

## BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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**Date:** October 26, 2001  
**To:** Board of Governors  
**From:** Edward W. Kelley, Jr.  
**Subject:** Proposed 2002 Fee Schedules for Priced Services

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The Committee on Federal Reserve Bank Affairs has reviewed staff's recommendation that the Board adopt the proposed 2002 fee schedules for priced services and electronic connections. In 2002, the Reserve Banks project that all priced services will recover 96.2 percent of their costs, including imputed costs and targeted return on equity. Except for the check and noncash collection services, all the priced services will fully recover all costs. The check service is projected to recover 95.4 percent of all costs as it continues to implement its check modernization initiatives. The Reserve Banks expect to fully recover all of their check costs, including those for the check modernization initiatives, over the long term.

The proposed 2002 fee schedules become effective in January 2002.

The Committee is forwarding the attached staff memorandum to the Board for its consideration.

Attachment

## BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

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**Date:** October 26, 2001  
**To:** Board of Governors  
**From:** Staff<sup>1</sup>  
**Subject:** Proposed 2002 Fee Schedules for Priced Services

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### **ACTION REQUESTED**

Staff requests that the Board approve the proposed 2002 fees for priced services and electronic connections shown in attachments I through VII.<sup>2</sup>

### **DISCUSSION**

Over the period 1991 through 2000, the Reserve Banks recovered 100.8 percent of their total costs for providing priced services, including imputed expenses, special project costs budgeted for recovery, and targeted after-tax profits or return on equity (ROE).<sup>3</sup>

Table 1 summarizes the actual, estimated, and budgeted cost and revenue performance and cost recovery rates for priced services for 2000, 2001, and 2002 respectively. For 2001, the cost recovery rate is currently estimated to be 94.0 percent and for 2002, the cost

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<sup>1</sup> Jeff Stehm, Bridget Spaniel, Jack Walton, Cynthia Yablon, Michele Braun, William Driscoll, Joseph Baressi, Gina Sellitto, Gregory Cannella, Marybeth Butkus, Lawrence Lucas, Wes Horn, Elizabeth Miyagi, and Brenda Richards.

<sup>2</sup> The Federal Reserve Banks' priced services include check, automated clearinghouse (ACH), funds transfer and net settlement, book-entry securities transfer and purchase and sale activity, noncash collection, and special cash. Staff separately forwarded to the Board its recommendations for the 2002 private sector adjustment factor (PSAF).

<sup>3</sup> These imputed costs, such as taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm, are referred to as the PSAF. The PSAF is based on consolidated financial data for the nation's fifty largest bank and financial holding companies for each of the last five years. The targeted ROE is the budgeted profit that the Federal Reserve would have earned had it been a private business firm. The ten-year recovery rate is based upon the pro forma income statement for Federal Reserve priced services published in the Board's *Annual Report*. Beginning in 2000, the PSAF included additional financing costs associated with pension assets attributable to priced services. This ten-year cost recovery amount has been retroactively computed as if these costs were not historically included in the PSAF calculations. If such costs were included in the calculations, the ten-year recovery rate would have been 99.5 percent.

recovery rate is targeted to be 96.2 percent. The aggregate cost recovery rates are heavily influenced by the performance of the check service, which accounts for approximately 83 percent of the total cost of priced services. The electronic services (FedACH, Fedwire funds transfer and net settlement, and Fedwire book-entry securities transfer) account for approximately 17 percent of costs, while the noncash collection and special cash services represent a de minimis percentage.

Table 1

| <b>Pro Forma Cost and Revenue Performance<sup>a</sup></b><br>(\$ millions) |                           |                                       |                                 |                                 |  |
|--|---------------------------|---------------------------------------|---------------------------------|---------------------------------|--|
| YEAR   | 1 <sup>b</sup><br>REVENUE | 2 <sup>c, f</sup><br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>ROE<br>[1-2] | 4 <sup>d</sup><br>TARGET<br>ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000   | 922.8                     | 818.2                                 | 104.6                           | 98.4                            | 100.7%   |
| 2001 (Estimate)  | 951.6                     | 902.6                                 | 48.9                            | 109.3                           | 94.0%  |
| 2002 (Budget) <sup>e</sup>   | 955.9                     | 900.9                                 | 55.1                            | 92.5                            | 96.2%  |

<sup>a</sup> Calculations on this table and subsequent pro forma cost and revenue tables may be affected by rounding.

<sup>b</sup> Includes net income on clearing balances (NICB).

<sup>c</sup> The calculation of total expense on this and subsequent pro forma cost and revenue tables includes operating expenses and imputed costs plus special project costs recovered during the year. Imputed costs include interest on debt, taxes, FDIC insurance, Board of Governors priced services expenses, and the cost of float. Credits for prepaid pension costs under FAS 87 are also included. In 2001, the check service estimates that it will incur \$13.1 million in special project costs related to the ongoing check modernization initiative. In 2002, the check service projects that it will incur \$11.4 million in special project costs related to check modernization.

<sup>d</sup> Targeted ROE is the pre-tax ROE included in the PSAF, adjusted for taxes. The taxes are included in column 2.

<sup>e</sup> Changes in the PSAF and NICB methodology for 2002 reduce both revenue and expenses. As a result, 2002 budgeted revenue is reduced by a loss on NICB of \$18.1 million as compared to an NICB related revenue increase of \$20.5 million included in the 2001 estimate. Total expenses include PSAF of \$150.1 million in the 2002 budget as compared with \$206.9 million in the 2001 estimate.

<sup>f</sup> Corporate overhead costs are allocated to Reserve Bank activities on a dollar-ratio basis (based on their proportion of total Reserve Bank costs). Because corporate overhead costs are not closely related to any particular priced service, the priced-services portion of these costs is assigned among the individual services to facilitate the funding of significant multiyear strategic investments that would otherwise result in short-term price fluctuations, subject to established minimum and maximum amounts. In 2000, the assignment of corporate overhead costs to individual priced services supported the Reserve Banks' strategic check modernization project. In 2001 and 2002 the corporate overhead allocation among priced services is on a dollar-ratio basis. The table below shows the assignment of corporate overhead costs for the years 2000-2002.

Table to Footnote f

| Corporate Overhead Allocations to Priced Services<br>(\$ millions) |       |     |                   |                |                       |              |       |
|--|-------|-----|-------------------|----------------|-----------------------|--------------|-------|
| Year   | Check | ACH | Funds<br>transfer | Book-<br>entry | Noncash<br>collection | Special cash | Total |
| 2000 Actual  | 36.0  | 8.0 | 4.3               | 1.1            | 0.1                   | 0.1          | 49.7  |
| 2001 (Estimate)  | 43.4  | 3.4 | 2.7               | 1.1            | 0.1                   | 0.1          | 50.8  |
| 2002 (Budget)  | 44.6  | 4.0 | 3.3               | 1.2            | 0.1                   | 0.1          | 53.4  |

Table 2 presents an overview of the budgeted 2001, estimated 2001, and projected 2002 cost recovery performance by category of priced service.

Table 2

| <b>Priced Services Cost Recovery</b><br>(percent) |             |                   |             |
|---|-------------|-------------------|-------------|
| PRICED SERVICE                                    | 2001 BUDGET | 2001 ESTIMATE     | 2002 BUDGET |
| All services                                      | 98.1        | 94.0 <sup>4</sup> | 96.2        |
| Check   | 97.6        | 93.3              | 95.4        |
| ACH   | 101.3       | 100.3             | 101.0       |
| Funds transfer                                    | 101.2       | 98.3              | 100.8       |
| Book-entry  | 95.6        | 87.1              | 100.2       |
| Noncash collection                                | 102.5       | 106.7             | 92.6        |
| Special cash                                      | 100.5       | 104.4             | 103.8       |

### 2001 Estimated Performance

In 2001, the Reserve Banks estimate that they will recover 94.0 percent of the costs of providing priced services, including imputed expenses, check modernization special project costs, and targeted ROE, compared with a targeted recovery rate of 98.1 percent.<sup>4</sup> Through August 2001, the Reserve Banks recovered 95.6 percent of total priced services expenses, including imputed expenses, check modernization special project costs, and targeted ROE. Although the estimated 2001 recovery rate is below 100 percent, the Reserve Banks estimate that they will fully recover actual and imputed expenses and earn net income of \$48.9 million, \$60.4 million less than the targeted ROE of \$109.3 million. The 2001 shortfall from the 2001 budget target is largely driven by three factors:

- Lower-than-expected performance in the check service is due to both lower revenue and higher expenses than budgeted. Check service revenues will be \$9.8 million lower than budgeted due to lower volume growth than budgeted, customers shifting to the use of lower-priced products, and implementation delays of two quality improvement products. Local check costs will be \$10.5 million more than budgeted and national support costs allocated to check (excluding check modernization costs) will be \$6.9 million more than budgeted; these increased expenses will be partly offset by lower-than-

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<sup>4</sup> Includes float costs, but excludes higher net income on clearing balances, associated with the events of September 11.

budgeted check modernization costs of \$6.0 million.<sup>5</sup> The Reserve Banks also incurred unbudgeted expenses associated with the September 11 terrorist attacks; these totaled approximately \$19 million and are primarily float costs resulting from a policy decision to grant funds availability according to published schedules despite the delays in presenting checks due to the shutdown of air traffic. Other costs associated with the September 11 event included expenses related to arrangements for ground transportation and overtime and related expenses.<sup>6</sup>

- The 2001 estimated net income on clearing balances (NICB), an imputed income, is significantly lower than the budgeted amount.<sup>7</sup> For the year, it was originally projected to be \$40.7 million, but the estimate has been revised downward to \$20.5 million. The decline is the result of a larger difference between the rate at which earnings credits are paid to depository institutions and the imputed earnings rate on clearing balances in 2001 than budgeted.
- The 2001 estimated pension credit, an offset to expenses, is lower than budgeted. It was budgeted at \$117.1 million, but the estimate is \$101.0 million. The decrease in the estimate is generally due to lower-than-anticipated return on pension plan assets in 2000.

