STB FD 32760 11-30-95 A 1648V1 6/6 installed at SP without the burden of large additional system development expenditures. As noted earlier in my statement, these information systems are essential to provide high-quality service levels at competitive prices.

The financial and operating network advantages available to SP only through this merger will permit SP to remedy the service weaknesses that have plagued it for years. Indeed, the ability to make the investments outlined by Mr. Yarberry are only part of the story. The integration of the UP and SP rail networks will create route efficiencies that could not be achieved by investments alone.

As Mr. King and Mr. Ongerth describe in detail, the operating plan for the combined railroads provides the means for SP to get the most out of its franchise. The following describes for SP's major traffic flows the service improvements that will be realized by the combined UP/SP.

(1) Oregon/Central and Northern
California/Utah/Colorado-Kansas City/
St. Louis/Chicago

The combined facilities of UP and SP in this corridor will enable the merged company to resolve problems of route congestion (particularly between Ogden and Salt Lake City, and between Pueblo and Herington), circuity and altitude, which have contributed to the irregularities that make SP's services less competitive. The new plan will avoid or cure tunnel clearance problems on SP's routes through the Rockies (Moffat Tunnel) and the Sierras. Yard expansion or pre-blocking of larger volumes of

combined traffic to by-pass yards will alleviate delays for traffic that moves through Roseville yard and other rehandling yards in California, as well as at Kansas City. SP will gain Chicago terminal facilities that will improve the efficiency of its handling in Chicago, and expanded barge facilities along the Mississippi River to increase capacity and velocity of coal shipments.

1

The resulting service improvements will provide consistent transit times -- better by many days than what SP offers now -- that can compete with the offerings of BN/Santa Fe for food products, forest products and coal moving in this corridor. Fleet utilization will improve because of shorter, less variable transit times, which will provide particular benefits in terms of added capacity on car types for which shortages exist, such as insulated and refrigerated box cars and centerbeam flat cars.

## (2) Portland-Southern California

UP and SP plan to integrate their facilities in this corridor so as to provide current SP shippers and others with an efficient single-line route all the way from Los Angeles to the Puget Sound area of Washington. This route will offer vigorous competition not only to BN/Santa Fe's route, but also to the trucks using the I-5 interstate highway. The Operating Plan provides for added capacity at Roseville yard that will result in pre-blocking trains to bypass other yards, such as relatively congested Colton and Eugene. Other new service patterns will

permit bypass of other yards. These efficient blockings and overall reduction in terminal usage will improve transit time and consistency significantly.

For the first time, intermodal trains will be competitive with trucks on this route. Improved tunnel clearances in the Cascades will permit the introduction of cost efficient double-stack intermodal service to compete vigorously with trucks. In addition, SP's service will again be competitive for lumber and paper traffic, and for scrap and steel traffic.

#### (3) Southern California/Arizona/New Mexico-Kansas City/St. Louis/Chicago

The merged UP/SP will achieve major improvements in transit time speed and reliability over this corridor by making investments in additional sidings and second main track, together with upgrading signal systems as necessary to permit truly high speed rail service. The multiple routes of the merged system will permit slower trains to be routed over the combined UP/SP Central Corridor so as to reduce the likelihood of interruptions in service on this corridor. When track capacity has been increased and track condition has been upgraded, this corridor, which offers the lowest mileage between Los Angeles and Chicago, the nation's largest single intermodal market, will provide transit speeds competitive with those of BN/Santa Fe. In addition, intermodal traffic will no longer have to use three different facilities and will benefit from the access to UP's excellent Global I and II Chicago intermodal terminals. This will save SP the necessity of making expenditures to develop a

new Chicago intermodal facility and will provide our customers premium terminal facilities in the shortest possible time.

#### (4) Chicago/St. Louis/Kansas City-Memphis/ New Orleans/Texas

Together, UP and SP will be able to provide much more consistent transit times in this corridor. The merged railroad will generate sufficient volumes in this corridor to build runthrough trains to Eastern locations, eliminating much rehandling of cars and bypassing now congested yards, such as Kansas City and St. Louis. In addition, the ability to use UP track for northbound traffic and SP track for southbound traffic in the corridor between St. Louis and Houston will permit additional improvements in the velocity and consistency of service for larger volumes, without substantial additional capital expenditures. Intermodal traffic will benefit from the use of UP's terminal at Yard Center, Illinois.

## (5) California/Arizona/New Mexico-Texas/Memphis/ St. Louis/New Orleans-Mexican Gateways

Improvements planned for the merged UP/SP will integrate the two railroads, so that trains will move more efficiently from Los Angeles, through Arizona, El Paso, and Houston, and on to Memphis, St. Louis, and New Orleans. The resulting service improvements will provide the speed and consistency demanded by the longer-haul intermodal and chemicals customers, as well as by shippers of minerals, aggregates, cement and building materials, which use shorter hauls. For all these commodities, equipment utilization will increase with improved

transit speeds and reliability, and our customers will be assured of the equipment supply needed to carry out their contracts with their own customers. The combined system will have sufficient volume to build run-through trains to and from Southeastern points. Intermodal traffic will benefit from a terminal to be constructed in West Memphis.

This corridor is also the immediate feeder of traffic to the Mexican gateways, and service improvements such as the new California to Laredo intermodal service, will provide greater capacity and reliability for transportation to this growing market. Better service will provide new opportunities for partnering with the Mexican railways.

#### B. UP/SP Will Provide Improved Competition In Specific Markets

Shippers of a wide range of commodities will enjoy the significant advantages of greatly improved service and increased competition provided by the UP/SP merger.

(1) Automotive. Use of a combination of SP and UP routes and terminals will provide the most timely and efficient flows from the Eastern gateways to the population centers in Southern California and Arizona. Current SP business to Denver, Salt Lake and Northern California will also find improved service using a combination of routes. Service improvements in these two corridors will translate into transit time reductions for shippers and improved rail equipment utilization, satisfying the requirements of these customers for precise, scheduled deliveries

of parts and finished vehicles, as well as for availability of empty equipment.

- (2) Chemicals. The settlement agreement with BN/Santa Fe ensures that chemicals shippers will have access to two extensive single-line route networks, which will intensify competition and enhance service for chemicals movements. UP/SP will offer an alternative network to that of BN/Santa Fe for shipments between the Gulf Coast and the Eastern and Southeastern gateways, and to the West. UP customers going west will be able to utilize the shortest route. Route and terminal capacity improvements will take days off cycle time for private equipment used by both SP and UP customers, particularly those shipping between the Gulf Coast and California. Chemical producers on SP will have single-line access to markets in every Western state except North Dakota. Producers of chemical intermediates on both SP and UP will have single-line access to the wide range of chemical plants served by both railroads, providing cost effective market growth opportunities.5
- (3) Coal. Mines located on SP in Colorado and Utah will have single-line routings available to utilities located on UP, as well as the most efficient route to the coal export

For example, see the statements of Mitsubishi Motor Sales of America, V.S. Katy Bremer; Nissan North America, Inc., V.S. Robert Frinier.

See, as example, the statements of Consolidated Oil & Transportation Company, Inc., V.S. Jim Hebert; Rexene Corporation, V.S. P.R. Malcolm.

facilities at Long Beach and Los Angeles, California as a result of the integration of the UP and SP systems. They also will have access to UP-served river terminals on the Mississippi system and the most efficient route to the Southeastern gateways of Memphis and New Orleans, thus opening new market opportunities. This will be enhanced by UP's expenditure of almost \$90 million in line improvements on its route east of Denver, making this coal even more competitive. Western Colorado and Utah coal moving to Eastern gateway and Texas markets will be able to use the more efficient Moffat Tunnel route to Denver and then move directly East over UP or south to Texas over SP's BN/Santa Fe trackage rights obtained in that merger, rather than being required to transit the Tennessee Pass line over the steepest and highest mountain pass in the West. The cost saving and improved service from this reroute should provide increased long-run market opportunities for Colorado and Utah producers.

geographic coverage of UP/SP will provide better origin-to-destination service. UP's car fleet and improved information technology-based operations management will help alleviate SP car shortages. Capacity improvements and use of more efficient, faster routes will decrease cycle times, effectively increasing the size of the car fleet, and enhancing customer market opportunities.

Greater volume obtained by consolidating flows of UP and SP will allow better utilization by avoiding yards,

particularly in high congestion locations such as Kansas City, St. Louis and Chicago. Improvements to yards such as Roseville and Colton will dramatically reduce delays in those instances where classification will still be required. Faster combined routes from UP origins in California and SP origins in Northern California and Oregon to Midwest and Southeastern destinations and gateways will improve the cycle times and availability of equipment, while faster routings will make rail service possible for a wider variety of perishable products. The ability to develop both origin and destination transloads will also make rail service available to a broader spectrum of customers.

combine fleets for paper and lumber, and to manage and utilize cars better. SP shippers will obtain direct routes from Oregon to the East and UP shippers will have direct service from all parts of the PNW to California. These shippers will receive faster and more predictable service. SP customers in Oregon will have high quality access to Eastern markets from which they may have been excluded in the past by cost and service considerations. The BN/Santa Fe settlement agreement will provide two highly competitive routes between the PNW and

For example, see the statements of Patterson Frozen Foods, Inc., V.S. Richard Fetzer; Spreckels Sugar Company, Inc., V.S. Richard C. Underwood.

As illustration, see statements of Golden State Lumber, Inc., V.S. Wayne Withers; Sierra Forest Products, V.S. Kent Duysen.

California consumer markets. The paper and pulp producers located on both carriers will have single-line access to a much broader range of production chemical suppliers.

(6) Grain and grain products. Currently, SP's lack of grain cars is severe, especially during peak season. The UP/SP merger will alleviate this equipment shortage through better supply and cycle time improvement. The crop seasonality on the two railroads will yield better fleet utilization because SP has Southern origins (at Lubbock and Amarillo, Texas, the Imperial Valley of California, Arkansas, and Louisiana), while UP has Northern origins (on CNW). The merged railroad will be able to use the same fleet for dry fertilizers to further improve service to agricultural interests.

UP/SP will provide SP shippers with better routing options from the Midwest to more Gulf Coast ports and Texas markets. SP grain customers are largely receivers in major population areas, particularly California, Arizona and Texas. The merger will provide these customers dramatically expanded options for single-line service from the numerous production points served by UP/CNW. SP shippers in Kansas, Oklahoma, Texas and Illinois will have single-line access to the export terminals in the PNW and in the Gulf of Mexico, as well as more options for movement to the Mississippi River system. UP customers will have

For example, see the statements of Midstate Lumber Corporation, V.S. George Bilderback; Sierra Forest Products and Sequoia Forest Industry, V.S. Kent Duysen; Golden State Lumber, Inc., V.S. Wayne Withers.

new markets and improved routes from the Midwest to California, and from Eastern Washington and Idaho to California. UP/SP will have more reload options, and will provide single-line service from elevators or processing mills to destination to compete with that of BN/Santa Fe. There will be faster combined single-line routes to destinations and gateways. Greater volumes will allow the operation of more cost effective unit trains.

(7) Intermodal. For domestic intermodal traffic, expanded geographic reach will provide customers with expanded service. The ability of shippers to choose between two full service carriers for movements throughout the West will permit them to bundle their business and require carriers to bid based on the best overall price/service package. This will maximize the leverage and options available to shippers. Increased volumes will foster direct service and bypassing of terminals, increase diversion from truck to rail, and put more motor carrier traffic on rail. UP/SP will have competitive routes for shippers to move traffic from all major West Coast points to everywhere in the West and Midwest. The merger will provide truck competitive rail routes from Northern California to the Midwest, Washington to Texas and California, and Northern California to Texas. UP's upgrade of its route from Ft. Worth to Sierra Blanca, Texas, will provide a new high-speed route between California and the Southeast. Upgrading of SP's route from Los Angeles to Chicago

See, for instance, the statements of Arizona Grain, Inc., V.S. John Skelley; Cook Flour Co., V.S. Brendan J. McEntee.

will provide a fully competitive alternative to BN/Santa Fe for all types of intermodal business.

For international intermodal traffic, UP/SP will provide fully competitive routes from all West Coast ports to Chicago, high-quality terminals East and West, expanded capacity on SP routes to meet growth, and easy repositioning of rail equipment and containers to accommodate ship scheduling (Oakland to Los Angeles, Los Angeles to PNW, Southeast to Chicago to return to PNW). In addition, UP/SP financial resources will permit investment in lift and hostling equipment for high volume terminals.<sup>10</sup>

scrap sources for mini-mills. In addition, UP shippers in Seattle and Portland will have more efficient single-line service to their primary market in California. By multiplying origins and destinations, UP/SP can economically make investments in specialized equipment. The merger will create major equipment benefits by eliminating the need to return empty equipment between UP and SP as separate railroads, and by creating many new reload opportunities. The result will be reduced costs to the railroad and increased car supply to customers. By permitting better use of existing specialized equipment such as covered coil gondolas, 100-ton copper boxcars and pipe flatcars, the merged

As examples, see the statements of American Cargo Systems, Inc., V.S. Chris Ellis; Pronto Pig, Inc., V.S. Michael M. Butler.

railroad will avoid the extreme fluctuations that now exist for these car types. This would further help justify increased investment in these types of specialized equipment.<sup>11</sup>

(9) Mineral; aggregates, cement, building materials, machinery and government. Flow improvements in the San Antonio and Houston terminals, as well as additional capacity on SP between these locations, will provide an operating environment that can improve equipment cycle time. This will reduce shippers' costs as well as those of UP/SP, and effectively increase the size and lift capacity of the car fleet. Movements between San Antonio and Corpus Christi will be able to use UP's direct line rather than SP's much longer route. Texas aggregates producers on both railroads will see an expansion in the single-line market available through the increased network of the combined system. Colorado perlite producers will have improved equipment availability due to faster cycle times with the UP direct routing to Eastern gateways. This effective increase in the car fleet will produce new market opportunities for these customers. 12

As illustrations, see the statements of Cascade Steel Rolling Mills, Inc., V.S. Kurt C. Zetzsche; Bull Moose Tube Company, V.S. Kathy A. Groh; Kreuger Engineering & Mfg. Co., Inc., V.S. Jerry Krueger.

See, for instance, the statements of Calaveras Cement Company, V.S. Gary Lancaster; Harborlite Corporation, V.S. William G. Blunt.

# C. UP/SP Will Assure Shippers Of A Strong Competitive Choice Of Rail Carriers Throughout The West

As an independent company, we cannot expect SP to contribute to the intensity of competition in three-railroad markets. As noted earlier, SP's service difficulties have begun to make SP an unstable option for some customers. As this occurs, and as the gap between SP's service and that of its rivals widens, SP competition becomes only a perception based around a line on a map rather than a true market counterbalance to UP or BN/Santa Fe. A UP/SP merger is the best competitive response to BN/Santa Fe. It will provide adequate, vigorous competition to BN/Santa Fe all over the West, from a position of financial and structural strength. Competition between UP/SP and BN/Santa Fe will be stronger than competition among BN/Santa Fe, UP and SP.

A two-railroad West is emerging. Absent the merger of SP and UP, the uncertainties generated by SP's service fluctuations in the face of competition would daily grow stronger. These uncertainties would jeopardize our customers' transportation options and their own markets.

The merger of SP with UP provides an unequalled opportunity to remove this risk to the public. It ensures an orderly transition to a Western rail system providing shippers a choice between two strong, comprehensive, intensely competitive rail systems capable of sustaining and nurturing competition into the future. SP shippers, who have patiently supported our efforts to be an effective participant in the Western logistics

picture, deserve nothing less. They deserve the right to move forward in the new competitive environment with the knowledge that the carriers providing their service are financially strong players dedicated to providing a complete service network that will support their own business efforts over the long term.

#### VERIFICATION

STATE OF COLORADO )
CITY AND ) ss.
COUNTY OF DENVER )

John T. Gray, being duly sworn, deposes and says that he is the Vice President, Network and Corporate Development, and has read the foregoing document, knows the contents thereof, and that the same is true and correct.

Subscribed and sworn to before me by John T. Gray this 14th day of November, 1995.

My commission expires: October 14, 1998.

Notary Public

### VERIFIED STATEMENT

OF

### LAWRENCE C. YARBERRY

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#### VERIFIED STATEMENT

OF

#### LAWRENCE C. YARBERRY

My name is Lawrence C. Yarberry, and my business address is Southern Pacific Building, One Market Plaza, San Francisco, California 94105. I am Vice President-Finance and principal financial officer for SPR and its rail subsidiaries.1 I am a graduate of San Francisco State University and have a Bachelor's degree in Accounting. I joined SPT in July 1964. Since that time, I have served in successively more responsible positions in accounting and finance. My prior position was that of Controller of SPT, which I held until I assumed my current position in April 1990. In my current position, I oversee the preparation and implementation of SP's capital and operating budgets, and have responsibility for financing SP's capital outlays and other activities, as well as the external and internal financial reporting of the company. The statistics and other financial data presented in this statement are drawn from publicly available records including audited financial reports filed by SPR with the Securities and Exchange Commission ("SEC") and compiled on the purchase basis of accounting, Form R-1

SPR, formerly Rio Grande Industries, Inc. ("RGI"), directly and indirectly owns all of the common stock of SPT and SPT's subsidiaries, DRGW, SSW (99.9%) and SPCSL.

reports filed by SPT with the ICC and compiled on the historic cost basis of accounting, and from other financial records of the company.

#### Introduction and Summary

The increasingly service-intensive and efficiency-driven nature of rail corpetition today places a premium on a railroad's ability to generate substantial cash flow for capital investment. BN/Santa Fe and UP consistently have been very profitable and already have acquired most of the technologies, equipment, facilities and other assets needed to provide customer-centered, high-quality rail service. In contrast, in financial terms, SP has been and is now a much weaker railroad than its two main competitors. In this statement, I will explain why SP, now a distant third in the West in financial and other resources, cannot expect to invest enough in the future to assure that it can avoid falling further behind in price and service competition with UP and particularly with the new BN/Santa Fe system. The merger will make possible vigorous competition of two unified systems and better service for SP's customers.

Although BN/Santa Fe is only a few months old, it is becoming clear that the new system has unprecedented competitive advantages. BN/Santa Fe already is ahead of schedule in integrating its operations and now expects to achieve even greater operating and financial benefits than had been anticipated. BN/Santa Fe's management recently announced plans to invest \$1.8 billion this year and lower but similar amounts in

future years.<sup>2</sup> This level of capital expenditure is much higher than had been planned originally and is much higher than the \$1.3 billion combined 1994 capital spending by BN and Santa Fe.

UP's annual capital expenditures will be about \$850 million over the same period, and UP already is in top condition and generally provides good service. The deep pockets of both of these large railroads will allow them to invest in continuous efficiency improvements and in expansion of the range of their service offerings over the indefinite future. BN/Santa Fe and UP will pull dramatically ahead of SP in competitiveness.

In contrast, SP has had negative operating cash flow after expenses, capital expenditures and debt service for all but three of the last 17 years. Furthermore, SP will have negative cash flow from operations in 1995 and expects to continue to have negative cash flow over the next few years.

While SP has been able to invest enough in the past to maintain its plant and equipment, and to operate the railroad, I am concerned that an independent SP likely will not be able to invest enough in the future to be competitive with BN/Santa Fe and UP, but instead will fall farther and farther behind these railroads.

Statement by Mr. Robert Krebs, CEO of BN/Santa Fe, at a New York meeting with rail industry analysts, October 24, 1995. See also Burke, J., "Krebs Plans \$3 Billion in Capital Spending in First Two Years of BNSF Combination," Traffic World, pp. 20-21, Oct. 2, 1995.

Drawn from reports to the ICC on Form R-1.

The severity of SP's financial constraints is revealed in the accompanying figures. For example, between 1987 and 1994, while BN and Santa Fe together earned about \$7.2 billion in cumulative operating income and UP earned over \$6.8 billion, SP realized a mere \$111 million. See Figure 1 overleaf.

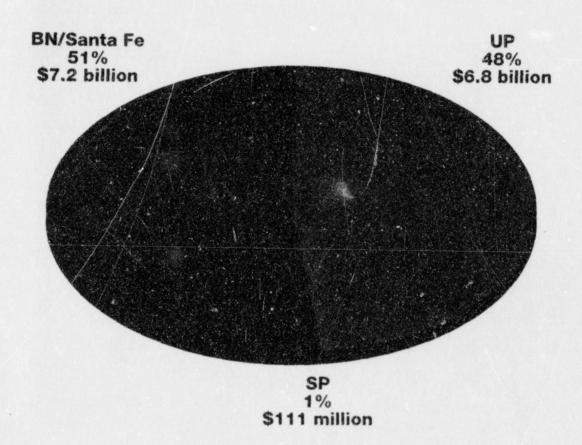
Similarly, from 1983 to 1994, BN and Santa Fe combined generated \$3.7 billion in cumulative operating cash flow, after capital expenditures and debt service, and UP generated over \$3 billion. During the same period, however, SP incurred a curllative operating cash flow deficit of \$1.5 billion. Figure 2 overleaf.

Also, SP's operating ratio consistently has been much higher than the other major Western railroads and, except for 1994, SP has been falling further behind in this important measure of overall efficiency. As shown in Figure 3, overleaf, SP's Western rivals have achieved major reductions in operating ratios, but SP has not.

In interpreting Figure 3, it is important to note that SP's operating ratio for the first nine months of 1995 has risen over 4 percentage points from its 1994 levels, while the other major railroads are continuing or improving their already favorable operating results. For the first three quarters of 1995, SP had operating income of only about \$77 million, and an operating ratio of almost 97 percent. For this same period, BN

Drawn from SPT's 1995 reports to the ICC on Form RE&I (excluding special charges).

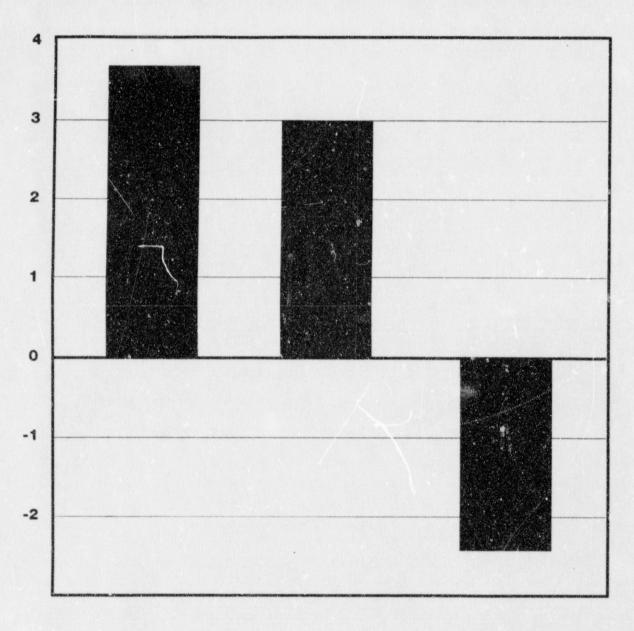
Figure 1
Rail Operating Income: 1987-1994



MARKET UP MERCHAN BN MARKE SP

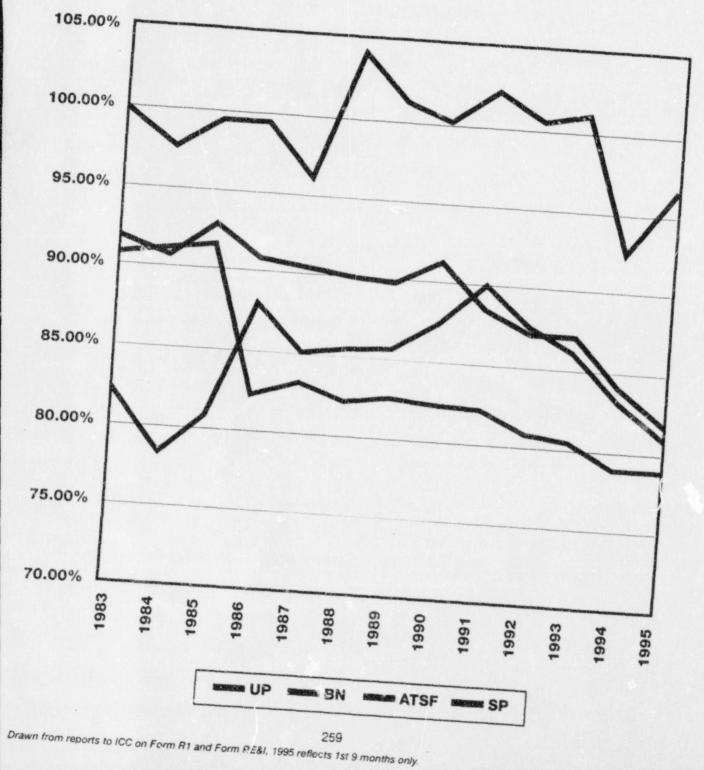
Figure 2

Cumulative Operating Cash Flow after Capital Expenditures and Fixed Charges: 1983-1994 (in \$ billions)



MERCHAE UP MERCHAE BN MERCHE SP

Figure 3 Operating Ratios of Major Western Railroads: 1983-1995



and Santa Fe added together had operating income of \$1.13 billion and their combined revenues and expenses for the first nine months of 1995 produce an operating ratio of 81.4 percent. Up earned operating income of \$943 million and achieved an operating ratio of 79.2 percent.

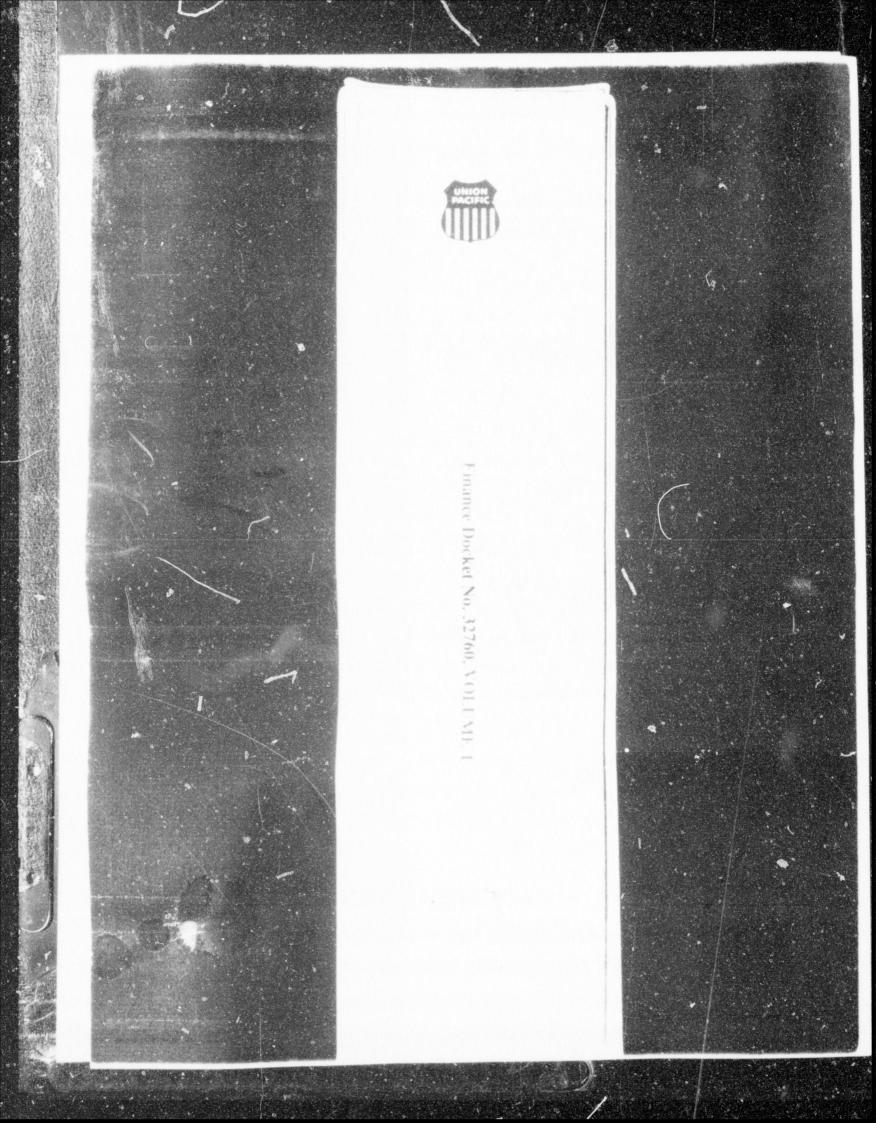
Over the years, SP has succeeded in investing enough to maintain and to operate a viable railroad. However, given our current and prospective financial constraints and our recently worsened competitive situation, compared with the investments needed for SP to offer prices and services competitive with what our rivals will be offering, I believe that SP is looking at a capital investment shortfall on the order of at least \$1 billion over the next three or four years alone.

SP likely will not be able to obtain, either from internal sources or from the public capital markets, the funds necessary to avoid falling farther and farther behind in competition against BN/Santa Fe and UP. Only UP has stepped forward to invest the necessary amounts in SP's system. This is because of the unique synergies that will flow from a union of the two systems. Since UP/SP will realize significant financial returns from improvements in SP's plant and equipment, and the integration of SP's properties with UP's, the combined system will have the economic incentives and returns to make the significant investments in SP's franchise necessary to provide

Drawn from 1995 reports to the ICC on Form RE&I.

Drawn from 1995 reports to the ICC on Form RE&I.

11-30-95 A 1648V2 1/5 32760 STB FD



# Before the INTERSTATE COMMERCE COMMISSION

Finance Docket No. 32760

UNION PACIFIC CORPORATION, UNION PACIFIC RAILROAD COMPANY
AND MISSOURI PACIFIC RAILROAD COMPANY
— CONTROL AND MERGER —

SOUTHERN PACIFIC RAIL CORPORATION,

NOV 3 0 1995 SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS ENTERED SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP. AND THE Office of the Secretary DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

COMMERCE COMMISSION

### RAILROAD MERGER APPLICATION

8 Part of Public Record

1.01 0 0 1995

#### **VOLUME 1**

SUPPORTING INFORMATION, SUMMARY OF BENEFITS, EXHIBITS 1, 8, 10-12 AND 16-19, STATEMENTS OF APPLICANTS' PRINCIPAL OFFICERS, AND OTHER SUPPORTING STATEMENTS

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Attorneys for Union Pacific Corporation, Union Pacific Railroad Company and Missouri Pacific Railroad Company consistent, excellent service to our shippers. We see no other railroad or investor willing and able to make these investments required to realize the potential operating benefits in SP's franchise.

A UP/SP merger would address SP's capital needs. First, UP now generates over \$1.2 billion in operating income annually. Also, the synergies of a UP/SP merger by themselves will generate over \$600 million of additional annual operating income. Further, in part because the merger will substantially improve the risk-return relationship for investments in SP's franchise, the combined UP/SP system will have superior access to capital as compared with that of either railroad today. Finally, as Messrs. King and Ongerth describe, UP already possesses many of the technologies, facilities and equipment that SP will need. The merger thus will promote a more productive utilization of UP's existing assets and systems, and at the same time make them available to SP without major additional expenditures, so that SP and ultimately its shippers will not have to pay for redundant facilities.

Considering SP's difficult competitive situation as a distant third in the West, the merger's financial advantages, and the operating and service benefits discussed by other witnesses supporting the Application, I am convinced that the merger is a necessary competitive response of SP -- as well as UP -- to the challenges posed by the new BN/Santa Fe system.

Part I: The New Competitive Environment in the West Places a Premium on Financial Strength and the Ability to Invest Heavily for Continuous Service and Efficiency Improvement

For more than a decade, SP has faced a difficult competitive situation as the weakest of four major Western railroads. The last year, however, has produced a major change in SP's competitive environment: there have been large-scale consolidations of the Western roads. Most significantly, BN and Santa Fe have combined to form the largest railroad in the nation, with greatly increased scope and ability to provide single-line service. It now appears that, with its financial strength and investment capacity, BN/Santa Fe will be able to set the pace of efficiency and customer service in the West. BN/Santa Fe likely will increase its competitiveness over just the next few years to a greater extent and more rapidly than we at SP had forecast even six months ago.

Railroads, of course, always have been a highly capital intensive industry. Each of the major Western railroads must expend hundreds of millions of dollars annually just to maintain its track system and equipment fleet. At the present time, I estimate that SP will require at least \$350 million in capital expenditures each year simply to maintain its existing plant and equipment at current levels of productivity and in safe operating order. This level of expenditures would not even permit any substantial replacements of aging and retired equipment.

In addition to the heavy annual investments needed simply to maintain their plant and equipment, railroads must also make competition-enhancing investments. As Mr. Gray describes, the enactment of the Staggers Rail Act of 1980 unleashed market competition and placed railroads face to face with a competitive imperative: meet customers' demands for quality service or the customers' transportation business will go elsewhere.

Satisfying these customer demands now spells the difference between winners and losers in the competition among Western railroads. Over many years, BN, Santa Fe and UP have made the substantial investments in fleets of specialized rail cars, transshipment facilities, efficient terminals and technology that are the cornerstones of high-quality rail service. In contrast, as a consequence of its financial position, SP has been restricted in making investments that will be critical to support its marketing, to upgrade its level of service, and to achieve productivity improvements. A lack of cash flow has tended to restrict SP to investments necessary to maintain its physical plant at current performance levels, during an era when its rivals have been making major investments that significantly enhance their efficiency and performance. And looking forward, we expect that the pace of these efficiencyenhancing investments will accelerate dramatically, since BN/Santa Fe's increased financial strength and cash flow will allow it to invest continuously in enhanced efficiency and service quality.

