the U.S. government.

The “Federal Reserve notes outstanding, net” account represents Federal Reserve notes reduced by currency held in the vaults of the Bank of \$19,062 million and \$22,713 million at December 31, 2001, and December 31, 2000, respectively.

#### **h. Capital Paid-in**

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. As a member bank’s capital and surplus change, its holdings of the Reserve Bank’s stock must be adjusted. Member banks are those state-chartered banks that apply and are approved for membership in the System and all national banks. Currently, only one-half of the subscription is paid-in, and the remainder is subject to call. These shares are nonvoting with a par value of \$100. They may not be transferred or hypothecated. By law, each member bank is entitled to receive an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

#### **i. Surplus**

The Board of Governors requires Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital. Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury excess earnings, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in.

The Consolidated Appropriations Act of 2000 (Public Law 106-113, Section 302) directed the Reserve Banks to transfer to the U.S. Treasury additional surplus funds of \$3,752 million during the federal government’s 2000 fiscal year. The Federal Reserve Bank of Dallas transferred \$123 million to the U.S. Treasury. Reserve Banks were not permitted to replenish surplus for these amounts during fiscal year 2000, which ended September 30, 2000; however, the surplus was replenished by December 31, 2000.

In the event of losses or a substantial increase in capital, payments to the U.S. Treasury are suspended until such losses are recovered through subsequent earnings. Weekly payments to the U.S. Treasury may vary significantly.

#### **j. Income and Costs Related to Treasury Services**

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services. The costs of providing fiscal agency and depository services to the Treasury Department that have been billed but not paid are immaterial and included in “Other expenses.”

#### k. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property, which are reported as a component of "Occupancy expense."

#### 4. U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Securities bought outright are held in the SOMA at the FRBNY. An undivided interest in SOMA activity, with the exception of securities held under agreements to resell and the related premiums, discounts, and income, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of interdistrict clearings. The settlement, performed in April of each year, equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding. The Bank's allocated share of SOMA balances was 1.813 percent and 2.959 percent at December 31, 2001, and December 31, 2000, respectively.

The Bank's allocated share of securities held in the SOMA at December 31 that were bought outright was as follows (in millions):

	2001	2000
Par value:		
Federal agency	\$ —	\$ 4
U.S. government		
Bills	3,301	5,289
Notes	4,821	7,106
Bonds	1,879	2,745
Total par value	\$ 10,001	\$ 15,144
Unamortized premiums	205	288
Unaccreted discounts	(23)	(91)
<b>Total allocated to Bank</b>	<b>\$10,183</b>	<b>\$15,341</b>

Total SOMA securities bought outright were \$561,701 million and \$518,501 million at December 31, 2001, and December 31, 2000, respectively.

The maturity distribution of U.S. government and federal agency securities bought outright, which were allocated to the Bank at December 31, 2001, were as follows (in millions):

Maturities of Securities Held	Par value		
	U.S. Government Securities	Federal Agency Obligations	Total
Within 15 days	\$ 194	\$ —	\$ 194
16 days to 90 days	2,258	—	2,258
91 days to 1 year	2,368	—	2,368
Over 1 year to 5 years	2,776	—	2,776
Over 5 years to 10 years	967	—	967
Over 10 years	1,438	—	1,438
<b>Total</b>	<b>\$ 10,001</b>	<b>\$ —</b>	<b>\$ 10,001</b>

At December 31, 2001, and December 31, 2000, matched sale-purchase transactions involving U.S. government securities with par values of \$23,188 million and \$21,112 million, respectively, were outstanding, of which \$420 million and \$625 million were allocated to the Bank. Matched sale-purchase transactions are generally overnight arrangements.

At December 31, 2001, and December 31, 2000, U.S. government securities with par values of \$7,345 million and \$2,086 million, respectively, were loaned from the SOMA, of which \$133 million and \$62 million were allocated to the Bank.

## 5. INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments. Foreign government debt instruments held include both securities bought outright and securities held under agreements to resell. These investments are guaranteed as to principal and interest by the foreign governments.

Each Reserve Bank is allocated a share of foreign currency-denominated assets, the related interest income, and realized and unrealized foreign currency gains and losses, with the exception of unrealized gains and losses on F/X swaps and warehousing transactions. This allocation is based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. The Bank's allocated share of investments denominated in foreign currencies was approximately 2.731 percent and 3.275 percent at December 31, 2001, and December 31, 2000, respectively.

