The changing structure of banking: A look at traditional and new ways of delivering banking services

Kenneth Spong and James Harvey

Kenneth Spong is an economist and James Harvey is a senior examiner in the Division of Bank Supervision and Structure of the Federal Reserve Bank of Kansas City.

¹ The Tenth Federal Reserve District includes Colorado, Kansas, Nebraska, Oklahoma, Wyoming, western Missouri, and northern New Mexico. This article, though, will look at banking throughout the Tenth District states, including all of Missouri and New Mexico, in order to examine banking consolidation trends on a statewide basis.

Since the mid-1980s, over 5,000 banks or more than one-third of all U.S. banks have disappeared. The change in Tenth Federal Reserve District states is even more dramatic, with a 40 percent decline in the number of banks over the last dozen years.¹ At the same time that the number of banks is declining significantly, other momentous changes are also taking place, including a rapid expansion in interstate banking and branching and the emergence of electronic banking and new product delivery systems. All of these changes appear even more remarkable when cast against the preceding fifty years—a period during which the banking population remained virtually constant and other bank structural characteristics experienced, at most, a very gradual evolution.

For bankers and bank customers, this quickly changing picture is beginning to raise a variety of questions and concerns about where the banking industry is headed. For instance, will vast numbers of banks continue to disappear or experience ownership changes? If so, should we be concerned about the health and the future of the banking system, and will most customers continue to have a wide choice of banking alternatives? Also, how will tomorrow's bank typically provide its basic services—through branch offices, facilities in supermarkets or other retail businesses, automated teller machines (ATMs), automated branches or banking kiosks, or in a customer's home or business through the use of

telephones and personal computers? Lastly, what new habits will bankers and their customers have to learn in response to these dramatic changes, and will everyone benefit from this new environment?

This article will attempt to provide some perspective to these questions and concerns by taking a close look at the banking consolidation trends in Tenth Federal Reserve District states, as well as recent innovations in the way that banking services are provided. The first section of this article will review the factors that are providing a strong impetus to recent banking consolidation, including the liberalization of bank expansion laws across the District. A second section will look at how the number and size of banks, banking offices, and banking organizations are changing within Tenth District states. The following section will investigate interstate entry and expansion throughout the District and their effects on banking consolidation. A final section will examine several new means of providing banking services and the inroads they are making into banking in the Midwest.

Factors behind banking consolidation

Recent banking consolidation can be attributed to a variety of factors. Financial innovation and significant improvements in data processing and communications, for example, are now allowing banks to operate efficiently over a greater geographic area and reach a much larger range of customers. As a result, banks can now market their services much more widely and manage multi-office networks more efficiently and effectively than in previous decades. Several examples of this trend include regional and nationwide marketing of credit cards and other loan products, extensive branch office and ATM networks, and the selling of various bank products through web sites on the Internet, deposit listing services, and other innovative advertising.

In addition, many bankers are using consolidation as a means to address current competitive pressures to cut costs, find new revenue sources, and improve the quality of existing services. Part of this pressure comes from bank customers and the broader access these customers have to information on new and competing financial products. In addition, banks must stay competitive with a wide range of institutions, including banks entering from other markets and nonbank institutions that are developing financial products similar to many banking services. Consolidation could conceivably enable banks to develop a more specialized staff and spread costs over a broader base of customers and activities, thereby achieving a more innovative and efficient operating framework.

Overall, such factors have created strong incentives for banking consolidation.² Many of these incentives, though, might never have been acted upon without one additional development—the recent liberalization of bank branching, holding company acquisition, and interstate entry laws within Tenth District states.

The changing legal framework is of particular significance because Tenth

District states were among the last to give up their unit banking traditions. Before the 1980s, no District states allowed banks to open branches on a statewide basis, and only New Mexico authorized branching at the county level. The remaining states either prohibited branching entirely or only allowed banks to operate a limited number of facilities within the city or county of their main office. As a result, most District banks historically had conducted their operations from a single location. At the beginning of the 1980s, for instance, more than 90 percent of the banks in Tenth District states reported all of their deposits as being held in a single office. Moreover, what limited branching occurred was generally confined to nearby locations.

This long tradition of unit banking then disappeared within a relatively short period of time. Between 1985 and 1991, every Tenth District state shifted to some form of statewide branching, although Colorado did not fully phase in statewide branching until 1997 (see Table 1). Four states— Colorado, Kansas, Missouri, and New Mexico—now allow statewide branching on an unrestricted basis, while Nebraska, Oklahoma, and Wyoming allow statewide branching by acquisition or merger, but not through *de novo* entry.