## **2002 Projected Performance**

For 2002, the Reserve Banks project that they will recover 96.2 percent of total priced services' expense, including imputed expenses and targeted ROE. The proposed 2002 fees for priced services are projected to result in a net income of \$55.1 million, compared with a targeted ROE of \$92.5 million. Factors affecting 2002 cost recovery include the following:

- Net costs of \$86.0 million associated with the check modernization project.

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<sup>5</sup> Check modernization is a multi-year initiative to standardize the processing of checks at all Reserve Banks, adopt a common platform for processing and researching check-adjustment cases, create a national system for archiving and retrieving check images, and deliver check services to depository institutions using web technology.

<sup>6</sup> Expenses associated with September 11 may be offset by increased NICB resulting from large excess clearing balances held during the September 11 – 21 period.

<sup>7</sup> NICB consists of imputed net income on clearing balances, assuming investment of clearing balances in three-month Treasury bills, minus the cost of earnings credits granted to clearing balance holders at the federal funds rate.

- Methodology changes reduce imputed income in NICB and reduce imputed expenses in PSAF.<sup>8</sup>
- In the 2002 budget, the pension credit is about \$22 million lower than in 2001 primarily due to the full amortization in 2001 of the initial pension asset as required by generally accepted accounting principles. The amortization of the initial pension asset contributed \$15 million a year to the pension credit from 1987 through 2001.

The primary risks to the 2002 projection are the check volume and revenue growth projections, the potential for cost overruns or delays in the check modernization projects, and potential further reductions to NICB and priced pension credits.<sup>9</sup> Additional risks include possible volume declines in the ACH and Fedwire funds transfer services due to increased competition.<sup>10</sup> Although the check service will not achieve full cost recovery in 2001 or 2002, the Reserve Banks believe that they will achieve full cost recovery of the check service over the long run by aggressively managing local and national costs, taking advantage of efficiencies gained from check modernization, and increasing value-added product revenue.

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<sup>8</sup> The methodology for computing PSAF was modified in October 2001 to include the following changes beginning with the 2002 calculation: clearing balances were made available to finance long-term priced-service assets; equity was imputed to meet the FDIC definition of a well-capitalized institution; target return on equity was determined using the results of three economic models; and the peer group of the fifty largest bank and financial holding companies was selected based on total deposits, rather than assets.

<sup>9</sup> If forward-processed volume were unchanged from the 2001 level, revenue would decline \$9.9 million from the budgeted level; if forward-processed volume declined one percent below the 2001 level, revenue would decline \$15.5 million. Similarly, payor bank service revenues would decline by \$1.7 million and \$2.6 million, respectively. If returned check volume were unchanged from the 2001 level, revenue would decline \$0.8 million from the budgeted level; if return volume were one percent below the 2001 level, revenue would decline \$2.2 million. Savings in operational costs and variable PSAF would partially offset such revenue losses.

<sup>10</sup> In July 2001, pursuant to previously negotiated agreements, the Reserve Banks and private-sector operators (PSOs) implemented new deposit deadlines for ACH transactions that they exchange with each other. On October 1, the Reserve Banks and the PSOs implemented a new fee structure for these interoperator transactions. The new deposit deadlines and interoperator fee structure were intended to enhance competition in the provision of ACH services, which is likely to result in volume shifts from the Reserve Banks to other ACH operators in 2002. Staff believes that the Reserve Banks' ability to successfully recover their ACH costs in 2002 as a result of such volume shifts may be challenging; however, the Reserve Banks believe that they will be able to recover costs over the long run. The competitor to the Fedwire funds transfer service, Clearing House Interbank Payments System (CHIPS), implemented an intraday finality mechanism for its service in January 2001. While there has been little movement of funds transfer volume from Fedwire to CHIPS to date, we understand that some high-volume funds transfer customers have decided to begin shifting substantial funds transfer volume to CHIPS. Fedwire funds transfer volume is expected to decline as customers that are also CHIPS participants move volume from Fedwire to CHIPS.

## **2002 Pricing**

The following summarizes the Reserve Banks' proposed changes in fee structures and levels for priced services:

### **Check**

- Fees for all check products are increasing 3.7 percent compared with current prices or 4.0 percent compared with January 2001 fees. Per-item and cash-letter fees for forward-collection check products are also increasing at this rate.
- Overall prices for electronic products overall are increasing faster than prices for paper check processing because margins for electronic products are currently lower than for paper check products. The increases reflect a Reserve Bank strategy to price these products to more fully reflect their value to customers. Transaction fees for payor bank services, which include electronic check products, will increase 4.5 percent relative to both current prices and January 2001 fees.
- Aggregate check service fee increases in 2002 are expected to cost depository institution customers approximately \$30 million, assuming no changes to current customer processing choices.
- Since 1996, the price index for check has increased more than 35 percent.

### **FedACH**

- The Reserve Banks are proposing to retain current prices for customers of the FedACH service.<sup>11</sup> The Reserve Banks anticipate a reduction in fees mid-year 2002 as a part of the overall strategy to meet competitive challenges.
- Since 1996, the price index for the ACH service has decreased almost 55 percent.

### **Fedwire Funds Transfer and Net Settlement**

- The Reserve Banks propose fee reductions to funds transfer customers in all tiers. The Reserve Banks propose the following fee reductions: tier 1 – two cent decrease to \$0.31 (6.1 percent decrease); tier 2 – two cent decrease to

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<sup>11</sup> The Reserve Banks modified their fee structure for transactions exchanged with PSOs October 1, 2001. Under the new fee structure, the Reserve Banks and PSOs will charge each other fees for interoperator transactions. Other price changes effective October 1 were a \$0.0005 decrease in the per item origination fee for items deposited in large files; a \$0.0020 decrease in the per item receipt fee for all items; a single, standard input file processing fee of \$5.00 which represents a decrease of \$1.75 for large-volume files and an increase of \$3.25 for small-volume files; and a new \$20.00 per month fee for FedACH settlement.

\$0.22 (8.3 percent decrease); and tier 3 – one-cent decrease to \$0.15 (6.3 percent decrease).<sup>12</sup>

- Funds transfer fee decreases in 2002 are expected to save depository institution customers approximately \$3 million.
- A realignment of net settlement service prices is planned to more accurately reflect costs. The Reserve Banks propose the following: decrease the settlement entry fee 15.8 percent to \$0.80; increase the settlement file fee 16.7 percent to \$14.00; increase the off-line settlement statement subject to surcharge 66.7 percent to \$25; eliminate the fee for telephone notification; and decrease the daily settlement fee for large-dollar Fedwire-based settlement arrangements 42.9 percent to \$100, the same as the fee for small-dollar Fedwire-based settlement arrangements.
- The price index for Fedwire funds transfers and net settlement has declined almost 55 percent since 1996.

#### **Fedwire Book-Entry Securities**

- The Reserve Banks propose to lower the following fees as a result of projected increases in volumes due to the addition of Ginnie Mae securities: decrease the on-line origination and receipt fees by \$0.04 to \$0.66 (5.7 percent decrease) and decrease the monthly account maintenance fee per issue per account by \$0.04 to \$0.41 (8.9 percent decrease).
- In the second half of 2002, the Reserve Banks plan to introduce a fee for a new feature of the service – automated claims adjustments related to failed securities transactions, interim accounting for securities with an accrual date different from the record date, and repurchase agreement tracking. The Reserve Banks will introduce a fee for the new product and will determine this fee once volume projections can be confirmed by actual experience. Initially, the Reserve Banks plan to establish a uniform fee for all claims adjustments.
- Book-entry fee decreases in 2002 are expected to save depository institution customers approximately \$1.4 million.
- Including the fee change for 2002, the price index for the book-entry securities service has declined about 30 percent since 1996.

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<sup>12</sup> The Reserve Banks reduced the per transfer fee for tier 3 customers by one-cent to \$0.16 on August 1, 2001.



