

FD-30400

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below, and the increasing financial needs of applicants can this be justified. Accordingly, this, possibly the most severe adverse effect, does not justify a denial.

If substantial harm to shippers of exempt commodities such as COFC traffic is not shown in the record and considering the small increase in even potentially captive shippers for whom regulatory remedies remain, where else can the harm to the public interest be found? No rail carrier presented evidence that its essential services would be harmed by the transaction. This is the primary consideration for conditions designed to protect individual rail carriers. See 49 CFR 1180.1(d). The majority found no harm to TM or DRGW's ability to provide essential services. Nevertheless, the majority found the merger would seriously jeopardize DRGW's competitive strength through the Central Corridor as a participant in transcontinental traffic and reduce Central Corridor options for shippers. In short, the majority finds that the new efficiencies, reduction in mileages and other savings would make the southern corridor too competitive; and therefore, because of these public savings, the merger should be denied, a conclusion that is exactly 180 degrees from our statutory mandate.

Underpinning the findings concerning the impact on the DRGW is the reduction in train service over DRGW segments, cited in the decision. This is based on DRGW projections. Reductions up to from four daily trains to one daily train are forecasted. To the extent these figures reflect the use of more efficient routes than SPSF's interline route with DRGW, our regulations do not provide



relief absent a showing that the reductions would adversely affect DRGW's ability to provide essential services. Further, to some extent, these projections reflect DRGW's allegations that SPSF would use inefficient routes in order to establish a monopoly. We have rejected that possibility since carriers will ultimately follow their best economic interests and long-term use of inefficient routes will not occur. Exemption from Regulation-- Boxcar Traffic, \_\_\_\_\_ I.C.C.2d. \_\_\_\_\_ (1986), slip op. at 2-5, served September 12, 1986. Therefore, the majority's reliance on these figures to this extent is misplaced. But, even if the figures were to be an accurate prediction, neither our regulations nor precedent justifies a denial on reduced train schedules, and the fact remains that on all segments at least 350 annual trains are predicted.

The majority has attached significant weight to the "Strategic Assessment" study. In so doing, they have concentrated on a few paragraphs from the 92 page exhibit. The bulk of that study entails historical analysis of why ATSF's financial performance has deteriorated, specifically including recent mergers, with its primary emphasis on ATSF's competitive situation vis-a-vis UP. Its fundamental conclusion is not to initiate widespread monopoly pricing, but its self-criticism that: "The major shortcoming appears to be the ATSF's inability to attain revenue levels within its market area commensurate with attractive returns on investment." KCS-C-1 at 21. After studying in detail its traffic patterns, interchange partners, interchange points, and possible

merger partners, ATSF's study concludes that the best merger partner is one that includes these "key characteristics:"

- "1. A potential to improve revenues derived from single-line movements.
2. An increase in the number of origin or destination points served exclusively by the merged carriers.
3. Creation of the most efficient, shortest route corridors between key city pairs."

This document does not prove that SFI had, as its corporate objective, the widespread introduction of monopoly pricing. What the document tries to justify is the purchase of a rail carrier that appears to be headed into bankruptcy, or at best is a poor risk. Accordingly, because "substantial additional profits may be achieved over and above any cost savings," purchasing what might appear to SFI's board of directors to be a poor risk, may not be such a bad idea. The document represents an internal attempt to persuade a board of directors to pursue a merger. The majority misreads the intent of the document.

In denying the application, the majority has misinterpreted the facts and misapplied the law. Both the Congress and the Supreme Court have given this Commission a simple direction: "The Commission shall approve and authorize a transaction under this section when it finds the transaction is consistent with the public interest." 49 U.S.C. 11344(c).

To determine whether a transaction is consistent with the public interest, the Congress has provided two sets of guidelines, the standards of 49 U.S.C. 11344(b)(1)(A) through (E) and the Rail



Transportation Policy, set forth at 49 U.S.C. 10101a. These standards do not require or authorize this Commission to stand as an antitrust court. However, the majority's decision rests solely on antitrust principles. No other explanation is given for the denial or to quantify the public interest.

The role of the nation's antitrust laws is that of qualifying the potential problems a merger would create and not to serve as the sole standard of whether to grant or deny a rail merger. The Commission does not force compliance with the Clayton, Sherman or related antitrust acts. Northern Lines Merger Case, 396 U.S. 491 at 506-516 (1970) (Northern Lines). The public interest standard is broader. Antitrust considerations alone are not a proper measure of the permissibility of railroad merger. Minneapolis & St. Louis R. Co. v. United States, 361 U.S. 173 (1959). The Commission may freely approve rail consolidations that violate the antitrust laws. United States v. I.C.C., 396 U.S. 491 (1970). Once approved by the Commission, the transaction is thereafter exempt from the antitrust laws under 49 U.S.C. 11341(a). United States v. I.C.C., 396 U.S. at 504.

Almost every railroad merger involves a lessening of competition between rail carriers. The primary interest of the Commission is on the effect of the rail restructuring on the adequacy of transportation services available to the public--in other words to preserve essential services. See e.g. New York Securities Corp. v. United States, 287 U.S. 12, 25 (1932). This is directly tied to the transportation system's need for economy

and efficiency and to the best use of transportation facilities.  
United States v. Lowden, 308 U.S. 225, 230 (1939).

The Transportation Act of 1920 ended the antitrust laws' regulation of rail mergers and directed the Commission to determine the permissibility of rail mergers by their anticipated effect on transportation services. See United States v. Southern Pacific Co., 259 U.S. 214 (1922), the litigation of which helped prompt the Transportation Act of 1920. Since that time, the Commission has regularly approved consolidations that directly reduced competitive transportation options provided (1) that full managerial and financial control results [49 CFR 1180.1(a) and (2) that counterbalancing benefits would be realized. For example, see Control of Central Pacific by Southern Pacific, 76 I.C.C. 508 (1923); NY Securities, supra; Seaboard Air Line R. Co.-Merger-Atlantic Coast Line, 320 I.C.C. 122 (1963), aff'd per curiam Seaboard Air Line R. Co. v. U.S., 382 U.S. 154 (1965). A review of the rail mergers previously denied by this Commission, shows that with possibly one exception--the Great Northern Pacific-Great Northern merger, Great Northern Pac.-Merger-Great Northern, 328 I.C.C. 460 (1966), subsequently approved upon reconsideration at 331 I.C.C. 228 (1967) affirmed at Northern Lines, supra,--the only rail mergers this Commission denied were those in which (1) common stock ownership but not consolidated operations were proposed or (2) more than one application to merge with the same carrier were presented. Cf Improving Railroad Productivity, Table VIII-A,



at 276-281, President's Task Force on Railroad Productivity, November 1973. The majority cites no legal precedent for their denial here.