Along with their previous branching restrictions, three District states— Kansas, Nebraska, and Oklahoma—had also prohibited multibank holding companies. Consequently, a banking organization in one of these states could not own more than one bank before the 1980s and had very little ability to expand its operations through branching. Nebraska and Oklahoma, however, began allowing multibank holding companies in 1983 and Kansas followed in 1985, thus giving banking organizations the ability to

² Another factor in consolidation may have been the increase in bank failures during the 1980s. However, these failures probably account for only a small portion of overall bank consolidation. In most cases, failed banks were sold to other banking organizations and they continued to operate under a new charter or as a branch office.

Recent changes in bank structure laws*

	Branching	Multibank holding companies	Interstate entry			
Colorado	1991 - Phase-in of statewide branching 1997 - Unrestricted statewide branching	No previous restrictions	1988 - Regional reciprocal entry 1991 - Nationwide entry through acquisition			
Kansas	1987 - Statewide branching by merger or acquisition 1990 - Unrestricted statewide branching	1985 - Multibank holding companies allowed**	1992 - Regional reciprocal entry			
Missouri	1990 - Unrestricted statewide branching	No previous restrictions**	1986 - Regional reciprocal entry			
Nebraska	1983 - Limited branching within a city 1985 - Statewide branching by merger	1983 - Multibank holding companies allowed**	1990 - Regional reciprocal entry 1991 - Nationwide reciprocal entry			
New Mexico	1991 - Unrestricted statewide branching	No previous restrictions	1989 - Nationwide entry through acquisition			
Oklahoma	1983 - Limited branching within a city 1988 - Statewide branching by acquisition	1983 - Multibank holding companies allowed**	1987 - Nationwide entry through acquisition			
Wyoming	1988 - Statewide branching by merger	No previous restrictions	1987 - Nationwide entry through acquisition			

* Several of these states also have had special branching and interstate entry laws for failing bank situations.

** These states have limits which prevent a banking organization from acquiring more than a given percentage of the deposits held by all banks in the state and, in some cases, thrifts and/or credit unions as well.

acquire banks throughout the state (see Table 1).

A final aspect in the changing structure of Tenth District banking is interstate expansion. District banking organizations traditionally had been confined to conducting banking operations within a single state.³ However, between 1986 and 1992, every state in the Tenth District opened its borders to banking organizations from other states (see Table 1). While these laws varied from one state to another, all District states, except Kansas and Missouri, either authorized interstate entry on a nationwide basis at the outset or subsequently expanded their laws to that extent. Kansas and Missouri, on the other hand, passed regional interstate laws, which limited entry to banking organizations from surrounding or nearby states.

These state entry laws were then supplanted by federal legislation, the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, which allows banking organizations to acquire banks in any state as of September 29, 1995. This legislation also authorizes interstate branching and interstate mergers between banks beginning June 1, 1997. Although states were given the right to opt out

³ Several banking organizations have owned Tenth District banks on an interstate basis for many years under the interstate grandfathering provisions of the Bank Holding Company Act of 1956. Although this act prohibited interstate banking acquisitions unless they had been authorized by state law, the legislative provisions allowed organizations to continue any interstate operations that had already been established, including some that were in Tenth District states.

of these branching provisions, every state in the District has chosen to allow interstate branching.

Since the early 1980s, Tenth District states have thus changed from a predominantly unit banking format to a structure that allows banking organizations to expand interstate and to branch at both a statewide and interstate level. This quick and quite remarkable change in bank structure laws, along with the other factors mentioned above, is now providing a very strong stimulus to banking consolidation within Tenth District states.

⁴ The number of banking organizations is equal to the number of top tier bank holding companies plus the number of banks operating without a holding company affiliation (independent banks). This measure thus consolidates all banks that are under the same holding company ownership and identifies the total number of ownership groups or "decision-making" organizations in a region's banking structure. ⁵ To provide a more consistent measure of banking offices over time, Table 2 does not include any offices that are listed as having zero deposits in the Summary of Deposits

Changes in banks and banking organizations

Much like the rest of the nation, substantial banking consolidation has occurred in this region since the mid-1980s. Recent consolidation, moreover, represents a fairly significant departure from the previous fifty vears, during which each state in the Tenth District experienced a gradual increase in its banking population. In fact, during the early to mid-1980s, every District state reached a post-Depression peak in the number of banks in operation. As shown in Table 2, the number of banking organizations and banks then began to decline rapidly in each state.⁴ For District states as a group, the number of banking organizations declined by about 36 percent between 1985 and 1997, while the number of banks fell by nearly 40 percent over the same period.