## 2002 Price Index

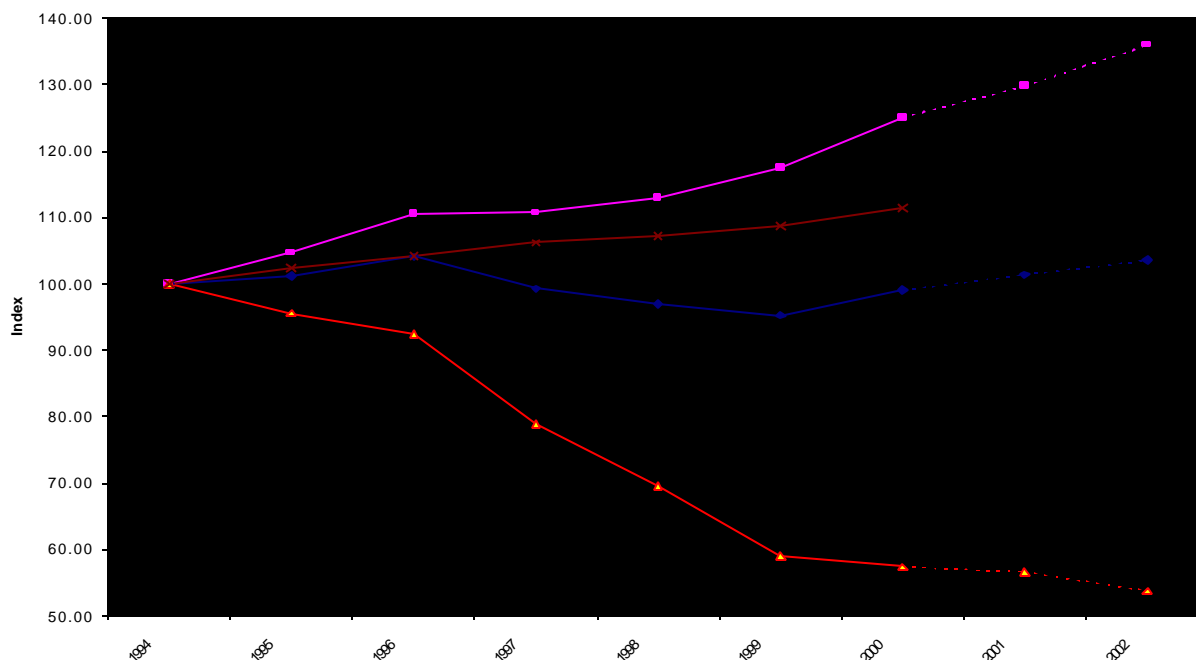
In their proposed 2002 fee schedules, the Reserve Banks include changes that continue to provide an economic incentive for depository institution customers to make greater use of electronic payment services. The price index for electronic payment services (ACH, funds transfer and net settlement, book-entry securities, and electronic check) and electronic connections is projected to decline approximately 5 percent in 2002.<sup>13</sup> In contrast, the index for paper-based payment services (check, special cash, and noncash collection) is expected to increase almost 5 percent in 2002. The overall 2002 price index for all Federal Reserve priced services is projected to increase slightly over 2 percent. Since 1996, the overall price index has increased approximately 3.5 percent.<sup>14</sup> Figure 1 compares the Federal Reserve's price index for priced services with the gross domestic product price deflator, which shows that Federal Reserve priced services have historically increased more slowly than the deflator.

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<sup>13</sup> The decline in the price index for electronic payment services since 1996 has reflected, in large part, the ability of the Reserve Banks to capitalize on the operational efficiencies and scale economies inherent in providing payment services through centralized electronic payment processing applications.

<sup>14</sup> These estimates are based on a chained Fisher ideal price index. This index provides customers with a representation of the total price or cost of Reserve Bank services, offering a more complete picture than is possible solely from comparing changes in individual service fees over time. This index is not adjusted for quality changes in Federal Reserve priced services. Data elements used in calculating the index include explicit fee revenue from priced services products and services and electronic connections to the Reserve Banks and volumes associated with those products and services. The price index is calculated using the actual, estimated, or projected full-year revenues and volumes. For 2002, the year-over-year percentage change in the index results from a comparison of the 2002 projections to the 2001 estimates for priced services revenues and volumes. The changes in the price index since 1996 are calculated with 1996-2000 actual, 2001 estimated, and 2002 projected revenues and volumes.

Figure 1  
Federal Reserve Price Index  
Chained Fisher ideal index compared with GDP price deflator



### ANALYSIS OF COMPETITIVE EFFECT

All operational and legal changes considered by the Board that have a substantial effect on payments system participants are subject to the competitive impact analysis described in the March 1990 policy statement “The Federal Reserve in the Payments System.”<sup>15</sup> Under this policy, staff assesses whether the proposed change would have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services because of differing legal powers or constraints or because of a dominant market position of the Federal Reserve deriving from such legal differences. If the fees or fee structures create such an effect, staff must further evaluate the changes to assess whether their benefits — such as contributions to payment system efficiency, payment system integrity, or other Board objectives — can be retained while reducing the hindrances to competition.

Staff does not believe that the proposed fees, fee structures, or changes in service will have a direct and material adverse effect on the ability of other service providers to compete

<sup>15</sup> FRRS 7-145.2.

effectively with the Federal Reserve in providing similar services. Assuming the Reserve Banks' volume and cost projections are accurate, the proposed fees are set to provide the Federal Reserve a return on equity similar to that earned by the large bank holding company peer group and provide for full cost recovery over the long run.

**RECOMMENDATION**

Staff recommends that the Board approve the 2002 fee schedules for priced services and electronic connections, which are included in attachments I to VII, and the check service fee supplement (which is available upon request). The 2002 fee changes are reflected in boldface type on the fee schedules in attachments I to VII.

**Attachments**  
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## Attachment I

### Check

The table below shows the actual 2000, estimated 2001, and projected 2002 cost recovery performance for the check service.

| <b>Check Pro Forma Cost and Revenue Performance</b><br>(\$ millions) |              |                       |                                   |                 |  |
|--|--------------|-----------------------|-----------------------------------|-----------------|--|
| YEAR   | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>[1-2] | 4<br>TARGET ROE | 5<br>RECOVERY RATE<br>AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000   | 763.3        | 680.1                 | 83.2                              | 80.8            | 100.3%   |
| 2001 (Estimate)  | 788.9        | 755.4                 | 33.5                              | 90.3            | 93.3%  |
| 2001 (Adjusted Estimate) <sup>a</sup>                                | 788.9        | 737.0                 | 51.9                              | 90.3            | 95.4%  |
| 2002 (Budget)  | 807.0        | 772.1                 | 34.9                              | 73.7            | 95.4%  |

<sup>a</sup> Includes float costs, but excludes higher NICB, associated with the events of September 11.

**2000 Performance** — The check service recovered 100.3 percent of total costs in 2000, including imputed expenses and targeted ROE, exceeding the targeted recovery rate of 98.7 percent. The volume of checks collected decreased 0.5 percent from 1999 levels, partly because of price increases on the lowest-priced products and stabilization of market volumes as banks that had merged in previous years completed back office operational consolidation and participated in more direct clearing relationships. Revenue grew from 1999 levels because of price increases and increases in forward-processed and payor bank service volumes, but revenue did not meet the budgeted amount. Despite lower-than-expected revenues, full cost recovery was achieved through an even greater level of cost savings, which were primarily the result of local cost reductions and postponed check modernization project costs.

**2001 Performance** — Through August 2001, the check service has recovered 94.9 percent of total costs, including imputed expenses and targeted ROE.<sup>1</sup> The Reserve Banks estimate that the check service will recover 93.3 percent of its costs for the full year compared with the budgeted 2001 recovery rate of 97.6 percent, a \$36.4 million shortfall, relative to the budget, in after-tax net income. The Reserve Banks expect to recover all direct and indirect costs of providing check services and part of the targeted return on equity. The lower-than-budgeted recovery rate is explained by several factors. First, service revenue and NICB are estimated to be lower than budgeted. The service revenue shortfall results from delayed implementation of

<sup>1</sup> Total costs include check standardization special project costs of \$13.1 million. None of these costs are deferred.

explicit quality-related fees for return items, lower-than-expected volume in forward-collection and electronic check products, and customers' use of lower-priced products. Second, costs are estimated to be higher than budgeted because of lower pension credits, somewhat offset by lower-than-budgeted check modernization costs. Third, cost recovery will be lower than budgeted because of expenses associated with the September 11 terrorist attacks. These expenses are primarily float costs resulting from a policy decision to grant funds availability according to published schedules despite the delays in presenting checks to paying banks due to the shutdown of air traffic. Other costs included supplemental ground transportation and overtime.<sup>2</sup>

The volume of checks handled by the Reserve Banks appears to be stabilizing. The volume received from the larger banks has decreased as these banks expand clearinghouse use and as merged banks have consolidated back office operations. Previous years' temporary volume increases following bank mergers, which shifted work to Reserve Banks while check-processing operations were streamlined, are now less of a factor because of fewer bank mergers. These volume declines have been offset by product improvements, which have continued to attract increased forward-collection volume.

Forward-collection check product volume through August 2001 grew 0.7 percent (including a 1.6 percent increase in processed volume and a 9.5 percent decline in fine-sort volume), following the 0.5 percent decline in 2000. For the full-year 2001, the Reserve Banks estimate that forward-processed volume will grow 2.2 percent, which is below the budgeted 4.0 percent growth rate. Because the full-year growth rate exceeds the growth to date, the estimate may be optimistic. Return-item volume has been higher than anticipated and is expected to remain so for the rest of the year. Table 2 summarizes the year-to-date and full-year estimated growth rates for paper check products.

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<sup>2</sup> Normally the Reserve Banks recover the cost of float, including float generated when airports close due to inclement weather, through product fees or by adjusting when they grant credit for deposits to reflect their experience collecting funds from paying banks. The expenses associated with September 11 may be offset by increased NICB resulting from large excess clearing balances held during the September 11 – 21 period. The expenses and imputed NICB associated with the September 11 attack, however, will not be taken into consideration in setting prices for 2002 or future years.