Congressional policy since 1920 has consistently encouraged railroad mergers. For example, when it was determined that the Emergency Railroad Transportation Act of 1933, Chapter 91, 48 Stat 217, requiring mergers to be made in conformity with an I.C.C. General Plan of Consolidation, was hindering rail mergers, that provision was repealed in the Transportation Act of 1940.<sup>1/</sup> The Act of 1940 was designed "to facilitate mergers and consolidations in the national transportation system..." County of Marin v. United States, 356 U.S. 412, 416 (1957). "The very language of the amended 'unification section' expresses clearly the desire of Congress that the industry proceed toward an integrated national system..." Id at 418.

The Railroad Revitalization and Regulatory Reform Act of 1976, Pub. L. No. 94- (R Act), continued to encourage "efforts to restructure the [railway system] on a more economically

<sup>1/</sup> The role of the Federal government in planning the nation's rail system is now assigned to the U.S. Department of Transportation. See, 49 U.S.C. 1654(a)-(d). The Commission can only judge consolidation proposals initiated by the railroads to be merged. See St. Joe Paper Co. v. Atl. Coast Line R. Co., 347 U.S. 298, at 305 (1954).



justified basis..." 45 U.S.C. 801. The legislative history of the 4R Act states: "...this bill is intended to encourage mergers, consolidations, and joint use of facilities that tend to rationalize and improve the Nation's rail system." S. Rep. No. 94-499, 94th Cong., 1st Sess. 20 (1975). And, see Missouri-Kansas-Texas R. Co. v. United States 632 F.2d 392 at 396 (1980).

The Staggers Act did not change this policy that competitive factors alone do not address the permissibility of a merger proposal. Southern Pacific Transportation Co. v. I.C.C., 736 F.2d 708 (1984) cert. denied 105 S.Ct. 1171 (1985)(SPT v. ICC). That case affirmed the Commission application and interpretation of the Staggers Act in Union Pacific--Control--Missouri Pacific; Western Pacific, 366 I.C.C. 459 (1982) (UP-Control), where we stated that: "...we reject the contention that antitrust considerations might assume controlling importance in railroad consolidations after the Staggers Act." UP-Control, 366 I.C.C. at 502. The D.C. Court of Appeals stated, referring to the Staggers Act and section 10101a, "The increased emphasis upon competition required by Congress modified but does not basically alter the ICC's traditional approach, which has always considered the competitive impact of a proposed merger, but not to the exclusion of other factors." SPT v. ICC, 736 F.2d at 717. The Court continued, stating: "In short, the Commission has never sat 'as an antitrust court [to determine] compliance with the Clayton, Sherman, or related antitrust acts.'" 366 I.C.C. at 485, citing United States v. ICC, 396 U.S. 491, 514

(1970). Its statutory mandate is considerably broader. The ICC can disapprove mergers which would not violate the antitrust laws and can approve mergers even if they otherwise would violate the antitrust laws. United States v. ICC, 396 U.S. 491 (1970) at 513-14." Id.

The Commission's ability to alleviate anticompetitive effects of a mergers rests on its ability to impose conditions on the consolidation. Great Northern Pac.-Merger-Great Northern, 331 I.C.C. 228, 269-271 (1967) aff'd sub nom. Northern Lines Merger Cases, supra. and SPT v. ICC, 736 F.2d at 717. The Commission also encourages private attempts of rail rationalization, and has announced that those "transactions...should...receive our support if consistent with the public interest." Missouri Pacific Railroad Company-Merger, 360 I.C.C. 6, at 15 (1978) and 49 CFR 1180.1(a).

The majority does not address SPT's chances to survive-- particularly in the long-run. It does not address SPT's dwindling traffic base which has been deteriorating for a number of years. The table below shows total tonnage and tonnage of the current leading commodities for selected years. (Source: Moody's Transportation Manual)



SPT  
Tonnage carried for selected years 2/  
(millions)

	<u>1973</u>	<u>1979</u>	<u>% Change</u> <u>from 1973</u>	<u>1983</u>	<u>% Change</u> <u>from 1973</u>
Total Tonnage	126.6	119.9	- 5.3%	89.8	-29.1%
Chemicals	13.5	16.3	+20.7%	16.5	+22.2%
Lumber	18.6	15.1	-18.8%	10.4	-44.1%
Food	14.2	13.8	- 2.8%	9.1	-35.9%
Transportation	3.5	3.2	- 8.6%	2.2	-31.1%
Pulp & Paper	5.6	6.0	+ 0.7%	5.6	-
Petroleum & Coal Products	6.5	5.5	-15.4%	4.0	-38.5%

Except for chemicals and pulp and paper, steady deterioration in traffic base is apparent, a trend which seems to be accelerating in the past four years. It also should be noted that SPT has experienced a decline in coal and petroleum, the mainstay of other western carriers and a major factor in its present financial situation.

The table below shows the tonnage changes for all Class I railroads in the United States, and for the Western District alone. (Source--Yearbook of Railroad Facts published by the Association of American Railroads--1985)

2/ Note: Tonnage is used instead of carloads in these longer term figures because carload average capacity increases somewhat each year. In the Western District the average carload capacity increased to about 70 tons in 1984 from about 57 tons in 1973 according to the yearbook of Railroad Facts published by the Association of American Railroads.