# Part II: BN/Santa Fe Has Unprecedented Financial and Other Resources That Will Allow It to Set the Pace in the New Competitive Environment

We are just becoming able to take full measure of the financial power of the new BN/Santa Fe system, and it is greater than we thought even six months ago. In 1994, BN and Santa Fe as separate companies earned a total of \$1.26 billion in operating income. Based on the subsequent extraordinary performance of BN and Santa Fe (again largely as separate railroads), especially during the third quarter of 1995, rail industry analysts predict that the consolidations and other efficiencies of the merger will generate annual savings of about \$1 billion? -- almost twice the figure estimated in the BN/Santa Fe merger application. These improvements by themselves would generate pro forma 1994 operating income of well over \$2 billion. Furthermore, BN/Santa Fe's CEO, Mr. Krebs, has stated that the railroad will realize the entire \$1 billion of merger synergies two years ahead of the schedule submitted to the Commission.

It thus appears that BN/Santa Fe will accomplish its integration and increase its own competitiveness and

Drawn from financial reports to the ICC on Form R-1.

 $<sup>^{8}\,</sup>$  BN and Santa F. formally consummated their merger on Sept. 22, 1995.

NatWest Securities Corp., Introducing the New BNSF, Oct. 24, 1995.

Finance Docket No. 32549, BN/SF-7 at 97.

Donaldson, Lufkin & Jenrette, <u>Burlington Northern</u>
Reports 30 Results -- Market Performance Rating Maintained,
Oct. 25, 1995.

profitability to a greater extent and far more rapidly than observers thought even a few months ago. SP, therefore, either must make <u>immediate</u> improvements to respond to BN/Santa Fe's current and expected service and efficiency improvements, or it will face the prospect of rapidly falling further behind as a competitor. This places SP under great pressure at a time when our financial results have trended down and we confront an investment shortfall in the range of \$1 billion over the next three or four years.

On the basis of data supplied by BN/Santa Fe's management, industry analysts are predicting that BN/Santa Fe's operating income in fact will rise from the \$2 billion level to about \$2.3 billion in 1997, \$2.6 billion by 1998 and \$3 billion by 1999. These estimates seem reasonable to me and are dramatic evidence of the unprecedented financial strength of the BN/Santa Fe system. In contrast, SP's operating income so far this year has been on the order of \$77 million. This difference between the financial strength of BN/Santa Fe and the still fragile level of SP's operating profits will allow BN/Santa Fe to spend far more than SP on improving its efficiency and service. It will also enable BN/Santa Fe to place severe and unprecedented

Morgan Stanley, <u>Burlington Northern Santa Fe: Pro</u> Forma EPS indicates the Stock Should Go Up, Oct. 24, 1995.

These estimates contrast with only \$224 million in 1994 operating income reported by SP on Form R-1 -- and, as discussed below, SP's 1395 earnings are trending down rather than up.

price pressure on SP and to limit us from increasing our profitability enough to narrow the competitive gap significantly.

BN/Santa Fe's geographic coverage gives it an important advantage over SP and UP in the range of services, particularly single-line service, it can provide and in the range of customers it can serve. I want to focus on the fact that BN/Santa Fe's financial strength will allow it to build on its unparalleled route structure to provide the quality single-line service that customers want, and thus to become an even more powerful competitor.

BN/Santa Fe originally stated that it intended to make \$350 million of incremental capital expenditures just to integrate and strengthen the two formerly separate rail systems, which are already in very good operating condition <sup>15</sup> During an October 24, 1995 meeting with rail industry analysts in New York, BN/Santa Fe's management stated that capital expenditures would approach \$1.8 billion this year. BN/Santa Fe management elsewhere has stated that the railroad will invest about \$1.5 billion annually over the next few years. <sup>16</sup>

While SP obtained some of its requested conditions to the BN/Santa Fe merger in the form of private agreements with BN/Santa Fe in exchange for not opposing the merger, these operating rights will not neutralize the financial power and other BN/Santa Fe advantages that we are now beginning to

<sup>15</sup> BN/SF-7 at 97.

see footnote 2.

discover and the effect of which SP originally may have underestimated.

In this regard, SP <u>already</u> is beginning to feel the adverse effects of competition with the newly merged BN/Santa Fe railroad. BN/Santa Fe's adverse impact on SP has been noted by a number of rail industry analysts.<sup>17</sup>

Some industry observers, moreover, have stated that the headstart enjoyed by the newly merged BN/Santa Fe will give it a significant competitive advantage even over a subsequently-merged UP/SP system. 

These observers anticipate that BN/Santa Fe may well be able to increase its long-term market share even against such a merged system. If this assessment is accurate, and in general terms I think that it is, then an independent SP will fare much worse in competing with the new BN/Santa Fe system.

C. J. Lawrence, for example, has blamed the recent decline in SP's intermodal volume and revenues, normally an area of SP strength, in part on increased competition from BN/Santa Fe. C.J. Lawrence Co., Southern Pacific Is Trading on UNP Takeover Value, Not on Earnings, Oct. 25, 1995. This assessment is consistent with SP's recent declines in intermodal traffic. SP's 3rd quarter intermodal volume went down 5 percent, while Santa Fe's increased 7.2 percent. Over the last winter, SP lost significant intermodal business to Santa Fe. PaineWebber, Inc., Southern Pacific: 30 In Line/Break-Even; Service Top Priority; Reducing Estimate, Oct. 25, 1995. Standard & Poor's recently stated: "[SPR's] financial performance has deteriorated in recent quarters, while competing railroads are posting improved results. [SPR's] competitive position and market share appear to be weakening in the face of pressure by the combination of the Burlington Northern Railroad and the Atchison, Topela and Santa Fe Railway Co." Standard & Poor's, Oct. 30, 1995 ("S&P Report").

PaineWebber, Inc., <u>Burlington Northern</u>: <u>Blowout 30</u>: Raising Estimates, Oct. 25, 1995.

BN/Santa Fe's unprecedented investments will understandably result in an extraordinary increase in efficiency. BN/Santa Fe's own expectations of increased efficiency are reflected in its recently announced goal of achieving an operating ratio for the merged system in the low 70s within a few years. On a revenue base approaching \$10 billion, that level of efficiency would result in operating income on the order of analysts' \$3 billion estimate for 1999. Those levels of operating income will allow BN/Santa Fe to be the price leader in the West.

BN/Santa Fe's financial resources also will permit it to expand the range of its service offerings at the expense of the weaker SP. We foresee aggressive competitive actions by BN/Santa Fe on the immediate horizon. For example, as Mr. Gray points out, BN/Santa Fe has the incentive and the resources to construct reload centers and build-ins to siphon off SP's most lucrative traffic. An independent SP would face great difficulties in raising sufficient capital to respond to such challenges with its own competitive facilities and services.

Part III: To Provide Meaningful Price and Service Competition in the New Competitive Environment, SP Needs to Make Large Additional Efficiency-Enhancing Investments Over the Next Few Years

At SP, we face the daunting task of generating the capital necessary to maintain our competitiveness with the other major Western railroads. This task has been made much more difficult by the acceleration of BN/Santa Fe's integration and the unexpected extent of its merger synergies. In this section

of my statement, I will describe SP's current capital expenditure projections and some of the investments that we likely will not be able to make, but which we should make in order to avoid falling farther and farther behind the other major Western railroads.

expenditures (including capital leases) averaging in the range of \$500-\$550 million annually. About \$300 million of this amount relates to roadway and other expenditures needed to maintain our plant at its current level of operations. About \$150-\$200 million represents capital equipment upkeep as well as the acquisition of new locomotives and rolling stock to replace retired equipment. A small amount is accounted for by other initiatives.<sup>19</sup>

While this plan does anticipate relatively small investments intended to increase our efficiency and the quality of our service, it does not provide nearly enough to put us in the competitive league of BN/Santa Fe. Many necessary investments, even though they likely would be profitable for SP, must be deferred because SP's available capital is absorbed largely by investments that must be made simply to keep the railroad operating.

This year's total expenditures will be substantially higher than \$500 million, due in part to the acceleration of a substantial amount of locomotive capital leases originally planned for 1996. Because of this acceleration and our anticipated cash flow, next year's investment level is expected to be significantly less than \$500 million.

In view of the head start that BN/Santa Fe already has, and its likely progress over the next few years, SP surely should be investing at a much more rapid rate than is currently anticipated. UP has estimated that it would have to spend about \$700 million of additional capital to upgrade the SP franchise after a merger. That estimate does not take account of the cost of the many excellent facilities and systems that UP already has built for itself and that will be available to the combined system after the merger. An adequate capital plan for SP in the absence of a merger therefore would involve much more than the \$700 million UP estimate. Moreover, in light of BN/Santa Fe's aggressive capital plans and extraordinary cash flows. I believe that the combined UP/SP will have to spend more capital on the SP franchise than even the \$700 million UP has estimated, if the merged system is to keep pace with BN/Santa Fe.

There are a number of capital improvements that SP has viewed as desirable, and had planned to make sometime in the future as our profitability gradually increased. SP's new competitive environment makes it imperative that SP make many of these capital improvements now.

Although I have not made a detailed study of SP's revised capital requirements in light of the aggressive performance of BN/Santa Fe, I estimate that, to be competitive with the other major railroads, in the absence of the merger SP should make additional capital expenditures of at least \$1 billion over our current plans for the next four years. In the

absence of large-scale investments such as these, SP as an independent company likely would suffer a reduction in SP's service. And on the basis of SP's current performance, I think it is unlikely that SP, other than through the proposed merger, could make these investments. Some of these investments include:

- (1) Technology. As Mr. Gray describes, the capacity to provide customers with accurate, real-time information on shipments is essential in the new customer-oriented competitive environment. Information technology is also important for railroad management, for accurate costing of service, and for pricing decisions. BN/Santa Fe and UP both have enhanced significantly their information technology systems in recent years. For SP to maintain its competitiveness with these railroads, it should invest heavily in upgrading its competition technology systems over the next few years.
- equipment to carry specific commodities. SP needs additional equipment, including several types of specialized cars, to compete effectively against BN/Santa Fe and UP. For example, SP notably lacks an adequate fleet of grain cars and also needs to make more equipment investments to serve its forest products customers. SP also must make substantial expenditures to upgrade and expand its switch engine fleet in the next few years.
- (3) An inland intermodal facility in Southern California. Santa Fe recently built such a facility in the "inland empire" area, which gives BN/Santa Fe a competitive

advantage over SP in the domestic intermodal market. SP should construct an intermodal facility of its own in the San Bernadino area to compete with BN/Santa Fe in the domestic intermodal market.

- (4) An efficient intermodal facility in Chicago. Currently, BN/Santa Fe has excellent intermodal facilities in Chicago and in Streator, Illinois, for interchange with Eastern carriers. UP enjoys access to the excellent Global I and II facilities in Chicago. SP lacks such an efficient facility for its lifeblood interchanges with the Eastern railroads. A Chicago-area intermodal facility would be absolutely critical to providing the services necessary to SP's existing customers and to protecting SP's intermodal business in the face of greatly intensified BN/Santa Fe competition in the coming years.
- (5) Terminal and yard facilities. A number of SP's larger rail yards and existing intermodal facilities will need expansion and modernization to meet the enhanced competition and single-line service offerings of BN/Santa Fe. SP also should consolidate and upgrade many of its car and locomotive maintenance facilities.
- (6) Reload centers. Reloading facilities permit a railroad to transload commodities between rail and truck and can greatly extend the market for rail transportation among shippers who are not located directly on a rail line. SP will have profitable opportunities to construct such facilities for chemical shippers, shippers of various food commodities such as

sweeteners and oils, and forest products shippers. But such facilities must meet rigorous standards for safety, and for product integrity and purity, and are therefore very expensive. This is an area where BN/Santa Fe has been and will be very active. BN/Santa Fe's construction of such facilities could allow it to threaten important parts of SP's traffic base. SP needs to invest substantial amounts in such facilities to protect and expand its market and to compete with BN/Santa Fe.

(7) Additional capacity. SP lacks the economies of density enjoyed by other railroads. However, it also is facing significant restrictions on capacity at certain important points in its system that limit volume and lengthen transit times. For example, we are phasing in over a substantial period of years some double-tracking and the extension of sidings along our Southern Corridor route, even though the new competitive situation makes it imperative to implement these improvements as rapidly as possible.

Further, SP would benefit from new sidings and centralized traffic control along its "Rabbit" line from Houston to Shreveport. We also need to increase tunnel clearances in the Sierras to accommodate double-stack intermodal cars, permitting more efficient intermodal service on the Central Corridor. Because of the recent growth in our coal business, we will have to improve our capacity in Utah. We should also double-track portions of, and add power switches to, our Tucumcari line in the

near future. Finally, SP should increase clearances along its I-5 route and in Colorado.

(8) Mexican gateways. SP carries important auto parts traffic with Mexico over its Eagle Pass gateway. BN/Santa Fe now has operating rights over Eagle Pass, and can be expected to compete vigorously for this and other SP traffic. SP must make significant investments to upgrade its Mexican gateways to compete with BN/Santa Fe and UP for cross-border traffic.

Part IV. SP is Subject to Financial Constraints That Limit Its Ability to Make the Investments Necessary in the New Competitive Environment

In this section of my verified statement, I will review SP's past and current financial position and show that SP will have difficulty generating the capital needed to make the kinds of investments described above.

A. SP Has Been A Financially Weak Railroad For The Last Two Decades

During the early and mid-1980s, SP increasingly fell behind the other major Western railroads in relative competitiveness. Table 1, immediately below, shows that since 1987, SP has generated pre-tax operating income in only two years, while UP, and BN and Santa Fe combined, earned substantial levels of operating income in every year during this period.

<u>Major Western Railroads: Pre-Tax Operating Income</u><sup>20</sup>
(In Millions)

	SP	UP	BN + Santa Fe
1987	\$ 84	\$ 651	\$ 787
1988	(\$ 91)	\$ 799	\$ 380
1989	(\$ 27)	\$ 776	\$ 898
1990	\$ 4	\$ 818	\$ 785
1991	(\$ 55)	\$ 838	\$ 724
1992	(\$ 12)	\$ 926	\$ 883
1993	(\$ 16)	\$ 951	\$ 966
1994	\$224	\$1,073	\$1,260
TOTAL	\$111	\$6,832	\$7,183

It is important to remember that SP has been the financially weakest carrier in the West for a very long time. In the 12 years from 1983 to 1994, SPT posted an average operating ratio of 99.3 percent and cumulative operating income of only about \$200 million. See Table 2, following:

Drawn from reports to the ICC on Form R-1. Before special charges. For 1987-1988, SP system figures do not include DRGW.

Table 2: SP Financial Results

(SPT consolidated; includes DRGW for years after 1988; dollars in millions)<sup>21</sup>

Year	Pre-Tax Income From Railway Operations	Operating Ratio
1983	3.7	100%
1984	57.8	98%
1985	17.3	99%
1986	13.2	99%
1987	83.6	96%
1988	(91.5)	104%
1989	(27.4)	101%
1990	3.9	100%
1991	(54.9)	102%
1992	(12.1)	100%
1993	(15.6)	101%
1994	223.5	92%
1995	76.9	97%

The decade of the 1980s was a period when the other major railroads made important strides in improving their efficiency, lowering their costs and reducing their operating ratio, yet SP did not. Its operating ratio hovered around 100 percent during all of this period except 1994, when it was 92 percent. During 1995, SP's operating ratio has risen again. Table 3, below, shows that today, as for many years, SP's costs, operating ratio and overall efficiency are significantly out of line with the rest of the industry.

Excluding special charges. Data are drawn from financial reports to the Commission on Form R-1 and Form RE&I. 1995 data reflect first nine months only.

Table 3: Operating Ratios of Major Western Railroads: 1983-9422

Year	ATSF	BN	UP	SP
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	91.3% 90.4% 92.8% 90.8% 90.6% 89.8% 89.7% 91.0% 88.2% 86.9% 86.9%	82.3% 78.7% 80.7% 87.8% 85.1% 85.3% 85.4% 87.3% 89.7% 87.3% 89.7% 87.3%	90.4% 90.6% 90.8% 81.9% 83.1% 81.7% 82.5% 82.2% 82.0% 80.7% 80.4% 79.2%	99.8% 97.8% 99.3% 99.2% 96.4% 103.9% 101.0% 99.9% 102.1% 100.4% 100.6%
1995	81.7%	81.3%	79.2%	96.7%

Finally, as noted above, SPT's operations in fact have failed to generate sufficient cash flow to cover its operating expenses, debt service and capital expenditures in all but three of the past 17 years.<sup>23</sup>

Since October 1988, SPT has formed a system with the much smaller DRGW railroad. For several years, this rail system also was unable to make significant headway in reducing its debt, improving the efficiency of its operations, or increasing operating cash flow. As the above Table 3 demonstrates, for the six years 1988-93, SP's operating ratio was at about 100 percent, and the railroad continued to have a serious annual cash flow deficit. SPR's debt-to-capital ratio typically exceeded 90

Drawn from reports to the ICC on Form R-1 and Form RE&I. Excluding special charges. SP includes DRGW for years after 1988. 1995 data reflect first nine months only.

Drawn from reports to the ICC on Form R-1.

percent during these years. In this period, the railroad relied on borrowings and a surge in big-ticket transit corridor and other real estate sales.

B. SP's Turnaround Efforts Have Encountered Substantial Obstacles

In 1993, SP began an effort aimed at achieving major improvements in its financial position and operating performance. This included a recapitalization, major investments in new and rebuilt locomotives, and extensive cost-reduction efforts.

Principal elements of this effort (including employee reductions and locomotive acquisitions) were implemented during 1993 and 1994.

Through this effort, SP's debt-to-capital ratio was reduced, which in turn facilitated capital leasing of needed locomotives. SP has acquired about \$800 million of new and remanufactured locomotives, and this has gone a long way toward remedying SP's serious power deficiencies of years past -- although we still confront locomotive shortages and associated service problems. SP managed to cut costs in many areas, including a reduction in its work force by some 18% between 1993 and 1994.

SP originally planned its current turnaround effort in the context of the competitive environment that existed in 1993 and 1994. We forecast that in that competitive environment, SP would be able to increase its efficiency and service quality and reduce its costs over several years, and thus gradually increase its profitability through 1997 and beyond. Our turnaround

effort, however, has encountered greater obstacles than we had anticipated when this effort commenced in 1993. As the locomotive shortages were addressed, other service-related problems came into sharper focus. We experienced some deteriorations in service. We had to hire additional employees to maintain service levels. Certain planned cost reductions were difficult to achieve. Our operating ratio remained higher than we had planned. And then we were confronted with the major new competitive threat of the BN/Santa Fe merger, which raises significant questions about SP's future competitiveness.

These issues are reflected to some extent in a comparison of our financial results for 1994 and 1995. During 1994 SP, like other major railroads, benefitted from a growing economy and an unprecedented demand for rail service. Our operating income for the year was \$224 million, the best we had achieved in more than 15 years. But in 1995, the first year after the major steps taken in 1993 and 1994 to reduce costs and improve performance, our operating income through the first three quarters has declined by about 60 percent from the comparable period in 1994. Costs have risen during the first three quarters of 1995, by almost 5 percent, even though our overall revenues and traffic volumes have been essentially flat. Our debt-to-capital ratio has risen sharply in 1995 as compared to 1994 because of the new debt associated with our equipment acquisitions and operating needs.

Excluding a special charge.

Despite our best efforts over the last several years, and our continuing efforts to improve, our costs are still far higher than the industry norm and any of our Western rivals, our service is the pocrest in the West, our finances are significantly weaker than BN/Santa Fe or UP, and we are more vulnerable to economic downturns and the intensifying forces of competition. The efforts begun in 1993 made good sense and moved us in the right direction, but it has been harder going than we and many expert observers expected. The financial constraints on our competition against BN/Santa Fe and UP remain.

## C. SP Is And Will Continue To Be Subject To Severe Constraints On Its Ability To Invest

SP must make large incremental investments in the next few years to be competitive with BN/Santa Fe and UP. The following summary explains why SP will face growing difficulties in raising capital for these incremental investments both internally, though operating income and real estate sales, and externally, from debt markets.

(1) Cash flow from operations. As I mentioned above, SP has had negative operating cash flow after railroad expenses, capital expenditures and fixed charges in all but three of the last 17 years. 25 By the end of 1994, SP's cumulative operating cash deficit over this period exceeded \$1.9 billion. As shown in the following Table 4, since 1986, SP has had a cash deficit from operations every year. Moreover, SP anticipates that it will not

Drawn from reports to the ICC on Form R-1.

have positive cash flow from operations in 1995, nor for the next few years. Currently, SP's cash flow is a negative half-million dollars a day.

Table 4<sup>26</sup>

NET CASH PROVIDED FROM OPERATIONS

LESS DEBT SERVICE AND CAPITAL EXPENDITURES

(Dollars in 000s)

Year	BN + Santa F	e SPT + DRGW	UP_
1983	\$392	(\$ 53)	\$306
1984	\$446	(\$ 70)	\$ 96
1985	\$105	(\$ 35)	\$ 21
1986	\$110	\$ 14	\$358
1987	\$385	(\$104)	\$250
1988	\$337	(\$198)	\$308
1989	\$852	(\$106)	\$439
1990	\$42427	(\$206)	\$166
1991	\$ 87	(\$276)	\$282
1992	\$302	(\$222)	\$201
1993	(\$6)	$($257)^{28}$	\$309
1994	\$266	(\$ 46)	\$332
Total	\$3,700	(\$1,559) \$	3,068

In contrast, as Table 4 demonstrates, UP, BN and Santa Fe each generated substantial operating cash flows over the last 12 years. During this period, while SP posted an operating cash flow deficit of over \$1.5 billion, UP alone generated over \$3 billion in operating cash flow and BN and Santa Fe added together

Drawn from Annual Reports to the ICC on Form R-1. Includes DRGW for years after 1988.

After removal of \$220.8 million after-income-tax impact of \$342.1 million special charge recorded in the ATSF R-1 schedule 210 at Line 45, which amount represents the discounted present value of Coal Slurry Litigation Settlement Expense (see also ATSF 1990 SEC Form 10-K, Note 12).

Adjusted to exclude effects of change in accounting for post-retirement benefits of \$90.8 million and intercompany transactions of \$108 million.

generated about \$3.7 billion in operating cash flow -- all after paying operating expenses, capital expenditures and debt service. Moreover, while SP continues to be cash-starved, BN/Santa Fe and UP likely will continue to enjoy large operating cash flows for the foreseeable future.

Part of the explanation for SP's cash flow constraints is its high cost structure relative to the other major Western railroads. This high cost structure limits our pricing flexibility and constrains our ability to grow our profitability. Although SP made progress in reducing its costs in 1994, during 1995, we have had to increase our operating expenses significantly in order to train crews and to maintain service levels. Based on our experience so far in 1995, it is likely that in the future we will have more difficulty than we thought in improving our cost structure. For example, increased service competition from BN/Santa Fe likely will make it much more difficult for SP to achieve cost reductions in the future.

As explained earlier, BN/Santa Fe will have increasing power to price aggressively based on billions of dollars of annual operating income. SP's much higher cost structure means that a strategy of attempting to main or to keep business by

One investment analyst stated that he expected BN/Santa Fe to be generating so much cash in a year or so that, in order to find a productive use for all the cash, it would start repurchasing its stock. Remarks of Gary Yablon, Wertheim Schroeder, at the Global Summit on Rail Finance, New York, N.Y., Sept. 21, 1995.

aggressive pricing is futile, and would only further harm our ability to generate capital internally.

SP's operating results again have trended down in the first nine months of 1995. For this period, although SP's revenues have been relatively flat, operating expenses have increased almost five percent. As a result, our operating ratio has worsened in 1995 as compared to 1994, and we remain far out of line with industry norms in this important measure of overall efficiency. Through the first nine months of 1995, our operating ratio was at 96.7, compared to 92.5 for the comparable period in 1994. BN and Santa Fe, if combined for the first nine months of 1995, would have posted an operating ratio of 81.4. Up's operating ratio for the first nine months of 1995 is 79.2. We are thus at a major cost disadvantage on a system-wide basis.

This year SPT reported nine-month pre-tax operating income of \$77 million. 32 In contrast, for the first nine months of 1995, BN and Santa Fe added together earned pre-tax operating

Not including a \$64.6 million special charge recorded during the second quarter. The expense increase was due in part to the fact that in order to maintain service levels SP had to take about 100 locomotives out of storage and utilize them in additional starts. Also, like other railroads, SP has found it necessary to hire additional personnel this year. SP had to hire and train about 500 employees for train and engine service and other operating requirements during the first half of 1995, in order to maintain service levels.

Drawn from 1995 reports to the ICC on Form RE&I.

Drawn from 1995 reports to the ICC on Form RE&I.

income of \$1.13 billion, and UP reported operating income of \$943 million.33

about \$1.7 billion from real estate and transit corridor sales.

Many of these sales involved big-ticket properties, several of which were acquired by governmental authorities to provide commuter rail service, or to provide freight service to promote regional economic development. As shown on Table 5, the proceeds from these sales basically subsidized SP's capital expenditures during the last six years.

Table 5: SP Annual Capital Expenditures and Proceeds from Real Estate Sales, 1989-94 (Dollars in 000s)

Capital Expenditures		Real Estate Proceeds
1989	\$407,356	\$376,170
1990	\$350,308	\$302,502
1991	\$352,852	\$522,074
1992	\$328,535	\$391,220
1993	\$364,307	\$69,662
1994	\$299,179	\$343,735

The real estate market has softened considerably, particularly in California where a number of SP's larger properties are located. And, the demand for SP's transit corridors has declined significantly in the last few years.

Drawn from 1995 reports to the ICC on Form RE&I.

Drawn from Annual Reports to the ICC by SPT and DRGW on Form R-1. 1993 amounts exclude intercompany transactions.

There has been only one major real estate transaction since 1992, the 1994 Alameda Corridor sale. SP has found over the last two years that governmental authorities have more constraints in assembling the funding to acquire such properties. Future sales, therefore, likely will be more difficult to achieve, and will be uncertain as to timing. Through the end of October 1995, we have realized real estate sale proceeds of only about \$40 million, and we anticipate going forward that annual real estate sales will be more in line with 1995, on average, than the much higher levels on which we were able to rely between 1989 and 1994.

recapitalization greatly reduced its leverage, the company's debt-to-capital ratio has risen again in the last year. By the end of the year, the company's long-term debt will be about \$1.8 billion. SPR's debt-to-capital ratio has risen from its low point of 51 percent at the end of 1994 to about 63 percent. The increase in SPR's leverage was due largely to the fact that it was necessary for SPT to incur additional debt to purchase an additional 278 new locomotives and new rail cars and other equipment during 1995. Because of these new obligations, S.R's fixed charges will increase substantially in the fourth quarter of 1995 and beyond. SP's debt-to-capital ratio compares with the much lower 44 percent debt-to-capital ratio of BN/Santa Fe. BN/Santa Fe thus begins its existence with a debt-to-capital ratio that is 19 percentage points lower than that of SPR.

In assessing the ability of an independent SP to invest enough in the coming years to be competitive with the new BN/
Santa Fe system, it should be kept in mind that there are limits to SP's ability to make additional borrowings in the future. On October 30, 1995, Standard & Poor's, the credit rating agency, stated that "[SPR's] financial performance has deteriorated in recent quarters, while competing railroads are posting improved results. [SPR's] competitive position and market share appear to be weakening in the face of pressure by the combination of the Burlington Northern Railroad and the Atchison, Topeka and Santa Fe Railway Co." <sup>35</sup> To the extent that SP could obtain additional financing in the future, such financing likely would be significantly more expensive. Therefore, SP cannot expect to look to debt financing to make the investments necessary to respond to BN/Santa Fe over the next few years.

# Part V: The Proposed UP/SP Merger Will Address Fully SP's Capital Needs.

The post-merger railroad will have adequate financial resources to address the very substantial capital needs of a unified UP/SP system, and will have the economic incentives and returns to do so. In this regard, UP's operations generate cash far in excess of its operating, capital and fixed charge requirements.

In addition, UP already possesses much of the equipment, facilities and technologies that SP will need to

<sup>35</sup> S&P Report.

compete effectively with the BN/Santa Fe system. For example, a merger will allow combined operations that alleviate many of the bottlenecks that plague SP -- and UP as well. The merger will give SP's shippers access to UP's Global I and II intermodal facilities in Chicago. SP shippers also will benefit from UP's state-of-the-art information and traffic management systems. And the seasonal and other differences in UP's and SP's traffic, together with other synergies, will allow a much more efficient use of the merged system's car fleets. The merger will permit SP's customers to benefit from these quality facilities and systems and will make both railroads' existing assets more productive, while allowing the combined railroads to target their investment dollars at the most promising marketing and service opportunities.

In addition, the synergies of the merger will generate over \$600 million of additional operating income. These synergies will improve the merged system's access to capital and help explain why the merger is vital for the SP franchise to receive the capital infusions necessary to provide our customers with high quality competitive service. UP can and will realize tremendous efficiencies from operating the SP franchise in conjunction with its existing system as a single railroad. Exploiting the synergies between the two systems will allow UP to realize a level of return on its investment that would not be available to potential investors in the capital markets. And UP's ability to realize the merger benefits would improve

dramatically the risk-return relationship for investments in SP's franchise.

For the reasons I have discussed, SP must merge with UP to improve its competitiveness. The merger is prudent for SP and its shareholders and is the only course that will ensure high-quality rail competition in SP's service area.

#### **VERIFICATION**

STATE OF CALIFORNIA )

CITY AND COUNTY OF SAN FRANCISCO )

L. C. YARBERRY, being duly sworn, deposes and says that he is the Vice President-Finance of Scuthern Pacific Transportation Company and has read the foregoing document, knows the contents thereof, and that the same is true and correct.

T. Charberry T. YARBERRY

Subscribed and sworn to before me by L. C. Yarberry this 15th day of November, 1995.

Vugnua France Fong Notary Public



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### **VERIFIED STATEMENT**

#### OF

#### JOHN H. REBENSDORF

My name is John H. Rebensdorf. I am Vice President-Strategic Planning for Union Pacific Railroad Company. I hold a Bachelor's Degree in Civil Engineering from the University of Nebraska and a Master's Degree in Business Administration from Harvard University. Before coming to Union Pacific, I was employed as a management consultant by Temple, Barker and Sloane. I have worked in the Mechanical Department of the Chicago, Burlington & Quincy Railroad and in the Operating and Engineering Department of the Chicago, Rock Island and Pacific Railroad. I joined Union Pacific in 1971 as Manager of Budget Research. I became Assistant Controller in 1976, Assistant Vice President-Planning & Analysis in 1980, Assistant Vice President-Finance in 1984 and was appointed to my present position in 1987.

The purpose of my statement is to describe the settlement agreement that was reached between UP and SP, on the one hand, and BN/Santa Fe, on the other hand, on September 25, 1995. I will review the background of the settlement agreement and the underlying negotiations and describe the key provisions of the agreement, including the rights granted and the compensation terms.

### Background of the Negotiations

I was charged with attempting to negotiate an agreement that would preserve rail competition for all customers who, prior to the announcement of the merger on August 4, 1995, were served by both UP and SP and no other railroad ("2-to-1" customers).

I undertook this assignment promptly following announcement on August 4 of the UP/SP merger agreement. The first step was to initiate discussions with other railroads. UP either contacted or was contacted by 11 railroads, all of whom indicated an interest in making a proposal to preserve competitive alternatives for "2-to-1" customers. Those 11 railroads included four Class I carriers, i.e., Santa Fe and BN (which were in the process of merging), IC, Conrail and KCS; four regional carriers, i.e., WC, Gateway Western, Utah Railway, and Montana Rail Link; and two experienced short-line operators, i.e., RailTex, and OmniTRAX.

Our guidelines for conducting these negotiations were: (a) we were looking for the strongest possible competitor, in order to be certain to satisfy our customers and meet any regulatory concerns; (b) the views of customers were to be a significant factor in determining which proposal to accept due to the importance of customer support for the merger; (c) we would not auction rights, because we knew any agreement would need to provide for real competition, and the "highest bidder" might have won the auction but at a price that would make it a less effective competitor; and (d) we would not carve up SP by selling off large chunks such as the Cotton Belt (SSW) and the Rio Grande (DRGW)

because doing so would destroy the benefits of the merger. We conducted all the negotiations in accordance with these guidelines.

The first carrier we met with was KCS. That meeting took place on August 15. Over the next several weeks, we met or spoke with all of the other interested parties. While we felt that many of these parties could put together a credible proposal, only three, BN/Santa Fe, RailTex and OmniTRAX, expressed interest in providing an alternative at all "2-to-1" points. More importantly, we began to hear that customers would insist on a Class I railroad because of their belief that only a major carrier would have the resources necessary to meet their transportation needs. BN/Santa Fe appeared to be the leading candidate in the minds of most customers because of its geographic reach and financial resources. Nevertheless, we remained open to consider whether a combination of carriers might be able to meet customers' needs as effectively as BN/Santa Fe standing alone.