The three states with the greatest decline in the number of banking organizations-Kansas, Nebraska, and Oklahoma—were also the District states which had not allowed multibank holding companies to operate within their borders until the early

to mid-1980s. This result suggests that banking organizations in these states were eager to take advantage of the new expansion opportunities to acquire additional banks and merge with other banking organizations. The smaller, but still notable decline in the number of banking organizations in the other District states implies that factors other than changes in multibank holding company laws have also played an important role in the consolidation trends.

In a similar manner, changes in state branching laws appear to be a key factor in the declining number of banks shown in Table 2. For instance, the large decrease in the number of banks operating in Colorado after 1990 corresponds quite closely to the elimination of previous branching constraints and the phase-in of statewide branching authority. Other District states also show substantial declines in their bank population as branching laws are eased. Undoubtedly, much of this decline in banks comes from the conversion of multibank organizations to branching networks—a trend that should leave bank customers with much the same choice in their banking options. A significant part of the declining banking population, though, can also be attributed to acquisition activity by both large and small organizations.

While the number of banking organizations and banks has continued to decline in Tenth District states since the mid-1980s, the total number of banking offices-main offices plus deposit-reporting branches and full service facilities—has risen by more than 38 percent over the 1985 to 1997 period and by more than 66 percent since 1980 (see Table 2).⁵ Thus, even with the recent banking consolidation trend, customers would appear to be gaining more convenient access to

report. In the 1980s, for instance, a number of District banks listed detached facilities,

drive-in or motor

offices with zero

deposits for the

reports.

branches, and ATMs or

remote service facilities

as separate banking

Summary of Deposits

report. Many of these

offices have not been

listed in more recent

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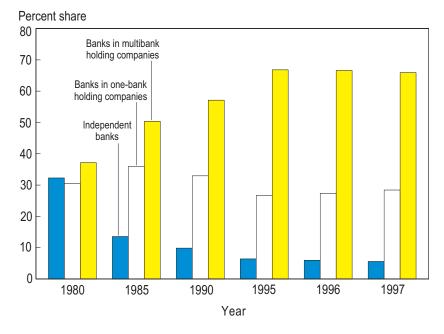
Number of banking organizations, banks, and banking offices in Tenth District states from 1980 to 1997*

	June 1980	June 1985	June 1990	June 1995	June 1996	June 1997	Percentage change from 1985 to 1997
Colorado							
Banking organizations Banks Total Offices	217 313 324	255 451 468	244 449 489	176 247 632	169 223 692	162 213 781	-36.47 -52.77 66.88
Kansas							
Banking Organizations Banks Total Offices	610 617 663	610 626 735	491 559 823	391 448 952	378 423 980	368 408 1,039	-39.67 -34.82 41.36
Missouri							
Banking Organizations Banks Total Offices	500 723 907	428 694 1,132	381 549 1,318	329 466 1,485	322 443 1,515	319 401 1,550	-25.47 -42.22 36.93
Nebraska							
Banking Organizations Banks Total Offices	444 456 484	426 465 564	336 391 589	278 340 657	272 331 678	268 328 705	-37.09 -29.46 25.00
New Mexico							
Banking Organizations Banks Total Offices	63 86 282	62 96 315	58 91 331	53 68 373	52 67 383	53 67 402	-14.52 -30.21 27.62
Oklahoma							
Banking Organizations Banks Total Offices	489 490 492	501 538 584	389 422 606	308 346 742	302 340 762	293 326 785	-41.52 -39.41 34.42
Wyoming							
Banking Organizations Banks Total Offices	68 97 97	62 115 115	53 71 102	43 53 108	44 54 121	44 53 140	-29.03 -53.91 21.74
Tenth District States							
Banking Organizations Banks Total Offices	2,391 2,782 3,249	2,344 2,985 3,913	1,952 2,532 4,258	1,578 1,968 4,949	1,539 1,881 5,131	1,507 1,796 5,402	-35.71 -39.83 38.05

*The figures for total offices exclude any branches and facilities that reported no deposits in the Summary of Deposits reports. Source: Federal Deposit Insurance Corporation Summary of Deposits

Chart 1

Share of total deposits in Tenth District states held by independent banks, one-bank holding companies, and multibank holding companies



financial services. Furthermore, with over 2,150 banking offices being added in Tenth District states since 1980, banking in this region would still appear to be a vibrant industry, looking for new ways to deliver services.