Tonnage and Changes  
(millions)

	<u>1973</u>	<u>1979</u>	<u>% Change</u> <u>from 1973</u>	<u>1984</u>	<u>% Change</u> <u>from 1973</u>
All United States	1532.2	1502.3	- 2.0%	1429.4	- 4.9%
Western District	624.6	683.8	+ 9.5%	669.4	+ 7.2%

SPT 1985 Carloads relative to 1984 Carloads plus the First quarter of 1986 compared to the first quarter of 1985

	<u>1985</u> <u>1st qtr.</u>	<u>1985</u> <u>2nd qtr.</u>	<u>1985</u> <u>3rd qtr.</u>	<u>1985</u> <u>4th qtr.</u>	<u>1986</u> <u>1st qtr.</u>
<u>Total Carloads</u>	- 6%	- 4%	- 6%	- 8%	- 9%
Chemicals	- 5%	- 3%	- 1%	- 2%	+ 1%
Lumber	-18%	- 5%	- 1%	- 3%	+ 9%
Pulp & Paper	- 9%	-13%	-13%	- 8%	- 4%
Coal	-31%	+32%	-19%	-38%	-50%
Food	- 5%	- 7%	-10%	- 8%	- 6%
Vehicles & Parts	- 4%	+ 2%	- 3%	- 6%	-15%
All other	- 2%	- 4%	- 9%	- 9%	- 9%

The first quarter 1986 record on all U.S. roads showed an 0.5% increase. No progress has been made since the first of 1985 in turning the traffic trend around. In the first quarter of 1985, carloadings were down 6% and gross revenues were off about 5%. Other income was down 47% in the first quarter. This arose partly because of a decline in the carrier's equity in subsidiary earnings. Land sales declined quite sharply in the 1985 first quarter. Land sales has been a major factor in SPT's ability to survive during the pendency of this proceeding.



SPT's operating ratios for 1983, 1984, and 1985 were 101.43 percent, 99.29 percent, and 100.51 percent respectively. The operating ratio for the first quarter of 1986, admittedly traditionally the worst quarter for SPT, was 113.4 percent.

St. Louis Southwestern also suffered a traffic decline in this period. The following table shows by quarter the overall decline for 1985 relative to 1984, and the first quarter of 1986 compared to 1985, the decline of the six major commodities currently handled by the SSW, and the trend of "all other" carloads which is the category covering those shipments not falling into specific commodity groups.

SSW 1985 Carloads relative to 1984 Carloads  
and first quarter of 1986 compared to 1985

	<u>1st qtr.</u>	<u>2nd qtr.</u>	<u>3rd qtr.</u>	<u>4th qtr.</u>	<u>1986 1st qtr.</u>
<u>Total Carloads</u>	- 5%	-11%	-16%	-15%	-17%
Chemicals	-11%	- 6%	- 8%	-10%	- 6%
Motor Vehicles	+ 6%	+17%	- 5%	+12%	-17%
Food	+13%	- 4%	- 8%	-11%	-14%
Pulp & Paper	-18%	-15%	-24%	-21%	-10%
Lumber	-11%	+ 2%	+27%	+ 6%	+34%
Grain Mill	-28%	-19%	-20%	-16%	- 4%
All other	+ 3%	-12%	-20%	- 9%	-24%

As can be seen below, ATSF's traffic decline was not precipitous as it was in the case of the SPT and SSW, although the fourth quarter reflected substantial declines which were continued into 1986.



ATSF Quarter to Quarter decline in Carloadings  
1984 to 1985 and the first quarter of 1986 compared to 1985

	<u>1st qtr.</u>	<u>2nd qtr.</u>	<u>3rd qtr.</u>	<u>4th qtr.</u>	<u>1986 1st qtr.</u>
Total Carloads	- 1%	- 2%	- 7%	- 9%	- 7%
Coal	+13%	+ 1%	- 4%	- 9%	- 7%
Grain	-18%	- 5%	-47%	-17%	+ 9%
Chemicals	- 9%	-12%	-11%	- 5%	- 4%
Vehicles	+31%	+23%	+ 4%	+ 3%	-13%
Food	- 0%	+11%	+ 7%	- 4%	-13%
Farm Products	- 4%	- 2%	+ 6%	+ 8%	-16%
All other	+17%	+12%	+10%	-12%	- 2%

With respect to ATSF's longer-term traffic pattern, the following table shows the ten year trend for the ATSF for total tonnage originated and received for each of its leading commodities. (Source: Moody's Transportation Manual.)

Tonnage and Changes  
(millions)

	<u>1973</u>	<u>1979</u>	<u>% Change from 1973</u>	<u>1984</u>	<u>% Change from 1973</u>
Total Tonnage	92.4	108.9	+ 17.9%	101.5	+ 9.8%
Coal	4.3	17.6	+309.3%	28.6	+565.1%
Chemicals	12.8	14.7	+ 14.8%	11.0	- 14.1%
Transportation	1.5	1.7	+ 13.3%	2.3	+ 53.3%
Food	9.8	10.7	+ 9.2%	7.3	- 25.5%
Farm Products (including grain)	20.5	18.1	- 11.7%	19.6	- 4.4%

Unlike the SPT, ATSF has gained tonnage in these years, even more than the Western District average. However, it has been coal that has contributed the most significant increase; and it is the lack of substantial coal transportation that has significantly tipped the balance of profitability against SPT as compared to other western railroads.

While the majority's Appendix G reflects positive operating income for SPT between 1983 and 1985, it should be recognized that there has been a good deal of cross-subsidization of results by non-operating means over the past ten years which has enabled the SPT to meet its fixed charges during this period. Actual operating results would not have permitted it to do so. The fact is that Net Railway Operating Income (NROI), while positive in the 1983-85 period, reflects large tax credits and is not truly a measure of actual operating results. The best measure of actual operations is net revenue from operations which is reported in the carrier's financial and quarterly reports to the ICC--and reconciled with the net revenue from railway operations noted above by subtracting or adding tax liabilities (plus small adjustments for certain rental income). Net railway operating income is essentially the after tax result of the reported net revenue from operations, and in the case of the SPT, with large tax credits and credits for deferred taxes, reflects a sharply better record than actual operating results.

The pre-tax operating results for the SPT alone have been insufficient to cover fixed charges for the last ten years. This, together with the long-term traffic downtrend, leads me to be conclusion that the SPT is in danger of bankruptcy. However, because of its capital ratio and its ability to cover fixed charges with the addition of non-operating earnings, SPT's bankruptcy may not be imminent.