The Bank's allocated share of investments denominated in foreign currencies, valued at current exchange rates at December 31, was as follows (in millions):

	2001	2000
European Union euro:		
Foreign currency deposits	\$ 125	\$ 152
Government debt instruments including agreements to resell	74	89
Japanese yen:		
Foreign currency deposits	52	90
Government debt instruments including agreements to resell	145	180
Accrued interest	2	2
<b>Total</b>	<b>\$398</b>	<b>\$513</b>

Total investments denominated in foreign currencies were \$14,559 million and \$15,670 million at December 31, 2001, and December 31, 2000, respectively.

The maturity distribution of investments denominated in foreign currencies that were allocated to the Bank at December 31, 2001, were as follows (in millions):

Maturities of Investments Denominated in Foreign Currencies	
Within 1 year	\$ 375
Over 1 year to 5 years	11
Over 5 years to 10 years	12
Over 10 years	—
<b>Total</b>	<b>\$ 398</b>

At December 31, 2001, and December 31, 2000, there were no open foreign exchange contracts or outstanding F/X swaps.

At December 31, 2001, and December 31, 2000, the warehousing facility was \$5 billion, with zero outstanding.

## 6. BANK PREMISES AND EQUIPMENT

A summary of bank premises and equipment at December 31 is as follows (in millions):

	2001	2000
Bank premises and equipment:		
Land	\$ 30	\$ 30
Buildings	115	114
Building machinery and equipment	24	24
Construction in progress	3	—
Furniture and equipment	76	79
	248	247
Accumulated depreciation	(84)	(79)
<b>Bank premises and equipment, net</b>	<b>\$164</b>	<b>\$168</b>

Depreciation expense was \$10 million and \$11 million for the years ended December 31, 2001, and December 31, 2000, respectively.

On June 30, 2000, the Houston office sold its building for \$4 million, net of costs of the sale of \$309,000, with a corresponding leaseback agreement allowing the Houston office use of the facility for up to five years while a new building is under construction. The sale is considered a sale-leaseback, with the lease classified as an operating lease. The sale resulted in a loss of \$2 million. Seventy-five percent of the sales price is financed with a promissory note due when the premises are vacated, but no sooner than four years from the date of purchase. The note, which contains no stated rate of interest, was discounted using the then current Treasury borrowing rate of 6.298 percent. The leaseback agreement stipulates that no rent is due during the lease term, with the Houston office responsible for property taxes and maintenance. Deferred rent expense of \$1 million was imputed using current rental rates for a comparable facility with similar stipulations.

## 7. COMMITMENTS AND CONTINGENCIES

At December 31, 2001, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from one to approximately four years. These leases provide for increased rentals based upon increases in real estate taxes, operating costs, or selected price indices.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance, and maintenance when included in rent), net of sublease rentals, was \$2 million and \$699,000 for the years ended December 31, 2001, and December 31, 2000, respectively. Certain of the Bank's leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with terms of one year or more, at December 31, 2001, were as follows (in thousands):

	Operating
2002	\$ 578
2003	262
2004	142
2005	38
<b>Total</b>	<b>\$ 1,020</b>

At December 31, 2001, there were no other commitments and long-term obligations in excess of one year.

Under the Insurance Agreement of the Federal Reserve Banks dated March 2, 1999, each of the Reserve Banks has agreed to bear, on a per-incident basis, a pro rata share of losses in excess of 1 percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio that a Reserve Bank's capital paid-in bears to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under such agreement at December 31, 2001, or December 31, 2000.

The Bank is involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.

## 8. RETIREMENT AND THRIFT PLANS

### Retirement Plans

The Bank currently offers two defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the Bank's employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan") and the Benefit Equalization Retirement Plan ("BEP"). The System Plan is a multi-employer plan with contributions fully funded by participating employers. No separate accounting is maintained of assets contributed by the participating employers. The Bank's projected benefit obligation and net pension costs for the BEP at December 31, 2001, and December 31, 2000, and for the years then ended, are not material.

### Thrift Plan

Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (“Thrift Plan”). The Bank’s Thrift Plan contributions totaled \$3 million for each of the years ended December 31, 2001, and December 31, 2000, and are reported as a component of “Salaries and other benefits.”

## 9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS

### Postretirement Benefits Other Than Pensions

In addition to the Bank’s retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets. Net postretirement benefit costs are actuarially determined using a January 1 measurement date.