The increases in total banking offices generally correspond to changes in state branching and facilities laws. For instance, the three states with the highest percentage increases in banking offices-Colorado, Kansas, and Missouri—all began the 1980s with fairly restrictive bank facilities laws, but then switched to unrestricted statewide branching during the 1990s. Thus, many banks in these states took advantage of the opportunity to open new branches. The other states in the Tenth District either adopted laws which limited statewide branching authority to

acquisitions and mergers of existing banks (Nebraska, Oklahoma, and Wyoming) or began the 1980s with more of a branching tradition (New Mexico) and therefore had less of a change to make. As a result, the number of new branches opened in these states has not been quite as great as in the first three states.

Overall, the liberalization of bank branching laws has given the District a much different banking structure. In 1980, the ratio of total offices to banks was 1.17, indicating this region's long tradition of unit banking and the fact that few banks operated more than a single office. By last June, however, this ratio had risen to 3.01, with

branches and facilities thus being twice as common as head offices. Moreover, the portion of the banking population in Tenth District states which reported deposits at more than one office rose from less than 10 percent of all banks in 1980 to more than 47 percent by 1997.

Trends in District banking consolidation and the effects of bank structure law changes can also be seen in the changing roles of independent banks, one-bank holding companies, and multibank holding companies. As shown in Chart 1, the share of deposits held by banks in multibank holding companies has grown significantly from about 37 percent of total deposits within Tenth District states in 1980 to nearly 66 percent in 1997. On the other hand, the deposit share of independent banks has fallen from

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32 percent of all deposits in 1980 to less than 6 percent in 1997.

The share held by banks in one-bank holding companies has experienced far less of a change, although the particular banks in this group have not necessarily stayed the same. During the 1980s, the one-bank holding company category gained many smaller banks as their stockholders formed holding companies. Over this same period, though, many one-bank holding companies merged together or were acquired by multibank holding companies, particularly as several District states began relaxing multibank laws. More recently, broader branching laws have begun to allow multibank organizations to convert their banks into single branching networks operated under one-bank holding companies.

Interstate banking in Tenth District states

Interstate banking has become a very important part of the Tenth District banking structure. Most of this interstate activity has occurred within the last twelve years, although a few interstate organizations have operated in Tenth District states under the interstate grandfathering provisions of the Bank Holding Company Act of 1956. A major impetus to interstate banking was the introduction of interstate entry laws in every Tenth District state between 1986 and 1992 (see Table 1). A subsequent factor has been the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 and its provisions for nationwide entry in all states after September 29, 1995, and interstate branching starting June 1, 1997.

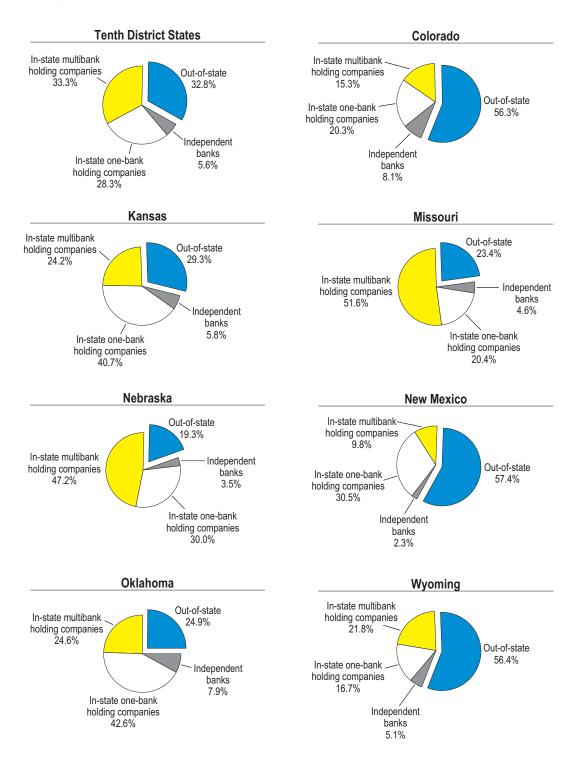
The effect of these legal changes has been quite dramatic. Bank customers in Tenth District states have recently seen many major banks with old, familiar names change hands and begin operating under such names as NationsBank, Norwest, U.S. Bank, Banc One, and Wells Fargo. In many cases, the names and interstate ownership of these banks have changed several times. As a result of such ownership changes, interstate banking, which represented just over one percent of total banking deposits in Tenth District states in 1980, has grown to approximately one-third of total deposits in 1997 (see Chart 2).