Table 2

| <b>Paper Check Product Volume Growth Rates</b><br>(percent) |                         |                               |                          |
|---|-------------------------|-------------------------------|--------------------------|
|   | BUDGETED<br>2001 GROWTH | GROWTH THROUGH<br>AUGUST 2001 | ESTIMATED 2001<br>GROWTH |
| Total forward-collection                                    | 3.7                     | 0.7                           | 1.6                      |
| Forward-processed   | 4.0                     | 1.6                           | 2.2                      |
| Fine-sort <sup>a</sup>                                      | 0.6                     | -9.5                          | -5.5                     |
| Returns   | -6.0                    | 1.6                           | 0.9                      |

<sup>a</sup> These rates exclude electronic fine-sort volume. Electronic fine-sort is a service offered by one Reserve Bank that allows depository institutions to exchange fine-sort information electronically among themselves with paper checks to follow. Including the electronic fine-sort product, fine-sort volume growth was budgeted to increase 0.5 percent in 2001 and is now estimated to decrease 5.0 percent.

Continuing a trend over the last few years, demand for electronic check products has steadily increased. Reserve Banks provide payor banks with electronic check data or images for about 37 percent of the checks they collect. Year-to-date 2001 demand for image products has grown 19.6 percent to approximately 948 million check images, which represents a penetration rate of 6.2 percent of all checks collected by the Reserve Banks. Growth and penetration rates for electronic check products are summarized in table 3. Given the volume growth through August, staff believes that Reserve Banks' estimates for electronic check services for the full year appear reasonable.

Table 3

| <b>Electronic Check Product Penetration and Growth Rates</b> |   |  |                                       |
|--|---|--|---------------------------------------|
|  | PENETRATION RATE<br>THROUGH<br>AUGUST 2001<br>(PERCENT OF CHECKS<br>COLLECTED) <sup>a</sup> | VOLUME GROWTH<br>THROUGH<br>AUGUST 2001<br>(PERCENT) | ESTIMATED<br>2001 GROWTH<br>(PERCENT) |
| Electronic check presentment                                 | 22.4  | 7.3  | 6.2                                   |
| Truncation   | 5.6   | 1.5  | 1.4                                   |
| Non-truncation   | 16.8  | 9.4  | 7.9                                   |
| Electronic check information                                 | 7.1   | -6.9   | -8.4                                  |
| Images   | 6.2   | 19.6   | 19.8                                  |

<sup>a</sup> These percentages exclude electronic fine-sort volumes from the number of checks collected.

**2002 Pricing** — For the coming year, the Reserve Banks will continue to focus on the check modernization initiatives to standardize check processing across all Reserve Bank

offices.<sup>3</sup> The Reserve Banks will incur significant transition costs associated with these initiatives over the next several years. These initiatives are expected to reduce costs and improve service over the long term.

In 2002, fees for all check products are increasing 4.0 percent on a volume-weighted basis compared with fees introduced in January 2001 and 3.7 percent compared with current fees.<sup>4</sup> Per-item and cash-letter fees for forward-collection check products are also increasing at this rate. The average volume-weighted fees for payor bank services will increase 4.5 percent compared with both January 2001 and current fees. The Reserve Banks propose to increase fees for electronic check information products at a faster rate than for electronic check presentment products (ECP), thereby encouraging depository institutions to increase their use of ECP products. Overall prices for electronic check products are increasing faster than prices for paper check processing because margins for electronic products are currently lower than for paper check products, and the prices of electronic products do not yet reflect their full value to payor banks. Table 4 summarizes the Reserve Banks' proposed 2002 price changes.

Table 4

| <b>2002 Price Changes</b><br>(percent) |                            |                       |
|--|----------------------------|-----------------------|
| PRODUCTS                               | 2002 vs. January 2001 fees | 2002 vs. current fees |
| Total check service                    | 4.0                        | 3.7                   |
| Forward-collection                     | 4.1                        | 3.7                   |
| Forward-processed                      | 3.9                        | 3.5                   |
| Returns                                | 3.9                        | 3.9                   |
| Payor bank services                    | 4.5                        | 4.5                   |
| Electronic check presentment           | 4.5                        | 4.5                   |
| Electronic check information           | 8.9                        | 8.9                   |
| Image services                         | -3.0                       | -3.0                  |

<sup>3</sup> Check modernization is a multi-year initiative to standardize the processing of checks at all Reserve Banks, adopt a common platform for processing and researching check-adjustment cases, create a national system for archiving and retrieving check images, and deliver check services to depository institutions using web technology. Check modernization should improve the operational efficiency and cost-effectiveness of the Reserve Banks' check services over the long run. It will also improve the consistency, quality, and uniformity of the check services that Reserve Banks deliver to their customers and allow new services to be developed and deployed more quickly.

<sup>4</sup> This discussion evaluates volume-weighted changes in the direct fees for check products. The price index, discussed in the cover memorandum, evaluates the average change in costs that would be incurred by a customer purchasing an average market basket of Federal Reserve check products, taking into account explicit fees and product substitution.



Table 5 summarizes ranges of key check fees for 2001 and 2002.

Table 5

| Selected Check Fees            |                           |                  |                     |                         |
|--------------------------------|---------------------------|------------------|---------------------|-------------------------|
| Items:                         | 2001 CURRENT PRICE RANGES |                  | 2002 PRICE RANGES   |                         |
|                                | (PER ITEM)                |                  | (PER ITEM)          |                         |
| Forward-processed              |                           |                  |                     |                         |
| City                           |                           | \$0.001 to 0.079 |                     | \$0.001 to 0.079        |
| RCPC                           |                           | \$0.003 to 0.200 |                     | \$0.003 to <b>0.300</b> |
| Forward fine-sort              |                           |                  |                     |                         |
| City                           |                           | \$0.003 to 0.021 |                     | \$0.003 to 0.021        |
| RCPC                           |                           | \$0.003 to 0.036 |                     | <b>\$0.004</b> to 0.036 |
| Qualified returned checks      |                           |                  |                     |                         |
| City                           |                           | \$0.08 to 0.85   |                     | \$0.08 to 0.85          |
| RCPC                           |                           | \$0.10 to 1.15   |                     | \$0.10 to 1.15          |
| Raw returned checks            |                           |                  |                     |                         |
| City                           |                           | \$1.05 to 5.00   |                     | \$1.05 to 5.00          |
| RCPC                           |                           | \$1.05 to 5.00   |                     | \$1.05 to 5.00          |
| Cash letters:                  | (PER CASH LETTER)         |                  | (PER CASH LETTER)   |                         |
| Forward-processed <sup>a</sup> |                           | \$2.00 to 32.00  |                     | <b>\$2.25 to 36.00</b>  |
| Forward fine-sort              |                           | \$3.00 to 14.00  |                     | <b>\$3.50 to 14.00</b>  |
| Returned checks: raw/qualified |                           | \$2.00 to 14.00  |                     | \$2.00 to <b>14.50</b>  |
| Payor bank services:           | (FIXED)                   | (PER ITEM)       | (FIXED)             | (PER ITEM)              |
| MICR information               | \$2-15                    | \$0.0020-0.0070  | \$2-15              | <b>\$0.0030-0.0110</b>  |
| Electronic presentment         | \$1-11                    | \$0.0005-0.0100  | \$1- <b>12</b>      | \$0.0005-0.0100         |
| Truncation                     | \$2-7                     | \$0.0020-0.0180  | \$2-7               | <b>\$0.0040-0.0180</b>  |
| Image capture                  | \$2-15                    | \$0.0020-0.02    | \$2-15              | \$0.002-0.02            |
| Image delivery                 | Varies <sup>b</sup>       | \$0.001-0.008    | Varies <sup>b</sup> | <b>\$0.002-0.008</b>    |
| Image archive                  | N/A                       | \$0.001-0.01     | N/A                 | \$0.001-0.01            |
| Image retrieval                | N/A                       | \$0.3-5          | N/A                 | \$0.3-5                 |

Note: Bold indicates change from 2001 prices.

<sup>a</sup> Cash letter fees for forward-processed items transported on Check Relay for 2001 and 2002 include a fifty-cent surcharge due to higher fuel costs.

<sup>b</sup> Fixed fee varies by media type.

**2002 Projected Cost Recovery** — For 2002, the Reserve Banks project that the check service will recover 95.4 percent of total costs, including imputed expenses, costs associated with the check modernization project, and targeted ROE. In total, the Reserve Banks expect to recover all direct and indirect costs of providing check services, but only a portion of targeted return on equity; thus net income is expected to fall short of the targeted ROE.

Total expenses are projected to increase approximately \$17.0 million, or 2.3 percent, from estimated 2001 expenses. Total expenses for 2002 include approximately

\$86 million in costs for the four check modernization projects (including special project costs), representing an increase of \$17.6 million over the 2001 estimate.

Check service revenue is projected to increase \$50.2 million, or 6.5 percent, from the 2001 estimate, as a result of fee and volume increases, including a budgeted 1.5 percent increase in forward-collection volume from the estimated 2001 level. In 2002, revenues from forward-collection and return-item processing, payor bank services and other operating and imputed revenues are expected to represent 87.6 percent, 11.6 percent, and 0.8 percent, respectively, of the check services' budgeted \$821.7 million in product related service revenue. Total revenue also reflects the decline in NICB, discussed previously.

