Thank you. And thanks to Jan Hart Black and the Greater Dallas Chamber of Commerce for inviting me. It’s an honor to be here. Before I get to my assignment, I’d like to call your attention to some history common to the Dallas Chamber and the Dallas Fed. According to its website, the Chamber was formed in 1909, and helping attract a Reserve Bank to Dallas was its second major achievement. I thought you might like to hear more about that.

Two days before Christmas in 1913, Woodrow Wilson signed the Federal Reserve Act, which created an oxymoron—a decentralized central bank. The new central bank would have a Washington component, of course, but also 12 regional Reserve Banks around the country. A committee was formed to determine the location of the regional banks, which triggered quite a competition among the major cities (and cities with major aspirations) to be chosen as a Reserve Bank site. (If you can do it without laughing out loud, think NFL franchises.)

In Dallas, as in most cities, the Chamber of Commerce led the campaign to attract a Reserve Bank. Dallas’ main competitors for the Southwestern Reserve Bank were Houston, New Orleans and Fort Worth—the Big Enchilada, the Big Easy and “that city across the river.”

The Dallas campaign was colorful, to say the least. To preserve secrecy, key players were given code names in telegrams between Dallas and Washington. For example, President Wilson’s code name was Allah. Treasury Secretary McAdoo was Croesus. Col. E.H. House, an Austin resident and a close advisor to the president, was Tacitus. Postmaster General Burleson, also a Texan—but more important, a member of the site selection committee—was Mercury.

Someone tipped off Dallas that Postmaster Burleson (I mean “Mercury”) would be changing trains in St. Louis on his way from Washington to Texas. So, Tom Finty, the political editor of the Dallas Morning News, and another fellow from Dallas just happened to run into him in the St. Louis train station. They invited the postmaster to their train compartment to talk about why Dallas should get a Fed Bank. He promised them only 10 minutes, because he wanted to sleep. Several hours later, at two in the morning, the meeting ended.

Anyway, based strictly on the merits, Dallas was chosen as headquarters of the Southwestern Fed. Branches of the Dallas Fed were established later in Houston, San Antonio and El Paso. Dallas’ victory was the banner headline of the Dallas Morning News on April 3, 1914. It pushed a major victory the day before by Pancho Villa in the Mexican Revolution below the fold.

The Dallas Fed opened for business in rented quarters at 10 a.m. on Monday, November 16, 1914, with 27 employees and a borrowed safe the size of a phone booth. (The underground currency vault we have today is as tall as a five-story building.) On that first day, the Dallas Fed’s first cashier was eight hours late to work. His train had run over a mule in Ennis.

According to the newspaper, the Bank’s first board of directors consisted of five bankers, a capitalist, two cattlemen and a cottonseed crusher. The new board’s first action in the first hour of the first day of business was to lower the discount rate. According to Oscar Wells—the new, first governor of the Dallas Fed, as they called them then—the 6 percent discount rate that had been established in Washington was “deemed a trifle high,” so the Dallas board cut it to a more appropriate 5.5 percent. The current discount rate, by the way, is 4.5 percent. The Dallas Fed has always been for sound money, and plenty of it. (If there are any reporters out there, I’m just kidding.)

The Dallas Chamber of Commerce, on the evening of that first business day, hosted a dinner in honor of the new Reserve Bank. According to the Morning News, 372 citizens attended this “prosperity dinner,” as they called it, which began at 7 p.m. and ended at 11 p.m. Many speakers spoke. They congratulated the Chamber and each other on their success, which would surely lead to a new era of prosperity and enhance the city’s standing as the new financial center of the Southwest.

Optimism was the theme of the evening. The toastmaster was Morning News publisher George B. Dealey, as in
Dealey Plaza. Mr. Dealey used the occasion to call for greater economic diversification in Texas and the South. He said farmers must get away from their "one crop" mind-set—the one crop being cotton, of course. They should diversify. They should raise hogs and cattle as well. He didn't mention oil, which was beginning to be discovered all over Texas.

Diversification remains a good idea, as we all know from oil's later lessons. And ever since I came to Texas in 1991 as the local FEDHEAD—as my wife, Suzanne, calls me—optimism has been official policy at the Dallas Fed. (You might be interested to know that, when my spell checker came across FEDHEAD, it said FEDHEAD didn't exist and suggested FATHEAD as the preferred alternative.)

Now, let me turn to my assigned topic: the economy. I believe the formal title I let the Chamber talk me into is "The United States Economy at the Millennium: A New Paradigm?" Let me skip the new paradigm part for a while and give you some perspective.

Most of my speeches on the economy are what I call "elevator speeches." What's up? What's down? And, what difference does it make? Answering these questions has been a pleasure lately since most good things are up and most bad things are down. Up are income, output, employment, wages, profits, the dollar and the stock market. Down are inflation, unemployment, interest rates and the welfare rolls. The "misery index"—the inflation rate added to the unemployment rate—is the lowest it's been since the '60s.