Out-of-state banking organizations, moreover, control the majority of banking deposits in three District states—Colorado (56.3 percent of all deposits in the state as of June 30, 1997), New Mexico (57.4 percent), and Wyoming (56.4 percent). In general, these three states have had a more concentrated banking structure compared to other District states, and interstate organizations were thus able to pick up more of the state deposit base through major acquisitions. Also, these states experienced some economic problems during the 1980s, which limited the ability of the larger, in-state organizations to expand on their own and become interstate players. In the other District states, interstate banking constitutes from 19 percent to nearly 30 percent of each state's deposit base (see Chart 2), and these percentages have grown very rapidly from just a few years ago. While interstate banking will continue to expand in these states, the less concentrated banking structure in several of these states will lead to a more gradual rate of consolidation.

The most recent step in interstate banking has been the opportunity to establish interstate branches. Since June 1, 1997, which was the interstate branching opt-in date in the Riegle-Neal Act, many interstate

Chart 2

Share of deposits in Tenth District states by organizational structure June 30, 1997



organizations have chosen to convert their interstate operations into branching networks. Table 3 provides an indication of interstate branching's importance in just the first month that branching legislation became effective.⁶ A total of 574 deposittaking offices in Tenth District states were being operated as branches of out-of-state banks on June 30, 1997, and these branches held over 17 percent of all banking deposits across these states. Since that time, many other interstate branch conversions have occurred, and interstate branching now makes up the vast majority of interstate banking operations in Tenth District states.

A key result of this interstate activity and of other forms of bank consolidation has been a change in the major players in Tenth District banking and in their relative importance within Tenth District states. According to Table 4, the five largest organizations operating within Tenth District states in 1980 were all headquartered within this region, had no interstate banking operations, and controlled only 12.52 percent of the total deposits in the region. By 1997, however, three of the five largest organizations were headquartered outside of Tenth District states, and all of the top five operated banks in more than one District state. Moreover, when compared to 1980, the top five organizations had a much greater presence in this region in 1997, together controlling nearly 32 percent of banking deposits in Tenth District states. NationsBank Corporation, Charlotte, North Carolina, became the largest organization through its 1997 acquisition of Boatmen's Bancshares, and it thus went from having no banking operations in District states to controlling almost 11 percent of all deposits within the region.

Table 3

Branches of out-of-state banks

June	30,	199
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Branch Location	Number of Branches	Percent of total state deposits held in these branches
Colorado	99	18.61
Kansas	153	18.13
Missouri	208	30.23
Nebraska	54	9.98
New Mexico	47	6.96
Oklahoma	0	0.00
Wyoming	13	3.72
All Tenth District States	574	17.13*

* As a percent of all banking deposits in Tenth District states.

Bank consolidation and interstate expansion have also led to an increase in banking concentration within several District states, although mostly in the states that had previously prohibited multibank holding companies. As shown in Table 5, statewide concentration began to increase in Kansas, Nebraska, and Oklahoma after the adoption of multibank holding company laws in the mid-1980s and after banking conditions improved. Banking concentration also rose in Missouri due to mergers among several large organizations and in Wyoming from the entry and expansion by interstate organizations. On the other hand, Colorado and New Mexico began with a more concentrated banking environment in the 1980s and have experienced little change in the portion of deposits held by the top five organizations. Not only has banking concentration changed in most District states, but some significant changes in ownership have also

⁶ A number of banks operated interstate branches in Tenth District states before June 1, 1997. Almost all of these branches were established under a provision of the National Bank Act, which allows national banks to relocate their head offices within a 30 mile distance, or through state wildcard provisions giving state banks similar authority. A few of the interstate branches were in response to special circumstances, such as banks serving more than one military base.