In sum, SPT's problem is quite simple. It is a firm, like all major rail carriers, whose costs decrease with output, so that its average costs are higher than its marginal or long run variable costs. In order to generate sufficient revenues to come close to a competitive return on its capital, some traffic must be priced at a rate higher than long run variable costs. Nonetheless, for the following reasons, the fierce competition it faces in nearly all markets precludes this possibility for most traffic. First, SPT carries little coal, a key "rail captive" commodity that is vital to the financial health of most of the Nation's financially sound rail systems. Second, a great many of its traffic movements are competitive with motor carriers. Third, most of its transcontinental central corridor movements (in combination with DRGW) face significant competition from motor carriers and from the consolidated UP system, and while the DRGW is a well run and efficient carrier the UP has a superior routing through the mountains. Fourth, its southern corridor routing is competitive with motor carriers and with ATSF, and ATSF's routing is more efficient for the majority of shipments. Finally, SPT has many thousands of miles of light density lines throughout California. While a short time ago this traffic faced competition only from motor carriers, SPT's rail traffic base has been severely eroded by recent aggressive TOFC marketing by UP and ATSF.

I want to emphasize that while I am concerned about SPT's current and future financial health, that carrier's financial condition was not an overriding element in my conclusion that the

merger application should be granted. The anticipated strengthening of both the ATSF and SPT was certainly a positive factor in my analysis of the application, but the significant expected improvements in efficiency and service would have warranted approval even if the SPT were in better financial condition.

The majority continues to hold out hope that another major rail carrier will come to the rescue of SPT; however, during the course of this proceeding, any other carrier or interested party could have filed an inconsistent application seeking control of SPT. The fact that no party has done this should indicate that this hope may be unrealistic.

If SPT remains independent, it must eliminate its low density lines. This means reduced rail service in Oregon, California, and Texas, if not elsewhere. In Oregon alone, the potential reduction in current track would approach over 50 percent of SPT's current mileage. Similarly, if SPT is broken into segments, only the most profitable will be purchased, leaving the rest to an unknown fate. Similarly, if the carrier goes bankrupt, the Commission will have little, if any control over the sale of its lines and assets under the new bankruptcy laws. It is incomprehensible that the majority is willing to trade the remote possibility of continued competition for the probability of the widespread loss of essential services, to the detriment not only of the public and the nation's shippers, but also to applicants.



Applicants have presented the Commission with the only presently viable alternative to SPT's dismemberment and/or bankruptcy. The Supreme Court has told this Commission that "the Transportation Act of 1920...was primarily intended to promote the absorption of financially weak [carriers] by strong carriers." Northern Lines, 396 U.S. at 507. The role of the Commission is to assure adequate rail service, largely through consolidations and mergers and other innovations. Schwabacher v. United States, 334 U.S. 182 (1948). Congressional policy since the Transportation Act of 1920 has been "that insistence upon the preservation of maximum competition among rail carriers was no longer essential to the public interest." Seaboard Air Line R. Co.-Merger-Atlantic Coast Line, 320 I.C.C. 122 (1963), upheld in Florida East Coast Ry. Co. v. United States, 259 F. Supp. 933 (1966), aff'd per curiam, 386 U.S. 544 (1967).

The preservation of competition between SPT and ATSF requires substantial maintenance of redundant capacity and facilities. The resources used for this purpose are a dead loss to the national economy. The interchanges required at applicants' common points in Arizona, California, New Mexico and Texas hinder the development of local and regional traffic movements where the rail industry is the weakest competitively in respect to motor carriage. The Commission has recognized that the maintenance of existing traffic patterns, routes, and interchanges is often inconsistent with a policy of reducing excess capacity and eliminating duplicate facilities. See Unification of Southwestern Lines, 124 I.C.C. 401, at 417 (1927), and Erie, supra.



Applicants have demonstrated a substantial capacity to survive as a competitively strong carrier if the merger were to be approved. Not only do applicants present undisputed figures of costs savings and diversions from competing railroads, but they also predict recapturing almost \$7.5 million worth of traffic from motor carriers. This results from an increased ability to provide prompt service through frequent train schedules, and expanded single-line operations. These are benefits not only to shippers but to other rail interline partners. Disapproving the merger decreases overall the western railroads' competitive ability against motor carriers.

The Commission has reached the wrong result and I fear for the consequences to the nation and its shippers. While I believe this decision leaves the American railroad system and its shippers vulnerable, I would take no solace in the fact that any dire predictions of mine come true. I hope this won't turn out badly. I will do everything I can to make the best of this situation--to work to cause or permit market forces to adjust so that the transportation providers and users can emerge from these uncertain times on a better footing than they have today.

That said, I continue to believe most strongly, that the country would have been better served by a prompt grant and early implementation of the merger. We would have had a better, stronger national transportation network which would improve the status and the prospects of the combined system and of its customers and employees.

APPENDIX A  
ABBREVIATIONS

AFC	American President Companies, Inc.
ARMCO	ARMCO
ATSF	The Atchison, Topeka and Santa Fe Railway Company
BEA	Business Economic Area
BN	Burlington Northern Railroad Company
CAL	California Attorney General
CALCOT	CALCOT, Ltd.
CALT	California Department of Transportation
C&NW	Chicago and North Western Transportation Company
COFC	Container-on-flatcar
CPUC	California Public Utilities Commission
Conrail	Consolidated Rail Corporation
DOJ	U.S. Department of Justice
DOT	U.S. Department of Transportation
DRGW, Rio Grande	The Denver and Rio Grande Western Railroad Company
IRMA	Independent Rating Authority
KANS	State of Kansas
KCS	The Kansas City Southern Railway Company and Louisiana and Arkansas Railway Company
MILW	Chicago, Milwaukee, St. Paul and Pacific Railroad Company
MKT, Katy	Missouri-Kansas-Texas Railroad Company System
MLB	Minilandbridge traffic
MP, MPRR	Missouri Pacific Railroad Company
NMTDB	National Motor Transportation Data Base
NROI	Net Railway Operating Income
NS	Norfolk Southern Corporation
OREGON	Oregon Public Utility Commissioner and Department of Transportation
RCAF	Rail Cost Adjustment Factor
SFI	Santa Fe Industries, Inc.
SFSP	Santa Fe Southern Pacific Corporation
SPC	Southern Pacific Company
SPLC	Standard Point Location Code
SPSF	The Southern Pacific and Santa Fe Railway Company
SPT	Southern Pacific Transportation Company
SSW	St. Louis Southwestern Railway Company
STCC	Standard Transportation Commodity Code
TEX MEX, TM	The Texas Mexican Railway Company
TOFC	Trailer-on-flatcar
TR	Transcript
TRAM	Transportation Research and Marketing, Inc.
UP, UPRR	Union Pacific Railroad Company
UP MP	Union Pacific and Missouri Pacific Railroad Companies
WP	Western Pacific Railroad Company