Now, let me give you some historical perspective on the economy. The last recession began in August 1990, when Iraq invaded Kuwait and caused consumer confidence to plunge and oil prices to spike as people were reminded of the gasoline lines of the '70s. That recession—which was fairly mild, especially in Texas—bottomed out eight months later, in March 1991. Recovery began in April '91—eight years and four months ago. So, we're well into our ninth year of expansion, and still going strong. In fact, the expansion has grown stronger in the past three and a half years as inflation has continued to fall—leading to all the talk about a "new paradigm" or "new era."

Early this year, the current expansion became our longest peacetime expansion in history, exceeding the expansion of the 1980s. Early next year, it will become the longest expansion, period, exceeding the wartime expansion of the 1960s. I see nothing to prevent us from getting from here to there. And those of you who are fans of compound interest may want to consider this little fact. It doesn't apply to Texas, which had its own problems in the '80s, but the nation as a whole has had only eight months of recession since November 1982. That's eight months out of 16 years and eight months. About 3.5 percent of the time. From the 1850s to the 1950s, the U.S. economy was in recession 40 percent of the time. Forty percent recession and 60 percent expansion means two steps back for every three steps forward.

How long it takes you to drive to the Grand Ole Opry in Nashville or to Graceland in Memphis depends in part on how fast you drive. But it probably depends more on how many pit stops, or bathroom stops, you make. Our economy hasn't broken many speed records in the past 17 years, but it's taken only one short bathroom break. Remember, you heard it here first.

The first five years of recovery and expansion were not spectacular. The pace of growth did pick up three and a half years ago, and since then growth has averaged almost 4 percent, unemployment has declined further to the low 4 percent range, and inflation has declined to 2 percent or below, depending on your measure.

Most economists thought the combination of accelerating growth and decelerating inflation was unlikely, if not impossible. They wondered what has changed to allow us to have tight labor markets and nicely rising wages without a sharp rise in unit labor costs. What has changed to permit almost a doubling of the growth rate without more inflation—so far at least? What is the mysterious X factor in the economy? Are we in a new era? A new paradigm?

"Paradigm" is too fancy a word for me. Frankly, I don't know how to define it, without repeating the familiar recipe for boiling a frog. Everybody knows you can't boil a frog by dropping it into a pan of boiling water. It jumps right out of the pan. But you can put the frog in a pan of cold water and gradually raise the heat to boiling. The frog won't jump out, because he doesn't realize his paradigm is shifting. I believe the economy's paradigm has been shifting, so slowly
and gradually that, like the frog, most of us didn’t notice.

The relevant changes probably began as long ago as the deregulations of the late ‘70s, or perhaps even the 1968 telephone deregulation. Other key events probably include:

Further deregulation in the ‘80s
The appointment of Paul Volcker as Fed Chairman in ‘79
The air traffic controllers strike (which goes a long way toward explaining why we have 4.3 percent unemployment while continental Europe has 10 to 12 percent)
The supply-side marginal tax-rate cuts in the early ‘80s
The reappointment of Paul Volcker in 1983 and the appointment of Alan Greenspan in ‘87, and his subsequent reappointments
The promotion of free trade and open markets through the ‘80s and ‘90s
The upgrading of the U.S. military, which ultimately led to the collapse of the Soviet Union and the Soviet bloc, bringing more of the world into the marketplace

And the related discrediting of communism and hard-core socialism, and—for a while, at least—protectionism.

Japan’s experience at the end of the ‘80s demonstrated the shortcomings of mercantilism, but not before the Japanese model was copied by its Asian neighbors. With communism, socialism, protectionism and mercantilism on the ropes, about the only bad “ism” left is rheumatism, and our biotech firms are working on that.

The policies put in place in the ‘80s bore fruit in the ‘90s as pro-market policies were pursued around the world. Of course, two major developments in the ‘90s helped as well:

The budget deficit moved into surplus due to the strong economy.
Finally, Bob McTeer became FEDHEAD in Dallas. (Just kidding, reporters.) (That’s FEDHEAD)

Did Chambers of Commerce like this one play a role in the new paradigm? Yes, I think so. Chambers of Commerce compete for new businesses and new jobs by promoting business-friendly local policies, taxes, regulations and the like. From a national perspective, they may largely cancel each other out, but they move the average in the right direction, and they provide valuable lessons all over the country of the relationship between sound policies and business success.

Increasingly, in our global economy, national governments engage in similar competition to attract foreign capital and business firms. That’s largely how Ireland became the economic superstar of Euroland—a fact that makes European socialists uncomfortable.

The instantaneous communication of the global economy has also shifted power that used to belong to governments to the private sector. Bond vigilantes—and, increasingly, stock and mutual fund vigilantes—are taking the law into their own hands, so to speak. They reward sound national policies with investment dollars and punish unsound policies with capital flight. I suppose sound policies are in the eye of the beholder, but so far the rule of the bond markets has probably done more good than harm. They favor anything that’s good for lower inflation, and hence for lower long-term interest rates, which is probably pretty good long-term policy, even though, in the short run, the interests of Wall Street may seem to clash with the interests of Main Street.