In 2002, forward-processed volume is projected to be 15.6 billion, an increase of 1.8 percent compared with the 2001 estimate, with the growth coming from additional weekend and off-peak Other Fed volume. Fine-sort volumes are expected to continue to decline 16 million, or 1.3 percent, from the 2001 estimate. Total returns are projected to be 179.8 million, an increase of 0.6 percent compared with the 2001 estimate.

The Reserve Banks anticipate further growth in payor bank services. The Reserve Banks project electronic presentment volume to be 3.2 billion, reflecting growth of 16.7 percent in 2002, and truncation volume to be 978 million, an increase of 6.8 percent—significant increases in growth targets compared with 2001 growth. The Reserve Banks expect to meet these targets as a result of price changes that will raise electronic information fees compared with electronic presentment fees and through the launching of a national image service, which will provide additional tools for banks accepting electronic check presentments. Image services volume is projected to be 1.8 billion, a projected growth of 19.7 percent in 2002, which is in line with 2001 growth and which may be driven by the increased functionality of the Image Services System (for example, electronic access to archived check images using web technology). MICR information is projected to decrease by 0.3 billion items or about 25 percent in 2002, which is in line with the 2001 decline.

Staff believes that the greatest risks to achieving the projected cost recovery rate for the check service of 95.4 percent are (1) challenges in meeting Systemwide volume projections and related revenue projections, (2) potential changes in NICB and priced pension credits, and (3) potential check modernization cost overruns. The results of changes to elements of NICB and delays in the timing of the check modernization project could also improve the 2002 cost recovery.

## Attachment II

### Automated Clearing House (ACH)

The table below presents the actual 2000, estimated 2001, and projected 2002 cost recovery performance for the commercial ACH service.

| ACH Pro Forma Cost and Revenue Performance<br>(\$ millions) |              |                       |                                   |                    |  |
|---|--------------|-----------------------|-----------------------------------|--------------------|--|
| YEAR  | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>[1-2] | 4<br>TARGET<br>ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000  | 71.7         | 61.6                  | 10.1                              | 8.0                | 103.1%   |
| 2001 (Estimate)   | 76.4         | 67.3                  | 9.1                               | 8.9                | 100.3%   |
| 2002 (Budget)   | 66.4         | 59.3                  | 7.1                               | 6.5                | 101.0%   |

**2000 Performance** — In 2000, the ACH service recovered 103.1 percent of total expenses, including imputed costs and targeted ROE, versus a targeted recovery rate of 100.0 percent. Commercial ACH volume was 13.6 percent higher than 1999 volume, compared with the 11.6 percent increase originally projected for 2000. The Reserve Banks' prices did not change over the course of the year.

**2001 Performance** — Through August, the ACH service recovered 101.6 percent of total expenses. The Reserve Banks estimate that the ACH service will recover 100.3 percent of total expenses in 2001, compared with the targeted recovery rate of 101.3 percent. The variance from targeted recovery is partially due to lower-than-expected NICB and pension credits. The year-over-year increase in expense from \$61.6 million in 2000 to \$67.3 million in 2001 is attributable to higher national support costs, and to transition costs associated with consolidating the twelve Districts' ACH operations into two offices, Minneapolis and Atlanta.

The Reserve Banks estimate that their 2001 commercial ACH volume will be 11.1 percent higher than in 2000, compared with the budgeted 10.0 percent increase. Through August 2001, by contrast, the Reserve Banks' commercial ACH volume had increased 17.2 percent from the same period in 2000. The difference between the volume growth through August and the volume growth for all of 2001 is due to the Reserve Banks' expectation that some large-volume customers will begin to originate their ACH transactions through a private-

sector ACH operator. The Reserve Banks also expect that other large-volume customers may split their transactions between the Federal Reserve and other ACH operators.

On October 1, the Reserve Banks implemented a modified ACH fee structure with decreased per-item fees for large-volume files and increased monthly fixed fees that will likely result in lower overall fees to large and medium-sized customers. These fee-structure modifications are the first phase of an overall strategy to meet competitive challenges facing the Reserve Banks' ACH service. The modified fee structure is designed to better reflect the ACH service's cost structure, which is characterized by high fixed and low variable costs.

Also on October 1, the Reserve Banks implemented pricing agreements with other operators for interoperator ACH transactions. Under the new interoperator agreements, the Reserve Banks will no longer charge per-item fees to depository institutions for ACH transactions that the depository institutions originate or receive through another operator. Instead, the Reserve Banks and the other operators will charge each other fees for the interoperator transactions. Thus, for ACH items originated by a Reserve Bank customer and destined for the customer of a private-sector operator, the Reserve Banks will pay a fee to the private-sector operator and will no longer receive fees from the receiving depository institution.

**2002 Pricing** — The Reserve Banks project that the ACH service will recover 101.0 percent of its costs in 2002, including imputed expenses and targeted ROE. Expenses are projected to decrease \$8.0 million, or 11.9 percent, from the 2001 estimate. The decrease in expense results primarily from consolidating ACH operations, which should be completed in February 2002, and from the Reserve Banks' reduction of ACH business development costs.

The Reserve Banks project that 2002 ACH revenue will decrease \$10.0 million, or 13.1 percent, from the 2001 estimate due to decreases in fees and expected transaction volume. In addition to the October 1, 2001 pricing structure changes, the Reserve Banks expect to further reduce fees in mid-year 2002. Although the Reserve Banks have not finalized the details of the mid-year 2002 fee changes, the Reserve Banks expect to offer volume-based discounts to their ACH transaction fees.

The Reserve Banks project that ACH volume will be 5.1 percent lower in 2002 than in 2001. While the Reserve Banks expect total ACH volume to grow substantially, the projected 5.1 percent decline in Federal Reserve ACH volume assumes many of the Reserve Banks' largest customers' shifting at least a portion of their volume to another operator. Staff believes there is some risk that transaction volume will decline more than projected.

**FEDERAL RESERVE  
AUTOMATED CLEARING HOUSE FEE SCHEDULE<sup>1</sup>**

**EFFECTIVE JANUARY 2, 2002**

|   |             |
|---|-------------|
| Origination (per item or record) <sup>2</sup> :                             | <b>Fees</b> |
| Items in small files  | \$0.0055    |
| Items in large files  | \$0.0040    |
| Addenda record  | \$0.0020    |
| Receipt (per item or record):   |             |
| Item  | \$0.005     |
| Addenda record  | \$0.002     |
| Input file-processing fees (per file):                                      | \$5.00      |
| Monthly fees (per routing number):  |             |
| Account servicing fee <sup>3</sup>  | \$25.00     |
| FedACH settlement <sup>4</sup>  | \$20.00     |
| Information extract file  | \$10.00     |
| Voice response return item/notification of change (NOC) fees <sup>5</sup> : | \$2.00      |
| Nonelectronic input/output fees <sup>6</sup> :                              |             |
| Tape input/output   | \$25.00     |
| Paper output  | \$15.00     |
| Diskette output   | \$15.00     |
| Facsimile return/NOC <sup>7</sup>   | \$15.00     |

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<sup>1</sup> This fee schedule does not include the Reserve Banks' charges to private-sector operators for interoperator transactions.

<sup>2</sup> Small files contain fewer than 2,500 items and large files contain 2,500 or more items.

<sup>3</sup> The account servicing fee applies only to routing numbers that have received or originated transactions that are processed by the Federal Reserve. Institutions that have a "government only" receiver status or that elect to use a PSO exclusively are not assessed the account servicing fee.

<sup>4</sup> The fee for FedACH settlement is applied to any routing number with activity during a month. This fee does not apply to routing numbers that use the Federal Reserve for government transactions only.

<sup>5</sup> The fee includes the transaction fee in addition to the voice-response fee. The Reserve Banks also assess a \$15 fee for every government paper return/NOC they process. This service is not considered a priced service. The fee includes the transaction fee in addition to the conversion fee.

<sup>6</sup> These services are offered in contingency situations only.

<sup>7</sup> The fee includes the transaction fee in addition to the conversion fee.

|   |         |
|---|---------|
| Cross-border fees   |         |
| Cross-border item surcharge <sup>8</sup>                  | \$0.039 |
| Same-day recall of item at receiving gateway operator     | \$3.50  |
| Same-day recall of item not at receiving gateway operator | \$5.00  |
| Item trace  | \$5.00  |
| Microfiche  | \$3.00  |
| Delivery by courier                                       | \$10.00 |

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<sup>8</sup> The cross-border item surcharge is a per-item surcharge in addition to the standard item, addenda, and input processing fees.

### Attachment III

#### Funds Transfer and Net Settlement

The table below presents the actual 2000, estimated 2001, and projected 2002 cost recovery performance for the funds transfer and net settlement services.

| <b>Funds Transfer and Net Settlement Pro Forma Cost and Revenue Performance</b><br>(\$ millions) |              |                       |                                   |                 |  |
|--|--------------|-----------------------|-----------------------------------|-----------------|--|
| YEAR   | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>[1-2] | 4<br>TARGET ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000   | 64.6         | 56.4                  | 8.2                               | 7.5             | 101.1%   |
| 2001 (Estimate)  | 63.0         | 56.7                  | 6.3                               | 7.5             | 98.3%  |
| 2002 (Budget)  | 56.1         | 50.2                  | 5.9                               | 5.5             | 100.8%   |

**2000 Performance** — The funds transfer and net settlement service recovered 101.1 percent of total costs in 2000, including imputed expenses and targeted ROE, and exceeding the targeted recovery rate of 100.4 percent. Although expenses for 2000 were \$1.7 million (2.5 percent) less-than-original budget projections, service revenue was \$1.4 million (2.2 percent) less-than-original budget projections. The shortfall in service revenue was attributed to \$0.8 million (8.7 percent) less-than-expected electronic connection revenue and 1.2 percent lower-than-expected funds transfer volume.