Another consideration in BN/Santa Fe's favor was that KCS and Conrail insisted on rights that were unrelated to any competitive impact of the merger and that would have deprived us of key facilities necessary to achieve and maximize the competitive and efficiency benefits of consolidation. Specifically, KCS suggested purchasing not only the Cotton Belt (SSW) and SP's Houston-New Orleans and Houston-Shreveport lines, but also UP's former OKT line between Wichita and Fort Worth, as well as the UP mainline between Fort Worth and Smithville via Taylor. Conrail pushed its proposal to purchase the Cotton Belt as well as SP's Gulf Coast lines extending all the way to Mexico and El Paso.

The more we considered the possible alternatives, the clearer it became that only BN/Santa Fe's operational infrastructure and network would support the rights we would need to grant in a way that would give the maximum benefits to customers and still allow UP and SP to take full advantage of the opportunities presented by consolidating their two complementary systems.

I should note, however, that notwithstanding our increasing view that BN/Santa Fe was the first choice, we continued negotiating with other parties since we had no assurance that an agreement could be reached with BN/Santa Fe. Also, because of the number of railroads we were dealing with, it was inevitable that negotiations with several of them would take place simultaneously.

In the case of BN/Santa Fe, the negotiations involved numerous phone calls and six meetings. The last of these meetings was a marathon three-day session that resulted in the September 25 agreement. A complete copy of the September 25 agreement is attached. Also attached is a supplemental agreement which contains various corrections to the original September 25 agreement. These corrections included errata, such as punctuation changes and the correction of other typographical errors, and substantive changes designed to ensure that the intent of the settlement agreement to preserve competitive rail service for all "2-to-1" customers was met.

For example, although Exhibit A to the original settlement agreement expressly listed Baytown and Mont Belvieu, Texas, as "2-to-1" points, it inadvertently failed to grant to BN/Santa Fe the operating rights between Dayton and Baytown in Texas needed to reach those points. The supplemental agreement includes the necessary rights.

Another change in the supplemental agreement is to delete the requirement in the original settlement agreement that the financial terms of the transaction be kept confidential. We determined to delete the confidentiality restriction because of the interest that a number of our customers had in reviewing the settlement agreement and its financial terms. We decided to dispel any possible suspicion by authorizing disclosure to interested parties.

As negotiations progressed with all parties, BN/Santa Fe emerged as the first choice to provide a competitive alternative. However, we continued to negotiate in good faith with other carriers against the possibility that no agreement could be reached with BN/Santa Fe. Once we arrived at an agreement with BN/Santa Fe, we contacted the other interested railroads to inform them that we had reached agreement with BN/Santa Fe and to thank them for their interest and any efforts they had devoted to developing a proposal. Of all the parties we dealt with, only one, KCS, has asserted publicly that it was not treated fairly by UP. KCS has assumed that BN/Santa Fe possessed more information than did KCS. That is, in fact, a misperception. We endeavored to provide traffic information to all interested parties. However, no party was given UP traffic data until September 19, and because of difficulties SP encountered developing its traffic data, we did not provide anyone with the SP portion of the "2-to-1" traffic. In fact, KCS was given more information than anyone else, including extensive hi-rail inspections of the Gulf Coast lines and a review of SP joint facility agreements pertinent to the line segments in question.

It is ironic that KCS, the first railroad we met with, is the only railroad raising these charges. Frankly, given the interest shown by KCS at the outset, we initially felt it would end up with significant rights. As I mentioned earlier, it was ultimately the

combination of KCS' desire to purchase large portions of SP and UP unrelated to the merger, feedback from customers, and the interest by BN/Santa Fe -- a far superior competitive alternative -- that tipped the scales in favor of BN/Santa Fe. However, until the moment we signed the deal with BN/Santa Fe, KCS was very much a "live" candidate for these rights.

# II. Rights Granted to BN/Santa Fe in Order to Preserve Competition at "2-To-1" Points

The focus of UP/SP's efforts was to preserve competition for "2-to-1" customers. To that end, we identified all geographic points on the combined UP/SP system where both UP and SP and no other railroad provided service to one or more customers. We then negotiated trackage rights and line sales with BN/Santa Fe that would provide service to as many of these customers as possible. The points reached by the trackage rights and line sales negotiated with BN/Santa Fe are listed in Exhibit A to the Settlement Agreement.

The points listed in Exhibit A do not include every "2-to-1" customer. At a few small "2-to-1" points, the negotiation of extensive trackage rights to give service access to a second railroad did not make sense. Examples are Dexter, Missouri, and Paragould, Arkansas. Both points are currently served by UP and SP, and have limited "2-to-1" traffic. A full-fledged trackage rights operation could not be justified solely to serve the existing "2-to-1" traffic at these points. Accordingly, we agreed with BN/Santa Fe that for those "2-to-1" customers who would not be reached by the trackage rights and line sales described in the Agreement, we would make alternative arrangements to ensure the preservation of

competitive service. In the case of Dexter and Paragould, the parties would most likely utilize a haulage arrangement to preserve competitive alternatives for "2-to-1" customers at those points.

Section 8i of the settlement agreement reflects this commitment. We refer to it as the "omnibus" clause because it ensures that steps will be taken to preserve competition for all "2-to-1" customers. With one exception, it identifies all "2-to-1" points of which we are aware that are not reached by BN/Santa Fe trackage rights or line sales.1

In addition to preserving competition for all "2-to-1" customers, the settlement agreement also preserves a two-railroad interchange with all short-lines that interchanged with both UP and SP and no other railroad prior to merger. Those expressly noted in the Settlement Agreement include Georgetown Railway, Utah Railway, Nevada Northern, Salt Lake, Garfield and Western, New Orleans Public Belt, Tex Mex, Little Rock & Western Railway, Little Rock Port Authority, and Utah Central. The "omnibus" clause also ensures that any additional "2-to-1" shortlines not expressly referred to in the settlement agreement will have the right to interchange with BN/Santa Fe.

Witnesses Peterson and Barber, who deal with the competitive implications of the merger, describe in their testimony how the rights granted in the settlement

The one exception is Labadie, Missouri, where we are working directly with the "2-to-1" shipper, Union Electric, to negotiate an arrangement to preserve two-railroad competition. BN/Santa Fe has agreed not to object to UP/SP seeking an arrangement, even with another railroad, to preserve rail competition for Union Electric. Nonetheless, even though the "omnibus" clause does not expressly mention Labadie, Labadie is covered by the clause, which expresses the parties' commitment to preserve two-railroad competition for all 2-to-1 customers, including those at points not specifically listed in the settlement agreement.

agreement preserve and enhance competition. The specific competition-preserving rights granted to BN/Santa Fe are described in the settlement agreement. Generally, they ensure preservation of two-railroad competition at points in Utah, Nevada and California through rights reaching from Denver through Salt Lake City to Oakland. Other rights preserve competition in Southern California, in Texas, and along the Gulf Coast of Texas and Louisiana, including interchanges with Tex Mex at Corpus Christi and with FNM at Brownsville and Eagle Pass. Competition at various points between Houston and Memphis and between Houston and New Orleans is ensured by other rights.

In addition to the rights which address competition at "2-to-1" points, the agreement also reflects an exchange of various other rights between UP/SP and BN/Santa Fe. The exchange of these rights resulted from demands by BN/Santa Fe that, in our view, were not justified by competitive concerns. In those cases, we negotiated on a business quid pro quo basis for something in return. However, these "trades" will improve the competitiveness and efficiency of both carriers and therefore, coupled with the rights addressed at potential diminutions in competition, create even more intense competition than exists today. As I mentioned earlier, KCS and Conrail demanded rights unrelated to the competitive issues presented by the merger. However, neither of these carriers could offer offsetting rights of value to UP/SP of the sort that ultimately enabled us to reach agreement with BN/Santa Fe on these issues.

Perhaps the most significant of the rights that fit in the category of business "trades" involves the so-called "I-5 Corridor." We were adamant in the negotiations with BN/Santa Fe that the merger presented no competitive issue in the corridor. However, in

order to reach an agreement, we ended up exchanging rights that will unquestionably lead to enhanced competition in this corridor, which runs north-south along the West Coast of the United States. Specifically, UP/SP granted to BN/Santa Fe the right to purchase UP's line between Bieber and Keddie, California. This sale, in conjunction with trackage rights that BN/Santa Fe will receive between Keddie and Stockton, will give BN/Santa Fe a single-line route along the entire West Coast and fill in a major gap in BN/Santa Fe's system. To enhance the competitiveness of UP/SP and preserve options for PNW customers now using SP, we negotiated a direct marketing/proportional rate agreement which is reflected in Exhibit B to the settlement agreement. This rate agreement will enable UP/SP to quote rates directly to customers for traffic moving between (a) BN/Santa Fe-served points in Washington, Oregon north of Portland, Idaho and Western Montana, including interchanges with Canadian and regional railroads, and (b) points in Oregon, California, Arizona, New Mexico, Colorado, Utah, and West Texas, including Mexican junctions. While traffic subject to this direct marketing/proportional rate agreement will continue to move in interline service with BN/Santa Fe over the Portland gateway, the rate agreement will provide UP/SP with a significant marketing tool. In addition, UP/SP received trackage rights over BN/Santa Fe's line between Bend and Chemult, Oregon. These rights will improve UP/SP's single-line route for traffic moving between (a) points in Northern Idaho, Eastern Washington. Eastern Oregon, and the Canadian interchange at Eastport, Idaho, and (b) points in California and the Southwest.

To further enhance UP/SP's competitiveness in the important California markets, we negotiated trackage rights on BN/Santa Fe's line between Barstow and

Mojaye which will allow much more efficient UP/SP service to Bakersfield, California, and other points in the southern San Joaquin Valley. Along the same lines, we secured the right to move double-stack business on the joint SP-BN/Santa Fe line over the Tehachapi Mountains in California without any contribution to the cost already incurred by Santa Fe to eliminate restrictive clearances along that line to accommodate its own double-stack traffic.

Improved access to various West Coast ports was also the subject of negotiation. BN/Santa Fe negotiated excellent access to the proposed Joint Intermodal Terminal (JIT) at Oakland. UP/SP also agreed to enhance BN/Santa Fe's access to the Ports of Long Beach and Los Angeles pending completion of the Alameda Corridor project. UP/SP also negotiated for improved port access. In the case of the Port of Portland, BN/Santa Fe agreed to allow UP/SP access to the so-called Hyundai lead without any contribution by UP/SP to the cost of the lead. In the case of the Port of Seattle, BN/Santa Fe agreed to eliminate the per box access charge at Terminal 5.

In other cases, negotiations covered issues that would facilitate post-merger operations, and thus enhance competition. These included agreements to cooperate on initiatives to improve operations in the St. Louis area; the right for UP/SP to enter and exit SP's Chicago-Kansas City-Hutchinson trackage rights at three points west of Chicago, and the agreement to amend certain SP-BN/Santa Fe agreements to eliminate the requirement that compensation be renegotiated in the event of a UP/SP merger. Other rights of this nature enable UP/SP to pick up and set out business at Newton, Kansas, on SP's trackage rights over BN/Santa Fe from Hutchinson to Winfield Junction, Kansas, and grant UP/SP

overhead trackage rights on BN/Santa Fe's line between West Memphis and Presley Junction in Arkansas.

Finally, some provisions of the Agreement resolved outstanding issues of concern that have no connection with the merger -- also adding to competition in the process. These included operating rights in Northern Wisconsin for UP/SP to resolve access to the MERC dock at Superior as well as direct access to the DWP and DMIR at Pokegama, Wisconsin. BN/Santa Fe, on the other hand, was granted the right to purchase UP's line between Dallas and Waxahachie, Texas, in order to consolidate maintenance and operating responsibility on this track which is part of BN/Santa Fe's main line between Houston and Dallas.

#### III. Compensation Terms

My objective in negotiating the trackage rights compensation terms was to ensure that Union Pacific would be fairly reimbursed for the maintenance and operating expense associated with BN/Santa Fe's trackage rights operations, and would receive a reasonable return on the capital tied up in the lines whose capacity BN/Santa Fe would be partially using. It was my intent that the trackage rights rate place both carriers on a level playing field with neither subsidizing the other. I am confident these goals were reached.

The rates ultimately agreed to were the result of arm's-length negotiation with a considerable give and take between the parties. There were several possible starting points for the rate negotiation.

One starting point, which until recently has been traditional in joint facility arrangements, would have been to allocate the actual cost of maintenance and operation between the parties on the basis of their relative usage together with an appropriate "interest rental" factor to provide a return to capital. The Commission has found that, to cover full economic costs, the interest rental factor must be based on the replacement cost of the property times the current cost of capital.

Another starting point was to establish a flat rate. Clerical work and expense associated with traditional joint facility arrangements are substantial, and railroads are increasingly moving to flat rate compensation for these facilities. We and BN/Santa Fe were in agreement that a flat rate was the best alternative.

I began my consideration of an appropriate flat rate by reviewing flat rates in other agreements that the parties had recently negotiated. The most recent flat rates, and ones that were before the Commission when it approved the BN/Santa Fe merger, were the rates included in the settlement agreement reached between SP and BN/Santa Fe in connection with the BN/Santa Fe merger. In fact, the rates we ultimately negotiated were, for intermodal and carload business, lower than the rates in the SP-BN/Santa Fe agreements.

The most important consideration from our standpoint was to recover UP/SP's cost of maintaining and operating the joint UP/SP-BN/Santa Fe track. I believe that the rates negotiated with BN/Santa Fe will cover the relevant costs. However, UP/SP is still exposed to significant risk. The risk results from the fact that the rates apply systemwide and reflect systemwide average costs. In some instances, the cost of

maintaining a particular line segment will be greater than systemwide costs, and in other cases it may be lower. However, several of the line segments in question involve some of the highest-maintenance portions of UP's and SP's systems. These include the UP and SP lines along the Gulf Coast, SP's line through the Rocky Mountains between Denver and Salt Lake City, SP's line through the Sierra Nevada Mountains over Donner Pass, and the former WP line through the Feather River Canyon in California.

The Gulf Coast lines are prone to flooding from hurricanes and other tropical storms. The terrain they cover is low lying and wet, requiring numerous bridges and shortening the life of wooden cross ties. In the Rockies and Sierra Nevadas, the grades and curvature inherent to mountain railroading increase wear and tear on the track structure. Tunnels, snowsheds, cuts and fills must also be maintained. Weather also leads to higher costs. For example, 24-hour-a-day snow removal is occasionally a necessity on Donner Pass. The Feather River Canyon is also subject to floods and slides. In fact, at certain times hi-rail vehicles must precede all trains in the Feather River Canyon to check for rock slides.

The settlement agreement does not restrict the traffic BN/Santa Fe can handle over these rights. BN/Santa Fe can - and likely will - choose to route quite a bit of east-west traffic over the Central Corridor rights. For example, the rights will shorten BN/Santa Fe's mileages in numerous corridors as described in Mr. Peterson's statement. These mileage savings (e.g., 387 miles between Oakland and Denver; 664 miles between Oakland and the Twin Cities) will likely lead to the rerouting over these lines of substantial

traffic that is unrelated to the "2-to-1" situations at which the rights were principally focused.

The rates in the settlement agreement are shown in Table 1 below.

Table 1
Trackage Rights Compensation
(mills per ton-mile)

	Keddie-Stockton/Richmond	All Other Lines
Intermodal and Carload Bulk (67 cars or more of one commodity in one car type)	3.48 3.0	3.1 3.0

I want to address three likely questions about these rates before discussing them in more detail. First, why is the rate different for intermodal and carload traffic as compared to bulk traffic? Second, why is the intermodal and carload rate higher for the Keddie-Stockton/Richmond segment than for other lines? Third, why is the rate based on ton-miles rather than car-miles?

1. The rate is different for intermodal and carload traffic as compared to bulk traffic. Certain expenses of maintenance and operation such as dispatching and signal operation are traditionally costed on a train mile basis. Spreading these expenses over all traffic on the basis of gross ton-miles will lead to bulk commodities bearing a disproportionately high share of these expenses. The extra one-tenth of a mill charged to intermodal and carload business more properly allocates expenses between the two categories of traffic.

- 2. The intermodal and carload rate is higher for the Keddie-Stockton/Richmond segment than for other lines. The rate for the rights between Keddie-Stockton/Richmond were set at 3.48 mills per ton-mile because this line segment is unquestionably a very high maintenance area and will handle BN/Santa Fe's north-south traffic in the so-called "I-5 Corridor" as well as some transcontinental business of both railroads. Accordingly, in this one instance, we negotiated a higher rate for a territory we felt would clearly incur high levels of traffic requiring correspondingly high levels of maintenance and expense.
- 3. The rate is based on ton-miles rather than car-miles. We used gross ton-miles as the basis for assessing the charges because it most accurately reflects the actual use made of the facility, and therefore the resulting expense.

Turning back to the rates themselves, they are not only cost-based, but reflect rates recently negotiated between SP and BN/Santa Fe as well as rates found in other recently negotiated joint facility agreements between UP and parties other than BN/Santa Fe.

Table 2 lists recent flat rate agreements involving UP, SP and BN/Santa Fe. Included in italics in Table 2 is the 3.0-3.1 mill per ton-mile rate applicable to the settlement agreement, which has been converted to a car-mile rate for ease of comparison.<sup>2</sup> Also converted to a car-mile rate is the mill-per-gross-ton-mile charge from

The conversion was based on a 100-ton load and 100% empty return. The actual rate will depend on the lading weight and the empty return associated with a given move. The 3.48 mill per ton-mile rate applicable to the Keddie-Stockton/Richmond line segment produces a higher car-mile rate, in the \$0.28 range. It applies to only a small percentage of the overall trackage rights. Even this rate is not out of line with the recent agreements.

the 1995 agreement between BN/Santa Fe and SP.

Table 2
Rates in Other Recent Trackage Rights Agreements

Date	Landlord	Tenant	Location	Miles	1994 Rate Per Car Mile
1990 1990 1986 1990 1990 1990 1992 1986 1995 1995	IC UP UP BN NS UP SP UP BN/Santa Fe UP/SP	SP CP DME SP SP SP SO CP SP	IL MN IA KC-Chi MO TX TX MN Various	48 25 48 465 25 96 10 10 2,108	\$0.45 \$0.36 0.34 0.28 0.27 0.27 0.27 0.24 0.24-0.28
1995	BN/Santa Fe	BN/Santa Fe UP	<i>Various</i> KS	<i>3,968</i> 139	0.24-0.25 0.20

As can be seen, the rates of \$0.22 to \$0.25 per car mile applicable to the settlement agreement are at the low end of rates found in other recent joint facility agreements.

The rates can also be viewed in comparison to costs developed using the Uniform Rail Costing System ("URCS"). A weighted average of UP and SP costs was used because 56 percent of the BN/Santa Fe trackage rights mileage will be over SP lines and 44 percent will be over UP lines. On a weighted average basis, the rates will cover between 143% (at the 3.0 mill rate) and 148% (at the 3.1 mill rate)<sup>3</sup> of what URCS defines as the system average variable cost of the so-called "M&O" (maintenance and operations) functions that a trackage rights landlord must perform (e.g., track maintenance/dispatching).

At the 3.48 mill per ton-mile rate the coverage of variable cost is 166%.

URCS variable cost includes only a percentage of all the costs associated with maintaining and operating the track. The balance of these costs is treated by URCS as fixed in the short term. However, given the permanent nature of these rights, I believe the coverage of full costs is important because over the long-run, as will be the case with these rights, all costs become variable. UP/SP must recover these costs to avoid subsidizing BN/Santa Fe's operations. Moreover, the URCS variable cost computation includes only 50% of the book value of the assets involved, and reflects no return on the other half of the book value, or on the difference between the book value and the current value of the assets. An economic return on the current value of assets must ultimately be earned if a railroad is to continue replacing its plant and stay in business and even URCS fully allocated cost includes only return to capital on the basis of 100% of the book value of the assets, not replacement cost. Looking at these rates on the basis of URCS fully allocated costs, again on a weighted average basis, the ratio of the trackage rights fee to our expense drops to 75% (at the 3.0 mill rate) and 77% (at the 3.1 mill rate).4 I believe these rates will be sufficient, but only marginally so, for UP/SP to receive a sufficient return from BN/Santa Fe's trackage rights fees to ensure that UP/SP is not investing its capital to subsidize BN/Santa Fe's operations.

The rates are also subject to adjustment, upward or downward. The adjustment will be undertaken annually by applying 70% of the Unadjusted Rail Cost Adjustment Factor (RCAF-U) to the rates. RCAF-U is the most commonly utilized index for measuring railroad inflation. The RCAF-U Index is developed by the Association of

At the 3.48 mill per ton-mile rate the coverage of fully allocated costs is 87%.

American Railroads from audited data that is supplied by the Class I railroads, and is approved by the Commission. The use of RCAF-U is appropriate because productivity has been driven more by initiatives in areas such as crew consist and fuel conservation than in the area of maintenance of way. To use a productivity-adjusted RCAF would, among numerous other serious deficiencies, reflect productivity gains that would not reduce maintenance of way costs -- which are the principal costs covered by the trackage rights fees. Using a percentage of RCAF-U as the adjustment mechanism is also common in long term agreements. Here, the 70% factor shares some productivity gains with BN/Santa Fe without disincenting UP/SP from making investments (such as to purchase high production maintenance of way equipment) that will improve maintenance of way efficiency -- investments which must earn an adequate return.

In looking at the relationship between this fee and the cost structures of the two carriers, one must also bear in mind three points. First, the fee is comprehensive. Second, the fee represents only one component of total operating expense, the balance being equipment, fuel, labor, switching and related overheads. Third, because very few moves will involve solely the trackage rights lines, the fee will be further diminished as a fraction of BN/Santa Fe's total cost.

1. The rate is comprehensive. It includes all day-to-day maintenance of the right-of-way, track, ties, bridges, turnouts, subgrade, signals, and communication systems. Replacement of the existing plant including rail relays, tie replacements and bridge replacements is also included. All dispatching expense and the overhead associated with maintenance and operation is also included.

BN/Santa Fe's responsibility for capacity-related improvements is also quite limited. However, there is no limitation on BN/Santa Fe's right to use capacity-related improvements for which it bears no financial responsibility. Specifically, BN/Santa Fe has no responsibility for capacity improvements related to the merger, or for any capacity improvement, whether merger-related or not, made during the first 18 months of operation. Finally, BN/Santa Fe will have no responsibility for the first \$25 million worth of capital expenditures for which it would otherwise have shared responsibility. The settlement agreement calls for establishing a capacity-related capital reserve fund to be drawn down to cover those first \$25 million of capacity-related capital expenditures. Accordingly, it will not be until 18 months after BN/Santa Fe has begun trackage rights operations that it will begin to fund any capacity-related improvements and even the first \$25 million of those will be funded out of a capital reserve fund. This total relief from capital expenditures at the inception of trackage rights operations will be a real advantage to BN/Santa Fe in building its trackage rights traffic base.

The sorts of capital projects that BN/Santa Fe ultimately will be responsible for will include its usage share of projects such as upgrading a signal system from automatic block signals to centralized traffic control; adding CTC and universal crossovers to double track; constructing new sidings; and lengthening existing sidings. However, as I have stated above, BN/Santa Fe will only be responsible for these expenses if they (a) are not merger-related, (b) take place more than 18 months after implementation of trackage rights operations and (c) exceed the \$25 million capital reserve fund.

- The trackage rights fee is only one element of cost, but a cost both carriers
  must incur in competing. The balance of operating costs are up to each individual carrier.
   These costs include locomotives, equipment, crews, fuel and terminal support services.
- 3. Finally, the trackage rights fee is important, but from BN/Santa Fe's perspective, it will only represent a small portion of total costs for most moves. Few moves will involve a haul solely over the trackage rights lines. In most cases, BN/Santa Fe will utilize its own existing routes -- often for the great majority of the overall haul -- in conjunction with the trackage rights lines. A good example is the Keddie-Stockton segment, which will give BN/Santa Fe single-line routes in the I-5 Corridor. Between Spokane and Los Angeles, this segment, at 183 miles, will be only 12.4% of BN/Santa Fe's total mileage (1,478 miles). On this move, only 4.2% of BN/Santa Fe's URCS variable cost would be attributable to the trackage rights fee. The trackage rights fee as a percentage of total variable and fully allocated cost is shown in Table 3 for Spokane-Los Angeles and several other representative moves:

Table 3 Trackage Rights Fee as a Percentage of Total Cost

Move	Total Miles	Trackage Rights Miles	Trackage Rights Fees as a % of Total Variable/ Fully Allocated Costs
Spokane-LA	1,478	183	4.2/3.1
Chicago-Eagle Pass	1,487	357	7.1/5.5
Denver-Oakland	1,383	1,383	33.5/27.2
PRB-LCRA*	1,468	115	4.0/3.0

<sup>\*</sup> Powder River Basin to Lower Colorado River Authority Power Plant at Halsted, TX.

In conclusion, the trackage rights charges are fair. They are cost-based and also reflective of rates in similar agreements. They will ensure that UP/SP can cover the costs attributable to BN/Santa Fe's operations and will not result in either carrier's subsidizing the other.

## IV. Line Sale Purchase Prices

The Settlement Agreement calls for three line sales. They are: (1) UP's line between Keddie and Bieber, California; (2) UP's line between Dallas and Waxahachie, Texas; and (3) SP's line between lowa Junction and Avondale, Louisiana, including terminal facilities in the New Orleans area. The purchase prices for these segments are \$30 million, \$20 million, and \$100 million, respectively. As with the trackage rights compensation, these purchase prices were the subject of arm's-length negotiation. They simply reflect what a willing buyer, BN/Santa Fe, would pay a willing seller, UP/SP, for these properties.

UP/SP retained trackage rights over those lines. The trackage rights will be subject to the same terms as applied to BN/Santa Fe operations over the rights it was granted by UP/SP. BN/Santa Fe can also elect not to purchase these lines and operate instead via trackage rights. In the case of the Avondale-lowa Junction and Dallas-Waxahachie segments, trackage rights would be covered by the compensation terms applicable to other trackage rights line segments. The Keddie-Bieber trackage rights charges would, however, be allocated "on a typical joint facility basis." Since BN/Santa Fe will become the sole user of this line should it choose not to purchase the line, we felt it reasonable that BN/Santa

Fe bear all the costs of maintenance and operation, plus pay interest rental. However, in the give and take of negotiation, we agreed that interest rental would be computed on the basis of book value times the current cost of capital rather than on the basis of replacement cost.

### V. Other Fees

Specific fees and prices for a variety of services and transactions contemplated by the agreement have yet to be finalized. These include fees for haulage, reciprocal switching, crews, terminal support services, and purchases of various facilities. I will deal with each of these in turn.

First, BN/Santa Fe has the option to provide service under haulage arrangements with UP/SP over the following line segments:

- Houston, Corpus Christi, Harlingen and Brownsville (including FNM interchange);
- ii. Pine Bluff-North Little Rock; and
- iii. "2-to-1" points not reachable over the trackage rights and line sales granted to BN/Santa Fe in the settlement agreement.

While the haulage fee has not been established, the agreement provides in Section 4f that it is to be "reasonable." Haulage fees will be fashioned using the trackage rights fee as a guide, i.e., cost-based with a reasonable return to capital. Any haulage fee will also take into account whether BN/Santa Fe or UP/SP is providing power, fuel, and crews. However, BN/Santa Fe will always have the option of conducting its own operations over trackage rights, and accordingly, BN/Santa Fe could always be expected to negotiate a rate equal to, or lower than, its own cost of operation on trackage rights. Ultimately,

however, if a fee cannot be negotiated, the settlement agreement calls for resolution of disputes through binding arbitration.

Second, Section 9h of the settlement agreement specifies that UP/SP will provide BN/Santa Fe with switching services at "2-to-1" points if BN/Santa Fe elects to serve particular shippers in that manner, and that the rates for those services will "fully reimburse UP/SP for its costs plus a reasonable return." Here, I think the language of the agreement speaks for itself. Again, any dispute over the rate would be subject to binding arbitration.

Third, in Section 1h of the agreement, UP/SP have agreed to provide BN/Santa Fe with crews to handle trains operating between Salt Lake City, Stockton and Oakland. BN/Santa Fe would be charged the costs incurred by UP to supply these crews plus reasonable additives. The incremental costs incurred for lodging and crew transportation would also be billed to BN/Santa Fe. UP has supplied crews to SP on the same terms for SP's operations between Pueblo, Colorado and Kansas City, and that arrangement has worked satisfactorily for both parties. Accordingly, I see no reason to anticipate any disputes in this area. However, if disputes did arise, they would be subject to arbitration.

Fourth, in Section 9i of the agreement, we have agreed to provide terminal support services for "normal and customary charges." The parties will need to review other arrangements where one railroad provides similar services to another railroad for a fee as guidance for what constitutes "normal and customary." Also cost recovery will be a requirement. Failing agreement, binding arbitration would be used to resolve a dispute.

Finally, negotiation of purchase prices or lease rates for facilities we have agreed to make available to BN/Santa Fe will again be negotiated (and if necessary arbitrated) using the "normal and customary" phrase as a guide.

## VI. Service Standards

The agreement specifies service standards for both trackage rights and haulage operations. It requires nondiscriminatory treatment by each carrier of the other's traffic. In the case of trackage rights, it calls for "equal dispatch without any discrimination and promptness, quality of service, or efficiency in favor of comparable traffic of the owning carrier." In the case of haulage, the agreement specifies that traffic will be handled "without any discrimination in promptness, quality of service or efficiency in favor of comparable traffic moving in UP/SP's account."

by arbitration, if necessary. However, I think it highly unlikely that we world need to resort to arbitration. As a practical matter, trackage rights are key elements of UP/SP's and BN/Santa Fe's systems. Taking all UP/SP-BN/Santa Fe joint trackage after merger, BN/Santa Fe will be UP/SP's tenant on about 6,000 miles of track. Including the rights negotiated by SP in connection with the BN/Santa Fe merger, UP/SP will be BN/Santa Fe's tenant on about 4,200 miles of track. Such reliance on trackage rights (although not to this extent) has existed for years. I see no reason to believe the parties will not continue to cooperate in the operation of these joint facilities.

## VII. Implementation Details

I have mentioned some implementation details that we will need to attend to such as negotiating haulage and other fees. There are a number of other details that we will need to resolve before trackage rights operations commence. These include (a) negotiating arrangements as needed to provide service to each of the "2-to-1" customers described in the "omnibus" clause; (b) developing formal agreements covering each trackage rights grant, line sale and haulage arrangement contemplated by the agreement (which, under the agreement, is to be done by June 1 of next year), and (c) defining the precise areas at "2-to-1" points which will be open to competitive service. In this regard, any industry that was open to service by both UP and SP before merger will be open to BN/Santa Fe service after merger. In addition, new facilities can be located by either carrier and open to service by both in that area where, prior to the merger of UP and SP, a new customer could have constructed a facility that would have been open to service by both UP and SP. Here again, should any dispute arise, binding arbitration would be the means used to resolve the impasse.

### VIII. Conclusion

I believe that UP and SP have fully lived up to their commitment to preserve competition at "2-to-1" points. The process of arm's length negotiation has led to an agreement with the most powerful rail competitor in the West. The agreement gives BN/Santa Fe the tools to provide a stronger competitive alternative than exists today for

There may conceivably be minor "2-to-1" points where the customers has no desire for two-railroad service -- but our intent is to arrange for competitive service at those "2-to-1" points where customers wish to have it.

customers who were previously served by UP and SP and no other railroad. In addition, provisions of the Agreement focused on the "I-5 Corridor" and other markets, together with its efficiency-producing arrangements, will further intensify rail competition.

### VERIFICATION

STATE OF NEBRASKA	)
	) ss
COUNTY OF DOUGLAS	)

John H. Rebensdorf, being duly sworn, deposes and says that he is the Vice President of Strategic Planning of Union Pacific Railroad Company and Missouri Pacific Railroad Company, and has read the foregoing statement, knows the contents thereof, and that the same is true and correct.

A GENERAL MOTARY-State of Behraska
MARY R. HOLEWINSKI
My Comm. Exp. Oct. 15, 1996

John H. Rebensdorf

Subscribed and sworn to before the by John H. Rebensdorf this 17 day of November, 1995.

Man R. Helewarder
Notary Public

### AGREEMENT

This Agreement ("Agreement") is entered into this J day of September, 1995, between Union Pacific Corporation, Union Pacific Railroad Company, Missouri Pacific Railroad Company (collectively referred to as "UP"), and Southern Pacific Rail Corporation, Southern Pacific Transportation Company, The Denver & Rio Grande Western Railroad Company, St. Louis Southwestern Railway Company and SPCSL Corp. (collectively referred to as "SP", with both UP and SP also hereinafter referred to collectively as "UP/SP"), on the one hand, and Burlington Northern Railroad Company ("BN") and The Atchison, Topeka and Santa Fe Railway Company ("Santa Fe"), hereinafter collectively referred to as "BNSF", on the other hand, concerning the proposed acquisition of Southern Pacific Rail Corporation by UP Acquisition Corporation, and the resulting common control of UP and SP pursuant to the application pending before the Interstate Commerce Commission ("ICC") in Finance Docket No. 32760, Union Pacific Corporation, Union Pacific Railroad Company, and Missouri Pacific Railroad Company — Control and Merger — Southern Pacific Rail Corporation, Southern Pacific Transportation Company, St. Louis Southwestern Railway Company, SPCSL Corp., and The Denver and Rio Grande Western Railroad Company.