What about monetary policy? Did it play a role in the new paradigm? Monetary policy’s main contribution has been to bring down the inflation rate to near price stability, which produces the best financial environment for economic growth. Contrast the economy of the ‘90s with that of the ‘70s, when monetary policy was not good enough to overcome the harm wrought by OPEC. In the inflationary environment of the ‘70s, companies could raise prices with impunity because they knew their competitors would likely go along. There was little competitive pressure or other incentives to cut costs or improve quality in an inflationary environment.

It’s no coincidence that cost-cutting, restructuring, downsizing, outsourcing and globalization coincided with the decline of inflation. These forces of creative destruction—destroying the old to make resources available for the new—have made the U.S. economy the most dynamic and competitive in the world.
Allowing the churn to work is the main reason U.S. unemployment rates are less than half those of continental Europe. Their workers have become victims of their governments’ efforts to protect them. Our workers have the security of job opportunities in a dynamic economy, rather than having the government protect old jobs at the expense of the new.

In parts of Europe, they are still trying to reduce unemployment by limiting the work of those already employed. They keep trying to get more slices out of their pie, by allocating jobs rather than creating jobs. We recognize that the American pie is not limited. Mostly, we get larger slices by making bigger pies.

But there are a couple of unfortunate exceptions to that: immigration and Social Security. Many still apparently believe that Social Security recipients should be penalized with punitive taxes if they decide to work part time or full time, so they won’t take a job someone else could have (a fixed pie concept). And, even in a period of acute skilled labor shortages, we want to limit the ability of U.S. firms to recruit highly educated, highly skilled foreign workers for key high-tech jobs that are going begging for a lack of qualified applicants—jobs that would be more likely to create more collateral jobs for Americans than to take any away.

The alternative is pushing U.S. firms abroad to hire foreign workers who may have been educated in U.S. universities. The *Wall Street Journal* ran an op-ed piece by me on May 20 where I called for the removal of the Social Security working penalty and the liberalization of the visa program for high-tech workers as a means of augmenting our labor force. Senator Gramm has introduced legislation in both these areas.

What about the mysterious X factor that I mentioned earlier? As I understand it, before the planet Pluto was discovered, scientists suspected it was there because of the behavior of the planets nearby. It was invisible, but you could see its influence. We’ve known all along that the X factor in today’s economy must be a significant rise in productivity, or output per hour worked. Only higher productivity could explain how tight labor markets and rising wages can have such mild impact on unit labor costs and profits, and how an economy that seemed to have a noninflationary speed limit of 2 to 2.5 percent could average 4 percent growth for more than three years without inflation rising.

A dramatic rise in productivity was always the logical answer, but hard to find in the statistics, except in agriculture and manufacturing. Productivity is harder to measure in the increasingly dominant service sector. But, surely, we know it’s there. We can all see it. Yogi Berra is alleged to have said, you can observe a lot just by watching. Or, as Richard Pryor put it, Who are you going to believe? Me or your own lying eyes?

I don’t have to convince you that there is a revolution in technology going on out there—much of it in Greater Dallas, Texas. Perhaps a once-in-a-century revolution, if not once in a millennium. We at the Dallas Fed believe that computer-related technologies are doing for the information age what electricity did for the industrial age. Electricity augments muscle power. Computer chips augment brain power. And those little brains are everywhere, in everything. Most of my toys are smarter than I am.

This weekend, I saw a magnificent special advertising section in *Business Week* by Richardson on its Telecom Corridor. It described in breathless language the “crescendo of creativity” taking place in the corridor by more than 600 high-tech companies making up America’s largest cluster of telecommunications firms. We recently did a research piece on the advantages of this agglomeration.

What amazes me the most today is how we’re ordering up inventions and innovations almost on demand—an assembly line. We’re no longer waiting for inventions to happen by accident or serendipity. Like when the guys carrying the peanut butter run into the gals with the chocolate and they both fall into a vat of caramel and knock the peanuts off the shelf and into the mess. The original collision made a Reese Cup, and the rest of it made a Baby Ruth. We now have serendipity on demand. Don’t tell me productivity growth is not here to stay.

The arithmetic of productivity growth and economic growth is simple. If productivity, or output per hour worked, increases just over 1 percent per year, as it did from the early ’70s to the early ’90s, and if hours worked increase at about the same rate, then just over 2 percent is your noninflationary growth rate. But if productivity growth doubles to 2 percent per year, and if hours worked double to 2 percent a year, a 4 percent growth rate can be noninflationary.

That’s essentially what happened last year. In 1998, hours worked increased 2 percent and productivity increased 2.2 percent for a 4.2 percent increase in real growth, with no increase in inflation. During the fourth quarter of ’98 and the
first quarter of ‘99, productivity increased at an average 4 percent annual rate and got me all excited. But it fell back to earth in the second quarter.

Still, sustaining a 2 to 3 percent growth rate in productivity seems doable to me. What overall growth rate that yields will depend on the labor supply as well. A 1 percent growth in hours worked would give us 3 to 4 percent real growth and keep the Goldilocks economy going. Not too hot, not too cold, but just right.