The five largest banking organizations in Tenth District states

Banking organizations	Deposits in Tenth District states (In millions of dollars)	Percent of all deposits in district states
Mercantile Bancorporation, Inc., St.Louis, MO	\$ 2,480.3	2.98
First Union Bancorporation, St. Louis, MO	2,272.7	2.73
Commerce Bancshares, Inc., Kansas City, MO	1,997.9	2.40
First National Bancorporation, Denver, CO	1,864.9	2.24
United Banks of Colorado, Inc., Denver, CO	1,793.1	2.16
Total – Top Five Organizations	\$10,408.8	12.52

Top five organizations in 1980

	····	
Banking organizations	Deposits in Tenth District states (In millions of dollars)	Percent of all deposits in district states
NationsBank Corporation, Charlotte, NC	\$21,445.1	10.99
Norwest Corporation, Minneapolis, MN	13,058.5	6.69
Mercantile Bancorporation, Inc., St. Louis, MO	12,075.7	6.19
U.S. Bancorp, Minneapolis, MN	7,861.4	4.03
Commerce Bancshares, Inc., Kansas City, MO	7,677.2	3.93
Total – Top Five Organizations	\$62,117.9	31.82

Top five organizations in 1997

occurred among the major players in each state. Of the top five organizations in each of the seven District states, twenty of the thirty-five companies were headquartered in another state in 1997 compared to just three organizations in 1980.⁷

Table 5

Percentage of deposits held by the five largest banking organizations in each district state

District State	June 1980	June 1985	June 1990	June 1995	June 1996	June 1997
Colorado	56.09%	55.49%	59.70%	56.38%	55.29%	55.33%
Kansas	12.65	14.19	28.44	31.88	31.09	29.41
Missouri	38.76	48.49	50.24	55.90	56.35	58.07
Nebraska	25.58	29.80	40.40	46.84	47.62	46.74
New Mexico	56.16	58.23	61.40	61.67	60.16	59.16
Oklahoma	24.34	27.04	22.51	31.94	35.81	36.78
Wyoming	45.07	48.04	52.35	63.15	64.37	63.88

Apart from the consolidation of large organizations, there is another picture of interstate expansion and bank consolidation that has

received less attention, but is also important to the District's banking structure—merger and expansion activity among community banking organizations. While most community banks operated for many years under a single office, unit banking structure, this format is beginning to change. A substantial portion of community organizations is starting to merge with other community organizations. A major objective of these mergers is not only to maintain services in smaller markets, but also to achieve a more efficient scale of operations and develop skilled staff in such areas as specialized lending, product development, regulatory compliance, and technology and data processing. In addition, retail trade has become more consolidated across many rural markets, and the same forces driving this consolidation are affecting community banking organizations.

Although their interstate deposit holdings are smaller, community banking organizations are playing a key role in interstate expansion throughout the District. Of the fifty-five organizations that have entered at least one District state on an interstate basis, thirtythree have less than \$1 billion in total banking assets, and twelve of these companies have less than \$150 million in banking assets. Moreover, a number of the interstate companies with total banking assets over \$1 billion began as community organizations and grew to their current size primarily by consolidating with other community organizations. Much community bank consolidation has also taken place on an intrastate basis through the formation of multibank holding companies and the use of branching laws.

New means of providing banking services

Banks are not only expanding through their traditional office format, but are also finding a variety of new and more flexible ways to deliver banking services. In many instances, these new delivery systems are becoming much more than an adjunct to what we now consider banking. In fact, such inno⁷ In the 1997 figures, a number of interstate organizations have operations which rank them among the top five in more than one District state. The statistics reported here count these companies each time they are among the top five organizations in a state. vations as ATMs, supermarket branches, and Internet and home banking have either become or soon promise to be the most common banking interface for many customers.

⁸ ATMs are typically shared through regional or national ATM networks, with each network setting the standards for entry fees, interchange transaction fees, and operational format and procedures. With sharing, customers of one institution in a network may then make transactions at the other ATMs in the network. ⁹ Many banks also charge their own customers a fee when they use an ATM owned by another institution. This fee allows the customer's bank to cover the interchange fee it must pay to the ATMs' owner for each transaction. A few ATMs surcharged prior to 1996 in states that had passed laws overriding the network surcharging bans. ¹⁰ The Plus System is a national ATM network that includes about 92 percent of all the ATMs in the United States. The vast majority of ATMs in Tenth District states are in this network, although the overall District participation rate may be slightly lower than nationwide. Because of the limited use of their ATMs by outside parties, rural banks in the District, for instance, are somewhat less likely than other banks to join an ATM network or may join only one of the national networks

More than just changing the way financial services are delivered to customers, though, these innovations are dramatically changing the competitive framework and many other aspects of banking. ATMs and Internet banking, for instance, are significantly reducing the importance of a bank's office and branching structure, thus making geographic location far less of a consideration in reaching customers. As a result, banks conceivably will be competing with banks located outside of the local market and, in some cases, with a wide range of other firms, including nonbank financial institutions, communications firms, Internet service providers, and data processing and software companies. New delivery channels are changing a number of other parameters in banking as well, such as the cost and ease of providing payments services and additional banking products, the type of personnel needed in banking, and customer access to financial information.