Frequently Cited Cases and Authorities

- BN-Frisco: Burlington Northern, Inc. -- Control & Merger -- St. L., 360 I.C.C. 788 (1980).
- Boxcar: Exemption from Regulation -- Boxcar Traffic, 367 I.C.C. 424 (1983), aff'd 367 I.C.C. 746 (1983), rev'd in part sub. nom., Brae Corp. v. United States, 740 F.2d 1023 (D.C. Cir. 1984), cert. denied, 105 S. Ct. 2149 (1985).
- Brown Shoe: Brown Shoe Co. v. United States, 370 U.S. 294 (1962).
- Central Pacific: Central Pac. Ry. Co. Control, 76 I.C.C. 508 (1923), 317 I.C.C. 469 (1962), 328 I.C.C. 345 (1966).
- CSX: CSX Corp. -- Control -- Chessie and Seaboard C.L.I., 363 I.C.C. 518 (1980).
- Merger Policy Statement: General policy statement for merger or control of at least two Class I railroads, 49 CFR §1180.1.
- McLean: McLean Trucking Co. v. United States, 321 U.S. 67 (1944).
- New York Dock: New York Dock Ry. -- Control -- Brooklyn Eastern Dist., 360 I.C.C. 60 (1979), aff'd New York Dock Ry. v. U.S., 609 F.2d 83 (2d. Cir. 1979).
- Norfolk Southern: Norfolk Southern Corp. -- Control -- Norfolk & W. Ry. Co., 366 I.C.C. 171 (1982).
- Railroad Consolidation Procedures: Railroad Consolidation Procedures, 363 I.C.C. 784 (1981), 366 I.C.C. 75 (1982).
- TOFC/COFC: Improvement of TOFC/COFC Regulation; 364 I.C.C. 731 (1981), rev'd in part sub. nom. American Trucking Association v. I.C.C., 656 F.2d 1115 (1981).
- Traffic Protective Conditions: Traffic Protective Conditions, 366 I.C.C. 112 (1982).
- Tucumcari: St. Louis S.W. Ry. -- Pur. -- Rock Island (Tucumcari), 363 I.C.C. 320 (1980).
- Union Pacific Control: Union Pacific -- Control -- Missouri Pacific; Western Pacific, 366 I.C.C. 459 (1982), aff'd sub nom., Southern Pacific Transp. Co. v. I.C.C., 736 F.2d 708 (D.C. Cir. 1984), cert. denied, 105 S. Ct. 1171 (1985).
- U.S. Steel: United States v. U.S. Steel Corp., 251 U.S. 417 (1920).

APPENDIX B

RELATED APPLICATIONS

1. Finance Docket No. 30400 (Sub-No. 1)

Upon approval of the primary application and prior to consummation of the proposed transaction, St. Louis Southwestern Railway Company (SSW) would be merged into SPT. Because SSW is controlled by SPT, this would be a transaction within a corporate family that is covered by the class exemption procedures at 49 C.F.R. 1180.2(d).

The notice of exemption for the merger of St. Louis Southwestern Railway Company and Southern Pacific Transportation Company, is rejected.

2. Finance Docket No. 30400 (Sub-No. 2)

SPSF seeks an exemption under 49 U.S.C. 10505(a) from the prior approval requirements of 49 U.S.C. 11343 for its acquisition of control of the Sunset Railway Company (Sunset) through the ownership of all of Sunset's capital stock. At present, ATSF and SPT each own 50% of Sunset's stock. Upon consummation of the transaction proposed in the primary application, SPSF would acquire all of the properties of ATSF and SPT, including the stock of Sunset that each holds. The acquisition by SPSF of control of Sunset will not occur unless the primary transaction is consummated.

The petition seeking an exemption for the acquisition of control by The Southern Pacific and Santa Fe Railway Company of Sunset Railway Company, is denied.

3. Finance Docket No. 30400 (Sub-No. 3)

SPSF seeks an exemption under 49 U.S.C. 10505(a) from the prior approval requirements of 49 U.S.C. 11343 for its acquisition of control of Central California Traction Company (CCT) through the ownership of two-thirds of CCT's stock. At present, ATSF and SPT each own one-third of CCT's capital stock, while the remaining one-third is owned by the Union Pacific Railroad Company (UP). Upon consummation of the transaction proposed in the primary application, SPSF would acquire all of the properties of ATSF and SPT, including the stock of CCT that each holds. SPSF contemplates that UP would continue to participate in the management and operation of CCT. The acquisition by SPSF of control of CCT will not occur unless the primary transaction is consummated.

The petition seeking an exemption for the acquisition of control by The Southern Pacific and Santa Fe Railway Company of Central California Traction Company, is denied.

4. Finance Docket No. 30400 (Sub-No. 4)

SPSF seeks an exemption under 49 U.S.C. 10505(a) from the prior approval requirements of 49 U.S.C. 10903, *et seq.*, for the abandonment of, and discontinuance of service over, various lines of ATSF and SPT.

ATSF lines to be abandoned include:

1. That portion of the Second District, Valley Division, between milepost 1166.9 at Maltby and Milepost 1179.1 at Collier, CA (12.2 miles)
2. That portion of the Second District, Valley Division, between milepost 1001.0 at Hammond and milepost 1007.0 near Figarden, CA (6.0 miles)



3. That portion of the Visalia District, Valley Division, between milepost 1.0 near Corcoran and milepost 23.0 near Visalia, CA (22.0 miles)
4. That portion of the Visalia District, Valley Division, between milepost 26.0 near Visalia and milepost 36.0 near Calgro, CA (10.0 miles)
5. That portion of the Matagorda District, Southern Division, between milepost 1.0 near Sealy and milepost 16.0 near Eagle Lake, TX (15.0 miles)
6. That portion of the Matagorda District, Southern Division, between milepost 19.9 at Rayner Junction and milepost 42.7 near Wharton, TX (22.8 miles)

SPT lines to be abandoned include:

1. That portion of the Coalinga Branch, Bakersfield Subdivision, San Joaquin Division, between milepost 240.0 at Goshen Junction and milepost 251.5 at Hanford, CA (11.5 miles)
2. The Riverside Branch, Yuma subdivision, San Joaquin Division, between milepost 538.9 at Colton and milepost 545.4 at Riverside, CA (6.5 miles)
3. That portion of the Palacios Branch, Victoria Subdivision, Houston Division, between milepost 2.0 near Wharton Junction and milepost 35.0 near Bay city, TX (33.0 miles)
4. That portion of the Galveston Subdivision, Houston Division, between milepost 46.8 at Texas City and milepost 56.6 at Galveston, TX (excluding trackage over Galveston Causeway between milepost 50.73 and 52.91) (7.6 miles)

ATSF line over which service is to be discontinued:

That portion of the Second District, Valley Division, between milepost 1124.4 near Gillis and milepost 1145.5 near Oakley, CA (21.1 miles)

The petition seeking exemption for the abandonment of, and discontinuance of service over, lines of Southern Pacific Transportation Company and The Atchison, Topeka and Santa Fe Railway Company in California and Texas, is denied.