NOW, THEREFORE, in consideration of their mutual promises, UP/SP and BNSF agree as follows:

## 1. Western Trackage Rights

- a) UP/SP shall grant to BNSF trackage rights on the following lines:
  - SP's line between Denver, Colorado and Salt Lake City, Utah;
  - UP's line between Salt Lake City, Utah and Ogden, Utah;
  - SP's line between Ogden, Utah and Little Mountain Utah;
  - UP's line between Salt Lake City, Utah and Alazon, Nevada;
  - UP's and SP's lines between Alazon and Weso, Nevada;

- SP's line between Weso, Nevada and Oakland, California via SP's line between Sacramento and Oakland referred to as the "Cal-P" (subject to traffic restrictions as set forth in Section 1g);
- UP's line between Weso, Nevada and Stockton, California; and
- SP's line between Oakland and San Jose, California.
- The trackage rights granted under this section herein shall be bridge rights for the movement of overhead traffic only, except for the local access specified herein. BNSF shall receive access on such lines only to industries which are presently served (either directly or by reciprocal switch) only by both UP and SP and by no other railroad at points listed on Exhibit A to this Agreement. BNSF shall also receive the right to interchange with the Nevada Northern at Shafter, Nevada; with the Utah Railway Company at the Utah Railway Junction and Provo; and with the Salt Lake, Garfield and Western at Salt Lake City.
- c) Access to industries at points open to BNSF shall be direct or through reciprocal switch. New customers locating at points open to BNSF under this Agreement shall be open to both UP/SP and BNSF. The geographic limits within which new industries shall be open to BNSF service shall generally correspond to the territory within which, prior to the merger of UP and SP, a new customer could have constructed a facility that would have been open to service by both UP and SP, either directly or through reciprocal switch. In negotiating the trackage rights agreements pursuant to Section 9f of this Agreement, the parties shall agree on the mileposts defining these geographic limitations. Where switching districts have been established they shall be presumed to establish these geographic limitations.
- d) Forty-five (45) days before initiating service to a customer, BNSF must elect whether its service shall be (i) direct, (ii) through reciprocal switch, or (iii) with UP/SP's prior agreement, using a third party contractor to perform switching for itself or both railroads.

- e) For Reno area intermodal traffic, BNSF may use SP's intermodal ramp at Sparks with UP/SP providing intermodal terminal services to BNSF for normal and customary charges. If expansion of this facility is required to accommodate the combined needs of UP/SP and BNSF, then the parties shall share in the cost of such expansion on a pro rata basis allocated on the basis of the relative number of lifts for each party in the 12-month period preceding the date construction begins.
- f) Except as hereinafter provided, the trackage rights and access rights granted pursuant to this section shall be for rail traffic of all kinds, carload and intermodal, for all commodities.
- g) On SP's line between Weso and Oakland via the "Cal-P," BNSF shall be entitled to move only (i) intermodal trains moving between (x) Weso and points east or Keddie and points north and (y) Oakland and (ii) one manifest train/day in each direction. Intermodal trains are comprised of over ninety percent (90%) multi-level automobile equipment and/or flat cars carrying trailers and containers in single or double stack configuration. Manifest trains shall be carload business and shall be (a) operated without the use of helpers and (b) equipped with adequate motive power to achieve the same horsepower per trailing ton as comparable UP/SP trains. If UP/SP operates manifest trains requiring the use of helpers then BNSFs manifest trains may be operated in the same fashion provided that BNSF furnishes the necessary helper service. BNSF may also utilize the "Cal-P" for one manifest train per day moving to or from Oakland via Keddie and Bieber; provided, however, that BNSF may only operate one manifest train/day in each direction via the "Cal-P" regardless of where the train originates or terminates. The requirement to use helpers, does not apply to movement over the "Cal-P."
- h) At BNSF's request, UP/SP shall provide train and engine crews and required support personnel and services in accordance with UP/SP's operating practices necessary to handle BNSF trains moving between Salt Lake City and Oakland. UP/SP shall be reimbursed for providing such employees on a cost plus reasonable additives basis and for any incremental cost associated with providing employees such as lodging or crew transportation expense. BNSF must also give UP/SP

reasonable advance notice of its need for employees in order to allow UP/SP time to have adequate trained crews available. All UP/SP employees engaged in or connected with the operation of BNSF's trains shall, solely for purposes of standard joint facility liability, be deemed to be "sole employees" of BNSF. If UP/SP adds to its labor force to comply with a request or requests from BNSF to provide employees, then BNSF shall be responsible for any labor protection, guarantees or reserve board payments for such incremental employees resulting from any change in BNSF operations or traffic levels.

- i) UP/SP agree that their affiliate Central California Traction Company shall be managed and operated so as to provide non-discriminatory access to industries on its line on the same and no less favorable basis as provided UP and SP.
- j) If BNSF desires to operate domestic high cube double stacks over Donner Pass, then BNSF shall be responsible to pay for the cost of achieving required clearances. UP/SP shall pay BNSF one-half of the original cost of any such work funded by BNSF if UP/SP subsequently decides to begin moving domestic high cube double stacks over this route. If UP/SP initiates and funds the clearance program, then BNSF shall pay one half of the original cost at such time as BNSF begins to use the line for domestic high cube double stacks.
- k) BNSF agrees to waive its right under Section 9 of the Agreement dated April 13, 1995, and agreements implementing that agreement to renegotiate certain compensation terms of such agreement in the event of a merger, consolidation or common control of SP by UP. BNSF also agrees to waive any restrictions on assignment in the 1990 BN-SP agreement covering trackage rights between Kansas City and Chicago.

### 2. 1-5 Corridor

- a) UP/SP shall sell to BNSF UP's line between Bieber and Keddie, California. UP/SP shall retain the right to use the portion of this line between MP 0 and MP 2 for the purpose of turning equipment. UP/SP shall pay BNSF a normal and customary trackage rights charge for this right.
- b) BNSF shall grant UP/SP overhead trackage rights on BN's line between Chemult and Bend, Oregon for rail traffic of all kinds, carload and intermodal, for all commodities.
- c) The parties will, under the procedures established in Section 9f of this Agreement, establish a proportional rate agreement incorporating the terms of the "Term Sheet for UP/SP-BNSF Proportional Rate Agreement Covering I-5 Corridor" attached hereto as Exhibit B.

### 3. Southern California Access

- a) UP/SP shall grant access to BNSF to serve industries at all stations in Southern California presently served (either directly or through reciprocal switch) only by both UP and SP and by no other railroad at points listed on Exhibit A to this Agreement.
- Duranio, California for the sole purpose of moving rail traffic of all kinds, carload and intermodal, for all commodities to industries at Ontario presently served (either directly or through reciprocal switch) only by both UP and SP and by no other railroad.
- c) UP/SP shall grant BNSF overhead trackage rights on UP's line from Basta, California to Fullerton and La Habra, California for the sole purpose of moving rail traffic of all kinds, carload and intermodal, for all commodities to industries at Fullerton and La Habra presently served (either directly or through reciprocal switch) only by both UP and SP and by no other railroad.

- d) BNSF shall grant UP/SP overhead trackage rights on Santa Fe's line between Barstow and Mojave, California for rail traffic of all kinds, carload and intermodal for all commodities.
- UP/SP shall work with BNSF to facilitate access by BNSF to the Ports of Los Angeles and Long Beach. Other than as legally precluded, UP/SP shall (a) extend the term of the present agreement dated November 21, 1981, to continue until completion of Alameda Corridor, (b) amend that agreement to apply to all carload and intermodal traffic, and (c) grant BNSF the right to invoke such agreement to provide loop service utilizing UP's and Santa Fe's lines to the Ports at BNSF's option to allow for additional operating capacity. UP/SP's commitment is subject to available capacity. Any incremental capacity related projects necessary to accommodate BNSF traffic shall be the sole responsibility of BNSF.

### 4. South Texas Trackage Rights and Purchase

- a) UP/SP shall grant to BNSF trackage rights on the following lines:
  - UP's line between Ajax and San Antonio;
  - UP's line between Houston (Algoa) and Brownsville;
  - UP's line between Odern and Corpus Christi;
  - UP's line between Ajax and Sealy;
  - SP's line between San Antonio and Eagle Pass (with parity and equal access
    to the Mexican border crossing at Eagle Pass);
  - · UP's line between Kerr (connection to Georgetown RR) and Taylor.
  - UP's line between Temple and Waco;
  - UP's line between Temple and Taylor.
  - UP's line between Taylor and Smithville; and
  - SP's line between El Paso and Sierra Blanca.
- b) The trackage rights granted under this section shall be bridge rights for movement of overhead traffic only, except for the local access specified herein. BNSF shall receive access on such

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lines only to industries which are presently served (either directly or by reciprocal switch) only by both UP and SP and by no other railroad at points listed on Exhibit A to this Agreement. BNSF shall also have the right to interchange with (i) the Tex-Mex Railway at Corpus Christi and Robstown.

(ii) the Georgetown RR at Kerr, and (iii) the FNM at Brownsville (Matamoros, Mexico).

- c) Access to industries at points open to BNSF shall be direct or through reciprocal switch. New customers locating at points open to BNSF under this Agreement shall be open to both UP/SP and BNSF. The geographic limits within which new industries shall be open to BNSF service shall generally correspond to the territory within which, prior to the merger of UP and SP, a new customer could have constructed a facility that would have been open to service by both UP and SP, either directly or through reciprocal switch. In negotiating the trackage rights agreements pursuant to Section 9f of this Agreement the parties shall define mileposts defining these geographic limitations. Where switching districts have been established they shall be presumed to establish these geographic limitations.
- d) Forty-five (45) days before initiating service to a customer, BNSF must elect whether its service shall be (i) direct, (ii) through reciprocal switch, or (iii) with UP/SP's prior agreement, using a third party contractor to perform switching for itself or both railroads.
- e) The trackage rights and access rights granted pursuant to this section shall be for rail traffic of all kinds, carload and intermodal, for all commodities.
- f) In lieu of BNSF's conducting actual trackage rights operations between Houston, Corpus Christi, Harlingen and Brownsville (including FNM interchange) UP/SP agrees, upon request by BNSF, to handle BNSF's business on a haulage basis for a reasonable fee. UP/SP shall accept, handle, switch and deliver traffic moving under haulage without any discrimination in promptness, quality of service, or efficiency in favor of comparable traffic moving in UP/SP's account.

- g) UP/SP shall sell to BNSF UP's line between Dallas and Waxahachie with UP retaining tracking rights to exclusively serve local industries on the Dallas-Waxahachie line.
- h) Upon the effectiveness of the trackage rights to Eagle Pass under this section, BNSF's right to obtain haulage services from UP/SP to and from Eagle Pass pursuant to the agreement between BNSF and SP dated April 13, 1995 and subsequent haulage agreement between those parties shall no longer apply, provided BNSF shall continue to have the right to use trackage at or near Eagle Pass as specified in that agreement for use in connection with trackage rights under this Agreement.

# 5. Eastern Texas - Louisiana Trackage Rights and Purchase

- a) UP/SP shall grant to BNSF trackage rights on the following lines:
  - SP's line between Houston, Texas and Iowa Junction in Louisiana; and
  - UP's and SP's lines near Avondale (SP MP 16.9) and West Bridge Junction (SP MP 10.5).
- b) The trackage rights granted under this section shall be bridge rights for the movement of overhead traffic only, except for the local access specified herein. BNSF shall receive access on such lines only to industries whic are presently served (either directly or by reciprocal switch) only by both UP and SP and by no other railroad at points listed on Exhibit A to this Agreement.
- c) Access to industries at points open to BNSF shall be direct or through reciprocal switch. New customers locating at points open to BNSF under this Agreement shall be open to both UP/SP and BNSF. The geographic limits within which new industries shall be open to BNSF service shall generally correspond to the territory within which, prior to the merger of UP and SP, a new customer could have constructed a facility that would have been open to service by both UP and SP, either directly or through reciprocal switch. In negotiating the trackage rights agreements pursuant to Section 9f of this Agreement the parties shall define mileposts defining these geographic limitations

b

where switching districts have been established they shall be presumed to establish these geographic limitations.

- d) Forty-five (45) days before initiating service to a customer, BNSF must elect whether its service shall be (i) direct, (ii) through reciprocal switching, or (iii) with UNITY'S prior agreement, through use of a third party to perform switching for itself or both railroads.
  - (1) UP/SP shall grant BNSF the right to use SP's Bridge 5A at Houston, Texas.
- f) Trackage rights and access rights granted pursuant to this section shall be for rail traffic of all kinds, carload and intermodal, for all commodities.
- Avondale, Louisiana (SP MP 16.9). UP/SP shall retain full trackage rights including the right to serve all local industries on the line for the trackage rights charges set forth in Section 9a of this Agreement. UP/SP shall retain rights for the Louisiana and Delta Railroad (L&D) to serve as UP/SP's agent between lowa Junction and points served by the L&D. BNSF agrees that the purchase of this line is subject to contracts between SP and the L&D. UP/SP shall cause L&D to pay BNSF compensation equal to that set forth in Table I in Section 9 of this Agreement for operations between Lafayette and Iowa Junction.
- b) UP/SP shall sell to BNSF UP's Westwego, Louisiana intermodal terminal; a portion of SP's Avondale yard as shown on Exhibit C; and SP's Lafayette yard.

# 6. Houston - Memphis Trackage Rights

- a) UP/SP shall grant to BNSF overhead trackage rights on the following lines:
  - SP's line between Houston, Texas and Fair Oaks, Arkansas via Cleveland and Pine Bluff;

- UP's line between Fair Oaks and Bridge Junction;
- SP's line between Brinkley and Briark. Arkansas; and
- UP's line between Pine Bluff and North Little Rock, Arkansas.
- b) In lieu of conducting actual operations between Pine Bluff and North Little Rock, Arkansac, UP/SP agrees, upon request by BNSF, to handle BNSF's business on a haulage basis for a reason tole fee.
- The trackage rights granted herein shall be bridge rights for the movement of overhead traffic only, except for the local access specified herein. BNSF shall receive access on such lines only to industries which are presently served (either directly or by reciprocal switch) only by both UP and SP and by no other railroad at points listed on Exhibit A to this Agreement. BNSF shall also have the right to interchange with the Little Rock and Western Railway at Little Rock.
- d) Access to industries at points open to BNSF shall be direct or through reciprocal switch. New customers locating at points open to BNSF under this Agreement shall be open to both UP/SP and BNSF. The geographic limits within which new industries shall be open to BNSF service shall generally correspond to the territory within which, prior to the merger of UP and SP, a new customer could have constructed a facility that would have been open to service by both UP and SP, either directly or through reciprocal switch. In negotiating the trackage rights agreements pursuant to Section 9f of this Agreement the parties shall agree on the mileposts defining these geographic limitations. Where switching districts have been established they shall be presumed to establish these geographic limitations.
- e) Forty-five (45) days before initiating service to a customer, BNSF must elect whether its service shall be (i) direct, (ii) through reciprocal switch, or (iii) with UP/SP's prior agreement, using a third party contractor to perform switching for itself or both railroads.

- f) The trackage rights and access rights granted pursuant to this section shall be for rail traffic of all kinds, carload and intermodal, for all commodities.
- BNSF shall grant to UP/SP overhead trackage rights on BN's line between West Memphis and Presley Junction. UP/SP shall be responsible for upgrading this line as necessary for its use. If BNSF uses this line for overhead purposes to connect its line to the trackage rights lines. BNSF shall share in one-half of the upgrading cost.

# St. Louis Area Coordinations

- a) UP/SP agree to cooperate with BNSF to facilitate efficient access by BNSF to other carriers at and through St. Louis via The Alton & Southern Railway Company (A&S). If BNSF requests, UP/SP agree to construct or cause to be constructed for the use of both BNSF and UP/SP a faster connection between the BN and UP lines at Grand Avenue and a third track from Grand Avenue to near Gratiot Street Tower at the sole cost and expense of BNSF. Upon completion of such construction, UP/SP shall grant to BNSF overhead trackage rights on UP's line between Grand Avenue and Gratiot Street.
- b) UP wishes to secure dispatching authority for the MacArthur Bridge across the Mississippi River at St. Louis. Dispatching is currently controlled by the Terminal Railroad Association of St. Louis (TRRA). BNSF agrees that it will cause its interest on the TRRA Board or any shares it owns in the TRRA, to be voted in favor of transferring dispatching control of the MacArthur Bridge to UP if such matter is presented to the TRRA Board or its shareholders for action. Such dispatching shall be performed in a manner to ensure that all users are treated equally.
- c) If BNSF desires to use the A&S Gateway Yard, upon transfer of MacArthur Bridge dispatching to UP, UP/SP shall assure that charges assessed by the A&S to BNSF for use of Gateway Yard are equivalent to those assessed other non-owners of A&S.

d) UP/SP and BNSF agree to provide each other reciprocal detour rights between Bridge Junction-West Memphis and St. Louis in the event of flooding, subject to the availability of sufficient capacity to accommodate the detour.

### 8. Additional Rights

- Oakland, California for rail traffic of all kinds, carload and intermodal, for all commodities to enable BNSF to connect via SP's line with the Oakland Terminal Railroad ("OTR") and to access the Oakland Joint Intermodal Terminal ("JIT"), or similar public intermodal facility, at such time as the JIT is built. BNSF shall pay 50% of the cost (up to \$2,000,000 maximum) for upgrading to mainline standards and reverse signaling of SP's No. 1 track between Emeryville (MP 8) and Stege (MP 13.1). Compensation for these trackage rights shall be at the rate of 3.48 mills per ton mile for business moving in the "I-5 Corridor" and 3.1 m. ills per ton mile on all other carload and intermodal business and 3.0 mills per ton mile for bulk business escalated in accordance with the provisions of Section 12 of this Agreement. UP/SP shall assess no additional charges against BNSF for access to the JIT and the OTR.
  - b) BNSF shall waive any payment by UP/SP of the Seattle Terminal 5 access charge.
- c) BNSF shall grant to UP overhead trackage rights on BN's line between Saunders. Wisconsin and access to the MERC dock in Superior, Wisconsin.
- d) BNSF shall grant UP the right to use the Pokegama connection at Saunders, Wisconsin (i.e., the southwest quadrant connection at Saunders).
- e) BNSF shall waive SP's requirement to pay any portion of the Tehachapi tunnels clearance improvements pursuant to the 1993 Agreement between Santa Fe and SP.

- f) BNSF shall allow UP to exercise its rights to use the Hyundai lead at Portland Terminal 6 without any contribution to the cost of constructing such lead.
- g) BNSF shall allow UP/SP to enter or exit SP's Chicago-Kansas City-Hutchinson trackage rights at Buda, Earlville, and west of Edelstein, Illinois. UP/SP shall be responsible for the cost of any connections required.
- h) BNSF will amend the agreement dated April 13, 1995, between BNSF and SP to allow SP to enter and exit Santa Fe's line solely for the purposes of permitting SP or its agent to pick up and set out interchange business, including reciprocal switch business at Newton, Kansas, and switching UP industry at that point.
- i) It is the intent of the parties that this Agreement result in the preservation of service by two competing railroad companies for all customers listed on Exhibit A to this Agreement presently served by both UP and SP and no other railroad (2-to-1 customers).

The parties recognize that some 2-to-1 customers will not be able to avail themselves of BNSF service by virtue of the trackage rights and line sales contemplated by this Agreement. For example, 2-to-1 customers located at Herlong, CA, Turlock, CA, Tyler, TX, Defense, TX, College Station, TX, Great Southwest, TX, Victoria, TX, Sugarland, TX, Sinton, TX, points on the former Galveston, Houston & Henderson Railroad served only by UP and SP, Harbor, LA, Paragould, AR, Forrest City, AR, Dexter Jct., MO, Preston, KS and Herington, KS, are not accessible under the trackage rights and line sales covered by this Agreement. Accordingly, UP/SP agree to enter into arrangements with BNSF under which, through trackage rights, haulage, raternaking authority or other mutually acceptable means, BNSF will be able to provide competitive service to 2-to-1 customers at the foregoing points and to any 2-to-1 customers who are not located at points expressly referred to in this Agreement or Exhibit A to this Agreement.

j) In the event, for any reason, any of the trackage rights granted under this Agreement cannot be implemented because of the lack of sufficient legal authority to carry out such grant, then UP/SP shall be obligated to provide an alternative route routes, or means of access of commercially equivalent utility at the same level of cost to BNSF as would have been provided by the originally contemplated rights.

### 9. Trackage Rights - General Provisions

a) The compensation for operations under this Agreement shall be set at the levels shown in the following table:

Table I
Trackage Rights Compensation
(mills per ton-mile)

	Keddie-Stockton/Richmond	All Other Lines
Intermodal and Carload	3.48	3.1
Bulk (67 cars or more of one commodity in one	3.0	3.0
car type)		

These rates shall apply to all equipment moving in a train consist including locomotives. The rates shall be escalated in accordance with the procedures described in Section 12 of this Agreement. The owning line shall be responsible for maintenance of its line in the ordinary course including rail relay and tie replacement. The compensation for such maintenance shall be included in the mills per ton mile rates received by such owning line under this Agreement.

b) BNSF and UP/SP will conduct a joint inspection to determine necessary connections and sidings or siding extensions associated with connections, necessary to implement the trackage rights granted under this Agreement. The cost of such facilities shall be borne by the party receiving the trackage rights which such facilities are required to implement. Either party shall have the right to cause the other party to construct such facilities. If the owning carrier decides to utilize such

facilities constructed by it for the other party, it shall have the right to do so upon payment to the other party of one-half (1/2) the original cost of constructing such facilities.

- c) Capital expenditures on the lines over which BNSF has been granted trackage rights pursuant to this Agreement (the trackage rights lines) will be handled as follows:
  - i) UP/SP shall bear the cost of all capacity improvements that are necessary to achieve the benefits of its merger as outlined in the application filed with the ICC for authority for UP to control SP. The operating plan filed by UP/SP in support of the application shall be given presumptive weight in determining what capacity improvements are necessary to achieve these benefits.
  - ii) Any capacity improvements other than those covered by subparagraph (i) above shall be shared by the parties based upon their respective usage of the line in question, except as otherwise provided in subparagraph (iii) below. That respective usage shall be determined by the 12 month period prior to the making of the improvement on a gross ton mile basis.
  - (iii) For 18 months following UP's acquisition of control of SP, BNSF shall not be required to share in the cost of any capital improvements under the provision of subparagraph (ii) above.
  - (iv) BNSF and UP/SP agree that a capital reserve fund of \$25 million, funded out of the purchase price listed in Section 10 of this Agreement, shall be established. This capital reserve fund shall, with BNSF's prior consent which will not unreasonably be withheld, be drawn down to pay for capital projects on the trackage rights lines that are required to accommodate the operations of both UP/SP and BNSF on those lines, but in any event shall not be used for expenditures covered by subparagraph (i) above. Any disputes over whether a project is required to accommodate the operation of both parties shall be referred to binding arbitration under Section 15 of this Agreement.

d) The management and operation of the trackage rights line shall be under the exclusive direction and control of the owning carrier. The owning carrier shall have the unrestricted power to change the management and operations on and over joint trackage as in its judgement may be necessary, expedient or proper for the operations thereof intended. Trains of the parties utilizing joint trackage shall be given equal dispatch without any discrimination in promptness, quality of service, or efficiency in favor of comparable UP/SP traffic.

Owner shall keep and maintain the trackage rights lives at no less than the track standard designated in the current timetable for the applicable lines subject to the separate trackage rights agreement. The parties agree to establish a joint service committee to regularly review operations over the trackage rights lines.

- e) Each party shall be responsible for any and all costs relating to providing employee protection benefits, if any, to its employees prescribed by law, governmental authority or employee protective agreements where such costs and expenses are attributable to or arise by reason of that party's operation of trains over joint trackage. To the extent that it does not violate existing agreements, for a period of three years following acquisition of control of SP by UP, BNSF and UP/SP shall give preference to each other's employees when hiring employees needed to carry out trackage rights operations or operate lines being purchased. The parties shall provide each other with lists of available employees by craft or class to whom such preference shall be granted. Nothing in this Section 9.e) is intended to create an obligation to hire any specific employee.
- f) The trackage rights grants described in this Agreement, and the purchase and sale of line segments shall be included in separate trackage rights and line sale agreement documents respectively of the kind and containing such provisions as are normally and customarily utilized by the parties, including exhibits depicting specific rail line segments, and other provisions dealing with maintenance, improvements, and liability, subject to more specific provisions described for each grant and sale contained in this Agreement and the general provisions described in this section. BNSF and UP/SP shall elect which of their constituent railroads shall be a party to each such trackage rights

agreement and line sale and shall have the right to assign the agreement among their constituent railroads. The parties shall use their best efforts to complete such agreements by June 1, 1996. If agreement is not reached by June 1, 1996 either party may request that any outstanding matters be resolved by binding arbitration with the arbitration proceeding to be completed within sixty (60) days of its institution. In the event such agreements are not completed by the date the grants of such trackage rights are to be effective, it is intended that operations under such grants shall be commenced and governed by this Agreement.

- All locations referenced herein shall be deemed to include all areas within the present designated switching limits of the location, and access to such locations shall include the right to locate and serve new auto and intermodal facilities at such locations and to build yards or other facilities to support trackage rights operations.
- h) If requested by BNSF, UP/SP will provide to BNSF reciprocal switching services at the 2-to-1 points covered in this Agreement at rates which will fully reimburse UP/SP for its costs plus a reasonable return.
- i) It is the intent of the parties that BNSF shall, where sufficient volume exists, be able to utilize its own terminal facilities to handle such local traffic. These locations include Salt Lake City. Ogden, Brownsville and San Antonio, and other locations where such volume develops. Facilities or portions thereof presently utilized by UP or SP at such locations shall be acquired from UP/SP by lease or purchase at normal and customary charges. Upon request of BNSF and subject to availability and capacity, UP/SP shall provide BNSF with terminal support services including fueling, running repairs and switching. UP/SP shall also provide intermodal terminal services at Salt Lake City, Reno, and San Antonio. UP/SP shall be reimburse 1 for such services at UP's normal and customary charges. Where terminal support services are not required, BNSF shall not be assessed additional charges for train movements through a terminal.

- j) BNSF may, subject to UP/SP's consent, use agents for limited feeder service on the trackage rights lines.
- k) BNSF shall have the right to inspect the UP and SP lines over which it obtains trackage rights under this agreement and require UP/SP to make such improvements under this section as BNSF deems necessary to facilitate its operations at BNSF's sole expense. Any such inspection must be completed and improvements identified to UP/SP within one year of the effectiveness of the trackage rights.
- BNSF shall have the right to connect for movement in all directions with the trackage rights lines where its present lines (including existing trackage rights), lines to be purchased under this Agreement, and the trackage rights lines intersect.

# 10. Compensation for Sale of Line Segments

a) BNSF shall pay UP/SP the following amounts for the lines it is purchasing pursuant to this Agreement:

Line Segment
Keddie-Bieber
Dallas-Waxahachie
lowa Jct.-Avondale MP 16.9
(includes UP's Westwego
intermodal yard: SP's
Avondale "New" yard:
and SP's Lafayette yard)

Purchase Price \$ 30 million 20 million 100 million

- b) The purchase shall be subject to the following terms:
  - (i) the condition of the lines at closing shall be at least as good as their current conditions as reflected in the current timetable and slow orders (slow orders to be measured by total mileage at each level of speed restrictions).
  - includes track and associated structures together with right-of-way and facilities needed for operations.

- (iii) indemnity for environmental liabilities attributable to UP/SP's prior operations.
- (iv) standard provisions for sales of this nature involving title, liens, encumbrances other than those specifically reserved or provided for by this Agreement.
- (v) assignment of associated operating agreements (road crossings, crossings for wire and pipelines, etc.). Non-operating agreements shall not be assigned.
- (vi) removal by Seller, from a conveyance, within 60 days of the closing of any sale, of any non-operating real property without any reduction in the agreed upon purchase price.
- (vii) the purchase will be subject to easements or other agreements involving telecommunications, fibre optics or pipeline rights or operations in effect at the time of sale.

BNSF shall have the right to inspect the line segments and associated property to be sold and records associated therewith for a period of ninety days from the date of this Agreement to determine the condition and title of such property. At the end of such period, BNSF shall have the right to decline to purchase any specific line segment or segments. In such event UP/SP shall grant BNSF overhead trackage rights on any such segment with compensation to be paid, in the case of Avondale-lowa Junction on the basis of the charges set forth in Section 9a of this Agreement, and in the case of Keddie-Bieber on a typical joint facility basis with maintenance and operating costs to be shared on a usage basis (gross ton miles used to allocate usage) and annual interest rental equal to the depreciated book value times the then current cost of capital as determined by the ICC times a usage basis (gross ton miles). In the case of Dallas-Waxahachie, operation would continue under the existing trackage rights agreement.

### 11. Term

This Agreement shall be effective upon execution for a term of ninety-nine years, provided, however, that the grants of rights under Section 1 through 8 shall be effective only upon UP's acquisition of control of SP, and provided further that BNSF may terminate this Agreement by notice to UP/SP given before the close of business on September 26, 1995, in which case this Agreement

shall have no further force or effect. This Agreement and all agreements entered into pursuant or in relation hereto shall terminate, and all rights conferred pursuant thereto shall be cancelled and deemed void ab initio, if, in a Final Order, the application for authority for UP to control SP has been denied or has been approved on terms unacceptable to the applicants, provided, however, that if this Agreement becomes effective and is later terminated, any liabilities arising from the exercise of rights under Sections 1 through 8 during the period of its effectiveness shall survive such termination. For purposes of this Section 11, "Final Order" shall mean an order of the Interstate Commerce Commission, any successor agency, or a court with lawful jurisdiction over the matter which is no longer subject to any further direct judicial review (including a petition for writ of certiorari) and has not been stayed or enjoined.

### 12. Adjustment of Charges

All trackage rights charges under this Agreement shall be subject to adjustment annually beginning as of the effective date of this Agreement to reflect seventy percent (70%) of increases or decreases in Rail Cost Adjustment Factor, not adjusted for changes in productivity ("RCAF-U") published by the ICC or successor agency or other organizations. In the event the RCAF-U is no longer maintained, the parties shall select a substantially similar index and failing to agree on such an index, the matter shall be referred to binding arbitration under Section 15 of this Agreement. The parties will agree on an appropriate adjustment factor for switching, haulage and other charges.

Upon every fifth anniversary of the effective date of this Agreement, either party may request on ninety (90) days notice that the parties jointly review the operations of the adjustment mechanism and renegotiate its application. If the parties do not agree on the need for or extent of adjustment to be made upon such renegotiation, either party may request binding arbitration under Section 15 of this Agreement. It is the intention of the parties that rates and charges for trackage rights and services under this Agreement reflect the same basic relationship to operating costs as upon execution of this Agreement.

### 13. Assignability

This Agreement and any rights granted hereunder may not be assigned in whole or in part without the prior consent of the other parties except as provided in this Section. No party may permit or admit any third party to the use of all or any of the trackage to which it has obtained rights under this Agreement, nor under the guise of doing its own business, contract or make any arrangement to handle as its own trains, locomotives, cabooses or cars of any such third party which in the normal course of business would not be considered the trains, locomotives, cabooses or cars of that party. In the event of an authorized assignment, this Agreement and the operating rights hereunder shall be binding upon the successors and assigns of the parties. This Agreement may be assigned by either party without the consent of the other only as a result of a merger, corporate reorganization, consolidation, change of control or sale of substantially all of its assets.

### 14. Government Approvals

The parties agree to cooperate with each other and make whatever filings or applications, if any, are necessary to implement the provisions of this Agreement or of any separate agreements made pursuant to Section 9f and whatever filings or applications may be necessary to obtain any approval that may be required by applicable law for the provisions of such agreement. BNSF agrees not to oppose the primary application or any related applications in Finance Docket No. 32760 (collectively the "control case"), and not to seek any conditions in the control case, not to support any requests for conditions filed by others, and not to assist others in pursuing their requests. BNSF shall remain a party in the control case, but shall not participate further in the control case other than to support this Agreement, to protect the commercial value of the rights granted to BNSF by this Agreement, and to oppose requests for conditions by other parties which adversely affect BNSF; provided, however, that BNSF agrees to reasonably cooperate with UP/SP in providing testimony to the ICC necessary to demonstrate that this Agreement and the operations to be conducted thereunder shall provide effective competition at the locations covered by the Agreement. UP/SP agree to support this Agreement and its implementation and warrant that it has not entered into agreements with other parties granting rights to other parties granted to BNSF under this Agreement. UP/SP agree to ask

the ICC to impose this Agreement as a condition to approval of the control case. During the pendency of the control case, UP and SP shall not, without BNSF's written consent, enter into agreements with other parties which would grant rights to other parties granted to BNSF or inconsistent with those granted to BNSF under this Agreement which would substantially impair the overall economic value of rights to BNSF under this Agreement.

### 15. Arbitration

Unresolved disputes and controversies concerning any of the terms and provisions of this Agreement or the application of charges hereunder shall be submitted for binding arbitration under Commercial Arbitration Rules of the American Arbitration Association which shall be the exclusive remedy of the parties.

#### 16. Further Assurances

The parties agree to execute such other and further documents and to undertake such acts as shall be reasonable and necessary to carry out the intent and purposes of this Agreement.

### 17. No Third Party Beneficiaries

This Agreement is intended for the sole benefit of the signatories to this Agreement. Nothing in this Agreement is intended or may be construed to give any person, firm, corporation or other entity, other than the signatories hereto, their permitted successors and permitted assigns, and their affiliates any legal or equitable right, remedy or claim under this Agreement.