One of the first major changes in the way banks deliver services has been the development of ATMs. Since their introduction in the early 1970s, ATMs have experienced a rapid growth rate that has shown little sign of slowing down. Both bank and nonbank ATMs have increased nationwide from about 60,000 terminals in 1985 to an estimated 181,000 at year-end 1997. The number of ATMs that an individual customer can access has increased at an even more rapid pace with the spread of regional and national ATM networks and terminal sharing agreements among institutions. In 1985, only 35,500 terminals or 59

percent of all ATMs were shared, and some of these were only shared within a regional network.⁸ Now more than 99 percent of ATMs are shared, and nearly all of these are shared on a nationwide basis. As a result, Tenth District bank customers can conduct transactions through almost any ATM in the United States, as well as many more throughout the world.

Recently, much of the ATM growth has been through off-premise machines as banks and other firms seek to reach customers in new and more convenient locations. This off-premise boom has received further impetus from declining ATM and telecommunications costs and from the spread of surcharging on ATM transactions. Surcharges, which are the fees cardholders pay to the owner of an ATM, had previously been prohibited by most ATM networks. However, the two national ATM networks dropped their surcharge bans in April 1996 and were followed by nearly all of the regional networks.9 The majority of ATMs now have surcharges, and the resulting revenues are providing a financial incentive for institutions to expand their ATM base and to locate terminals in high-traffic, off-premise sites.

ATM growth in Tenth District states has closely followed the national trends. Over the last year, for example, the number of ATMs within Visa's Plus System increased by over 22 percent across Tenth District states to reach a total of 12,397 terminals at year-end 1997 (see Table 6).¹⁰ As a result of this growth, Tenth District ATMs now outnumber the offices of depository institutions by a substantial amount, thus making these terminals the most convenient form of banking for many customers. The percentage of ATMs in District states with surcharges has also followed national trends. While 31 percent of the ATMs in District states

had surcharges in March 1997, more than 51 percent were surcharging just six months later. The only exception to this trend was in Nebraska, where regional network restrictions have limited the ability of banks to set surcharges. As shown in Table 6. the average surcharge fee across District states ranged from \$0.98 to \$1.26 as of September 1997.

With surcharging helping to raise the profitability of ATMs and with technology lowering the cost of purchasing and maintaining terminals, many District banks and nonbank providers have become active in finding new locations for ATMs. Many of these new ATMs have appeared in such places as convenience stores, shopping centers, supermarkets, service stations, department stores, and casinos. One other trend that is starting to show up in the District is ATMs that offer a wider variety of services and products. Some institutions are beginning to experiment with automated loan machines (ALMs), which allow customers to fill out loan applications and apply for loans electronically. Other innovations include ATMs that sell postage stamps, movie and other entertainment tickets, mass transit tickets, and other nonbanking services. A few institutions are also setting up electronic banking kiosks and automated business and consumer banking centers.

Table 6

ATMs in Tenth District states that are in the Plus System

	Number of ATMS		Percent of with surc	Average surcharge fee	
	Dec. 1996	Dec. 1997	March 1997	Sept. 1997	Sept. 1997
Colorado	2,109	2,624	28%	55%	\$1.21
Kansas	1,412	1,566	31	42	1.05
Missouri	2,725	3,138	29	53	1.17
Nebraska	1,401	1,518	1	1	1.26
New Mexico	769	1,184	59	68	.99
Oklahoma	1,417	2,061	41	65	.98
Wyoming	240	306	51	86	.99
All Tenth District States	10,073	12,397	31%	51%	\$1.13

Source: Visa/Plus ATM Product Office

An additional change in bank delivery channels is the effort to locate bank branches in places where customers conduct other business on a fairly frequent basis. An important example of this is the emergence of bank branches in supermarkets. Under this branching alternative, banks typically rent a small area within a supermarket and bring in several employees to offer a limited range of services, most commonly deposit and transaction services and consumer lending. The advantage of such branches for banks is the opportunity to locate in a high traffic area at a relatively low initial outlay. As shown in Table 7, an increasing number of banks in Tenth District states are now offering services through supermarket branches, with the total number of such branches nearly doubling since 1993.