**2001 Performance** — Through August 2001, the funds transfer and net settlement services recovered 99.5 percent of total costs, including imputed expenses and targeted ROE. For full-year 2001, the Reserve Banks estimate that the funds transfer and net settlement services will recover 98.3 percent of total expenses, compared with a targeted recovery rate of 101.2 percent. The underrecovery is attributed to several factors, including lower-than-expected NICB and pension credit, and higher-than-budgeted operating costs, which were primarily due to higher-than-anticipated automation costs.

Funds transfer volume through August 2001 has increased 4.5 percent relative to the same period in 2000. For the full-year, the Reserve Banks estimate a 3.0 percent volume increase over 2000 compared to a budgeted decline of 1.2 percent. The Reserve Banks anticipated a decline in funds volume in 2001 because of potential shifts in volume from Fedwire

to CHIPS.<sup>1</sup> These shifts, however, have not been realized fully to date, but the Reserve Banks expect some shifts in volume to CHIPS during the remaining months of the year.

**2002 Fedwire Funds Transfer Pricing** — The Reserve Banks propose maintaining the thresholds for volume-based discounts but reducing the per-transfer fees for each threshold. Specifically, the Reserve Banks propose lowering the transfer fee for the first volume tier ( $\leq 2,500$  transfers per month) by two cents from \$0.33 to \$0.31 (6.1 percent), lowering the transfer fee for the second volume tier (2,501 – 80,000 transfers per month) by two cents from \$0.24 to \$0.22 (8.3 percent), and lowering the transfer fee for the third volume tier ( $> 80,000$  transfers per month) by one cent from \$0.16 to \$0.15 (6.3 percent).<sup>2</sup> The average (volume-weighted) per-transfer price would decline from its current level of \$0.216 to \$0.201 (6.8 percent). In addition, the Reserve Banks propose retaining the off-line surcharge at its current level.

Reserve Banks project that the Fedwire funds transfer service will recover 100.8 percent of total costs in 2002, including imputed expenses and targeted ROE. Total costs are expected to decline \$8.5 million (13.2 percent) from the 2001 estimate, primarily due to operating cost reductions of \$4.9 million (8.5 percent). The reduction in operating costs is due to cost savings associated with the consolidation of the majority of funds transfer activities to the Staff believes the 2002 cost projections are reasonable.

Funds transfer volume is expected to decline 1.1 percent from the 2001 estimate as customers that are also CHIPS participants move volume from Fedwire to CHIPS. Since the implementation of volume-based pricing, volume growth in the high-volume pricing tier (tier 3) has outpaced growth in the other two tiers. In 2002, however, the Reserve Banks project that any

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<sup>1</sup> The New York Clearing House implemented an intraday finality mechanism for its CHIPS service in January 2001. While there has been little movement of funds transfer volume from Fedwire to CHIPS to date, the New York Clearing House has increased its marketing efforts and we understand that some high-volume funds transfer customers have decided to begin shifting substantial funds transfer volume to CHIPS. Fedwire funds transfer volume is expected to decline as customers that are also CHIPS participants move volume from Fedwire to CHIPS.

<sup>2</sup> The Reserve Banks reduced the per transfer fee for the highest-volume tier (tier 3) from \$0.17 to \$0.16 on August 1, 2001.

<sup>3</sup> Specifically, the Reserve Banks will consolidate on-line funds operations to and fund computer interface testing to the Central Business Administration Function at The consolidation began in September 2001 and will be completed in August 2002.



trend growth in tier 3 volume will be offset by the migration of transfers to CHIPS. The Reserve Banks also expect that the loss of volume in tier 3 will be somewhat offset by movement of volume from the mid-volume pricing tier (tier 2) to tier 3 due to merger activity and the consolidation of master/sub-account relationships. Therefore, the Reserve Banks project that in 2002 tier 3 volume will remain relatively stable at 48.8 percent of total volume and tier 2 volume will decline by 0.7 percent to 33.9 percent of total volume. The Reserve Banks also project that volume in the low-volume pricing tier (tier 1) will increase 0.5 percent to 17.3 percent of total volume.

The Reserve Banks project total funds transfer revenue to decline by \$6.9 million (11.0 percent) in 2002 from the 2001 estimate primarily because of the full-year effect of the August 2001 and proposed 2002 price reductions. Staff believes that the Reserve Banks' projections for 2002 funds transfer volume and revenue are reasonable.

**2002 Net Settlement Pricing** — By year-end 2001, all local net settlement arrangements will have been converted to the enhanced net settlement service. The Reserve Banks propose increasing the per settlement file fee by \$2.00 from \$12.00 to \$14.00 (16.7 percent) and reducing the per-settlement entry fee by \$0.15 from \$0.95 to \$0.80 (15.8 percent); these changes will lower the costs for the larger arrangements while only marginally increasing the costs for a few of the smaller arrangements. The revenue loss is minimal – a net of \$10,000 or 1.4 percent of the previous fee level. The Reserve Banks will eliminate the off-line notification service and associated surcharge in 2002. In addition, the Reserve Banks propose raising the off-line origination surcharge by \$10.00 from \$15.00 to \$25.00 (66.7 percent) to better reflect the work involved in providing this service; budgeted revenue, however, will not be affected because this service is only offered as a contingency to the arrangements.<sup>4</sup> Further, the Reserve Banks propose that the fee for all Fedwire-based settlements be \$100. Previously, small arrangements were charged \$100 and large arrangements were charged \$175. There will be no effect on revenue because the only arrangement that was being charged \$175 made changes early in 2001 to its file structure to fit the criteria for the \$100 fee. Finally, the Reserve Banks will

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<sup>4</sup> While the Reserve Banks encourage net settlement arrangements to maintain their own contingency procedures, they will provide off-line contingency services in the event of the failure of an arrangement's primary contingency backup arrangement.

retain the \$60 minimum account maintenance fee per arrangement.<sup>5</sup> The Reserve Banks expect settlement entry and file volumes to remain stable in 2002 compared with the 2001 estimate.

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<sup>5</sup> The monthly account maintenance fee will only be assessed if total settlement charges during a calendar month are less than \$60.00. In addition, the fee will be reduced by the total amount of any per entry and per settlement charges incurred during the month.

**FEDERAL RESERVE  
FUNDS TRANSFER AND NET SETTLEMENT FEE SCHEDULE**

**EFFECTIVE JANUARY 2, 2002**

| Funds transfer:  | <u>Fees</u>     |
|--|-----------------|
| Volume-based pricing fees (originations and receipts)        |                 |
| Per transfer for the first 2,500 transfers per month         | <b>\$0.31</b>   |
| Per transfer for additional transfers up to 80,000 per month | <b>\$0.22</b>   |
| Per transfer for every transfer over 80,000 per month        | <b>\$0.15</b>   |
| Surcharge  |                 |
| Off-line transfer originated                                 | \$15.00         |
| Telephone notification                                       | \$15.00         |
| Net settlement:  |                 |
| Basic fee  |                 |
| Settlement charge per entry                                  | <b>\$0.80</b>   |
| Settlement file charge                                       | <b>\$14.00</b>  |
| Surcharge  |                 |
| Off-line origination per file                                | <b>\$25.00</b>  |
| Monthly account maintenance <sup>1</sup>                     | \$60.00         |
| Fedwire-based net settlement <sup>2</sup>                    |                 |
| Settlement charge per day                                    | <b>\$100.00</b> |

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Note: Bold indicates change from 2001 prices.

<sup>1</sup> The monthly account maintenance fee will only be assessed if total settlement charges during a calendar month are less than \$60. The fee will be reduced by the total amount of any per entry and per settlement charges incurred during the month.

<sup>2</sup> Participants in arrangements and settlement agents are also charged the applicable Fedwire funds transfer fee for each transfer into and out of the settlement account.

## Attachment IV

### Book-Entry Securities<sup>1</sup>

The table below presents the actual 2000, estimated 2001, and projected 2002 cost recovery performance for the book-entry securities service.<sup>2</sup>

| <b>Book-Entry Securities Transfer Pro Forma Cost and Revenue Performance</b><br>(\$ millions) |              |                       |                                   |                    |  |
|---|--------------|-----------------------|-----------------------------------|--------------------|--|
| YEAR  | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>[1-2] | 4<br>TARGET<br>ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000  | 18.5         | 16.0                  | 2.6                               | 1.9                | 103.9%   |
| 2001 (Estimate)   | 19.0         | 19.5                  | -0.5                              | 2.3                | 87.1%  |
| 2002 (Budget)   | 22.6         | 20.3                  | 2.3                               | 2.2                | 100.2%   |

**2000 Performance** — The book-entry securities service recovered 103.9 percent of total costs in 2000, including imputed expenses and targeted ROE, exceeding the target recovery rate of 101.3 percent. Total costs for 2000 were \$1.1 million (6.6 percent) higher than budgeted, and service revenue was approximately \$1.5 million (9.0 percent) more than budgeted. The additional revenue was due to higher-than-expected on-line volume and account and issue maintenance volume. Total book-entry transfer volume increased 15.2 percent from the 1999 level.