## 18. Confidentiality

The parties may make all other terms of this Agreement known to the public through a press release previously reviewed and approved by the other parties, and may address it in subsequent communications to the ICC or others. The parties agree, however, that the financial terms of this Agreement are confidential and shall not be disclosed, without the consent of the other party, to individuals not employed by or acting as counsel for or consultants to UP/SP or BNSF, except as

required by law, provided the parties may make appropriate disclosure of such terms to government entities or as required in connection with the process of seeking government approval of the control case, or of this Agreement under applicable ICC confidentiality procedures.

By: Dkuds on Title:	By: Southern Pacific Rail CORPORATION  By: Southern Pacific Rail CORPORATION  By: Southern Pacific Rail CORPORATION
MISSOURI PACIFIC RAHLROAD COMPANY  By: Daniel Company  Title:  THE DENVER & RIO GRANDE WESTERN RAILROAD COMPANY  By: Daniel Company  Title:  ST. LOUIS SOUTHWESTERN RAILWAY COMPANY	SOUTHERN PACIFIC TRANSPORTATION COMPANY  By: Strong May South Company  Citle: SPCSL CORP.  By: Servin May South Company  Title: Spc. Servin May So
By:	THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY  By:

### EXHIBIT A

# Points Referred to in Section 1b

Provo UT
Salt Lake City UT
Ogden UT
Ironton UT
Gatex UT
Pioneer UT

Garfield/Smelter/Magna UT (access to Kennecott private railway)

Geneva UT Clearfield UT Woods Cross UT Relico UT Evona UT

Little Mountain UT Weber Industrial Park UT

Points on paired track from Weso NV to Alazon NV

Reno NV (intermodal and automotive only -

BNSF must establish its own automotive facility)

Points between Oakland CA and San Jose CA

San Jose CA Warm Springs CA Fremont CA

Points in the Livermore CA area (including Pleasanton CA, Radum CA, and Trevarno CA)

West Sacramento CA Melrose Drill Track near Oakland CA

# Points Referred to in Section 3a

Ontario CA La Habra CA Fullerton CA

# Points Referred to in Section 4b

Brownsville TX
Port of Brownsville TX
Harlingen TX
Corpus Christi TX
Victoria TX
San Antonio TX
Halsted TX (LCRA plant)
Waco TX
Points on Sierra Blanca-El Paso line

# Points Referred to in Section 5b

Baytown TX Amelia TX Orange TX Mont Belvieu TX

# Points Referred to in Section 6c

Camden AR
Pine Bluff AR
Fair Oaks AR
Baldwin AR
Little Rock AR
North Little Rock AR
East Little Rock AR
Paragould AR

#### EXHIBIT B

# TERM SHEET FOR UP/SP-BNSF PROPORTIONAL RATE AGREEMENT COVERING I-5 CORRIDOR

#### Concept

BNSF trackage rights in the "I-5" corridor will allow BNSF to handle traffic on a single line basis that currently moves via joint BN-SP routes. This Agreement will enable UPSP to compete with BNSF for that traffic and to make rates, using the proportional rates, to and from all points UP/SP serves in the covered territory described below.

### Covered Territory

Traffic moving between the following areas north of Portland, Oregon and west of Billings and Havre, Montana:

- · Canadian interchanges in Vancouver area
- · Points north of Seattle and west of Cascades
- Points south of and including Seattle and west of Cascades
- Washington points east of Cascades and west of and including Spokane
- Points east of Spokane and west of Billings and Havre

and points in

- · Arizona,
- · California.
- · Colorado,
- New Mexico,
- Nevada,
- Oregon,
- · Utah,
- Texas west of Monahans and Sanderson, and
- connections to Mexico at El Paso and to the west.

### Traffic Covered

Traffic covered will be all commodities (carload, intermodal and bulk) moving both southbound and northbound. All cars loaded or made empty on BNSF lines in the Covered Territory (including reloads) and cars received in interchange.

## Proportional Rates

A third party, such as a major accounting firm or other established transportation consultant (the "consultant"), will be employed to compute the proportional rates. The mileage prorate shall be the ratio of (a) BNSF miles between areas north of Portland or interchange north of Portland and SP interchange at Portland to (b) BNSF single-line miles from BNSF origin or interchange to BNSF destination or interchange.

The consultant will develop a table of net ton mile rates (net of refunds, allowances, and rebates). This table will be in matrix form based on commodity, car type, and area north of Portland, Oregon. The rates shown in the matrix will be by commodity at the 3-digit STCC level and by car type for movement between each of the areas north of Portland, Oregon, and the Portland interchange. The net ton mile rates will be based on movements between each of the areas north of Portland and the group of states (including connections to Mexico) listed above. The initial rates will be derived based on the BN-SP portion of BN-SP interline rates (net of refunds, allowances, and rebates) in effect in the quarter preceding acquisition of SP by UP.

The net ton mile rate for each commodity/car type shall be a weighted average of the rates applicable to movements of each such commodity/car type between the points listed above. An example of this computation is attached.

New rates will be derived each subsequent quarter. In subsequent quarters, the rates will include a prorate of both SP-BNSF interline rates (net of refunds, allowances, and rebates) and BNSF single-line rates (net of refunds, allowances, and rebates). At such time as a rate can be developed for a particular commodity/car type on the basis of a BNSF single-line rate then future rate adjustments for such commodity/car type shall be based solely on BNSF single-line rates. All computations of net ton mile rates will be based on rates that actually moved traffic.

UP/SP agree that any rate it publishes will reflect the proportional rate from the latest quarterly study and BNSF's division shall be that amount. Movements using proportional rates shall be interline BNSF-UP/SP movements and will be billed accordingly. Proportional rates used by UP/SP in contracts will be escalated on the same basis as UP/SP's rates are escalated. BNSF and UP/SP will establish procedures to ensure that in settling interline accounts UP/SP's and BNSF's revenue south of Portland is not disclosed to the other.

## Application

The net ton mile rates in each cell of the matrix will be applied to the BN mileage and the associated net tons from areas north of Portland to Portland interchange to develop the proportional rate to the Portland interchange.

#### Service

BNSF shall accept, handle, switch and deliver traffic moving under this Agreement without any discrimination in promptness, quality of service, or efficiency in favor of comparable traffic moving in BNSF's account. UP/SP has the right to provide equipment. BNSF will work with UP/SP to establish and provide trackage for strategically located car distribution points in BN territory. To the extent justified by business volumes, BNSF will continue operating Vancouver, BC-Portland (SP interchange) trains comparable to BN Nos. 111 and 112. BNSF will cooperate with UP/SP to establish necessary blocks to provide efficient and competitive service on traffic moving under the proportional rate.

## Third Party Consultant

The third party consultant shall be jointly employed by UP/SP and BNSF. The parties will share equally in the expense of employing such third party consultant. Both UP/SP and BNSF shall have the right to audit the work of the third party consultant and agree to share in any irregularities found in this work and cooperate to work with the third party consultant to establish procedures to promptly correct those deficiencies. The third party consultant shall be required to remain impartial between UP/SP and BNSF. Any breach of the impartiality requirement shall result in the termination of such third party consultant and the selection of a new consultant by the parties.

# Example of Revenue Per Ton Mile Calculation by Origin-Destination Cell Cell Includes Car Type and Commodity

	Assumption:	Move 1	Move 2
1.	BNSF Revenue Per Car From O/D Areas North of Portland to Destination States	\$5000	\$2000
2.	BNSF Miles From O/D Areas North of Portland to Destination States	1000	500
3.	BNSF Net Tons From O/D Areas North of Portland to Destination States	100	50
4.	BNSF Number of Carloads From O/D Areas North of Portland to Destination S	10 States	5
5.	BNSF Miles Between Actual Point of Origin to Interchange and Portland	300	200

A. Revenue/NTM Factor (Computed by Consultant for Each Call in Matrix)

 $\frac{\sum (1) \times (4)}{(2) \times (3)}$  (for all moves)  $\frac{\sum (4)}{\sum (4)}$ 

$$\frac{5000 \times 10}{1000 \times 100} + \frac{2000 \times 5}{500 \times 50} = \$0.06/NTM$$

B. Compute BNSF Division on a Specific Move

(A) x (5) x (3) \$0.06 x 300 x 100 = \$1800 \$0.06 x 200 x 50 = \$ 600

S.P. Avondale Yard Old Yard Capacity 4- 7900 (Thru X-overs) 1200' Old: Yard 12001 TrK,40-5300 640 each 37-39-4000' 23.) 1000' 16,1700 30-36 - 2000 24,) 900

# SUPPLEMENTAL AGREEMENT

This Supplemental Agreement ("Supplemental Agreement") is entered into this 8 day of November, 1995, between Union Pacific Corporation, Union Pacific Railroad Company, Missouri Pacific Railroad Company (collectively referred to as "UP"), and Southern Pacific Rail Corporation, Southern Pacific Transportation Company, The Denver & Rio Grande Western Railroad Company, St. Louis Southwestern Railway Company and SPCSL Corp. (collectively referred to as "SP", with both UP and SP also hereinafter referred to collectively as "UP/SP"), on the one hand, and Burlington Northern Railroad Company ("BN") and The Atchison, Topeka and Santa Fe Railway Company ("Santa Fe"), hereinafter collectively referred to as "BNSF", on the other hand, concerning the proposed acquisition of Southern Pacific Rail Corporation by UP Acquisition Corporation, and the resulting common control of UP and SP pursuant to the application pending before the Interstate Commerce Commission ("ICC") in Finance Docket No. 32760, Union Pacific Corporation, Union Pacific Railroad Company, and Missouri Pacific Railroad Company -- Control and Merger -- Southern Pacific Rail Corporation, Southern Pacific Transportation Company, St. Louis Southwestern Railway Company, SPCSL Corp., and The Denver and Rio Grande Western Railroad Company.

Pursuant to an Agreement between UP/SP and BNSF dated September 25, 1995 (the "Agreement"). UP/SP and BNSF agreed to various trackage rights, line sales, and other related transactions.

In order to (a) realize the intent of the parties that the Agreement result in the preservation of service by two competing railroad companies for all 2-to-1 customers as described in Section 8i of the Agreement and (b) correct various errata to the Agreement that have been identified since it was signed, the parties agree to amend the Agreement as follows:

#### 1. Amendment to Section 1.

a) Section 1b is amended by (i) inserting the phrase "with the Utah Central Railway Company at Ogden" between the phrases "Provo:" and "and with the Salt" in the second to last line, and (ii) adding at its conclusion the following language:

"BNSF shall also receive the right to utilize in common with UP/SP, for normal and customary charges, SP's soda ash transload facilities in Ogden and Salt Lake City. BNSF shall also have the right to access any shipper-owned soda ash transload facilities in Ogden and Salt Lake City and to establish its own soda ash transload facilities along the trackage rights granted under this section."

- b) Section 1d is amended by adding at its conclusion the following language:

  "BNSF shall have the right, upon 180 days prior written notice to

  UP/SP, to change its election; provided, however, that BNSF shall

  (x) not change its election more often than once every five years and

  (y) shall reimburse UP/SP for any costs incurred by UP/SP in

  connection with such changed election."
- Section 1g is amended by (i) revising the third and fourth sentences to read as follows:

  "Manifest trains shall be carload business and shall be equipped with
  adequate motive power to achieve the same horsepower per trailing
  ton as comparable UP/SP trains. Helpers shall not be used unless
  comparable UP/SP manifest trains use helpers in which case BNSF
  trains may be operated in the same fashion provided that BNSF
  furnishes the necessary helper service."

and (ii) by deleting the comma in the last sentence after the word "helpers."

d) Section 1i is amended by inserting the term "BNSF" between the words "provide" and "non-discriminatory" in the second line.

- 2. Amendment to Section 3. Section 3 is amended by adding a new Section 3f to the Agreement. New Section 3f shall read as follows:
  - Forty-five (45) days before initiating service to a customer pursuant to Sections 3a and 3b. BNSF must elect whether its service shall be (i) direct, (ii) through reciprocal switch, or (iii) with UP/SP's prior agreement, using a third party contractor to perform switching for itself or both railroads. BNSF shall have the right, upon 180 days prior written notice to UP/SP, to change its election: provided, however, that BNSF shall (x) not change its election more often than once every five years and (y) shall reimburse UP/SP for any costs incurred by UP/SP in connection with such changed election."

### 3. Amendment to Section 4.

- a) Section 4a is amended by adding the phrase "(with parity and equal access to the Mexican border crossing at Brownsville)" at the conclusion of the second sub-paragraph which reads "UP's live between Houston (Algoa) and Brownsville."
  - b) Section 4b is amended by adding at its conclusion the phrase "and Eagle Pass."
  - Section 4d is amended by adding at its conclusion the following language:

    "BNSF shall have the right, upon 180 days prior written notice to

    UP/SP, to change its election; provided, however, that BNSF shall

    (x) not change its election more often than once every five years and

    (y) shall reimburse UP/SP for any costs incurred by UP/SP in

    connection with such changed election."
- d) The first sentence of Section 4f is amended by inserting a comma between the phrase "(including FNM interchange)" and the term "UP/SP."

# 4. Amendment to Section 5.

- a) Section 5a is amended as follows in order to add an additional grant of trackage rights:
  - "a) UP/SP shall grant to BNSF trackage rights on the following lines:
    - SP's line between Houston. Texas and lowa Junction in Louisiana;
    - SP's line between Dayton, Texas and Baytown, Texas;
    - UP's and SP's lines near Avondale (SP MP 16.9) and West Bridge Junction (SP MP 10.5):
       and
    - UP's line between West Bridge Junction (UP MP 10.2) and UP's Westwego. Louisiana intermodal facility (approximately UP MP 9.2)."
- b) Section 5b is amended by adding at its conclusion the following sentence:

  "BNSF shall also have the right to interchange with and have access

  over the New Orleans Public Belt Railroad at West Bridge Junction."
- c) The last sentence in Section 5c is amended by inserting a period after the word "limitations" and by beginning a new sentence immediately thereafter with the word "where."
  - Section 5d is amended by adding at its conclusion the following language:

    "BNSF shall have the right, upon 180 days prior written notice to

    UP/SP, to change its election: provided, however, that BNSF shall

    (x) not change its election more often than once every five years and

    (y) shall reimburse UP/SP for any costs incurred by UP/SP in

    connection with such changed election."

# 5. Amendment to Section 6.

- a) Section 6c is amended by adding at its conclusion the following language: "and the Little Rock Port Authority at Little Rock."
  - b) Section 6e is amended by adding at its conclusion the following language:

    "BNSF shall have the right, upon 180 days prior written notice to

    UP/SP, to change its election; provided, however, that BNSF shall

    (x) not change its election more often than once every five years and

    (y) shall reimburse UP/SP for any costs incurred by UP/SP in

    connection with such changed election."

# Amendment to Section 8.

- a) The parenthetical clause in Section 8d is amended to read as follows:

  "(i.e., the southwest quadrant connection at Saunders including the track between BN MP 10.43 and MP 11.14.)"
- b) The second line in Section 8h is amended by substituting "UP/SP" for "SP" in the two places "SP" appears in that line.
  - c) Section 8i is amended in its entirety to read as follows:
    - "i) It is the intent of the parties that this Agreement result in the preservation of service by two competing railroad companies for all customers listed on Exhibit A to this Agreement presently served by both UP and SP and no other railroad (2-to-1 customers).

The parties recognize that some 2-to-1 customers will not be able to avail themselves of BNSF service by virtue of the

trackage rights and line sales contemplated by this Agreement. For example, 2-to-1 customers located at points between Niles Junction and the end of the joint track near Midway (including Livermore, CA. Pleasanton, CA. Radum, CA, and Trevarno, CA), Turlock, CA, South Gate, CA, Tyler, TX, Defense, TX, College Station, TX, Great Southwest, TX, Victoria, TX, Sugar Land, TX, points on the former Galveston, Houston & Henderson Railroad served only by UP and SP, Opelousas, LA, Paragould, AR, Dexter, MO, and Herington, KS, are not accessible under the trackage rights and line sales covered by this Agreement. Accordingly, UP/SP and BNSF agree to enter into arrangements under which, through trackage rights, haulage, ratemaking authority or other mutually acceptable means. BNSF will be able to provide competitive service to 2-to-1 customers at the foregoing points and to any 2-to-1 customers who are not located at points expressly referred to in this Agreement or Exhibit A to this Agreement.

BNSF shall have the right to interchange with any short-line railroad which, prior to the date of this Agreement could interchange with both UP and SP and no other railroad."

d) Section 8j, is modified by adding the word "or" between the words "route" and "routes."

# Amendment to Section 9.

a) The third sentence of Section 9d is amended by deleting the phrase "UP/SP traffic" and inserting the phrase in place thereof "traffic of the owning carrier."

- b) Section 9h is amended in its entirety to read as follows:
  - "h) The rates for reciprocal switching services provided by UP/SP to BNSF pursuant to the terms of the Agreement shall fully reimburse UP/SP for its costs plus a reasonable return."
- c) Section 91 is amended in its entirety to read as follows:
  - directions, with its present lines (including existing trackage rights) at points where its present lines (including existing trackage rights) intersect with lines it will purchase or be granted trackage rights over pursuant to this Agreement.

    UP/SP shall have the right to connect, for movement in any direction, with its present lines (including trackage rights) at points where its present lines (including trackage rights) intersect with lines it will be granted trackage rights over pursuant to this Agreement."
- 8. Deletion of Section 18. Section 18 of the Agreement captioned "Confidentiality" is hereby deleted.

# 9. Amendment of Exhibit A.

a) In the section captioned "Points Referred to in Section 1b" make the following deletions and insertions: (i) insert before "Points between Oakland, CA and San Jose, CA: the following points: "Herlong, CA: Johnson Industrial Park at Sacramento, CA: Farmers Rice at West Sacramento, CA: Port of Sacramento, CA:" (ii) add the following language after "Points between Oakland, CA and San Jose, CA": "(including Warm Springs CA, Fremont CA, Elmhurst CA, Shinn CA, Kohler CA, and Melrose CA) and (iii) delete "Points in the Livermore, CA area (including Pleasanton, CA, Radum, CA, and Trevarno, CA): West Sacramento, CA: Melrose Drill Track near Oakland, CA".

- b) Delete the reference to "Victoria, TX" in the section captioned "Points Referred to in Section 4b." Add "Sinton, TX" in place thereof.
- c) Add the phrase "(Arnoco, Exxon and Chevron plants)" after the reference to Mont Belvieu, TX in the section captioned "Points Referred to in Section 5b." Add the points "Eldon, TX (Bayer plant)" and "Harbor, LA" at the end of this section.
- d) Delete the reference to "Paragould, AR" in the section captioned "Points Referred to in Section 6c." Add "Forrest City, AR" in place thereof.

For ease of reference, a revised Exhibit A incorporating the foregoing changes is attached.

10. Amendment to Exhibit B. The third sentence in the last section (captioned "Third Party Consultant") of Exhibit B shall modified by amending the phrase "share in any" to "share any."

This Supplemental Agreement makes no other changes to the Agreement and the Agreement's terms shall remain in full force and effect except as modified above.

IN WITNESS WHEREOF, the parties have caused this Supplemental Agreement to be fully executed as of the date first above written.

UNION PACIFIC CORPORATION  By:	UNION PACIFIC RAILROAD COMPANY  By:
	SOUTHERN PACIFIC RAIL CORPORATION
	By: John 5 Grange
MISSOURI PACIFIC RAILROAD COMPANY	SOUTHERN PACIFIC TRANSPORTATION COMPANY
By: Carulton	By: John During
THE DENVER & RIO GRANDE WESTERN RAILROAD COMPANY	SPCSL CORP.
By: Show Grang	By: And Gray
T LOUIS COMPANIES	

RAILWAY COMPANY

BURLINGTON MORTHERN BAILROAD COMPANY

Trice P

THE ATCHISON, TOPKKA AND SANTAFE BAILWAY COMPANY

By: Caul Stee

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#### EXHIBIT A

# Points Referred to in Section 1b

Provo UT Salt Lake City UT Ogden UT

Ironton UT Gatex UT Pioneer UT

Garfield/Smelter/Magna UT (access to Kennecott private railway) Geneva UT

Clearfield UT

Woods Cross UT

Relico UT

Evona UT Little Mountain UT

Weber Industrial Park UT

Points on paired track from Weso NV to Alazon NV

Reno NV (intermodal and automotive only -

BNSF must establish its own automotive facility)

Herlong CA

Johnson Industrial Park at Sacramento CA

West Sacramento CA (Farmers Rice)

Port of Sacramento CA

Points between Oakland CA and San Jose CA (including Warm Springs CA, Fremont CA, Elmhurst CA, Shinn CA, Kohler CA, and Melrose CA)

San Jose CA

# Points Referred to in Section 3a

Ontario CA La Habra CA Fullerton CA

# Points Referred to in Section 4b

Brownsville TX
Port of Brownsville TX
Port of Corpus Christi
Harlingen TX
Corpus Christi TX
Sinton, TX
San Antonio TX
Halsted TX (LCRA plant)
Waco TX
Points on Sierra Blanca-El Paso line

# Points Referred to in Section 5b

Baytown TX
Amelia TX
Orange TX
Mont Belvieu TX (Amoco, Exxon, Chevron plants)
Eldon, TX (Bayer plant)
Harbor, LA

# Points Referred to in Section 6c

Camden AR
Pine Bluff AR
Fair Oaks AR
Baldwin AR
Little Rock AR
North Little Rock AR
East Little Rock AR
Forrest City, AR

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#### **VERIFIED STATEMENT**

#### OF

#### MARK J. DRAPER AND DALE W. SALZMAN

We are Mark J. Draper and Dale W. Salzman. Respectively, we are Senior Project Manager-Financial Planning in the Finance Department, and Manager-Transportation Research in the Planning & Analysis Group within the Finance Department, both at UP. We are submitting this verified statement to describe the preparation and contents of the Summary of Benefits Exhibit, which is Appendix A in this volume of the Application.

#### Qualifications

Draper: I began my career in UP's Finance Department in 1980, immediately after graduating from Creighton University with a B.A. in Mathematics and Economics. I earned an M.B.A. degree from Creighton in 1987. For the last fifteen years, I have held positions of increasing responsibility in the Finance Department, receiving my current appointment in 1993. I have sponsored both written and oral testimony before the Commission in rail line abandonment proceedings. I assembled the Summary of Benefits Exhibit and have overall familiarity with its components. Mr. Salzman, due to his involvement in their preparation, has better knowledge of the Operating Department benefits.

Salzman: I began my railroad career with MPRR. After serving as a management trainee, I worked in MPRR's Industrial Engineering Department for eight years. I was primarily involved in operations planning on MPRR, although I also participated in the development of TCS, MPRR's computer-based operating data system.

I moved to UP in November 1974 and worked for one year on transportation-related projects in the Coerating Department. Since 1974 I have been involved in transportation and strategic planning activities, first as Assistant Manager-Service Planning in the Marketing Department and then as Project Manager and Manager-Transportation Research. I have been involved in many consolidation cases, including BN/Frisco, SP/Tucumcari, UP/MP/WP, SFSP, SP/DRGW and UP/MKT, as well as both UP/CNW proceedings, and I offered testimony before the Commission in several of those cases. As the principal draftsman of the UP/SP Operating Plan, I have overall familiarity with the Operating Department benefits reflected in the Summary of Benefits.

## Purpose and Structure of the Summary of Benefits Exhibit

Applicants in railroad merger proceedings routinely portray the quantifiable economic costs and benefits of their proposals in a Summary of Benefits Exhibit. UPRR and MPRR may have initiated this tradition in their 1980 application in the UP/MP/WP merger proceeding.

The Summary of Benefits Exhibit in this case is intended to capture the identified quantifiable public benefits of a UP/SP merger, whether those benefits are enjoyed by the Applicants or by other parties. We made no attempt in the Summary of Benefits Exhibit to estimate the non-quantifiable benefits of the merger. Examples of

unquantified benefits, which may be very significant, include the advantages of new single-line services for shippers; the significant economic stimulation created by new patterns of rail service (such as creation of the first-ever single-carrier rail services between California and many points in the Pacific Northwest and of a second direct single-line rail route for BN/Santa Fe between New Orleans and Los Angeles); and the employment and productivity effects to be realized by shippers.

The quantifiable benefits of a UP/SP merger were conservatively estimated in a number of respects. We did not capture all the potentially quantifiable benefits of the merger, even for the Applicants. For example, as Mr. King and Mr. Ongerth explain in their joint verified statement, we did not include the reduced costs of cross-hauling empty cars because we could not be absolutely certain that those benefits are independent of others. We did not even attempt to quantify some types of potentially quantifiable benefits, such as volume purchasing discounts, beyond a few specific examples.

The Summary of Benefits Exhibit is simple in its structure and little different from those presented in other rail consolidation applications in the 1980s and 1990s. It depicts benefits and costs during each of the implementation years leading to full integration of UP/SP. Because of the length of the permitting process for a new "Inland Empire" intermodal facility in Southern California, and also because of the magnitude of planned construction projects, we showed costs and benefits over five implementation years, although more than 90 percent of the annual benefits will be realized by the end of the third year. In each of those years, we separated "annual" costs and benefits from "one-time" costs and benefits. Generally speaking, annual costs and benefits are those

that are expected to continue into the future. Examples include operating savings resulting from the inherent efficiency of combining two railroads, such as the reduced costs of operating one yard instead of two in a city. One-time costs and benefits are those that occur only once, such as the proceeds from a sale of real estate made surplus by closing a freight yard.

We also showed costs and benefits in a "normal" year. This is a projected typical year after the two railroads are fully integrated. By the normal year, the costs and benefits are all annual and recurring. All of the one-time costs and benefits have been spent or received by then.

In recent railroad consolidations, the applicants usually assumed that most operating efficiencies and traffic gains would be realized during the first year of combined operations and that all efficiencies and gains would be realized within three years. In a LP/SP merger, however, operating efficiencies and traffic gains will depend in part on substantial capital expenditures to increase capacity of and upgrade several SP lines and yards, upgrade certain UP lines, build new intermodal facilities, connect UP and SP tracks, and improve SP's technological capabilities. Many of these projects will be completed during the first year of merged operations, but others will require two years or even longer.

We estimate that approximately 40 percent of the additional capital expenditures required to support operations will occur during the first year of UP/SP combined operation. We expect an additional 30 percent of the capital investments to be made during the second year, 20 percent during the third year and 10 percent in the fourth year. The timing of most benefits is based on predictions by affected departments about

when those benefits would be realized. Otherwise, because operating efficiencies and traffic gains may trail capital investments, we assumed that 30 percent of these benefits will accrue during the first year of combined operations, an additional 40 percent during the second year and an additional ten percent in each of the following three years.

## Costs and Benefits Outside the Operating Department

The Summary of Benefits Exhibit shows the Net Revenue Gains to a UP/SP system. The net revenue gains reflect the impact of the BN/Santa Fe agreement, which ensures competition at points that would otherwise go from two carrier service to one carrier. These revenue gains represent the additional net revenues (gross revenue less cost of handling the traffic) a UP/SP system will earn by attracting more rail traffic, offset by traffic lost due to the UP/SP-BN/Santa Fe agreement. Witnesses Peterson, Ainsworth and Roberts testify that shippers, responding to improved UP/SP services, will elect to ship via UP/SP instead of by truck, choose to route their shipments over UP/SP for a longer distance, decide to use UP/SP services instead of shipping on another railroad, or ship on UP/SP when they otherwise would not ship at all.

For all of this traffic, Mr. Peterson estimated gross revenues based on base-year rail rates. Costs were determined by applying URCS unit costs to the difference in total operating statistics derived by comparing the statistics associated with UP and SP separately handling their base-year traffic, as adjusted to reflect the UP/CNW and BN/Santa Fe consolidations, with the statistics associated with moving the post-merger traffic volume over the merged UP/SP system. We disaggregated the benefits associated with more efficient movement of base year traffic and included these efficiencies in

"Operations." The remaining costs were then subtracted from gross revenues to arrive at net revenue gains.

In the normal year, UP/SP expects net revenue gains from net additional traffic of approximately \$76 million. This is not a large sum for a transaction of the magnitude and geographic reach of a UP/SP merger. The number is not larger for one reason: As a result of the UP/SP-BN/Santa Fe settlement agreement, BN/Santa Fe will capture a substantial volume of traffic now transported by SP and UP, beginning in the first year after merger. We estimate BN/Santa Fe's revenues at \$445 million (gross revenue) annually by the normal year. This estimate was based on the assumption that BN/Santa Fe will generally capture 50 percent of the traffic to which it gains access as a result of the settlement.

The Summary of Benefits Exhibit also reflects savings attributable to reduced General and Administrative ("G&A") activities. In general, the G&A savings result from combining the managements and administrative functions of the two separate railroads. Specifically, the G&A savings shown in the Summary of Benefits Exhibit consist of combining central office functions in fewer buildings: reduced supply and procurement costs; avoided insurance, audit and outside counsel fees; and elimination of certain duplicative employee benefits costs. These savings total \$137,970,000 in a normal year. In addition, the income from line sales to BN/Santa Fe is shown as a one-time, year-one G&A item.

The Labor Impact Exhibit, described in the Verified Statement of Michael A. Hartman, identifies the impacts of a UP/SP merger on all categories of personnel, as

estimated by each UP and SP department. As reflected in the Summary of Benefits Exhibit, those impacts consist of avoided labor wages, salaries and benefits, which are shown as "Labor Savings," employee relocation costs and labor protection and separation payments. Mr. Hartman's statement discusses how the financial effects of labor impacts were estimated.

Finally, the Summary of Benefits Exhibit contains an entry for "Shipper Logistics Savings." These savings, which will accrue to shippers, not to UP/SP, were computed by Mr. Roberts and are described in his verified statement.

# Costs and Benefits in the Operating Department

The changes in rail operations and Operating Department functions resulting from the merger are described in the Operating Plan and in the Verified Statement of R. Bradley King and Michael D. Ongerth in Volume 3 of the Application. The costs and savings associated with those changes were aggregated and are shown in the Summary of Benefits Exhibit.

The entry for "Equipment Utilization" represents the economic value of more efficient use of freight cars by a combined system, computed on the basis of average lease costs for each car type. The reduced need for locomotives due to more efficient routes and operations is included in "Operations." The entry for "Communications/Computers" reflects the direct monetary savings from combining UP and SP communications and information technology services, offset by a very substantial and sustained increase in expenditures for computer and related equipment needed by SP. In addition to the locomotive benefits mentioned above, the entry designated "Operations" represents the

aggregated savings from line abandonments, more efficient routings, reduced interchange delay, heavier bridge loadings, savings at points served by both carriers (closure of freight yards, reduced need for vehicles, elimination of various fees and trackage rights charges, etc.), better control of loss and damage costs, reduced track and car maintenance costs, and lower locomotive fuel costs, as well as the net trackage rights proceeds to UP/SP from BN/Santa Fe.

#### VERIFICATION

STATE OF NEBRASKA ) ss. COUNTY OF DOUGLAS

Mark J. Draper, being duly sworn, deposes and says that he is Senior Project Manager--Financial Planning for Union Pacific Railroad Company and Missouri Pacific Railroad Company, and has read the foregoing statement, knows the contents thereof, and that the same is true and correct.

Mark J. Draper

Subscribed and sworn to before me by Mark J. Draper this 16 day of Mary R. Holewashi November, 1995.

## VERIFICATION

STATE OF NEBRASKA	)	
COUNTY OF DOUGLAS	) SS. )	

I, Dale W. Salzman, Manager - Transportation Research for UP, being duly sworn, state that I have read the foregoing statement, that I know its contents and that those contents are true as stated.

DALE W. SALZMAN

Subscribed and sworn to before me this 20th day of November, 1995.

DORIS J. VAN BIBBER
My Comm. Exp. Nov. 30, 1996

NOTARY PUBLIC

My Commission Expires:

Hov. 30, 1996

### VERIFIED STATEMENT

of

## BERNARD J. LA LONDE

My name is Bernard J. La Londe, and my business address is The Ohio State University, 1775 College Road, Columbus, Ohio 43210. I currently hold the title of Professor Emeritus at the Fisher College of Business at The Ohio State University. For the preceding 26 years I served as a chaired professor at The Ohio State University. During this entire period, the principal focus of my teaching and academic research has been on shipper logistics and transportation issues. I have published over 200 articles and 6 books. Most of these publications have reported on what I consider my core expertise — understanding how shippers make logistics decisions. In addition to this academic work, I have served as a consultant on logistics and transportation issues to a large number of business firms, many of them Fortune 500 companies. In a typical year, I am also invited to address shipper and carrier groups many times, and I typically accept around 25-30 of these industry-based speaking assignments. My curriculum vitae and partial list of publications is included as Exhibit A.

It is my purpose here to speak to the proposed merger of UP and SP from the perspective of the shipper. My conclusion is that this merger is in the best interests of both shippers and the U.S. transportation/logistics system. My statement is divided into three parts. The first deals with logistics trends for the next decade. The second identifies shippers' key requirements from their transportation carriers. The third evaluates the synergies and benefits

The first important foundation trend to consider is supply chain management. Supply chain management is defined as the delivery of enhanced customer and economic value through synchronized management of the flow of physical goods and associated information from sourcing through consumption. The basic objective of the supply chain is to manage a set of relationships that create value for the ultimate consumer. The words "value chain" and "demand chain" are also sometimes used to describe this approach to managing a set of relationships that bring value to the ultimate customer. Manufacturers and distributors are developing integrated, synchronized, end-to-end supply chains. This process is driven by the need to manage inventory in meeting domestic and global competition, and to manage time effectively in the order cycle.