5. Finance Docket No. 30400 (Sub-No. 5)

SPSF seeks authority under 49 U.S.C. 11103 for joint use of railroad track owned by Union Pacific Railroad Company (UP) extending between milepost 3.1 at Hobart and milepost 1.7 at Ninth Street Junction, a distance of 1.4 miles, in Los Angeles, CA. At present, SPT exercises trackage rights over this track under a 1943 agreement with UP. If the primary transaction were approved and consummated, SPST's primary intermodal terminals in southern California would consist of ATSF's Hobart Yard and SPT's Los Angeles Transportation Center (LATC). The only practical routing for SPSF train movements between Hobart Yard and LATC would involve the use of the subject UP track between a new connection to be constructed [Finance Docket No. 30400 (Sub-No. 6)] at Hobart and Ninth Street Junction. The existing trackage rights agreement between SPT and UP does not permit SPT to use the trackage for these purposes. That impediment would be resolved by approval of the joint use application.

The application of The Southern Pacific and Santa Fe Railway Company for acquisition of use of terminal facilities of Union Pacific Railroad Company in Los Angeles, CA, is denied.



6. Finance Docket No. 30400 (Sub-No. 6)

SPSF seeks an exemption under 49 U.S.C. 10505(a) from the prior approval requirements of 49 U.S.C. 10901 for the construction of a connecting track between (1) trackage known as the Third District, Los Angeles Division main line of the ATSF, and (2) the San Pedro Branch of Union Pacific Railroad Company (UP) at Hobart, in Los Angeles, CA. This track construction would enable SPSF to implement its plans for joint use of UP's trackage between Hobart and Ninth Street Junction to accommodate direct train movements between ATSF's Hobart Yard and SPT's Los Angeles Transportation Center (LATC).

The petition seeking exemption for the construction by The Southern Pacific and Santa Fe Railway Company of connecting track in Los Angeles, CA, is denied.

7. Finance Docket No. 30400 (Sub-No. 7)

SPSF seeks authority under 49 U.S.C. 11301 to assume obligation and liability, as principal or guarantor, with respect to the payment of principal, premium, interests, dividends, and other amounts due on securities issued or guaranteed by the ATSF and SPT and their transportation subsidiaries.

The application of The Southern Pacific and Santa Fe Railway Company for authority to assume obligation and liability, is denied.

8. Docket No. MC-F-15628

SPSF seeks authority under 49 U.S.C. 11343 to acquire control of Pacific Motor Trucking Company (PMT), Pacific Motor Transport Company (PMTC), and Louis Heller, Incorporated (Heller), through control of SPT. PMT and PMTC are wholly-owned motor carrier subsidiaries of SPT; Heller is a wholly-owned motor carrier subsidiary of PMT. SPT's direct control of PMT and PMTC and SPT's indirect control of Heller by SPT would shift from SPT to SFSP as a collateral incident of the consummation of the primary transaction.

The application of Southern Pacific and Santa Fe Railway Company for the acquisition of control of Pacific Motor Trucking Company, Pacific Motor Transport Company, and Louis Heller, Incorporated, is denied.

9. In Finance Docket No. 30400 (Sub-No. 8)

The application of Missouri-Kansas-Texas Railroad Company for trackage rights over the Southern Pacific Transportation Company between San Antonio and Corpus Christi, TX, is denied.

10. In Finance Docket No. 30400 (Sub-No. 9)

The application of Missouri-Kansas-Texas Railroad Company for acquisition of use of terminal facilities of Missouri Pacific Railroad Company at Corpus Christi, TX, is denied.

11. In Finance Docket No. 30400 (Sub-No. 10)

The application of Missouri-Kansas-Texas Railroad Company for trackage rights over Southern Pacific Transportation Company between San Antonio and Eagle Pass, TX, is denied.

12. In Finance Docket No. 30400 (Sub-No. 11)

The application of Missouri-Kansas-Texas Railroad Company for trackage rights over St. Louis Southwestern Railway Company between Topeka and Liberal, KS, is denied.

Finance Docket No. 30400, et al.  
Appendix B cont'd

13. In Finance Docket No. 30400 (Sub-No. 12)

The application of Missouri-Kansas-Texas Railroad Company for trackage rights over Southern Pacific Transportation Company between Houston and Texas City, TX, is denied.

14. In Finance Docket No. 30400 (Sub-No. 13)

The application of Missouri-Kansas-Texas Railroad Company for Trackage rights over Southern Pacific Transportation Company between Houston and Beaumont, TX is denied.

15. In Finance Docket No. 30400 (Sub-No. 14)

The application of Missouri-Kansas-Texas Railroad Company for trackage rights over The Atchison, Topeka and Santa Fe Railway Company between Dallas and Ward Spur, TX, is denied.

16. In Finance Docket No. 30400 (Sub-No. 15)

The application of Union Pacific Railroad Company and Missouri Pacific Railroad Company for trackage rights (1) over Southern Pacific Transportation Company between El Paso, TX and Colton, CA, and between points in California; (2) over The Atchison, Topeka and Santa Fe Railway Company between points in California; and (3) over Southern Pacific Transportation Company and The Atchison, Topeka and Santa Fe Railway Company between Oil Junction and Maltha, CA, and between Martinex and Antioch, CA, is denied.

17. In Finance Docket No. 30400 (Sub-No. 18)

The application of The Kansas City Southern Railway Company and Louisiana & Arkansas Railway Company for trackage rights over Southern Pacific Transportation Company between Avondale and West Lake, LA; between Beaumont and Houston, TX; between Houston and Galveston, TX; and between Greenville and Fort Worth, TX, is denied.