**2001 Performance** — Through August 2001, the book-entry securities service recovered 90.0 percent of total costs, including imputed expenses and targeted ROE. For full-year 2001, the Reserve Banks estimate that the book-entry securities service will recover 87.1 percent of total costs, compared with a targeted recovery rate of 95.6 percent. The underrecovery is attributed to several factors, including higher-than-budgeted operating costs, mostly due to higher-than-anticipated automation costs and higher-than-anticipated volume, and a less-than-expected pension credit. In addition, NICB is lower than budgeted and the book-entry

<sup>1</sup> Includes purchase and sale activity.

<sup>2</sup> The Reserve Banks provide securities transfer services for securities issued by the U.S. Treasury Department, federal government agencies, government-sponsored enterprises, and certain international institutions. The priced component of this service, reflected in this memorandum, consists of revenues, expenses, and volumes associated with the transfer of all non-Treasury securities. For Treasury securities, the Treasury Department assesses fees for the securities transfer component of the service. The Reserve Banks assess a fee for the money settlement component of a Treasury securities transfer; this component is not treated as a priced service.

service is projected to take in less revenue due to the delay of the conversion of Government National Mortgage Association (Ginnie Mae) securities to the National Book-Entry System (NBES), which was planned for the fourth quarter 2001, but, because of the events of September 11, will be delayed until the first quarter 2002.

Through August 2001, total book-entry securities transfer volume has increased 19.6 percent compared with the same period in 2000. For the full year, the Reserve Banks estimate that total book-entry volume will increase 15.4 percent from the 2000 level, compared with a budgeted 8.7 percent increase. The increased volume is primarily due to higher-than-anticipated mortgage refinancing activity, but the Reserve Banks expect this activity to slow down in the remaining months of the year.

**2002 Pricing** — The Reserve Banks propose reducing the on-line transfer origination and receipt fee by four cents from \$0.70 to \$0.66 (5.7 percent), and lowering the per-issue per-account maintenance fee by four cents from \$0.45 to \$0.41 (8.9 percent). The Reserve Banks propose retaining the off-line surcharge and account maintenance fee at their current levels. The Reserve Banks will implement new functionality to support automated claim adjustments related to failed securities transactions, interim accounting for securities with an accrual date different than the record date, and repurchase agreement tracking.<sup>3</sup> The Reserve Banks will implement fail tracking in December 2001, but have not yet announced the implementation dates for interim-accounting adjustment processing and repurchase agreement tracking. The Reserve Banks will determine a fee for the new functionality once volume projections can be confirmed by actual experience, and plan to implement this fee in the second half of 2002. Initially, the Reserve Banks plan to establish a uniform fee for all claims adjustments.

The purchase and sale activity represents less than 0.5 percent of the costs and revenues of the book-entry securities service line. Provision of this activity, which facilitates the purchase and sale of Treasury and government agency securities by depository institutions on the secondary market, is consolidated at the Federal Reserve Bank of Chicago. Steadily declining volume over the past six years strongly suggests there is no longer a need for the Federal Reserve Banks to provide this activity and private-sector alternatives exist. The Reserve Banks' Wholesale Payments Product Office (WPPO) will develop an exit strategy for the product by

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<sup>3</sup> Initially, the new functionality will be available only for mortgage-backed securities, while functionality for Treasury securities and other agency debt may be incorporated later.

year-end 2001. In the interim, the Reserve Banks propose maintaining the \$40 transaction fee for securities purchases and sales.

The Reserve Banks project that the book-entry securities service will recover 100.2 percent of costs in 2002, including imputed expenses and targeted ROE. The Reserve Banks project that total costs for the service will increase 3.1 percent – a \$0.4 million decrease in the pension credit combined with a \$0.9 million increase in costs associated with the agency portion of the service will be partially offset by \$0.9 million costs savings associated with the consolidation of the majority of securities activities to the Federal Reserve Banks of Staff believes the 2002 cost projections are reasonable.

The Reserve Banks project the volume of agency securities transfers in 2002 will increase 19.8 percent from the 2001 estimate and total revenue will increase 18.7 percent from the 2001 estimate. The volume increase is due to the scheduled move of Ginnie Mae securities to NBES by March 2002. The influx of more than 325,000 Ginnie Mae securities also will dramatically increase the number of securities issues held in customers' securities accounts; the number of issues maintained is projected to nearly double. Additional securities issues from the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Veterans Administration will also move to the service in 2002, albeit in much smaller numbers, as the securities processing system of the former Participants Trust Company is retired. Given the conversion of Ginnie Mae securities to NBES and the movement of other securities to NBES, staff believes the 2002 book-entry volume and revenue projections are reasonable.

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<sup>4</sup> Specifically, the Reserve Banks will consolidate on-line securities operations at the joint custody collateral processing at the ..., and securities computer interface testing at the Central Business Administration Function at the The consolidation began in September 2001 and will be completed in August 2002.

**FEDERAL RESERVE  
BOOK-ENTRY SECURITIES FEE SCHEDULE  
(AGENCY SECURITIES)**

**EFFECTIVE JANUARY 2, 2002**

|  |               |
|--|---------------|
| Book-entry securities transfer:                      | <u>Fees</u>   |
| Basic transfer fee                                   |               |
| Transfer or reversal originated or received          | <b>\$0.66</b> |
| Surcharge  |               |
| Off-line transfer or reversal originated or received | \$25.00       |
| Monthly maintenance fees                             |               |
| Account maintenance (per account)                    | \$15.00       |
| Issues maintained (per issue/per account)            | <b>\$0.41</b> |
| Purchase & sale:                                     |               |
| Transaction fee                                      | \$40.00       |

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Note: Bold indicates change from 2001 prices.

## Attachment V

### Noncash Collection

The table below lists the actual 2000, estimated 2001, and projected 2002 cost recovery performance for the noncash collection service.

| Noncash Collection Pro Forma Cost and Revenue Performance<br>(\$ millions) |              |                       |                                   |                    |  |
|--|--------------|-----------------------|-----------------------------------|--------------------|--|
| YEAR   | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>[1-2] | 4<br>TARGET<br>ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000   | 2.4          | 2.1                   | 0.4                               | 0.2                | 108.6%   |
| 2001 (Estimate)  | 2.0          | 1.7                   | 0.3                               | 0.2                | 106.7%   |
| 2002 (Budget)  | 1.5          | 1.4                   | 0.0                               | 0.1                | 92.6%  |

**2000 Performance** — The noncash collection service recovered 108.6 percent of total expenses in 2000, including imputed expenses and targeted ROE, slightly exceeding the targeted recovery rate of 108.1 percent. Volume for 2000 declined 15.3 percent from 1999 levels, compared with a budgeted decline of 29.3 percent, and revenue declined 20.1 percent from 1999 levels, compared with a budgeted decline of 31.6 percent. Total costs for 2000 increased 3.6 percent over 1999 levels, compared with an 11.3 percent budgeted decline. The increase was primarily due to additional costs associated with the purchase of computer equipment.

**2001 Performance** — Through August 2001, the noncash collection service recovered 118.1 percent of its costs. For full-year 2001, the Reserve Banks estimate that the noncash collection service will recover 106.7 percent of costs, including imputed expenses and targeted ROE, compared with the targeted recovery rate of 102.5 percent. Through August, volume declined 20.2 percent compared with the same period in 2000. The Reserve Banks estimate that full-year 2001 volume and revenue will decrease 20.8 percent and 18.6 percent, respectively, from the 2000 levels; these estimates are consistent with the budgeted decline. In addition, the Reserve Banks anticipate that full-year total costs will decrease 17.3 percent from 2000 levels, compared with a 12.4 percent budgeted decline.

**2002 Pricing** — The Reserve Banks propose retaining all fees in 2002 at their current levels. The Reserve Banks project that the noncash collection service will recover 92.6



percent of total costs, including imputed expenses and targeted ROE, in 2002. The underrecovery is the result of continuing volume decline within the service. The Reserve Banks project a volume decline of 22.8 percent in 2002, from the 2001 estimate, resulting in a revenue decline of \$0.5 million (25.6 percent). The Reserve Banks project that total costs will decline \$0.3 million (14.3 percent) in 2002 compared with the 2001 estimate.

New issues of bearer municipal securities effectively ceased in 1983 when the Tax Equity and Fiscal Responsibility Act of 1982 removed the tax advantage for investors. Volume decline will continue as the number of outstanding physical securities diminishes and other service providers compete for the remaining coupon redemption and bond-collection activity.

**FEDERAL RESERVE  
NONCASH COLLECTION FEE SCHEDULE**

**EFFECTIVE JANUARY 2, 2002**

|                                     |                          |
|-------------------------------------|--------------------------|
| Coupon collection:                  | <u>Fees</u>              |
| Cash letters:                       |                          |
| with five or fewer coupon envelopes | \$7.50                   |
| with six to fifty coupon envelopes  | \$15.00                  |
| Coupon envelopes:                   |                          |
| with five or fewer coupon envelopes | \$4.75                   |
| with six to fifty coupon envelopes  | \$2.50                   |
| Return items                        | \$20.00                  |
| <br>Bond collection (per bond):     | <br>\$40.00 <sup>1</sup> |

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<sup>1</sup> Plus actual shipping costs.