A second important trend is what is being termed "time-definite delivery."

Almost everyone in the transportation business has heard about just-in-time, and quick-response, and can quote situations where hourly deliveries reduce inventory and speed products toward the ultimate consumer. (See Table 2.) Time-definite delivery, on the other hand, sets a specific date that might be two weeks, fourth morning, or some other number, which is intended to meet a specific delivery window required by the customer. Time-definite delivery provides predictability, both in terms of reducing inventory requirements, and in making and keeping promises to supply chain managers. It provides a level of consistency where the customer is able to plan its business operations more effectively. (See Table 3.)

of the UP/SP merger and the impact of these factors on the transportation requirements of shippers.

# PART 1: Logistics Trends for the Next Decade

In 1995, an annual study at The Ohio State University asked a group of 186 shippers what they felt were going to be the primary "drivers" for logistics over the next decade. The respondents were free to state any factor or factors that they felt were important. A summary of their responses is presented in Table 1. These results generally provide a foundation for the discussion that follows. It should be noted that information technology is a key factor, closely followed by customer service, globalization, supply chain management, cost control, and inventory management. This survey has been conducted for over two decades, and while there has been some stability in the responses to this question, the importance of technology and appreciation of the importance of supply chain management are more recent additions to the list of important drivers. The trends identified in the O.S.U. study are generally consistent with other research findings published in this area.

I would like to discuss six important logistics trends for the next decade. I believe these trends will condition, and will significantly affect, how the nation's transportation system will be required to respond to shipper needs. It is of course important to understand that transportation is almost purely a derived demand. The shipper initiates the demand chain or value chain, and carriers and other third-party transportation resources respond to the wishes of the shipper.

A third and related factor is what might be called "technology matching." (See Table 4.) In order for a shipper to contract with a carrier (see Table 5), or to build a comprehensive third-party relationship, the carrier must be willing to match up to the shipper/customer's level of technology. The simplest example of this would be for a shipper using EDI. The carrier and shipper or third-party partner must be on-line and matched up with the same EDI transaction sets to achieve the full benefit of EDI capability. This technology match-up extends to bar-coding, radio frequency, and the entire range of emerging technology for the effective global movement of freight.

A fourth trend in logistics today is the increasing number of shippers who are considering third parties as outsourcing partners. These alliances go beyond simply using a transportation carrier, and usually involve a substantial investment on the part of both the shipper and the third party in a long-term contractual relationship. This investment requires both a financial commitment and a commitment of management resources and new technology to the relationship on the part of the third party. This shift is caused by a number of factors. Among the more important is a growing desire of shippers to focus on their "core competencies" while drawing on the "core competencies" of a value-added partner in regard to transportation. Most of these relationships require broadened responsibility on the part of the carrier to provide a range of value-added services to the shipper or its third-party partner.

A fifth trend is found in the globalization of American industry. (See Table 6.)
While NAFTA will certainly affect the business process in North America, the influence of today's global economy extends thousands of miles to South America, Asia and Europe. This

global reach suggests that supply relationships will be extended and will involve more partners in the process. The importance of time and process transformation at movement transfer points will become more important in the last half of the 1990s.

A final and related trend in logistics is the importance of asset management, or asset productivity, to the shipper and customer. Shippers and customers are aggressively seeking ways to become the low-cost providers in their industries. With the level of competition being ratcheted up by both global competitors and more aggressive local competitors, the stewardship and use of assets becomes a central part of how firms bring value to their shareholders and to their customers. The metric that is typically used to measure productivity is inventory turnover. (See Table 7.) The reason that inventory turnover is so important in measuring asset performance is that it is arguably the most manageable element of a firm's asset base. More effective management of inventory can produce quicker, more sustainable bottom-line profit results than almost any other strategy a firm might use. As a result, aggressive shippers are seeking out those partners that can provide or facilitate asset productivity and asset turnover. (Table 8.)

#### PART 2: Shipper Requirements for their Transportation System

Part 1 outlined important logistics trends for the next decade. These are general trends in the sense that they are a part of most firms' go-to-market strategy as the decade of the 1990s unfolds. This section reviews shippers' requirements for their transportation systems. These will be more specific to the transportation segment of the logistics system.

There are seven transportation system requirements that are important to most shippers. The most significant of these is service reliability, because it allows the shipper to reduce levels of inventory required to support customers or operations. As the level of transportation unreliability or unpredictability rises, the three most likely responses by the shipper are to accumulate additional inventory to serve as safety stock, suffer stock outages, or incur the added costs of expedited shipments. In Table 9, this process is presented as a conceptual overview. It can be seen that days of delay actually cost money, and when the days of delay can ite reduced, inventory holding costs decline and profitability improves. This does not include the cost of additional expedited shipments, special handling, and other expenses required either to fix a stock-out or to shut down and restart a plant operation.

A second requirement, and also an important one in most transportation systems, is the reduction of overall transit time. This means dock-to-dock time, or for those companies that measure order cycle time based on when they place an order, until the order is on their dock. Pressures on total order cycle time are expected to increase into the last half of the 1990s. This pressure on order cycle time will continue to create pressures on transit time. Those transport carriers that are not able to perform will lose market share. Any of the factors that delay end-to-end transit time will therefore cause a deterioration in the performance of a transportation carrier. This includes terminal congestion, delays or congestion while a movement is under load, inaccuracies in paperwork, delays in information processing, and all of the related issues that add cost by creating volatility in service reliability or increases in

information -- all of these factors as noted above can affect both the quality and cost of the transaction. Still another dimension of quality of delivery relates to potential delays that occur in the system as the delivery process takes place. This may be due to inaccurate drayage instructions, late notification to the shipper, or a variety of other factors that could cause delay, and which in turn add to variability in transit time and cost.

A sixth emerging factor in the transportation/logistics industry is the expansion or broadening of value-added services by the shipper. In some cases, this is a "one-stop" shopping issue, where the transportation company has become a logistics company and provides warehousing, assembly, transfer services, mixing/consolidation points, and a variety of other potential value-added services. There appears to be a well-established trend that shippers are seeking out companies that can provide additional value to their transportation services. Carriers able to provide such services can have competitive advantage in the marketplace. This type of purchase of transportation and transportation-related services can simplify transactions, and provide single-source accountability from an integrated transportation carrier.

The last major shipper requirement is the ability to improve market reach through a transportation system. Improved market reach allows the shipper to serve new markets without incurring significant incremental transportation cost. The converse of this point is also true. That is, as transportation costs increase, the market coverage tends to shrink for most products.

typically to lower cost, to provide more reliable transportation, and to "match up" with shippers' technology. The "match up" with a shipper's technology is an attempt to keep the shipper fully informed of shipment status, and to provide efficient transaction systems for accounting and financial purposes. The shipper need not have a transparent view of internal technology (TCS in the case of UP), but must have a port into the information system that allows the shipper to get shipment predictability.

The second dimension of information technology relates to the flow of effective information between the transportation provider and the shipper, which allows for better inventory management. In the traditional push environment, inventory has been used to buffer uncertainty. This approach has resulted in duplicate inventory at different stages in the distribution channel, and increased levels of safety stock to protect against out-of-stocks. The more forward-thinking companies are effecting a resource transformation, wherein information rather than inventory is used to buffer uncertainty. The net result of this is to use lower-cost information resources as a substitute for higher-cost inventory resources. As this trend continues to spread, the ability of the transportation supplier to provide a quality information menu becomes a critical success factor.

The fifth important factor to the shipper is a quality delivery process. This particular requirement may also be viewed from a number of different perspectives. The most obvious dimension is the question of damage to freight, which results in stock-outs, safety stock, and additional OS & D expense. Another dimension of quality of delivery is in the transaction process. Duplicate claims filing, excessive paperwork, lack of accurate

service time, or by requiring corrective action to fix the problems that are created by poor transit time performance.

A third and related factor is the importance of reducing transportation cost to the shipper. Transportation cost reduction has two significant impacts on shipper strategy. First, it allows the shipper to reach an expanded market at the same total transportation cost. Second, it can bring shipper customers into the carrier's customer base, for instance by allowing for diversion of freight from highway to the rails. In an era when the shipper is both cost-sensitive and time-sensitive, and is increasingly using just-in-time or time-definite delivery windows, lower-cost modes of transportation open up new options for the shipper, and give it greater opportunities to compete effectively in its end markets. For example, if a potential rail shipper can be assured of consistent third-morning delivery between Chicago and West Coast points at a lower cost than current highway options, the shipper will most likely divert freight to the rail option. In addition, shippers that move time-sensitive freight or relatively high-cost freight will see rail as relatively more attractive as costs are reduced. The total pool of rail shippers will expand as transportation costs are lowered.

A fourth important factor to the shipper, which is growing in significance in the 1990s, is the quality of information. The information issue actually has two dimensions. The first dimension involves the carrier's internal use of information — the ability to use technology and information for more effective deployment, utilization and tracking of transportation assets and customer shipments. This can require significant investments on the part of the carrier in both technology and information systems. The target result of these investments is

These seven requirements are significant transportation factors for most shippers. They are of course related and non-exclusive in that, for example, good information typically reduces cost. There are also situations where the transportation system must be built to meet the unique demands of the shipper. For example, there are companies in Silicon Valley that have a standard of two hours for parts replacement anywhere in the world. However, even in those high-performance parts distribution systems, service reliability, information and quality are critical dimensions of the transportation carriers' value-added.

#### PART 3: Impact of the UP/SP Merger

There are a number of benefits that may flow from a merger or consolidation.

A merger can give rise to synergies created by linking together two systems or organizations that, because of their individual strengths and characteristics, together are able to provide their services more efficiently and productively than either can accomplish individually. In addition, a merger may give rise to the ability to provide entirely new services that neither of the merging parties can offer by itself. In more familiar terms, the whole can be greater than the sum of the parts.

It is of course possible that some mergers or consolidations may not give rise to such benefits. However, in the case of the UP/SP merger, it is clear to me that UP and SP together will realize substantial synergies and advantages that will be of direct and compelling benefit to shippers. Based on the verified statement of Mr. Peterson, who describes these synergies and merger-related benefits in some detail, the testimony of other witnesses, and the

many shipper statements I have reviewed, I conclude that the merger will lead to important advantages for shippers and for the nation's transportation and logistics infrastructure.

The benefits of the merger can be categorized according to the shipper requirements that I have previously discussed. This section focuses on those factors, and in Table 10 I present a matrix that portrays the impact of the UP/SP merger on specific shipper requirements.

- 1. Service Reliability. As noted in the earlier discussion, service reliability is the single most significant transportation requirement for most shippers. And this merger will have important benefits in terms of added reliability of service, for the reasons Mr. Peterson, Mr. Ongerth and other witnesses address in great detail. The merged system will upgrade SP's line and terminal infrastructure, thereby addressing SP's longstanding problems of unreliable service, and will make large investments across both railroads' lines and facilities in order to handle traffic more efficiently and reliably. The merged system will have much greater capacity and flexibility to accommodate shippers' service needs, and to respond to maintenance work or other disruptions that can impair reliability. With a much broader network of single-line service, there will be major improvements in end-to-end service reliability because there will be fewer handoffs of freight between two different carriers. Better information systems will also improve the reliability of service.
- 2. Overall Transit Times. The verified statements of Messrs. King & Ongerth, and Mr. Peterson, paint a compelling picture of the vast improvements in transit times that will be achieved through the merger. These improvements are a natural outgrowth

of the fact that SP's routes will fill gaps in UP's route system, and vice versa, so that the merged system will be able to offer much more direct routings throughout the West.

Combining UP and SP lines will in effect add to total capacity, which will also lead to better transit times. And transit times will also be improved through the major investments in yards and terminal facilities that the merged system will make.

- 3. Reduced Costs. The merger will reduce transportation costs through improved efficiencies and lower overheads. There will be better utilization of equipment (including cars owned by shippers), as a result of new repositioning opportunities, faster transit times, and combined fleet management. Switching costs will be reduced. More generally, because the merged system will be far more efficient, there are obvious opportunities for lower transportation rates as UP/SP competes against rail and other modes for business.
- 4. Information Quality. SP today lags behind in terms of its information technology, while UP has been a leader in this important aspect of transportation logistics. The merger will lead to immediate benefits for SP shippers who will quickly realize significant improvements in the quality of information available to them for purposes of tracking their shipments and managing their inventories. Shippers who move freight via the new single-line network will not have to deal with two railroads with differing information systems to track their freight. A single railroad will have "information accountability" for the movement, to a much greater extent than we see today. Significant enhancements in SP's information technology will also lead to better internal information on asset deployment,

tracking of transportation assets, and monitoring of delivery cycles -- all of which will ultimately inure to the benefit of shippers in the form of more efficient and reliable transportation service.

- 5. Delivery Process. The proposed merger should have important benefits in terms of reducing damaged freight, both because of UP's more efficient claim- and damage-reduction methods and because of the reduction in transit times and interline exchanges of freight. The delivery process will also improve through reductions in paperwork and billing inaccuracies -- reflecting both improved information systems and the advantages of dealing with one railroad rather than two. And, perhaps most important, by allowing for far broader single-line service and the elimination of many interline movements, the merger will create significant benefits for shippers who can look to a single entity as being solely responsible for ensuring responsive, on-time delivery.
- 6. <u>Value-Added Services</u>. As Mr. Peterson explains, the UP/SP merger is a competitive reaction to the newly merged BN/Santa Fe system. Competition between these merged systems will predictably be intense. In particular, both systems intend to make large additional capital investments aimed at providing better service to shippers. Out of this will flow important new value-added services, such as new distribution and reload facilities, that will be a significant new benefit for many shippers and will create new opportunities for shippers in their end-markets. There will be significant new opportunities for triangulation of movements and other value-added services, where shippers can look increasingly to the UP/SP system as a transportation partner interconnecting a variety of origins and destinations.

7. Improved Market Reach. UP/SP will offer superior rail transportation to what either railroad provides today. Competition in many end-markets is heavily dependent on access to reliable, fast transportation, and shippers will be more competitive in a wider geographic area as a result of the merger.

In this section, I have thus far concentrated on the seven specific transportation-related considerations that underlie most shippers' logistics systems. I would add, though, that the UP/SP merger also advances the broader logistics considerations that I described in Part 1 of my statement. As I noted, supply chain management -- the synchronized management of the flow of goods and information -- is an essential consideration for most shippers. The merger will allow for dramatic improvements in the quality of rail transportation throughout the West -- both through the merger of UP and SP and through the related benefits that BN/Santa Fe will achieve through its settlement agreement with the merged system. A merger that makes this much improvement in rail service -- in the fundamentals of route structure, length of haul, transit time, service, and investment in new productive capacity -- is a compelling advance in terms of the overall logistics of shippers' supply chain management.

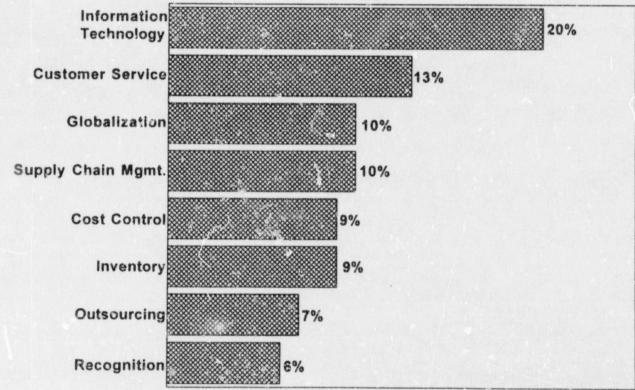
For much the same reason, this merger will significantly improve the ability to provide shippers with time-definite delivery by rail -- a second essential element of the logistics equation that shippers confront. The merger will also lead, almost inevitably, to improved "technology matching" and greater opportunities for shippers to rely on outsourcing partners for transportation requirements.

Finally, I noted in Part I the increasingly global nature of American industry.

Competition across most end-markets in this country is intensive. Transportation plays a crucial role in global competitiveness. Viewed in this context, the UP/SP merger is an historic opportunity to enhance industrial productivity and competition throughout a range of markets by achieving substantial upgrades in the quality and efficiency of rail service. This merger is important for shippers. Steps that can be taken to make major enhancements in the transportation infrastructure -- as this merger will -- significantly advance the interests of shippers and the economy as a whole.



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PERCENT OF RESPONSES

1995 Career Patterns in Logistics

Table 1

### Percentage of Freight Shipped on a Just-In-Time Basis [Chemicals and Plastics]

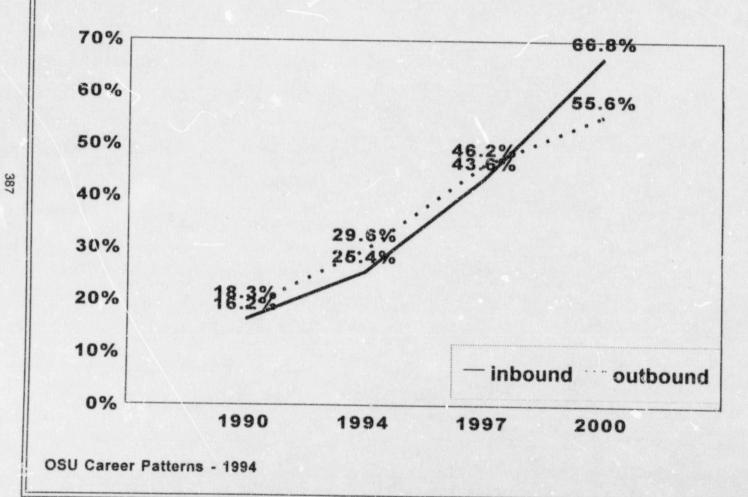


Table 2

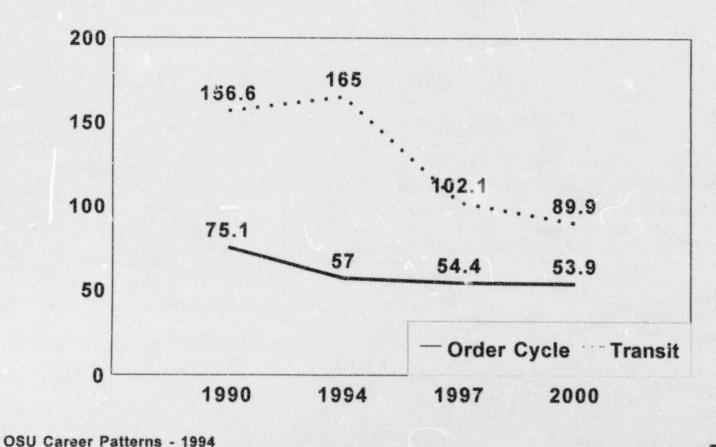
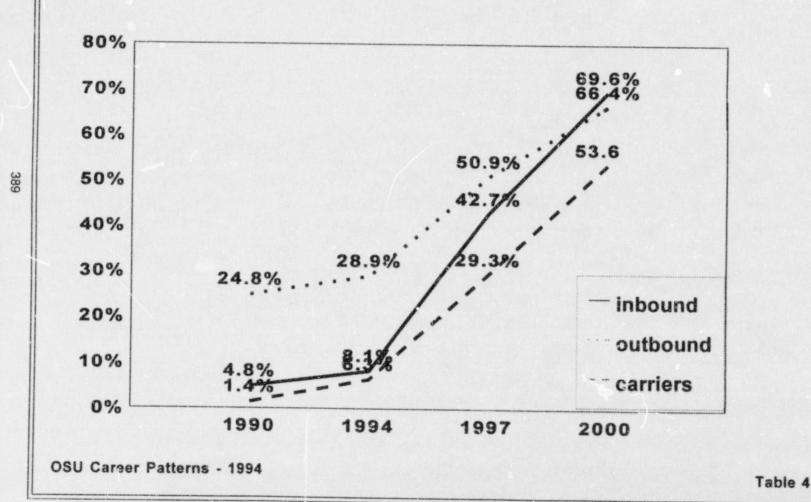


Table 3

### Percentage of Total Orders Transmitted Via EDI [Chemicals and Plastics]



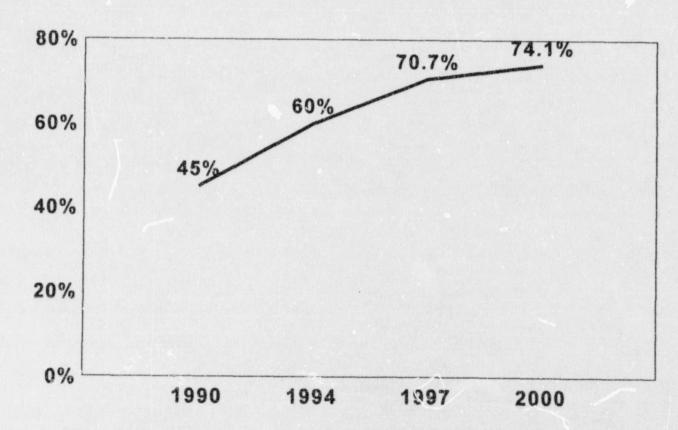


Table 5

OSU Career Patterns - 1994

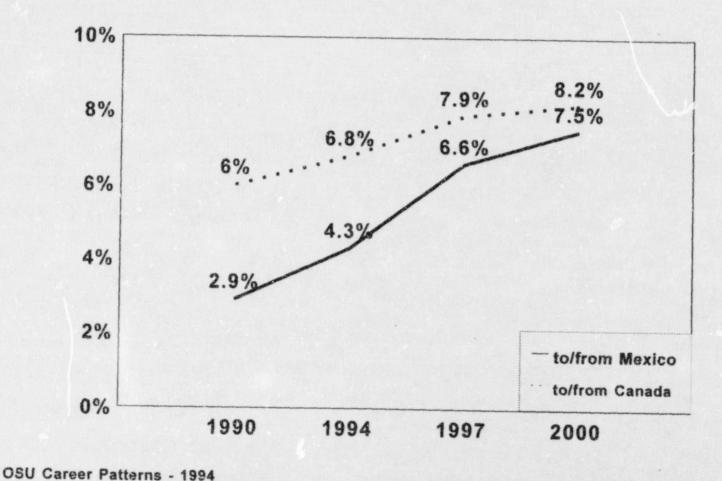
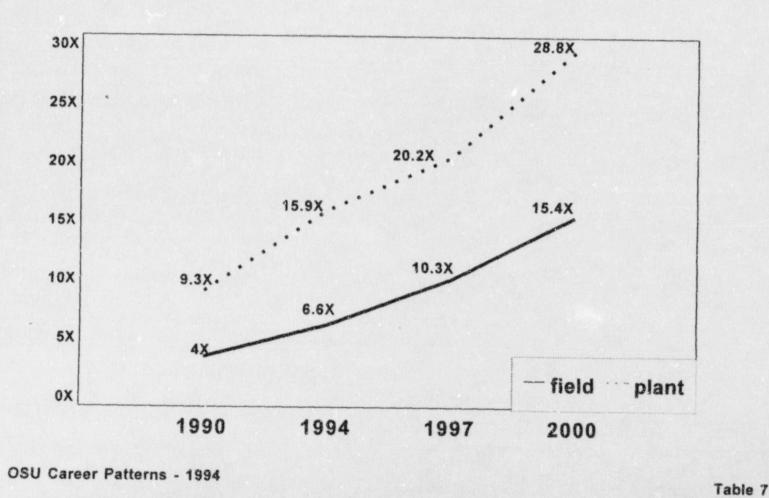


Table 6

391

# Annual Inventory Turnover at Warehouses/DCs [Chemicals and Plastics]



# Transportation Trends-Intermodal [Chemicals and Plastics]

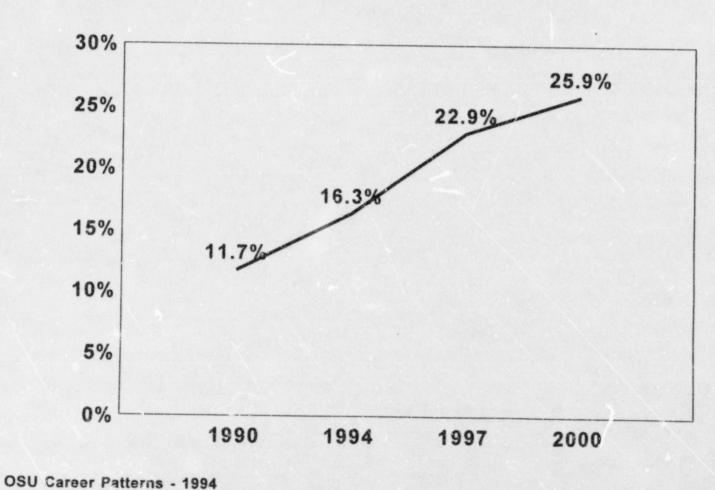
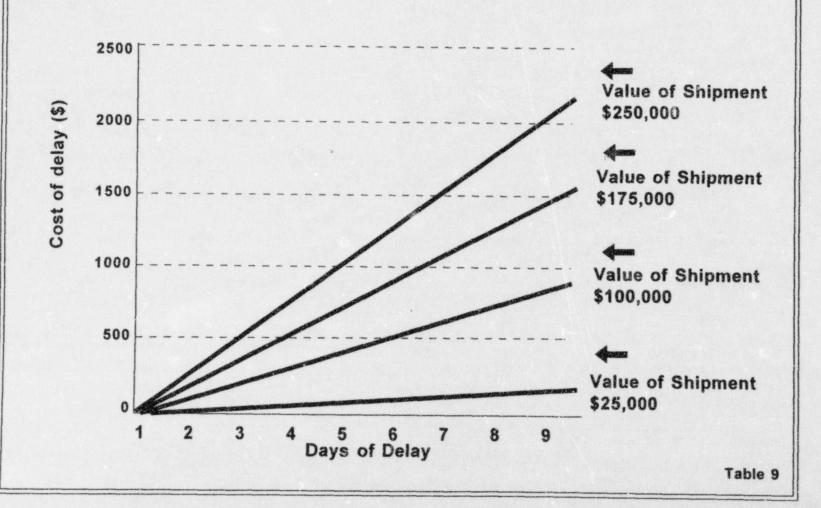


Table 8

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## THE COST OF UNANTICIPATED DELAY

(Assuming 36% Inventory Holding Cost)



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#### **VERIFICATION**

I, Bernard J. La Londe, verify under penalty of perjury that the foregoing statement is true and correct. Further, I certify that I am qualified and authorized to file this statement. Executed on November 20, 1995.

Bernard J. La Londe

Sworn to and signed before me this 20th day of November 1995.

Notary Public

CARLA CHAMBERS-LYNDE
NOTARY PUBLIC. STATE OF CHIO
MY COMMISSION EXPIRES JUNE 27, 1999

#### CURRICULUM VITAE

#### BERNARD J. LA LONDE

Professor Emeritus
Department of Marketing
Max M. Fisher College of Business
The Ohio State University

#### PERSONAL DATA:

Home Address: 8538 Pitlochry Court

Dublin, Ohio 43017 (614) 791-0800

Office Address: The Ohio State University

College of Business

Department of Marketing/Logistics

421D Hagerty Hall 1775 College Road Columbus, Ohio 43210

(614) 292-0331 FAX 292-0440

Marital Status: Married: Barbara

Three Children

Date - Place of Birth: June 3, 1933

Detroit, Michigan

#### EDUCATIONAL BACKGROUND:

University	Date	Degree
University of Notre Dame	1955	A.B. (Economics)
University of Detroit	1957	M.B.A.
Michigan State University	1961	Ph.D. Business
		Administration
		(Marketing)

#### **ACADEMIC POSITIONS:**

#### The Ohio State University:

Professor Emeritus	1995 to Presen
Raymond E. Mason Professor of Transportation and Logistics	1985 - 1995
Associate Dean, Graduate Programs and Continuing Education	1980 - 1983
James R. Riley Professor of Marketing and Logistics	1969 - 1984

#### Michigan State University:

Professor, Marketing & Coordinator of Food Marketing Program	1966 - 1969
Associate Professor, Marketing	1965 - 1966

#### University of Colorado:

Associate Professor,	Marketing	&	Coordinator,	Faculty	Research	1964 -	1965
Assistant Professor,						1961 -	

#### HONORS AND AWARDS:

- Arthur Andersen Award Recipient of Best Paper award at the Annual CLM Conference in Cincinnati, Ohio. La Londe, Bernard J. and Richard F. Powers: "Disintegration and Re-Integration: Logistics of the Twenty-First Century." *The International Journal of Logistics Management*, Vol 4 No 2, 1993, pp 1-12.
- Arthur Andersen Award Recipient of Best Paper awarded at the Annual CLM Conference in Washington DC. (Paper in IJPDLM). La Londe, Bernard J. and Arnold B. Maltz: "Some Propositions About Outsourcing The Logistics Function." *The International Journal of Logistics Management*, Vol 3, No 1, 1992, pp 1-11.
- Honorary Harry E. Salzberg Medallion for substantial contribution to education and research in the field of transportation from Syracuse University.

1976	Distinguished Service Award for outstanding achievement in physical distribution management from the National Council of Physical Distribution Management.
1974	Eccles Medal for outstanding contributions to logistics education by the Society of Logistics Engineers.
1973	Listed in the Outstanding Educators of America, Who's Who in America, American Men and Women of Science.
1967	Alpha Kappa Psi, Michigan State University.
1960-1961	General Electric and Michigan State University Fellowship for Doctoral Dissertation.
1961	Beta Gamma Sigma, Michigan State University.
1954-1955	Who's Who in American Universities and Colleges.
1951-1955	Ford Motor Company Scholarship.

#### ACADEMIC AND PROFESSIONAL AFFILIATIONS:

Founding Editor, JOURNAL OF BUSINESS LOGISTICS, 1978-1989

Past Member of the Board, National Center for Export-Import Studies, Georgetown University, Washington, D.C.

Served on the Advisory Group for the 2nd edition of Marketing Information: A Professional Reference Guide, 1987, published by Georgia State University College of Business Administration.

Appointed to the National Research Council's Transportation Research Board Committee on Freight Transportation Planning and Marketing, 1989-92.

Member - National Cooperative Highway Research Program Project Panel.
"Measuring The Impact of Changes in Freight Transportation Services and Infrastructure on Industry Productivity." National Research Council, Transportation Research Board - Appointed January 1991 to present.

Program Committee - The 6th World Conference on Transport Research - Lyon France June 29-July 3, 1992.

Honorary Program Chairman - Air Cargo Shippers Conference, "Air Cargo in Corporate Logistics Worldwide", September 17-19, 1991, Portland, OR.

Member - Air Force Institute of Technology Board of Visitors, Appointed 1991

General Accounting Office: Logistics Issues Advisory Committee, 1989 to present.

Member - Executive Committee, World Trade Association - Columbus Chamber of Commerce.

Program Committee Member for the "26th ISATA Conference." The "Dedicated Conference on Advanced Logistics and Communications in Road Freight Transport will be held in Aachen Germany, September 13-17, 1993.

Member: Executive Advisory Committee - North America Trade Point.

Member: Executive Committee - Inland Port Commission - Columbus.

Academic Associate Member: Intermodal Association of North America.

Council of Logistics Management - Member and Chairman, Research Committee, 1986-1992

Chairman, First Annual Ph.D. Consortium held in conjunction with CLM Annual Meeting. September 27-28, 1991, New Orleans, LA.

Past Member and Chairman, CLM Research Strategies Committee.

Past Member of the American Marketing Association Global Council.

Member: American Marketing Association, Council of Logistics Management

Past Member of American Management Association's Purchasing, Transportation and Physical Distribution Council

#### Editorial Review Board:

International Journal of Physical Distribution & Logistics Management.

The International Journal of Logistics Management.

Journal of Marketing Education.

Waterways and Transportation Review.

Marketing Management.

Logistique et Management.

Management Science.

Ad Hoc Reviewer: Journal of Business Logistics.

North American Editor: Transport Topics.

#### **Academic Activities:**

#### University

Professor La Londe has Chaired or been a member of a number of University Committees over the past several decades. This participation included the University Excellence Committee, the Promotion and Tenure Committee and currently includes membership on the CAST Committee and the Advisory Committee - Ameritech.

#### College and Departmental

Professor La londe has served as a Chair and/or member of nost of the Standing Committees of the College as well as a number of special Committee for the Marketing Department during the past several decades.

#### Doctoral Education

Professor La Londe had chaired over forty completed doctoral dissertations during his tenure at The Ohio State University. Nine of these dissertations have won the Council of Logistics Management Doctoral Dissertation Award (given to only one dissertation per year in a National competition). Three have won the National Association of Purchasing Management Doctoral Dissertation Scholarship Award.

#### PUBLICATIONS Bernard J. La Londe 1980 to Present

#### BOOKS

<u>Customer Service: A Management Perspective</u>, Bernard J. La Londe, Martha C. Cooper (with Thomas G. Noordeweir). Published by Council of Logistics Management, Oak Brook, IL 1988.

Partnerships in Providing Customer Service: A Third Party Perspective, Bernard J. La Londe, Martha C. Cooper. Published by Council of Logistics Management, Oak Brook, IL 1989.

Evolution, Status, and Future of the Corporate Transportation Function, Bernard J. La Londe and James M. Masters (with Arnold Maltz and Lisa Williams). Published by American Society of Transportation and Logistics, Inc. Lock Haven, PA 1991.