18. In Finance Docket No. 30400 (Sub-No. 19)

The application of The Texas Mexican Railway Company for trackage rights over Southern Pacific Transportation Company between Corpus Christi and San Antonio, TX, is denied.

19. In Finance Docket No. 30400 (Sub-No. 20)

The application of The Denver and Rio Grande Western Railroad Company for acquisition of, or trackage rights over, Southern Pacific Transportation Company lines between Ogden, UT and Klamath Falls, OR/Roseville, CA, and between points in Nevada, California, and Oregon, is denied.



## APPENDIX C

### OPERATING PLAN AND COST ANALYSIS

The following discussion summarizes the major features of applicant's operating plan as presented in SPSP-4, v. 5.

#### More Efficient Use of Lines and Facilities

Because of the consolidated system's ability to reroute traffic over more efficient internal routes, applicants anticipated train mile and car mile reductions that would save approximately \$57.6 million a year, through reduced fuel consumption and maintenance costs, labor saving, and other means. This rerouting assertedly would improve existing schedules, enhance schedule reliability, and eliminate considerable circuitry.

Reallocation of traffic moving over the ATSF and SPT lines through southern California, Arizona, and New Mexico would create particular efficiencies. Traffic moving between Los Angeles, CA, and Houston, TX, would use the shorter SPT route, which represents a reduction of nearly 150 miles for traffic formerly moving over ATSF's route between these points. Similarly, traffic moving between northern California and Dallas/Fort Worth, TX, Pine Bluff, AR, and Memphis, TN, would use the ATSF line between Mojave, CA, and Dallas/Ft. Worth, thereby saving present SPT traffic about 250 miles. The SPT single track Sunset Route now carries a great number of trains and is approaching capacity. To permit competitive scheduling and enhance reliability on that line, some existing traffic would be shifted to ATSF's line, consisting mainly of double track.

Applicants also planned to reallocate traffic moving between California and the Midwest. Time-sensitive traffic (including TOFC/COFC trains) would be concentrated on the current higher performance ATSF route between Los Angeles and Kansas City. This would permit much manifest traffic to be rerouted on the present SPT-SSW line between Vaughn, NM, and Hutchinson, KS, where it would not interfere with the trains carrying time-sensitive freight.

Rerouting of traffic within California was also planned. Several routes in the Fresno, CA, area, would be consolidated, with construction of new connections and upgrading of an existing one. In particular, this would permit all trains to be moved over SPT's line through Fresno rather than over the ATSF line, which crosses and lies in the center of numerous city streets. Between Fresno and Bakersfield, the parallel ATSF and SPT lines would be used interchangeably, depending on traffic flow patterns and other conditions, thereby increasing flexibility and reducing operating costs. Although ATSF and SPT have parallel lines between Fresno and the Bay area, all trains between these points would use SPT trackage, including the Moccoco line between Tracy and Martinez. The ATSF line north of Fresno would be used only as far as Stockton, for trains moving to or from the Sacramento/Roseville area, with SPT trackage to be used between that area and Stockton. This rerouting would enable SPSF to discontinue running Bay area freight trains over ATSF's high maintenance line between Stockton and Pittsburg through the San Joaquin River Delta. Construction of sidings and connections, as well as other improvements, would be made on the SPT line between Martinez and Lathrop to permit higher operating speeds for Bay area trains.

Because applicants intended, through rerouting, to increase movements through Dallas of traffic between northern California and Pine Bluff and points beyond, they planned several adjustments to improve service in and around Dallas. Two ATSF facilities were to be downgraded and used for storage and local service support, with carload and TOFC traffic of both merging railroads to be consolidated at SPT's Miller Yard, which was to be expanded and improved. This would permit more frequent dispatch of traffic. A connection at Wylie, TX, between the ATSF Dallas-Paris line and the SSW Fort Worth-Mt. Pleasant line would

provide a slightly shorter route for trains moving between Dallas and points east of Mt. Pleasant on the SSW line (such as Memphis and St. Louis), and would permit Memphis-Dallas-Oakland TOFC trains to pass through Dallas without entering Miller Yard. To accommodate the increase in this long-distance traffic, heavy tie renewals, surfacing, and construction of additional sidings were planned for the SSW Wylie-Mt. Pleasant line (known as the "C" branch), as were extensions of siding on the present ATSF line between Brownwood and Farwell/Texico, TX (on the New Mexico border).

Construction relating to consolidation of the Fresno-Bakersfield routes and to added capacity on the Martinez-Lathrop line would cost \$11.6 and \$33.2 million, respectively. The Dallas-related line and terminal construction and rehabilitation would cost \$17.5 million. Together with construction undertaken to expand SPT's West Oakland, CA, terminal (costing \$19.8 million, and described below under "Changes at Common Points"), these projects would cost about \$82 million, or 84 percent of the \$98 million (1982 dollars) in capital expenses on lines and facilities needed to implement the Operating Plan. These are the four major locations at which significant rehabilitation or construction projects were planned. Martinez-Lathrop and Texico-Mt. Pleasant are the only two main line segments that would require upgrading to accommodate an increase in the number and size of trains.

Only two main line segments were scheduled for diminished status in their respective system roles: (1) the SPT line between Hutchinson and Topeka, KS, as well as SPT's operation over UP trackage between Topeka and Kansas City, and (2) the ATSF line between Stockton and Richmond, CA, traversing the San Joaquin River Delta, discussed above.

Several abandonments, totalling approximately 140 miles in California and Texas, were planned to increase operational efficiency. With one exception, the lines no longer generate local traffic. In California, an ATSF line between Collier and Maltby, near Martinez, was to be abandoned, with traffic rerouted over the SPT double track main line along San Pablo Bay and the Sacramento River. As indicated previously, traffic on the ATSF line through Fresno was to be rerouted to the SPT line, permitting abandonment of the ATSF line. In the San Joaquin Valley, abandonments of ATSF trackage between Corcoran and Tulare, and between Visalia and Calgro, and of SPT trackage between Goshen Junction and Hanford, were to be undertaken, with those communities continuing to receive service on other, north-south, SPSF lines. In Texas, ATSF lines between Sealey and Eagle Lake, and between Rayner Junction and Wharton, were to be abandoned, again, with service from other SPSF lines continuing to be available to those communities. The SPT line between Wharton and Bay City were to be abandoned in favor of generally parallel ATSF trackage. Finally, SPT's line between Texas City and Galveston was to be abandoned, with rail service at Galveston provided by the existing ATSF line.