**Attachment VI**  
**Special Cash**

Priced special cash services represent a very small portion (less than one percent) of overall cash services provided by the Reserve Banks to depository institutions. Special cash services include providing wrapped coin, packaging nonstandard currency orders and deposits, and making registered mail shipments of currency and coin. The table below presents the actual 2000, estimated 2001, and projected 2002 cost recovery performance for special cash services.

| <b>Special Cash Pro Forma Cost and Revenue Performance</b><br>(\$ millions) |              |                       |                                   |                 |  |
|---|--------------|-----------------------|-----------------------------------|-----------------|--|
| YEAR  | 1<br>REVENUE | 2<br>TOTAL<br>EXPENSE | 3<br>NET INCOME<br>(ROE)<br>(1-2) | 4<br>TARGET ROE | 5<br>RECOVERY<br>RATE AFTER<br>TARGET ROE<br>[1/(2+4)] |
| 2000  | 2.2          | 2.2                   | 0.1                               | 0.1             | 98.8   |
| 2001 (Estimate)   | 2.2          | 2.1                   | 0.2                               | 0.1             | 104.4  |
| 2002 (Budget)   | 2.3          | 2.2                   | 0.2                               | 0.1             | 103.8  |

**2000 Performance** — In 2000, special cash services recovered 98.8 percent of total expenses, including imputed expenses and targeted ROE, compared with a targeted recovery rate of 101.7 percent. This underrecovery was due primarily to the increase in the costs associated with the registered mail service in Kansas City.

**2001 Performance** — Through August 2001, special cash services recovered 103.7 percent of total expenses, including imputed expenses and targeted ROE. For full-year 2001, the Reserve Banks estimate that special cash services will recover 104.4 percent of total expenses compared with a targeted recovery rate of 100.5 percent. The overrecovery is primarily due to higher-than-anticipated volumes of nonstandard packages in Chicago along with mid-year price increases for coin wrapping and registered-mail services in Helena. The additional revenue is offset slightly by the discontinuation of nonstandard packaging in El Paso and registered mail services in Boston.

**2002 Pricing** — For 2002, the Reserve Banks project that special cash services will recover 103.8 percent of costs, including imputed expenses and targeted ROE. Total costs are projected to increase \$0.1 million or 6.2 percent from the 2001 level, and revenue is expected

to increase \$0.1 million or 5.5 percent from the 2001 level. The anticipated cost increase is due to an increase in direct and support costs associated with the Kansas City registered mail service; the anticipated revenue increase is due to the full-year effect of the mid-year repricing for coin wrapping and registered mail in Helena and the proposed increase in the registered mail surcharge in the Tenth District.

Beginning in January 2002, the Tenth District proposes to increase the insurance fee from \$0.32 to \$0.45 and to increase the surcharge for registered mail from \$16 to \$24. The increase in the insurance fees will offset an increase in registered mail insurance costs, and the increase in the registered mail surcharge reflects higher projected costs to manage insurance issues for this service. The Tenth District expects registered mail volume to decrease approximately 12 percent because of an active campaign to encourage the use of armored-carrier service.

**FEDERAL RESERVE  
SPECIAL CASH SERVICES FEE SCHEDULE**

**EFFECTIVE JANUARY 2, 2002**

|  | <u>Fees</u>   |
|--|---|
| Wrapped coin (per box <sup>1</sup> )<br>Helena   | \$3.25  |
| Nonstandard packaging  |   |
| Seventh District offices<br>(per currency order or deposit<br>Helena (per coin bag deposited)<br>El Paso (Express Cash orders) | \$12.00 <sup>2</sup><br><b>Will be discontinued December 2001</b><br><b>Discontinued October 2001</b> |
| Registered Mail Fees <sup>3</sup>  |   |
|  | <u>Surcharge</u> <u>Insurance Fee</u> <sup>4</sup>  |
| First District<br>Helena <sup>5</sup>  | <b>Discontinued April 2001</b><br>\$30.00   |
| Tenth District Offices   | <b>\$24.00</b> <b>\$0.45</b>  |

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Note: Bold indicates change from 2001 prices.

<sup>1</sup> There are 50 rolls of coin in each box.

<sup>2</sup> This service only applies to the \$1 through \$20 denominations.

<sup>3</sup> Depository institutions also pay any postage fees incurred for registered mail. Postage fees are billed separately from Federal Reserve Bank surcharges and insurance fees.

<sup>4</sup> Insurance fees are based on every \$1,000 shipped via the registered mail service in excess of the first \$25,000, which is covered by the U.S. Postal Service.

<sup>5</sup> The Helena Office only ships registered mail packages valued up to \$25,000, so no additional insurance is needed in excess of the \$25,000 covered by the U.S. Postal Service.

**Attachment VII**  
**FEDERAL RESERVE**  
**ELECTRONIC CONNECTION FEE SCHEDULE<sup>1</sup>**

**EFFECTIVE JANUARY 2, 2002**

The Reserve Banks charge fees for the electronic connections that depository institutions use to access priced services; Banks allocate cost and revenue associated with electronic access to the various priced services.

Current Fednet network:

|   |                          |
|---|--------------------------|
| Dial – receive and send (FedLine®)                | \$75.00 per month        |
| Link encrypted dial                               | \$200.00 per month       |
| High-speed dial @ 56 kbps                         | \$350.00 per month       |
| Multi-drop leased line                            | \$500.00 per month       |
| Dedicated leased line (to 9.6 kbps)               | \$750.00 per month       |
| High-speed leased line @ 19.2 kbps                | \$850.00 per month       |
| High-speed leased line @ 56 kbps                  | \$1,000.00 per month     |
| High-speed leased line @ 128 kbps                 | \$1,800.00 per month     |
| High-speed leased line @ 256 kbps                 | \$2,000.00 per month     |
| Premium dedicated dial test connection            | \$500.00 per month       |
| Basic dedicated dial test connection              | \$250.00 per month       |
| Shared dial test connection                       | 150.00 per month         |
| Third party contingency site dial test connection | \$45.00 per month        |
| Additional backup modem/DSU                       | \$25.00 per month        |
| Additional backup link encryptor                  | \$20.00 per month        |
| Cross-district                                    | Actual cost <sup>2</sup> |

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<sup>1</sup> Installation, training, contingency hardware, and software certification are not considered priced services, and the fees for these services are not listed here. For a copy of the full electronic access fee schedule, contact the local Federal Reserve Bank.

<sup>2</sup> The customer will pay the actual costs of the circuit and a monthly surcharge to cover an equitable share of expenses associated with customer support, depreciation of hardware (that is, link encryption units), and other overhead expenses. This fee must be, at a minimum, equivalent to the standard fee for the particular type of leased line connection.

Frame relay network:

|  |                      |
|--|----------------------|
| Frame Relay-FedLine @ up to 19.2 kbps <sup>3</sup> | \$500.00 per month   |
| Frame Relay-Computer Interface (CI) @ 56 kbps      | \$1,000.00 per month |
| Frame Relay-CI @ 256 kbps                          | \$2,000.00 per month |
| Frame Relay-CI T1                                  | \$2,500.00 per month |

Test and contingency options<sup>4</sup>:

| CONNECTION TYPE           | LOGICAL<br>SPLIT | FULL CIRCUIT<br>BACKUP | FRAME<br>CONNECTION<br>ONLY | REDUNDANT<br>COMPONENT<br>SET |
|---------------------------|------------------|------------------------|-----------------------------|-------------------------------|
| FedLine @ up to 19.2 kbps | No charge        | \$500                  | \$420                       | \$155                         |
| CI @ 56 kbps              | No charge        | \$845                  | \$765                       | N/A                           |
| CI @ 256 kbps             | No charge        | \$1,750                | \$1,585                     | N/A                           |
| CI T1                     | No charge        | \$2,230                | \$2,010                     | N/A                           |

Logical split: Applies to production and test systems that are located together at the same facility. The institution could use the production equipment with a logical split (different port) in its router as a test or contingency facility. There is no additional cost for this option.

Full-circuit backup: Applies to production and test systems, or production and contingency systems, that are located at separate facilities, including another bank office or a third-party contingency site.<sup>5</sup> This option replicates full production technology and costs; only one set of equipment components is provided.

Frame connection only: Applies to production and test systems, or production and contingency systems, that are located at separate facilities. The institution uses a frame relay link connection with no ISDN dial-up backup. Only one set of equipment components is provided.<sup>6</sup>

Redundant components: Includes a Cisco router, a DSU and a link encryptor

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<sup>3</sup> The frame relay FedLine 19.2 kbps connection is identical to the frame relay 56 kbps connection except for the following: (a) redundant equipment is not included with the 19.2 kbps option; and (b) the speed limitation of 19.2 kbps is imposed by FedLine. This connection is otherwise capable of operating at 56 kbps.

<sup>4</sup> Test and contingency options, including redundant parts, are only available to customers with a primary connection. The exception is a third party vendor.

<sup>5</sup> Prices shown are for full-circuit backup only located at the customer site. Multiple customers sharing a single disaster-recovery connection at a third-party provider will result in custom implementations. Districts will bill the vendor's bank for the contingency circuit.

<sup>6</sup> Prices shown are for frame connection only located at the customer site. Multiple customers sharing a single disaster recovery connection at a third-party provider will result in custom implementations. Districts will bill the vendor's bank for the contingency circuit.