#### ARTICLES-MONOGRAPHS-REPORTS-WORKING PAPERS-VIDEOS

Supplement to the CLM Bibliography on Physical Distribution Management (with various Co-authors), (Oak Brook, IL: National Council of Physical Distribution Management: changed to Council of Logistics Management). 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994 and 1995.

"The Ohio State University Study of Career Patterns in Logistics," (with various Co-authors), CLM Annual Conference Proceedings, (Oak Brook, IL:Council of Logistics Management) 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994.

La Londe, Bernard J. and James M. Masters: "Organizational Trends and Career Paths in Distribution." Chapter 7 in Part 1 (Management Overview) of The Distribution Management Handbook. Editors: Tompkins & Harmelink - McGraw-Hill, Inc. 1994.

La Londe, Bernard J.: "Evolution of the Integrated Logistics Concept." Section I (Section Editor: Bernard J. La Londe), Chapter 1 in *The Logistics Handbook*, Editors: Robeson & Copacino - The Free Press, 1994.

Masters, James M. and Bernard J. La Londe: "The Role of New Information Technology in the Practice of Traffic Management." Section V, Chapter 22 in *The Logistics Handbook*, Editors: Robeson & Copacino - The Free Press, 1994.

Innis, Daniel and Bernard J. La Londe: "Modelling The Effects of Customer Service Performance on Purchasing Intentions in the Channel." *Journal of Marketing Theory and Practice*, Vol 2, No 2, Spring 1994, pp 45-60.

La Londe, Bernard J and Innis, Daniel E: "Customer Service: The Key to Customer Satisfaction, Customer Loyalty and Market Share." Journal of Business Logistics. Vol 15, No 1, 1994, pp 1-27.

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Terrance L. Pohlen and Bernard J. La Londe: "Implementing Activity-Based Costing (ABC) in Logistics." Journal of Business Logistics, Vol 15, No 2, 1994, pp 1-24.

La Londe, Bernard J. and James M. Masters: "Emerging Logistics Strategies: Blueprints for the Next Century." International Journal of Physical Distribution & Logistics Management, Vol 24, No 7, 1994, pp 35-47.

La Londe, Bud, Kee-Hian Tan and Mike Standing: "Forget Supply Chains, Think of Value Flows." *Transformation*, The International publication of Gemini Consulting, Summer 1994, No 3.

Wise, Dean H. and Bernard J. La Londe: "Future Trends in Transportation and Logistics." Conference Proceedings, Railroad Freight Transportation Research Needs. (Accepted for publication).

La Londe, Bernard J. (Advisor): "Books - Logistics/Physical Distribution Management." Marketing Information: A Professional Reference Guide, 3rd Edition. 1994.

La Londe, Bernard J.: "Distributing Inventory: More Speed, Less Cost." Chain Store Age Executive, The Keys to High Performance Retailing: A Management Horizons Special Report. January 1994, pp 18.

La Londe, Bernard J.: "Manufacturers Who Understand The Shifts In the Logistics Process Can Provide New Value To Their Customers and So <u>Give Both Sides A Competitive Edge</u>." The Staging Area, (Two-Part Conversation-in-Print) Vol 10, No 10, 1994.

La Londe, Bernard J.: "Flow-Through Distribution changes Warehousing and Transportation To Speed Delivery." *The Staging Area*, (Two-Part Conversation-in-Print) Vol 10, No 11, 1994.

La Londe, Bernard J. and Richard F. Powers: "The 21st Century Logisticians - Disintegration and Reintegration." PB Professional Broker, March/April 1994.

La Londe, Bernard J. and The Logistics Research Group: "Staying The Course." Distribution, November 1994, pp 54-58.

La Londe, Bernard J. and Robert V. Delaney: "Trends in Warehousing Costs, Management, and Strategy." Warehousing Education and Research Council. 1993 Research Study.

Video Interview: "Making A World of Difference." Roadway International, Columbus, OH March 31, 1993

Video Interview: "Status of the Trucking Industry." American Trucking Association, Columbus, OH, November 12, 1993.

Audio Visual Outlook Interview: "Future Logistics Trends." 1993 Annual Conference for the Institute of Logistics, NEC Birmingham, England May 26, 1993.

La Londe, Bernard J and Richard F. Powers: "21st Century Logistics Professionals." CLM Annual Conference Proceedings, Washington, DC, 1993, pp 9.

La Londe, Bernard J, John R. Grabner and James F. Robeson: "1970s: A Period of Development and Integration - Integrated Distribution Systems: A Management Perspective." (Reprinted in A Compendium of Research in Logistics Strategy) International Journal of Physical Distribution & Logistics Management, Vol 23, No 5, 1993, pp 4-12.

La Londe, Bernard J and Raymond E. Mason: "Some Thoughts on Logistics Policy and Strategies: Management Challenges for a the 1980s." (Reprinted in A Compendium of Research in Logistics Strategy) *International Journal of Physical Distribution & Logistics Management*, Vol 23, No 5, 1993, pp 39-45.

Interview: "How to Choose A Distributor," by Julie Candler. Nation's Business, August 1993.

Interview: "Distribution is Changing: How to Choose the Best Distributor ... Now." Boardroom Reports, November 1, 1993, pp 11-12.

La Londe, Bernard J. and Terrance L. Pohlen: "Truckers Need to Know About Activity-Based Costing." *Transport Topics*, October 4, 1993.

La Londe, Bernard J: "Evolution of the Integrated Logistics Concept" Chapter in *The Distribution Handbook*.

Masters, James M and La Londe, Bernard J: "The Role of New Information Technology in the Practice of Traffic Management." Chapter in *The Distribution Handbook* 

La Londe, Bernard J and Masters, James M: "Organizational Trends and Executive Career Paths in the Logistics Discipline." Chapter 7, pp 7.1-7.26, *The Logistics Handbook*. James A. Tompkins & Dale A. Harmelink, Editors. McGraw-Hill, Inc. 1994.

La Londe, Bernard J: "Global Logistics: A Management Perspective." 1993 Edition, Logistics Technology International. Gordon Brace: Editor, Sterling Publications Ltd., London, England. p 27.

La Londe, Bernard J and Maltz, Arnold B: "Some Propositions About Outsourcing The Logistics Function." The International Journal of Logistics Management, Vol 3, No 1, 1992.

La Londe, Bernard J: "The Gentle Art of Trade-Off." 1992 Edition, Logistics Technology International. Gordon Brace: Editor, Sterling Publications Ltd., London, England.

La Londe, Bernard J.: "Forces For Warehouse Productivity Gain." Ackerman Warehousing Forum, Vol 7, No 9, August 1992.

La Londe, Bernard J; Norek, Christopher and Shrager, Marvin: "Designing and Implementing an Exploratory Study of Shipper Awareness of Intermodal Options." College of Charleston Intermodal Transportation Program. 1992.

La Londe, Bernard J and Norek, Christopher: "The Intermodal decision Making Process Really Green Lawnmower Company." College of Charleston *Intermodal Transportation* Program. 1992

La Londe, Bernard J and Shrager, Marvin B: "The South Allegheny Railway." College of Charleston *Intermodal Transportation* Program. 1992

"Whatever Happened to One-Stop Transportation Shopping?" Bernard J. La Londe, Transportation Topics, September 30, 1991, page 13.

"Traffic Management: a Discipline in Transition." Bernard J. La Londe, James M. Masters, Arnold B. Maltz and Lisa R. Williams, *Transportation Journal*, Winter 1991, 31:(2)55-64.

"Update Logistics Skills for the Future," Transportation and Distribution Management, January, 1990, pp. 46-48.

"Logistics: Perspectives for the 1990s," (with James M. Masters), The International Journal of Logistics Management, Vol. 1, No. 1, 1990, pp. 1-6.

"The Role of Transportation in Supply Chain Management," (with David L. Anderson) in Proceedings of the 5th World Conference on Transport Research, Yokahama, Japan, 1989.

"The Competitive Edge: Evaluating the Changing Shipper-Carrier Relationship" (with Martha C. Cooper), *Transportation Executive Update* (Regular Common Carrier Conference), Vol. 3, No. 5, September/October, 1989, pp. 6-14.

"Logistics Careers: A View of the Future" (with James M. Masters) in Distribution, November, 1989, pp. 76-86.

"Retail Logistics: Current Issues and Future Perspectives," (with Lisa Ellram and Mary Margaret Weber), International Journal of Physical Distribution and Materials Management, Vol. 19, No. 12, 1989, pp. 29-39.

"Logistics Careers: A View of the Future," (with James M. Masters) in *Distribution*, November, 1988, pp. 36-44.

Contributed to "Physical Distribution" section of book entitled *Dictionary of Marketing Terms*, Peter D. Bennett (Editor), (Chicago, IL: American Marketing Association), 1988.

"Managing Logistics Change Through Innovative Technology," in Managing Logistics Change Through Innovative Information Technology, Results and proceedings of the 1986 Logistics Resource Forum, (Cleveland, OH: Leaseway Transportation Corporation, 1987), pp. 3-19.

Remarks on Panel concerning "Improving Competitiveness of U.S. Business Through its Own Efforts," in *Improving U.S. Competitiveness, Proceedings of a Conference held at the U.S. Department of Commerce*, September 22, 1987 (Washington, DC: U.S. Department of Commerce), pp. 104-110.

"Changing Career Patterns in Logistics," recorded for Transportation Digest, (Business to Business Communications Co., 345 N. Canal Street, Chicago, IL 60606). July 7, 1986

"Distribution Career Patterns," Distribution, Vol. 85, No. 110, November, 1986, pp. 32-48.

"Some Thoughts on Logistics Policy and Strategies: Management Challenges for the 1980s," *International Journal of Physical Distribution and Materials Management*, Vol. 15, No. 5, 1985, pp. 5-15.

"Electronic Purchase Order Interchange: Its Impact on the Purchasing Function," (with Margaret A. Emmelhainz), Journal of Purchasing and Materials Management, Vol. 21, No. 3, Fall, 1985, pp. 2-9.

"Careers: Where Do You Fit In?" (with Larry W. Emmelhainz), Distribution, November, 1985, pp. 32-38.

"Cost Reduction in Warehouse Management," in Warehousing Forum, (Columbus, OH: The Ackerman Company). Vol. 1, No. 1, December, 1985, pp. 1-3.

"Career Patterns of Food Executives--1984," (with Larry W. Emmelhainz), Grocery Distribution, March/April, 1985,pp. 17-20, 40.

"Transportation in the 21st Century," reprinted in Handling & Shipping Magazine - Presidential Issue, 1984-85, pp. 76-82.

"Some Explorations of the Manufacturing/Logistics Interface," (with Martha C. Cooper), College of Administrative Science Working Paper Series #84-99, December, 1984.

"Some Thoughts on Logistics Policy and Strategies: Management Challenges for the 1980s," College of Administrative Science Working Paper Series #84-100, December, 1984.

"Making Warehousing More Efficient," (with Kenneth B. Ackerman) reprinted in Harvard Business Review's Series on Manufacturing Management: Logistics, Materials, Inventory (Soldiers Field, MA: Harvard University, 1984), pp. 145-153.

"Let's Repair our Research, Review Systems," Marketing News, July 20, 1984, p. 2.

"This Year's Trail to the Top: Distribution Careers," (with Larry W. Emmelhainz), Distribution, November, 1984, pp. 57-67.

"An Analysis of Service Delivery in the Latin American Export Activities of U.S. Manufacturers," (with Michael R. Czinkota) in U.S. Latin American Trade Relations: Issues and Concerns, Michael R. Czinkota (ed.), (New York, NY: Praeger Publishing Company, 1983).

"A Reconfiguration of Logistics Systems in the 80s: Strategies and Challenges," Journal of Business Logistics, Vol. 4, No. 1, 1983, pp. 1-11.

"The Physical Distribution Manager and Strategic Planning," (with Michael A. McGinnis), Managerial Planning, March/April, 1983, pp. 39-42.

"Comments on 'Capital Productivity in Retailing' (by Louis P. Bucklin)," in *Productivity and Efficiency in Distribution Systems*, David A. Gautschi, Editor, (New York, NY: Elsevier Science Publishing Co, Inc., 1983).

"Strategic Planning and the Physical Distribution Manager," (with Michael A. McGinnis) in *Proceedings*, National Council of Physical Distribution Management Annual Meeting, New Orleans, LA, October 2-5, 1983 (Oak Brook, IL: NCPDM, 1983), pp. 790-799.

"Transportation in the 21st Century," in *Papers and Proceedings*, Eastern Transportation Law Seminar, October, 1983, (Washington, DC: Association of Transportation Practitioners).

"Logistics Reconfiguration and the Changing Role of Transportation" in Management in Road Transport, Proceedings of the XVIII International Road Transport Union Congress, (Geneva, Switzerland: International Road Transport Union, 1982).

"Integrated Logistics--Status Quo and Future Outlook," in *Integrated Logistics: Concepts-Aims-Experiences*, Proceedings of the International Conference on Integrated Logistics, Ruschlikon-Zurich, Switzerland, September 20-22, 1982.

"Distribution Careers 1982" (with Richard Brand) in Distribution, November, 1982, pp. 67-73.

"The Role of Physical Distribution in the Export Activity of U.S. Manufacturing Firms," with Michael R. Czinkota, *International Journal of Physical Distribution and Materials Management*, Vol. 11, No. 5/6, 1981, pp. 5-11.

"Strategic Distribution for the 1980s," with Michael A. McGinnis, Distribution, Vol. 80, No. 12, December, 1981, pp. 44-49.

"Making Warehousing More Productive," with Kenneth B. Ackerman, Harvard Business Review, March-April, 1980, pp. 94-102.

Bernard J. La Londe Professor Emeritus College of Business The Ohio State University July 1, 1980 to 1995

#### SPEECHES AND PRESENTATIONS

Spoke at seminar entitled "Planning Integrated Logistics Systems: Challenges for the 80s" at University of Texas, Austin, TX. March 29-30,1981.

Served as Discussant on paper by Louis P. Bucklin entitled "Capital Productivity in Retailing," at Conference on Productivity in Distribution sponsored by Cornell University, Ithaca, New York. October 16-17, 1981.

Made presentation on "Reconfiguration of Logistics Systems: Strategies and Challenges" at The Visiting Scholar Program, Virginia Polytechnic & State University, Blacksburg, Virginia. May 17, 1982.

Presentations at seminar on Physical Distribution Management at Northwestern University, Advanced Transportation Management Executive Program, Evanston, Illinois. June 1981 and 1982.

Presentation at annual Physical Distribution Management Seminar at Michigan State University, East Lansing, Michigan. June 1981 and 1982.

Chaired entire day's sessions at Logistics/Distribution Meeting at the Transportation Center, Northwestern University, Evanston, Illinois. March 1981, 1982, and 1983.

Chaired panel discussion at the Annual Salzberg Memorial Program sponsored by the Franklin Program, Syracuse University, Syracuse, New York. May 6-7, 1983.

Presented "Logistics Management Organization & Administration" and "Logistics Management Perspective for the Future" at Logistics Management Executive Development Seminar, Michigan State University, East Lansing, Michigan, September 16, 1983.

Presented sessions on "Corporate Overview of Logistics," "Planning Elements of the Logistics System," "Customer Service Meaning and Measurement," and "Organizing and Implementing Logistics Systems" at the Advanced Transportation Management Program, Northwestern University, Evanston, Illinois, May 18, 1984.

Presented "Logistics Management Organization and Administration" and "Reconfiguration of Logistics Systems" at Logistics Management Executive Development Seminar, Michigan State University, East Lansing, Michigan, September 14, 1984.

Presented "Logistics Management Organization and Administration" and "Reconfiguration of Logistics Systems" at Logistics Management Executive Development Seminar, Michigan State University, East Lansing, Michigan, September 20, 1985.

Made presentation and led case discussion on "Future Direction of Logistics Management" at the Physical Distribution Management Seminar, Northwestern University, Evanston, Illinois, February 27-28, 1986.

Spoke on "New Dimensions in Transportation Decision Making" at a Graduate Symposium, the Transportation Center, Northwestern University, Evanston, Illinois, February 28, 1986.

Served as panel speaker at the 35th Anniversary of the Salzberg Program at Syracuse University, April 3, 1986, Syracuse, New York.

Presented sessions at the Advanced Transportation Management Seminar at the Transportation Center of Northwestern University, Evanston, Illinois. May 9-10, 1986.

Presented "The Logistics/Marketing Strategy Interface" at the 1986 American Marketing Association Faculty Consortium, July 16, 1986. University of Tennessee. Knoxville, Tennessee.

Served as Senior Faculty for Transportation Certification Programs sponsored by the U.S. Department of Energy and conducted in association with Battolle Memorial Institute. Two sessions in August, 1986. Dartmouth College, Dartmouth, New Hampshire.

Presented "Logistics Management: Organization & Administration" and "Reconfiguration of Logistics Systems" at the Logistics Management Executive Development Seminar, Michigan State University, East Lansing, Michigan. September 19, 1986.

Presented "The Role of Customer Service in Strategic Planning" at the University of South Florida seminar, Tampa, Florida. March 6, 1987.

Presented the keynote address, "Logistics Strategy Planning for the 1990s," to the New England Roundtable of the Council of Logistics Management annual educational seminar, Logistics and the Corporate Strategy, March 17, 1987. Bentley College, Waltham, Massachusetts.

Presented "The Changing Role of Logistics in the 1990s" at the 28th Annual Southeast Transportation & Distribution Forum at the Sheraton Capstone Inn, sponsored by the University of Alabama, Tuscaloosa, Alabama. May 6, 1987.

Presented session on "Future Directions in Transportation and Logistics" at the Advanced Transportation Management seminar, Northwestern University, Evanston, Illinois. May 14, 1987.

Presented "Logistics Management: Organization and Administration" and "Reconfiguration of Logistics Systems" at the 1987 Logistics Management Executive Development Seminar held at Michigan State University, East Lansing, Michigan. September 25. 1987.

Presented "Logistics and Transportation Perspective for the 21st Century" at the Transportation Profit Strategy seminar at Northwestern University, Evanston, IL. October 15, 1987.

Presented "Customer Service, Warehousing, and the Strategic Role of Logistics" at the 5th Annual Executive Seminar on Integrated Logistics and its Impact on Warehousing, sponsored by the Warehousing Education and Research Council, Marcum Conference Center, Miami University, Oxford, Ohio. November 3, 1987.

Presented "Logistics: Perspectives for the 21st Century" at seminar on Logistics/Distribution Management, Northwestern University, Evanston, Illinois. March 4, 1988.

Spoke on "Logistics and Transportation--Perspectives for the 1990s" at meeting of the University of Nevada-Reno Industry Support Group for Business Logistics Programs. Reno, Nevada. March 22, 1988.

Presented "Logistics Management: Organization and Administration" and "Reconfiguration of Logistics Systems" at the 1987 Logistics Management Executive Development Seminar held at Michigan State University, East Lansing, Michigan. September 16, 1988.

Presented "Profits in the Year 2000" at the Transportation Profit Strategy seminar sponsored by the Transportation Center at Northwestern University. Evanston, Illinois. October 21, 1988.

Organized and Hosted Columbus Young Presidents' Organization Meeting, Fawcett Center for Tomorrow. February 6-7, 1981.

Organized and Hosted Strategic Distribution Planning Seminar, Fawcett Center for Tomorrow, The Ohio State University. February 10-12, 1981.

Presented session on "Developing the Business Plan" to seminar sponsored by the National Office Products Association. Columbus, Ohio. June 25, 1982.

Presentation (with Dr. Martha C. Cooper and Dr. Wesley Johnston) on "Logistics of Industrial Distribution" at American Marketing Association Consortium, Columbus, Ohio. July 7, 1982.

Presentation to management group at Distribution Centers Incorporated, Columbus, Ohio on Physical Distribution Management. July 23, 1982.

Made presentation to session of Distribution Education Seminar, Columbus, Ohio. September 1, 1982.

Spoke on "The Role of the Academic Consultant" at luncheon meeting of the Downtown Rotary Club, Columbus, Ohio. January 31, 1983.

Presented "The Role of Warehousing in Physical Distribution Management" at seminar entitled Improving Warehouse Supervision, sponsored by The Ackerman Company, Columbus, Ohio, February 2, 1984.

Made presentation entitled "Productivity in Distribution" to Executive Seminar sponsored by Formica Corporation, Fawcett Center for Tomorrow. May 23, 1984.

Presented "Preparing a Business Plan" to the National Office Products Association Dealer Management Institute at the Fawcett Center for Tomorrow. June 22, 1984.

Presented "Developing the Customer Service Plan" and "Managing Change & Implementation" at seminar entitled Marketing Intangibles: Delivering More than Meets the Eye, sponsored by Mercatus, Inc. Columbus, Ohio, October 9, 1985.

Luncheon speech on "Transportation Past and Future Under Deregulation" to the Columbus Transportation Club, April 7, 1986. Columbus, Ohio.

Presented sessions on "Customer Service" to executive seminar for Retail Florists Association, Fawcett Center for Tomorrow, The Ohio State University. August 20-21, 1986.

Spoke on "Management of Supply Chains" to joint meeting of Columbus, Ohio, Chapter of the American Production and Inventory Control Society, AIIE, CLM, and Delta Nu Alpha, December 9, 1986. Columbus, Ohio.

Interviewed with Robert Burns of Worldwide Shipping as part of the Columbus Chamber of Commerce's Media Visitation Program, Columbus, Ohio. October 12, 1987.

Spoke on logistics management and customer service to a Logistics Management Study Team from Japan sponsored by the Japan Physical Distribution Management Association. Columbus, OH. March 17, 1988.

Presented "Distribution Productivity--A Key to Profitability" at Exploratory Conference on Farm Machinery Distribution Systems for the 21st Century sponsored by the Ohio State Department of Agricultural Engineering, Columbus, Ohio. March 28, 1988.

Presented "Achieving High Levels of Customer Service" at the 1988 Wholesale Florists & FSA Management Institute, Fawcett Center for Tomorrow. Columbus, Ohio. August 25, 1988.

Met with members of the General Management Review Team for the General Services Administration, U.S. General Accounting Office, Columbus, Ohio. August 30-31, 1988.

Spoke on Physical Distribution Management in several session of the College of Administrative Science Executive Development Program, Fawcett Center for Tomorrow, The Ohio State University. August 21 and 25, 1980.

Presented "A Reconfiguration of Logistics Systems in the 80s: Strategies and Challenges" at Riley Symposium (co-sponsored by College of Administrative Science Continuing Education and Central Ohio NCPDM Roundtable). Columbus, Ohio. May 6, 1982.

Conducted week-long seminar in Physical Distribution Management for managers of KLM Royal Dutch Airlines-Cargo Marketing Services, Columbus, Ohio. January 31-February 4, 1983.

Presented sessions entitled "Reconfiguration of Logistics Systems: Strategies & Challenges" and "Customer Service: Meaning and Measurement" at the College of Administrative Science Executive Development Program, Fawcett Center for Tomorrow, The Ohio State University. August 23, 1983.

Presented "A Research Perspective: Future Directions in Warehousing" at The First Annual Seminar for Senior Executives sponsored by the Warehousing Education and Research Council at Fawcett Center for Tomorrow, The Ohio State University. September 20, 1983

Served as Faculty Coordinator and presented session entitled "The Role of the Public Warehouseman in Physical Distribution Operations" at Choosing and Using a Public Warehouse Seminar, Fawcett Center For Tomorrow. January 22-24, 1984.

Led panel discussion at the Second Annual W. Arthur Cullman Symposium, "Global Productivity: Roles for Executives and Educators," The Ohio State University, Columbus, Ohio, April 27, 1984.

Presented sessions entitled "Reconfiguration of Logistics Systems: Strategies & Challenges" and "Customer Service: Meaning and Measurement" at the College of Administrative Science Executive Development Program, Fawcett Center for Tomorrow. The Ohio State University. August 21, 1984.

Presented "The Role of the Public Warehouseman in Physical Distribution Operations," at Choosing and Using a Public Warehouse Seminar, Columbus, Ohio. October 15, 1984.

Presented "Marketing Logistics" at the College of Administrative Science Executive Development Program, Fawcett Center for Tomorrow. The Ohio State University. August 20, 1985.

Presented "Marketing Logistics" and "Quality of Service" at American Telephone and Telegraph Seminar, March 7, 1986, Columbus, Ohio.

Presented "Logistics Strategy" and "Customer Service and Inventory Management" at Steel Service Center Institute Continuing Education Program, June 24, 1986. Columbus, Ohio.

Organized seminar on Choosing and Using a Public Warehouse, and presented "The Role of the Public Warehouseman in Physical Distribution Operations," Fawcett Center for Tomorrow, Columbus, Ohio. March 1-3, 1987.

Presented "Some Emerging Principles of Logistics" at the Executive Development Program, The Ohio State University, Columbus, Ohio. July 29, 1987.

Organized seminar on Choosing and Uring a Public Warehouse, and presented "The Role of the Public Warehouseman in Physical Distribution Operations, "Columbus, Ohio. November 8-10, 1987.

Presented "Logistics: Perspectives for the 21st Century" at The Ohio State University, College of Business, Executive Development Program. Columbus, Ohio. August 2, 1988.

Made presentation at IBM Physical Distribution for Manufacturing Industry Executives meeting, Poughkeepsie, New York. September 30, 1980.

Organized and Chaired Tenth Annual Transportation and Logistics Educators Conference, Atlanta, Georgia. October 12, 1980.

Presented "Career Patterns 1980" and served as Tract Chairman for "Strategic Planning" at Annual Meeting of the National Council of Physical Distribution Management, Atlanta, Georgia. October 13-15, 1980.

Served as member of John Drury Sheahan (Distinguished Service) Award Committee for National Council of Physical Distribution Management. Summer, 1980.

Made presentations to the New York City Roundtable and the Philadelphia Roundtable of National Council of Physical Distribution Management. November 12, 1980.

Presented session on Physical Distribution Management at General Electric Company's Manufactured Housing Symposium, Phoenix, Arizona. February 16, 1981.

Spoke at Academy of Marketing Science Conference, "The 1980s: A Decade of Marketing Challenge," Miami Beach, Florida. May 1, 1981.

Made presentation at American Marketing Association Workshop entitled "Logistics and Marketing Management: Improved Coordination for Productivity and Profitability," Point Clear, Alabama. May 5-7, 1981.

Spoke on "Reconfiguration of Logistics Systems" in the A. T. Kearney Lecture series in England and Scotland sponsored by the Centre for Physical Distribution Management (London). April 26-May 3, 1982.

Made presentation on "New Dimensions in Logistics Management" at annual meeting of the American Production & Inventory Control Society, Boston, Massachusetts. May 11, 1982.

Spoke on "Reconfiguration of Logistics Systems" at annual meeting of the Warehousing Education & Research Council, Kansas City, Missouri. May 12, 1982.

Made presentation on "Logistics Reconfiguration and the Changing Role of Transportation" at the International Road Transport Union Congress, Montreal, Canada. May 22, 1982.

Participated in the Symposium for Shipping Management Degree Program to assist the Maine Maritime Academy in their plans for establishing a degree program. July 18-20, 1982.

Attended American Marketing Association Meeting in Chicago, Illinois. August 3-4, 1982.

Presented Keynote Address, "Integrated Logistics--Status Quo and Future Outlook," at International Conference on Integrated Logistics sponsored by the Gottlieb Duttweiler-Institute for Economic and Social Studies, Zurich, Switzerland. September 20-22, 1982.

Presented "Career Patterns--1982" at National Council of Physical Distribution Management Annual Meeting, San Francisco, California. October 11-13, 1982.

Spoke to management group on Physical Distribution Management in the Food Industry at IBM Corporation, Dallas, Texas. March 22, 1983.

Presentation entitled "Organizing for Effective Distribution" to Canadian Association of Physical Distribution Management, 1983 Spring Seminar, Toronto, Canada. April 19, 1983.

Spoke on "Transportation in the 21st Century" at the Thirteenth Annual Association of Interstate Commerce Commission Practitioners Eastern Transportation Law Seminar, Arlington, Virginia. October 24, 1983.

Presented session entitled "Emerging Distribution Patterns, Shipper Perspectives and Service Needs" at IU Transportation Services Management Conference, Phoenix, Arizona. January 21, 1984.

Served as the Keynote Speaker on "Corporate Profit Model" at the 3rd National Physical Distribution Management Conference, Australian Institute of Management, Melboune, Australia. February 13, 1984.

Addressed the New South Wales Division of the Australian Physical Distribution Management Association on "Defining the Corporate Role of Customer Service," in Sydney, Australia. February 21, 1984.

Attended Board meeting of the National Center for Export-Import Studies, Georgetown University, Washington, D.C. August 2, 1984.

Spoke on "Planning for Change" to meeting of the Drug and Toilet Preparation Traffic Conference, Longboat Key, Florida. October 10, 1984.

Addressed the 1984 Annual Conference on Industrial Traffic of the American Petroleum Institute on "The New Role of Transportation Managers," Boston, Massachusetts. October 11, 1984

Presented "Logistics: The 'Boundary Spanning' Function" to the Westchester County/Lower Connecticut Roundtable of the National Council of Physical Distribution Management, Stamford, Connecticut. October 11, 1984.

Presented "Distribution Past, Distribution Present, Distribution Future: The Evolving Role of the Distribution Manager" at meeting of the New England Roundtable of the National Council of Physical Distribution Management, Cambridge, Massachusetts. December 18, 1984.

Presented "Foodservice Customer Profitability" at 1985 Annual Convention of the International Foodservice Distributors Association of the National-American Wholesale Grocers' Association, Chicago, Illinois. March 19, 1985.

Participated in the winter session of the Purchasing, Transportation & Physical Distribution Council of the American Management Association, San Diego, California. March 21-22, 1985.

Presented "The Public Warehousing Industry: A Decade of Progress--1975/1985" at the 94th Annual Meeting of the American Warehousemen's Association, Hilton Head Island. April 24, 1985.

Presented Keynote address, "Distribution Issues of the '80s" at seminar sponsored by the Atlanta Roundtable of the National Council of Physical Distribution Management, Atlanta, Georgia. May 13, 1985.

Served as Senior Faculty for Transportation Certification Programs sponsored by the U.S. Department of Energy and conducted in association with Battelle Memorial Institute. Dartmouth College, Dartmouth, New Hampshire, June and July, 1985.

Participated in the summer session of the Purchasing, Transportation & Physical Distribution Council of the American Management Association, Hamilton, New York. August 8-9, 1985.

Presented Keynote Address on "Logistics Policy and Strategy Challenges for the 1990's" at the NCPDM Senior Executive Workshop, Chicago, Illinois. September 10, 1985.

Presented "Future Trends in Distribution Technologies" as the Featured Speaker at the 1985 Operations Seminar of the National Wholesale Druggists' Association in Milwaukee, Wisconsin. September 30, 1985.

Presented "Career Patterns in Distribution: 1985" and "Planning for Change in the External Logistics Environment" at the 23rd Annual Conference of the National Council of Physical Distribution Management, St. Louis, Missouri. October 27-30.

Presented "The Role of Quality of Service in Marketing Transportation" to the 1985 Planning Conference of the National Tank Truck Carriers, Inc. Westin O'Hare Hotel, Chicago, Illinois. December 3, 1985.

Presented "Some Thoughts on Logistics Policy and Strategies" to Delta Nu Alpha Transportation Fraternity, February 18, 1986. Dayton, Ohio.

Participated in the spring meeting of the American Management Association's Purchasing, Transportation and Physical Distribution Council, March 13-14, 1986, Tucson, Arizona.

Presented "Challenges Facing the Logistics Manager" at the Indianapolis Roundtable of the Council of Logistics Management, March 25, 1986, Indianapolis, Indiana.

Presented session on "Quality of Service" to the Annual Conference of the National Tank Truck Carriers, inc., May 7, 1986. San Francisco, California.

Served on panel discussion of "Customer Responsive Distribution" at the 2nd Annual Sales and Marketing Conference & Expo presented by The American Management Association with the cooperation of Sales and Marketing Management Magazine, June 17, 1986. Chicago, Illinois.

Participated in the Summer Session of the Purchasing, Transportation and Physical Distribution Council of the American Management Association, July 27-29, 1986. Hamilton, New York.

Presented "Managing Logistics Change Through Innovative Information Technology" and moderated 1986 Logistics Resource Forum, co-sponsored with Logistics Resource, Inc. August 10-12, 1986. Granville, Ohio.

Presented "Measuring Quality of Service in Logistics Systems" to a meeting of the St. Louis Roundtable of the Council of Logistics Management, September 17, 1986. St. Louis, Missouri.

Chaired the 1986 Transportation and Logistics Educators Conference in conjunction with the Council of Logistics Management Annual Conference, October 5, 1986. Anaheim, California.

Presented "Logistics Career Patterns: Retrospect and Prospect," "Strategic Logistics Planning," and "Managing Logistics Change Through Innovative Information Technology" at the 1986 Council of Logistics Management Annual Conference. October 7, 1986. Anaheim, California.

Served as Program Chair and presented "The Planning Process: An Approach to the Management of Change" at Conference of the National Tank Truck Carriers Association on The Management of Change in the Tank Truck Carrier Industry, November 19-20, 1986. Chicago, Illinois.

Presented "Managing Logistics Change Through Innovative Information Technology," at Cleveland Roundtable of the Council of Logistics Management, January 15, 1987. Cleveland, Ohio.

Attended the Winter Session of the American Marketing Association's Purchasing, Transportation, and Physical Distribution Council, February 9-10, 1987. Naples, Florida.