Following is a reconciliation of beginning and ending balances of the benefit obligation (in millions):

	2001	2000
Accumulated postretirement benefit obligation at January 1	\$ 34.9	\$ 32.7
Service cost—benefits earned during the period	1.0	1.0
Interest cost of accumulated benefit obligation	2.8	2.3
Actuarial loss	6.2	0.1
Contributions by plan participants	0.3	0.3
Benefits paid	(1.7)	(1.5)
Plan amendments, acquisitions, foreign currency exchange rate changes, business combinations, divestitures, curtailments, settlements, special termination benefits	(2.0)	—
<b>Accumulated postretirement benefit obligation at December 31</b>	<b>\$ 41.5</b>	<b>\$ 34.9</b>

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit cost (in millions):

	2001	2000
Fair value of plan assets at January 1	\$ —	\$ —
Contributions by the employer	1.4	1.2
Contributions by plan participants	0.3	0.3
Benefits paid	(1.7)	(1.5)
<b>Fair value of plan assets at December 31</b>	<b>\$ —</b>	<b>\$ —</b>
Unfunded postretirement benefit obligation	\$ 41.5	\$ 34.9
Unrecognized prior service cost	15.3	14.4
Unrecognized net actuarial loss	(9.2)	(3.2)
<b>Accrued postretirement benefit costs</b>	<b>\$ 47.6</b>	<b>\$ 46.1</b>

Accrued postretirement benefit costs are reported as a component of “Accrued benefit costs.”

At December 31, 2001, and December 31, 2000, the weighted-average discount rate assumptions used in developing the benefit obligation were 7.0 percent and 7.5 percent, respectively.

For measurement purposes, a 10.0 percent annual rate of increase in the cost of covered health care benefits was assumed for 2002. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.0 percent by 2008, and remain at that level thereafter.

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A 1 percentage point change in assumed health care cost trend rates would have the following effects for the year ended December 31, 2001 (in millions):

	1 Percentage Point Increase	1 Percentage Point Decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	\$ 0.1	\$ (0.1)
Effect on accumulated postretirement benefit obligation	1.2	(1.1)

The following is a summary of the components of net periodic postretirement benefit costs for the years ended December 31 (in millions):

	2001	2000
Service cost—benefits earned during the period	\$ 1.0	\$ 1.0
Interest cost of accumulated benefit obligation	2.8	2.3
Amortization of prior service cost	(1.0)	(1.0)
Recognized net actuarial loss	0.1	—
<b>Net periodic postretirement benefit costs</b>	<b>\$ 2.9</b>	<b>\$ 2.3</b>

Net periodic postretirement benefit costs are reported as a component of “Salaries and other benefits.”

#### **Postemployment Benefits**

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined and include the cost of medical and dental insurance, survivor income, and disability benefits. Costs were projected using the same discount rate and health care trend rates as were used for projecting postretirement costs. The accrued postemployment benefit costs recognized by the Bank at December 31, 2001, and December 31, 2000, were \$6 million each year. This cost is included as a component of “Accrued benefit costs.” Net periodic postemployment benefit costs included in 2001 and 2000 operating expenses were \$1 million each year.

**Volume of Operations****(UNAUDITED)**

	<b>Number of Items Handled</b>		<b>Dollar Amount</b>	
	<b>(Thousands)</b>		<b>(Millions)</b>	
	2001	2000	2001	2000
<b>SERVICES TO DEPOSITORY INSTITUTIONS</b>				
<b>CASH SERVICES</b>				
Federal Reserve notes processed	2,394,863	2,181,705	37,720	37,128
Currency received from circulation	2,448,543	2,327,013	38,533	38,054
Coin received from circulation	1,383,392	1,117,063	173	141
<b>CHECK PROCESSING</b>				
Commercial—processed	1,321,166	1,285,998	818,354	754,315
Commercial—fine sorted	81,087	112,186	92,803	37,657
U.S. government checks	29,390	22,795	24,877	21,400
<b>ELECTRONIC PAYMENTS</b>				
Funds transfers processed	13,659	13,050	15,748,657	15,524,004
Book-entry security transfers processed	73	84	1,916,375	1,791,126
<b>LOANS</b>				
Advances made	202*	613*	350	2,497
<b>SERVICES TO THE U.S. TREASURY AND GOVERNMENT AGENCIES</b>				
Issues and reinvestments of Treasury securities	70	39	2,535	1,575

\*Individual loans, not in thousands.



## About the Dallas Fed

The Federal Reserve Bank of Dallas is one of 12 regional Federal Reserve Banks in the United States. Together with the Board of Governors in Washington, D.C., these organizations form the Federal Reserve System and function as the nation's central bank. The System's basic purpose is to provide a flow of money and credit that will foster orderly economic growth and a stable dollar. In addition, Federal Reserve Banks supervise banks and bank holding companies and provide certain financial services to the banking industry, the federal government and the public.

The Federal Reserve Bank of Dallas has served the financial institutions in the Eleventh District since 1914. The district encompasses 350,000 square miles and comprises the state of Texas, northern Louisiana and southern New Mexico. The three branch offices of the Dallas Fed are in El Paso, Houston and San Antonio.

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