Bank branches located in supermarkets in Tenth District states

	Branches in supermarkets				
	June 1993	October 1997			
Colorado	15	37			
Kansas	26	41			
Missouri	27	45			
Nebraska	9	17			
New Mexico	14	27			
Oklahoma	12	4			
Wyoming	1	34			
All Tenth District States	104	205			

Source: Branch Migration DataSource, SNL Securities

Internet and home banking are the most recent innovations in bank delivery systems and, ultimately, promise to be among the most noteworthy developments in banking. These innovations, for example, will allow customers to conduct many banking operations from home or work without the need to enter a bank or to write out and mail their payments. Electronic banking will also enable customers to immediately access their account information, remotely transfer funds between bank accounts and other investment alternatives, and apply for and receive credit and other banking services outside of the traditional banking framework. In addition, electronic banking could dramatically lower the cost of many banking services, while expanding the types of financial products that can be offered. One other likely change is an increasing level of

competition as customers gain the ability to go beyond their local market area and do business with any financial institution over the Internet.

A number of banks in Tenth District states have experimented with offering home banking services through telephone lines and secured communications channels. The most common and rapidly growing remote delivery system, though, is Internet web sites. As shown in Table 8, a total of 157 banks in Tenth District states were listed as having web sites in the first quarter of 1998. This number compares to just 78 banks a year earlier. Although most of these sites only provide general information about a particular bank and its services, more advanced web sites are becoming common. Thirteen percent of the web sites in District states now offer intermediate level banking services through such features as online account balance inquiries, applications to open deposit accounts, and online lending (see Table 8). Two banks have advanced web sites allowing online check writing and transfers among accounts. It seems likely that a substantial portion of Tenth District banks will have web sites within the next few years, and the variety of products offered on these sites can be expected to increase rapidly as well.

Summary

In the short span of just ten to fifteen years, the banking industry has changed quite dramatically in Tenth District states. Unit or single office banking characterized much of the District at the beginning of this time frame. However, since then, the legal framework has changed to allow statewide branch banking, multibank holding companies, and interstate banking and branching in all District states.

Banks in Tenth District states with Internet web sites

		Number of banks (Percent of total web sites)						
Functionality of web site	Description	Third quarter 1996	Fourth quarter 1996	First quarter 1997	Second quarter 1997	Third quarter 1997	Fourth quarter 1997	First quarter 1998
Entry level	General information: products, interest rates, news.	30 (73)	37 (73)	51 (65)	63 (64)	76 (64)	96 (68)	100 (64)
Basic	Adds interactive tools and limited loan origination capabili- ties: loan payment calculators, download loan applications.	6 (15)	8 (16)	18 (23)	25 (25)	26 (22)	27 (19)	35 (22)
Intermediate	Adds some advanced features: online account balances, apply for deposit accounts online, apply for loans online.	5 (12)	6 (12)	9 (12)	11 (11)	16 (14)	16 (11)	20 (13)
Advanced	Full banking functionality: all of the above plus interaccount transfers and online check writing.	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	2 (1)
Total		41	51	78	99	118	141	157
Percent increase of total, quarter to quarter			24%	53%	27%	19%	19%	11%

Note: This tally is based on the links listed in the BankWeb directory of banks with Internet sites (www.bankweb.com/bankweb.html). The BankWeb directory attempts to list all banks with Internet sites, but we have found some District banks with sites that are not listed in BankWeb. Although the count is incomplete, we think that the information in this table does a reasonable job in measuring trends in the overall number of sites and their functionality.

Source: A quarterly survey by Richard Sullivan, Banking Studies and Structure Department, Federal Reserve Bank of Kansas City

One key result of these legal changes and other incentives for consolidation is a decline of nearly 40 percent in the number of banks operating in Tenth District states. At the same time, though, over 2,150 banking offices have been added in this region since 1980. This office growth would thus suggest that customers now have more convenient access to banking services even though the number of separately chartered banks has declined. Interstate banking has also changed the District's banking structure substantially, with almost onethird of the total banking deposits in Tenth District states now under the control of out-of-state organizations.

Even more notable changes could occur in the near future as banks develop new delivery systems and take advantage of recent innovations. A significant portion of banking transactions is now being conducted through ATMs, bank branches in retail stores, and over the telephone or the Internet.

Although all of these changes pose new issues and challenges for bankers and their customers, they will also open up new opportunities. Bankers will have the chance to enter new markets and reach a broader base of customers. They will also have opportunities to construct a more efficient payments system and to develop many new services. For bank customers, financial innovation and new delivery systems are likely to bring more convenience and a broader choice of financial institutions and products.