Presented "The Future Direction of Logistics" and conducted case discussion at the 1987 Logistics/Distribution Management Seminar, Northwestern University, February 27, 1987. Evanston, Illinois.

Presented Keynote Address entitled "Customer Service Needs in Today's Environment" to Burlington Northern Railroad's Senior Staff Conference, March 9, 1987. Tucson, Arizona.

Presented "The Impact of Today's Technologies on Food and Grocery Distribution Systems" at the Second Annual Grocery Manufacturers Association Information Systems Committee Conference with Distributors, April 9, 1987. Williamsburg, Virginia.

Presented "New Dimensions in Logistics Management" and "Customer Service: Meaning and Measurement" at Seminar on Customer Service & Physical Distribution sponsored by the Canadian Industrial Traffic League. April 13, 1987, Montreal; April 14, 1987 Toronto, Canada.

Presented "Supply Chain Management and the Logistics Process" at meeting of the Pittsburgh Roundtable of the Council of Logistics Management. Pittsburgh, Pennsylvania. April 22, 1987.

Presented "The future Direction of Customer Service in Industrial Companies" at Chemicals Customer Service Meeting sponsored by the International Customer Service Association. Whippany, New Jersey, May 21, 1987.

Served on panel discussion entitled "Improving Competitiveness of U.S. Business Through Its Own Efforts" at International Trade Administration Conference on Improving U.S. Competitiveness sponsored by the U.S. Department of Commerce. Washington, D. C. September 22, 1987.

Presented "Career Patterns in Logistics--1987," "Customer Service: Making It Happen," and participated in tract sessions on "Customer Service: Strategies & Management" at the 1987 Annual Conference of the Council of Logistics Management. Atlanta, Georgia. September 27-30, 1987.

Presented "A Profile of Carrier/Customer Attitudes" at the 1987 Planning Conference of the National Tank Truck Carriers Association. Chicago, Illinois. October 6, 1987.

Presented speech on Logistics Management Involvement in Corporate Decisionmaking at seminar on "Surviving the Corporate Shakeouts and Improving the Traffic Manager's Contribution to Corporate Profits" sponsored by the National Industrial Transportation League, Chicago, Illinois, February 16, 1988.

Presented Keynote Address, "Information Partnerships and Customer Service: Technology's Role in Achieving Excellence in Customer Service" at seminar on EDI: Information Partnerships & Competitive Advantage sponsored by Phillips Publishing, Inc. and Temple, Barker, & Sloane, Inc., Washington, D.C., March 8, 1988.

Participated as part of a General Management Review Team for the General Services Administration, U.S. General Accounting Office. Washington, D.C., March 11, 1988.

Participated in panel discussion on "Logistics Excellence: Are You on the Leading Edge?" at the National Retail Merchants Association Annual Financial Executives Conference, New Orleans, Louisiana. June 15, 1988.

Attended Summer Session of the American Management Association's Purchasing, Transportation and Physical Distribution Council, The AMA Grove, Hamilton, New York. July 13-15, 1988.

Presented sessions on "Customer Service in an Electronic Age" and "Partnerships in Customer Service: A Third Party Perspective" at the 1988 Council of Logistics Management Annual Meeting. Boston, Massachusetts. October 10-12, 1988.

Presented Keynote Address, "Technology's Role in Achieving Customer Service Excellence" at seminar on EDI: Information Partnerships & Competitive Advantage II, sponsored by Phillips Publishing, Inc. and Temple, Barker, & Sloane, Inc., San Francisco, California, November 1, 1988.

Presentation: "The Role of Logistics in Time Based Competition." Council of Logistics Management Pittsburgh Roundtable. Pittsburgh, PA, January 9, 1992.

Presentation: "Strike One! You're Out!!" Council of Logistics Management Cincinnati Roundtable. Cincinnati, OH, January 16, 1992.

Session Leader: "The Role of the Public/Contract Warehouseman in Physical Distribution Operations." Choosing and Using a Public/Contract Warehouse Seminar. The Ohio State University - Executive Education Program. Columbus, Ohio, January 19-21, 1992

Presentation: "Logistics: Definition, Evolution and Options." Yonsei University Overseas Management Program. The Ohio State University, Columbus, OH, January 21, 1992.

Presentation: "The Changing Role of the Logistics Professional." The Traffic Club of Chicago's Transportation Logistics Seminar. Chicago, IL, February 3, 1992.

Presentation: "Managing Logistics Change in the 1990s," at the Advanced Transportation Management Session, Logistics/Distribution Management Seminar, Northwestern University, Evanston, IL February 24, 1992.

Presentation, "The Challenge of Change: The Public Warehouse Industry of the 1990s." 101st Annual American Warehousemen's Association Meeting, Orlando, FL March 6, 1992.

Presentation: "New Perspectives in Shipper-Carrier Relationships." Second Annual Mason Symposium, The Ohio State University, Columbus, Ohio March 12, 1992.

Presentation: "Managing Logistics Change in the 1990s." University of North Florida, Jacksonville, FL March 13, 1992.

Presentation: To Students and Faculty at Penn State University "Logistics as a Source of Competitive Advantage." University Park, PA April 2, 1992.

Presentation: To Faculty and Graduate Students at Penn State University "Directions for Logistics Research in the 1990s: Logistics in an Electronic Age." April 3, 1992.

Keynote Speaker: "Managing Logistics Change in the 1990s" Second Annual Western Logistics Conference. Reno, NV April 6, 1992.

Presentation: "Managing Logistics Change in the 90's." CLM Columbus Roundtable, Dublin, OH April 9, 1992.

Presentation: "Managing Logistics Change in the 1990s." University of Tennessee, Knoxville, TN May 1, 1992

Keynote Speaker: Third annual DNA National Transportation Week Breakfast, "Transportation Challenges for the 90s - An Educator's Perspective" Columbus, OH, May 11, 1992.

Presentation: "Ferspective on Third Party Logistics." Advanced Transportation Management Program, Northwestern University, Evanston, IL. May 12, 1992

Presentation: "Some Principles of Logistics" and "Logistics Management: Perspectives for the 1990s," Michigan State University Executive Logistics Program. East Lansing, MI. May 15, 1992.

Presentation: "Managing Logistics Change in the 1990s." CSX Intermodal Unit Management Meeting. The Greenbrier, Greenbrier, WV May 18, 1992.

Presentation: "Logistics Management: Perspectives for the 1990s." Michigan State University Executive Logistics Program with Johnson & Johnson. East Lansing, MI. May 22, 1992.

Presentation: "Carrier Quality Assurance, Customer Relations, and The Use of Information Techniques." The World Bank Intermodal Symposium May 26-28, 1992.

Presentation: "Five Propositions About Managing Logistics Change in the 1990s." Federal Express Board of Directors. Memphis TN, May 31, 1992.

Presentation: "Managing Logistics Change in the 1990s." Annual meeting, Canadian Association of Logistics Management. York University, Waterloo Canada, June 8, 1992.

Presentation: "How Logisticians Can Improve Their Opportunities for Professional Advancement." New York CLM Roundtable. New York, NY June 22, 1992.

Presentation: "Logistics: Definition, Evolution and Options." OSU Advanced Management Development Program for Korean Executives: Issues for Gaining Competitive Advantage. Columbus, Ohio, July 20, 1992.

Presentation at OSU Executive Development Program for Dutch Trade Mission, Columbus, OH July 31, 1992.

Presentation: "Time Based Competition" Heartland CLM Roundtable, Overland Park, KS September 14, 1992.

Presentation: "Global Logistics" Foundations of International Trade: Import/Export Operations (Evening Class Series) The Columbus Chamber of Commerce and World Trade Association, Columbus, Ohio, September 16, 1992.

Presentation (with Arnold Maltz): "The Relative Importance of Quality and Cost in the Make-or-Buy Decision for an Industrial Service." at Frontiers in Services Marketing Conference, Vanderbilt University, Nashville, TN September 25, 1992.

Presentation: "Foundations of International Trade: Import/Export Operations." "International Logistics - Workshop." Tenth Ohio International Trade Conference, Columbus, OH October 5, 1992.

Presentation: "Career Patterns in Logistics: Profile 1992." (with James M. Masters) CLM Annual Conference, San Antonio, TX October 13, 1992.

Presentation: "Implementing Supply Chain Management with a Customer Driven Focus." 1992 Educational Program, Health & Personal Care Distribution Conference, Inc. Longboat Key, FL October 22, 1992.

Presentation: "Managing Logistics Change in the 1990s." World Class Logistics, Johnson & Johnson Seminar. Michigan State University, East Lansing, MI November 6, 1992.

Presentation: "Quick Response in a Global Economy." The Strategic Manufacturing Enterprise: Re-creating Competitive Advantage Conference. University of Dayton, Dayton, OH November 10, 1992.

Moderator: Distribution Issues Forum IX. Exel Logistics, Inc. Orlando FL, February 19-21, 1992

Moderator: DEC/CCA Meeting, Naples, FL February 27-28, 1992.

Video Tape Interview: BOSE Just-In-Time with Chuck Chubbuck & Associates. Columbus, OH March 30, 1992

Co-Director: CLM Doctoral Consortium, San Antonio, TX October 9-10, 1992.

Panelist: "Panel on the Future of Logistics Education." CLM Transportation and Logistics Educator's Conference, San Antonio, TX, October 11, 1992.

Video Interview: "Making A World of Difference." Roadway International, Columbus, OH March 31, 1993

Video Interview: "Status of the Trucking Industry." American Trucking Association, Columbus, OH, November 12, 1993.

Audio Visual Outlook Interview: "Future Logistics Trends." 1993 Annual Conference for the Institute of Logistics, NEC Birmingham, England May 26, 1993.

Ameritech Proposal: Varghese S. Jacob, Bernard J. La Londe and Hasan Pirkul: "Facilitating International Electronic Commerce: A Process Approach." Funded \$33,500.

Presentation: "Quality in Logistics: Education for Today and Tomorrow." CLM Saint Louis Roundtable, St. Louis, MO, January 19, 1993.

Keynote Speaker: "Supply Chain Management: It's not Business as Usual." CALM Re-Engineering the Business: An Imperative for the 90s. Showcase Ninety-Three Canadian Exposition. Toronto Ontario Canada. Digital Equipment Corporation, January 20, 1993.

Presentation: "Strike One - You are Out!" CLM New Jersey Roundtable, Edison, NJ, January 21, 1993.

Presentation: "The Corporate Traffic Function: Perspectives for the 1990s." Piedmont Traffic Club, Greenville SC, February 1, 1993.

Presentation: "Five Propositions About Managing Logistics Change in the 1990s." CLM Upstate South Carolina Roundtable. Greenville, SC February 2, 1993.

Guest Speaker: "Re-engineering the Business - Vision for the 90s," Transportation and Logistics Seventh Annual Winter Banquet. The Ohio State University, Columbus Ohio, February 10, 1993.

Speaker: "Importing/Exporting Study Report." Downtown Council of Columbus Area Chamber of Commerce. Columbus, Ohio, February 19, 1993.

Presentation: "Managing Logistics Change in the 1990s." Logistics/Distribution Management Seminar, Northwestern University, Evanston, IL, February 22, 1993.

Presentation: "Seven Principles of Customer Service: A Wholesaler/Distributor Perspective." The 1993 Wholesale Distribution Executive Conference - IBM, Orlando, FL March 16, 1993.

"Cutting Edge Logistics Strategies" and "Future Directions for Logistics Planning." Logistics '93 Management Seminar - University of North Florida Executive Development Program, Jacksonville, FL March 17, 1993.

Progress Report Presentation: Inland Port Commission Project, World Trade Association, Columbus, OH March 19, 1993.

"Third Party Logistics: The Customer Perspective." Exel Logistics 3rd Party Symposium, Chicago, IL March 22, 1993

Executive Briefing: "Inland Port/Info Port" Columbus America Chamber of Commerce, Columbus, OH March 25, 1993.

Presentation: "Skill Requirements for Survival in the 1990s: An Educational Perspective." CLM Columbus Roundtable, Columbus, OH April 8, 1993.

"The Future Role of the Logistics Manager." International Intermodal Expo '93, Atlanta, GA April 20, 1993.

"Logistics of the Nineties." 11th Annual Regional and Distribution Carriers Conference. Columbus, OH May 4, 1993.

"Dimensioning Principles" and "Perspective 2000." Logistics Management Executive Development Seminar. Michigan State University. East Lansing, MI May 7, 1993.

Speaker: "Columbus United Nations InfoPort Task Force" International Business Interest Group Meeting. OSU-College of Business, May 14, 1993

"An In-Depth Look at Warehousing Industry Costs." WERC 16th Annual Conference. Anaheim, CA May 17, 1993.

"Transforming Benchmarking into Action." Grocery Manufacturers of America Seminar. Chicago, IL May, 1993.

Presentation: "Distribution and Logistics." Goodyear Tire and Rubber Company Marketing Executive Development Program. Kent State University, Kent, OH, May, 1993.

Keynote Speaker: "Managing Logistics Change in the 1990s" Cass Logistics Software Systems User's Group Annual Meeting. Chicago, IL June 21, 1993.

Presentation: "Future Trends in Transportation and Logistics; View of the Research Community." Conference on Railroad Freight Transportation Research Needs, sponsored by Transportation Research Board of the National Research Council, Association of American Railroads and Federal Railroad Administration. Bethesda, MD, July 12-14, 1993.

Presentation: "Managing Logistics Change in the 1990s." International Commercial Realty Services Convention. Columbus, OH, September 10, 1993.

Presentation: "Future Directions in Supply Chain Management." *Industry Week* and Manugistics Seminar, Supply Chain 2000: Innovations in Market-Responsive Supply chain Management. Chicago, IL, September 28, 1993.

Presentation: "CLM Facilitating Research." PhD Consortium, CLM Annual Meeting, Washington DC, October 1, 1993.

Presentation: "Activity Based Costing - Applications and Issues." CLM Annual Meeting, Washington DC, October 4, 1993.

Presentation: "Is the Channel Real? Case Studies of Quick Response and Supply Chain Management." CLM Annual Meeting, Washington DC, October 4, 1993.

Presentation: "Career Patterns in Logistics: Profile 1993." (with James Masters) CLM Annual Meeting, Washington DC, October 4, 1993.

Luncheon Presentation: "Disintegration and ReIntegration: The Logistics of the 21st Century." CLM Annual Meeting, Washington DC, October 5, 1993.

Presentation: "Managing Logistics Change in the 1990s." Premark Traffic Council, Lexington, KY, October 22, 1993.

Presentation: "New Developments in Transportation and Logistics." Delta Nu Alpha, Columbus, OH, November 2, 1993.

Presentation: "Process Dynamics." Johnson & Johnson World Class Logistics Seminar, Michigan State University and Council of Logistics Management. East Lansing, MI, November 9, 1993.

Presentation: "ECR: Challenges to Implementation." A Holistic Approach to Efficient Consumer Response - LogiCNet, Chicago, IL December 7-8, 1993.

Program Chair and Keynote Speaker: "Intermodalism: Challenge and Opportunities in the 1990s. Session II: "Strike One - You're Out!" College of Charleston, Greenville Technical College. Greenville, SC. February 3, 1993.

Conference Track Chair: 1993 AMA Summer Marketing Educators' Conference, "The Global Information/Logistics Revolution." Boston, MA August 7-10, 1993

Session Chair: 2nd National Faculty Seminar in Wholesale Distribution, "Wholesale Distribution Course Presentations." Boston, MA August 10-11, 1993

Panelist: "Panel on the Future of Legistics Research." Educator's Conference CLM Annual Meeting, Washington DC, October 3, 1993.

Briefing of Michael Huerta, Associate Deputy Secretary of Transportation Director, Office of Intermodalism, U.S. Department of Transportation on Inland Port Marketing Plan. January 26, 1994

Presentation: "Managing Logistics Change" Northwestern University-Logistic/Distribution Management Seminar, February 21, 1994 Evanston, IL.

Presentation: "Changing Environment of Transportation and Logistics" 4th Annual Mason Symposium. March 3, 1994 Columbus, OH.

Presentation: "Transforming Columbus Into the Next Great American Port City." President's Roundtable Breakfast, Greater Columbus Chamber of Commerce. March 8, 1994, Columbus, OH.

Presentation: "Managing Logistics for the 21st Century." CLM College Challenge, Robert Morris University, April 7, 1994, Pittsburgh, PA.

Presentation: "Is the Supply chain Real? Case Studies on Quick Response and Supply Chain Integration." CLM Upstate South Carolina Roundtable, April 11, 1994, Greenville, SC.

Presentation: "Only the Best," Cutting Edge Logistics Strategies for the 21st Century. Sears logistics Services, April 12, 1994, Chicago, IL.

Presentation: "Global Logistics: Strategy and Prospects." International Business Luncheon Series, April 13, 1994, OSU, Columbus, OH.

Presentation: "Third Party Logistics: An Emerging Trend or More Smoke and Mirrors?" American Logistics Management Association, Chicago, IL, April 22, 1994.

Presentation: "Dimensioning Principles." Logistics Management Executive Development Seminar, Michigan State University. East Lansing, MI May 6, 1994.

Presentation: "Building a Competitive Advantage Through Customer Service." and "Eight Principles of Customer Service." Advanced Transportation Management Seminar, Northwestern University, Evanston, IL, May 10, 1994.

Presentation: "Managing Logistics Change for the 21st Century." South Carolina International Trade Conference. Charleston, SC May 16, 1994.

Presentation: "Redefining the Logistics Process for the 21st Century: Process and Challenges." Bose International Logistics Conference, Boston, MA May 17, 1994.

Presentation: "Co-To-Market Strategies: "Best Practice" for the Last Half of the 1990s." Executive Committee Osram Sylvania, Boston, MA June 27, 1994.

Presentation: "Go-To-Market Strategies: "Best Practice." Limited Distribution Forum, Columbus, OH, June 29, 1994.

Supply Chain Research Meeting with Price Waterhouse, Tampa, FL June 30-July 1, 1994.

Mason Advisory Committee Meeting, Worthington, OH July 7, 1994.

Presentation: "Logistics: A Competitive Weapon for Grace Europe." Grace Europe Board Lausanne, Switzerland, August 10, 1994.

Engineering Comerence - ODT Presentation: "Columbus' Inland Port Developing A Multi-Modal Transportation Distribution Center. Columbus, OH November 29, 1994.

Presentation: "Managing Logistics Change for the 21st Century." Cleveland CLM Roundtable. Cleveland, OH, December 1, 1994.

Hosted: Distinguished International Speaker Series - "The Trade Information Highway: Prospects for the Future" by Randall Wise, Max M. Fisher College of Business, The Ohio State University, January 28, 1994

Attended: Board of Visitors, AFIT - March 6-8, 1994, Dayton, OH.

Host: Fourth Annual Mason Symposium, March 2-4, 1994, OSU Columbus, OH.

Briefing: Congresswoman Deborah Pryce on Inland Port/marketing effort/Alum Creek improvement project. MORPC, Columbus, OH, February 4, 1994

Press Conference: Inland Port Sister Cities, Atlanta Intermodal Expo - Atlanta, GA, April 19, 1994

Presentation: "Managing Logistics In The 21st Century." CLM Middle Tennessee Roundtable, Nashville, TN, January 10, 1995.

Presentation: " Defense Logistics Agency, Atlanta, GA, January 10, 1995.

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### VERIFIED STATEMENT

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#### DON P. AINSWORTH

My name is Don P. Ainsworth. I am employed by Reebie Associates, a firm specializing in consulting and research assignments in matters pertaining to freight transportation and physical distribution. The firm is located at 411 West Putnam Avenue in Greenwich, Connecticut.

My educational background consists of undergraduate work completed at the University of Cincinnati where I majored in economics, and a graduate degree in agricultural economics from Cornell University. In 1958, I began work in transportation and distribution activities as an industrial engineer for the Kroger Company of Cincinnati, Ohio. I joined the New York Central Railroad's marketing department in 1963 as a market analyst for the food industry. Later, at the New York Central, I held a position as an Industry Manager and Director of Market Research. Shortly after the incorporation of Reebie Associates in late 1968, I joined the firm as a Principal, and in 1978 became President.

Reebie Associates is a management consulting firm specializing in freight transportation. For more than twenty-five years, we have applied our experience to issues such as:

- · freight transportation planning;
- goods movements analysis and economics;
- merger and consolidation studies and analysis;
- · intermodal planning and marketing; and
- · new business development.

Mary of my past and recent assignments for private and governmental clients have related to transportation marketing. These studies have included evaluation of rail/truck intermodal opportunities, marketing organization design and planning, equipment management and control, study of industry distribution alternatives, and railroad merger analysis.

Recently, for the merger application of the BN/Santa Fe, we concluded studies of truck-to-rail-intermodal diversion, evaluating total market potential in selected traffic lanes, with economic, service and competitive factors applied to determine the levels of divertibility. Earlier, in support of the UP/MP/WP merger application, we also developed and used a diversion analysis model to evaluate potential for intramodal traffic diversion. On a number of other occasions the firm has assisted parties to legal and regulatory proceedings involving transportation matters, including truck/rail diversion issues.

In the current proceeding, we have been asked by the Applicants to determine the extent of traffic diversions from truck to UP/SP intermodal service as a result of the anticipated efficiencies and the overall service improvements of combining UP and SP into a single system. We undertook this assignment, and in conjunction with Transmode Consultants, arrived at a joint best estimate of the diversions.

## I. PREMISES

A combined UP/SP will enhance competition as well as produce important cost and service efficiencies for rail/truck intermodal service. Intermodal holds strong prospects for growth. With a consolidated network, UP/SP will be able to provide new, through train service on 67 major routes (in some instances the new routes will be upwards of 16% shorter), and it will be able to take better advantage of yard facilities, thereby reducing congestion and speeding service over present schedules. These merger-related benefits in service will attract more traffic from existing customers and new customers who currently do not use either railroad. Greater traffic volumes will allow for an increase of train payloads on existing trains. In turn, these increases will provide a basis for more expedited service between numerous market pairs and improve operational balance, an important component to intermodal efficiency. Further, trains will be upgraded in terms of service types, typically reducing the need for intermediate switching and providing better use of locomotive power. The broad

geographic coverage by UP/SP will assure effective competition with both motor and rail carriers for dry van commodity shipments throughout the West.

In the past 10 years, rail/truck traffic has increased by 6.6% per year. For the Western railroads, much of this growth can be attributed to increases in international business, especially Pacific Rim traffic, and to the concomitant use of double stack trains. The increase in international business provided considerable westbound capacity, which required freight to balance the movement and maximize the cost effectiveness of the intermodal system. To achieve this balance, a significant amount of domestic traffic has made its way into containers. During the pact seven years, container activity has nearly doubled, growing at over 11 percent per year. More recently, motor carriers have increased their efforts to incorporate use of intermodal service into their business operations. Major LTL carriers have committed up to nearly 20 percent of their traffic to intermodal, typically in longer-haul lanes. Moreover, truckload carriers have made major commitments to intermodal operations. Certainly, these shifts will persist as trucking firms face continuing pressure to realize cost reductions, to improve equipment utilization, and to deal with shortages of qualified drivers.

Motor carriers will continue to maintain strong market shares in intercity lanes where they have a pronounced advantage in terms of an economic and service package -- typically in short and medium haul distances. In longer hauls, especially those connecting major market areas, UP/SP will provide a more effective option for motor carriers as well as shippers and their agents. That is, the new UP/SP intermodal system will set a new competitive standard -- with a superior economic and service package -- to the benefit of all parties involved.

The focus of our analysis has been on "dry van" freight, that segment which constitutes the majority of the intercity traffic and particularly that which is divertible to intermodal service. Thus, freight traffic requiring refrigerated trailers was not included. While the refrigerated traffic portion of the business is important in the Western part of the United States, the intermodal service package

for this segment is in such transition that it was left for separate evaluation by others. The same is true for freight that would benefit from bulk intermodal or flatbed.

For dry van shipments, it is very apparent that intermodal market share increases with distance. Intermodal unit costs bear a distinct relationship to miles and to higher lane or corridor densities. The potential for increasing rail market share is further enhanced because as mileage increases the difference between truck and intermodal cost becomes more pronounced. Intermodal offers significant transportation cost advantages at the greater mileages. Moreover, as the length of haul increases, intermodal service time can best its all-truck competition. Recognizing these existing relationships in the intermodal marketplace, we based our diversion estimates on an analysis of price elasticity for each individual traffic lane. This analysis is described in Part V, "Market Shares and Diversion Analysis."

Even with the increase in market penetration by intermodal service, the overall business perspective has been somewhat more gray. By any number of accounts intermodal traffic has not been as strong a contributor to the rail carrier's profit column as many carriers would desire. However, the situation is improving. Carriers are not only pressing to better their service but also endeavoring to assure that new business is a contributor to the bottom line. The intent in this study design is to reflect this initiative. Diversions are based on costs which include clear contributions to profit. From an operational perspective, diversions are most desirable when the volumes maintain current traffic balance levels within the lanes, or improve them. Diversion prospects, therefore, are not just a matter of accepting any and all traffic available for movement. Can the business generate adequate revenues? Do the movement patterns contribute to efficient overall operations? Do the movements reduce the empty return factor for intermodal equipment? All of these issues affect diversion levels.

Our analysis builds on the fundamental conditions outlined above. Patterns of market share and their relationship with underlying cost advantages provide valuable insights into future truck diversion prospects.

#### II. MARKET ASSESSMENT

In developing a quantified estimate of the potential diversion of freight traffic from trucks (all-highway intercity hauls) to the new rail/highway intermodal system that will be embodied by UP/SP, the selection of market areas is a critical element. Volume estimates must be based on a careful examination of specific individual traffic lanes (from a single origin market area to a single destination market area). Individual lanes can be combined and discussed as broad corridors, but the resulting corridors must stem from a realistic analysis of the potential diversions in each individual lane according to:

- · the presence and effectiveness of intermodal competitors;
- · the established practices of highway competitors;
- · the traffic balance leading to the issue of empty returns and associated costs; and
- · the profiles of service and cost that the new UP/SP system can offer.

In conjunction with the Applicants and Transmode Consultants, we selected a set of broad corridors and particular market pairs within each corridor for our analysis. These definitions were refined several times during the analysis as work on the Applicants' Operating Plan progressed. Final selections were based on three factors. First, did the merger create a prospect for improved intermodal service as a result of shorter routes, improved operations, lower costs, better terminal arrangements or other factors? Second, was a sufficient volume of truck freight traffic moving in a lane to make the attempt at diversion an attractive prospect? Third, would the introduction of some improved aspect of service or cost (or both), attributable to the merger of the two rail systems into a single system, in fact be likely to generate diversions? If there were to be no improvements in service due to route changes or operating changes, then it was presumed the diversion from present

highway freight traffic would be zero. Conversely, if there were to be significant improvements, such as faster schedules, higher on-time reliability, lower costs spurred by shorter route miles, greater volume per train due to increased traffic levels from the combined system, less switching, or improved terminal location and handling, then diversion of a certain portion of volume to intermodal was considered realistic.

Our approach has been a behavioral one. That is, we assembled information on shipment flows and volumes, translated these to market shares and then correlated them with the underlying changes in carriers' estimated costs. At the same time, we examined the competitive service characteristics to confirm that the UP/SP intermodal service met market standards. These relative changes in market shares were driven by the changes in costs and service which arise from the benefits of the merger on a lane-by-lane basis.

## A. Data Sources for Freight Volumes

TRANSEARCH, Reebie Associates' data base of intercity freight movement statistics, was employed as a foundation upon which to assess market size in specific traffic lanes. For rail carload and intermodal volumes -- used in several portions of the analysis, such as determining current intermodal market share -- the source was the 1994 ICC Waybill Sample.

TRANSEARCH is a data base of intercity freight movements by specific commodity and mode of transport, covering 183 market areas in the U.S. It is based upon numerous sources of information, among which is a data exchange program with major U.S. long-haul motor carriers. TRANSEARCH information has been used by nearly 500 clients, mostly freight carriers, for a variety of planning and marketing applications, since its introduction in 1980. TRANSEARCH data also have been submitted as evidence in several Commission proceedings, and those of other regulatory bodies.

TRANSEARCH defines commodities at a four-digit Standard Transportation Commodity Code ("STCC") level. The more aggregated two-digit STCCs describe industries: for example, STCC 20 is Food or Kindred Products. Four-digit codes are used to distinguish among products. Thus, #2012 denotes Frozen Meat; #2046, Wet Corn Milling; and #2047, Pet Foods. In our analysis, for example, we studied only the Pet Foods portion of truck freight, since the other two categories do not typically move in "dry van" type vehicles -- and our analysis was limited to dry van freight.

In addition to commodity detail, TRANSEARCH describes market areas in terms of Business Economic Area ("BEA") origins, destinations or hub areas. TRANSEARCH provides reports showing what freight commodities are moving between Los Angeles and Dallas, for example, broken into seven modes of transport: Rail Carload; Rail Intermodal; For-Hire Truckload; Less-Than-Truckload; Private Truck; Air; and Water. Origin-to-destination spatial patterns for truck are confirmed in TRANSEARCH by real-world information obtained in the motor carrier data exchange program and for rail through the Waybill Sample. Freight volumes in TRANSEARCH are shown as annual tons, in this case using a 1994 base year.

Our approach has been conservative. We recognize that intermodal rail/highway operators are already moving some refrigerated vans or containers in intermodal service, as well as tank, flatbed and hopper type vans or containers — some with new, innovative equipment such as RoadRailers and BulkTainers. As we have done on many prior occasions, we screened out non-containerizable portions of the commodity groups to produce a listing of those volumes which are clearly amenable to intermodal or containerized movement in each traffic lane.

# B. Key Geographic Corridors

As an outcome of our review of traffic lanes, five "Corridors" were selected for inclusion in the truck diversion study. These Corridors, including associated gathering areas, are described in the next section, which discusses the estimated diversions. In addition, we recognized that there are a number of market areas that may play directly into the specified Corridors via connecting service by rail, or by extended, over-the-road truck hauls. An example is the Los Angeles-Detroit traffic lane. This would be a logical extension of the Los Angeles-Chicago traffic lane, via rail service interlining with CN or Conrail or via truck from an intermodal terminal in Chicago -- some 275 miles west of Detroit. If such a service were determined to be competitive with over-the-road motor carriage all the way from Los Angeles to Detroit, then presumably there are numerous other market areas -- e.g., Cleveland, Pittsburgh, Toledo, Columbus, Cincinnati, Indianapolis -- that might offer further diversions. Rather than analyze all these combinations of on-line to off-line traffic lanes, we studied several "extended traffic lanes" in order to judge the overall potential diversions to/from/beyond the UP/SP terminals at the eastern end of its rail system. Thus, we were again conservative in our estimates of total traffic diversions attainable by the new, combined intermodal system.

# C. Diversion Estimates for the Operating Plan

Once we had arrived at our preliminary estimates of diversions, we conferred with Transmode Consultants. After a joint meeting with Transmode senior staff and the Applicants, we arrived at consensus estimates of diversions that were provided to groups who were involved with Operations Planning and other aspects of the merger application.

A detailed breakdown of the consensus diversion estimate, which was supplied to the Applicants for use in their development of the Operating Plan, is provided in Appendix A to this statement. We believe that the process of arriving at a consensus by considering the attributes and results of two different methodologies produced highly reliable results, and the final diversion estimates generated by our model correspond quite closely to the consensus estimate.

Pacific Crescent (I-5) Carridor: This Corridor encompasses combinations of Seattle and Portland in the Pacific Northwest, on the one hand, and California's Bay Area, Central Valley and Los Angeles plus extensions to Phoenix, San Antonio, Houston, Dallas and New Orleans, on the

other. Between Seattle and Los Angeles, no single-line rail intermodal service has existed. Intermodal service via interline connection involving BN, UP and SP has not attained any significant market share to date for intermodal or containerizable-type freight. Thus, this is a Corridor that, in an initial assessment, appears very attractive for diversions from all-highway movements to a new, single-line intermodal service. Profitability in the Corridor will require intense service, cost and equipment management, however, due to the strong competition posed by motor carriers.

In general, the movement of merchandise-type freight in this Corridor is very heavy. North and southbound flows are dominated almost completely by motor carriers. In particular, the Los Angeles-Bay Area traffic lane is one of the largest in the nation, with approximately 16 million tons of intermodal-type traffic or an estimated 950,000 truckloads per year. The Los Angeles-Bay Area traffic lane alone, in terms of containerizable truck traffic, is more than five times larger than the third largest lane - Portland-Los Angeles - estimated at two million tons or 115,000 truckloads. The strong level of competition among over-the-road truckers in the Los Angeles-Bay Area (only 380 miles by highway) is widely acknowledged; but the Los Angeles-Portland lane, with a greater length of haul (966 highway miles), is a more likely candidate for truck diversions to intermodal. Moreover, SP has maintained a share of this market via intermodal service, albeit a small share compared to truck. With UP/SP intermodal train service moving through Portland to/from Seattle, there is good reason to expect some diversion from present highway traffic here.

In addition, the Los Angeles-Seattle lane offers still greater attraction for truck diversions. This is due, in part, to the fact that no single-line rail intermodal service has existed, and there has been only very minimal market penetration via interline service between two rail carriers. This lane represents a market where the length of haul is into the economic "comfort zone" for intermodal operations (approximately 1,140 highway miles); and its potential has remained untapped because of the lack of an effective service alternative to the motor carriers. The long-haul service between Los