Applicants expected the merger to produce efficiencies in system yards that would allow a net reduction of 18 local freight assignments and 37 engine shifts per day on a systemwide basis. This would create about \$25.3 million a year in operating savings.

#### Changes at Common Points

The operating plan contemplates physical changes and operational modifications at numerous common locations where the two carriers conduct operations. Changes at Dallas and related points have already been discussed.

The capacity of SPT's existing intermodal facility in West Oakland, CA, adjacent to the Port of Oakland, would be more than doubled. This would enable it to absorb traffic now moving



through ATSF's Richmond intermodal terminal, the location of which necessitates an expensive over-the-road drayage of significant volumes of port traffic. Consolidating all traffic in one terminal would not only reduce much of this expense but would simplify train make-up and break-up, reducing delay, and improving transit times and frequency of dispatch. The merged system would use both SPT's classification yard and its TOFC/COFC facilities at Oakland, and the Richmond intermodal facility would be closed except for storage. Both railroads have switching yards at Richmond; the SPT yard would be closed except for storage, while the ATSF yard would be used to serve Richmond area industries. Other Bay area modifications include service of San Francisco shippers from SPT's Mission Bay Yard, with ATSF abandoning the tug and barge service it uses to provide such service, and new connections at Pittsburg and Stockton to permit more efficient train movements.

At Los Angeles, traffic would be more efficiently distributed among the several ATSF and SPT facilities. The Operating Plan contemplated concentrating container operations at a facility SPT is now developing at Delores, near Long Beach and Los Angeles harbors. Certain trains would depart directly from Delores, while others would operate through connections between Delores and other area facilities. Use of SPT's container facility at Valla would be discontinued. The existing terminals of ATSF at Hobart and SPT at Los Angeles Transportation Center (LATC) would be dedicated to specific TOFC traffic flows, with the former handling trains to and from Chicago, Kansas City, East St. Louis and present ATSF transcontinental route points, and the latter handling trains to and from west coast locations and such eastern locations as New Orleans, Memphis, Houston, and Dallas. For conventional traffic, the Delores yard would handle inbound traffic and the ATSF Watson yard outbound traffic. SPT's hump yard at Taylor would be the main yard serving central Los Angeles, with the ATSF Hobart yard used as a satellite local yard to serve adjacent industrial areas. Through manifest trains would arrive and depart Taylor yard. Connections and operations between the various yards would be constructed and maintained. These changes would have fully accommodated existing traffic levels and growth in traffic, as well as improved critical service aspects such as cutoff and departure times.

In the San Joaquin Valley, SPT's classification yard at Fresno would be used for boxcar/manifest traffic, while ATSF's TOFC facility at Calwa would be the single intermodal facility serving Fresno. At Bakersfield, the present ATSF classification yard and TOFC facilities would be used by the merged railroad, with the SPT line retained for storage purposes.

Significant changes would occur in the roles of the ATSF classification yard at Barstow, CA, and the SPT classification yard further south at West Colton. Barstow would be used primarily as a northern California serving yard, switching traffic between eastern points and points in Oregon and northern and central California (although certain traffic, especially eastbound TOFC traffic, would bypass Barstow). West Colton would be the prime serving yard to and from all locations in the Los Angeles basin and on the southern half of the California coast, with outbound traffic collected there for classification in eastward and northward trains, and inbound traffic from eastern points generally bypassing Barstow and moving directly to either local yards or to West Colton for classification. To permit fuller use of the West Colton yard, connections would be built to the ATSF line serving points in the Los Angeles area.

At Vaughn, NM, where the SSW Tucumcari line intersects ATSF's transcontinental route, connections would be upgraded and constructed to permit direct movements from one line to the other. Similar connections would be built where ATSF and SPT/SSW lines intersect at Hutchinson, KS, and Kountze, TX. Facilities would also be consolidated at Phoenix, Kansas City, El Paso, Fort Worth, Beaumont, Houston, Galveston, and other Texas points. At

some of these common points, one carrier's yard would be employed while the other's is shut down or assigned to storage purposes. At other points, traffic would be reallocated between the respective carriers' facilities.

The operating plan contemplated the addition of 22 manifest trains throughout the merged system, 14 of them operating in both directions, four eastbound, and four westbound. The consolidation of the two railroads would have permitted such new train operations as those between Barstow and Lafayette/New Orleans, Barstow/West Colton and Pine Bluff, and El Paso and Amarillo. An eastbound manifest train from Eugene, OR, to Kansas City, with traffic destined for St. Louis, Chicago, and other eastern connections, would be operated without switching in southern California. Trains operating between Eugene and Barstow would permit Pacific Northwest traffic to be short-routed to the east and southeast, and to take advantage of frequent eastward schedules out of Barstow. Also planned were blocks from West Colton to the Conrail connections at Streator, IL, and a run-through train from Pine Bluff to the Southern Railway at Memphis.

Ten new and rescheduled TOFC and perishables trains would be operated to accommodate the expanding volume of this freight generated through coordination. These include TOFC trains in each direction between Oakland and Pine Bluff/Memphis over Dallas, and between Oakland and Houston/New Orleans. Also, an eastbound perishables train would operate from the Salinas Valley (or the Imperial Valley, depending on the season) to Chicago.

Twenty trains now operated by the individual railroads would be modified, by either shortening, extending, or altering their routes. Thirty existing trains operating over the lines of the two systems, in addition to eight division trains, would be discontinued, with their traffic to be handled by the new and replacement trains. The structure of local distribution and gathering services on the merged railroad would not change materially from the service now provided, but applicants specify the areas where consolidation of local train operation in commonly served areas would be effected to increase efficiency. Applicants also projected traffic densities over individual line segments to demonstrate the impact of change resulting from coordinated use of the individual railroads' routes.

The blending of the ATSF and SPT traffic bases provides a more balanced mix of traffic. TOFC/COFC traffic accounts for 53 percent of ATSF's traffic, but only 32 percent of SPT's. In contrast, it will account for 43 percent of the merged system's traffic (42.9 percent if the traffic mix is augmented by rail and truck diversions). Similarly, manifest traffic accounts for 58 percent of SPT's present traffic, but only 37 percent of ATSF's, while it would comprise 47.1 percent of the merged system's (46.5 percent if diversions were considered).

#### Equipment Utilization

The car and locomotive fleets of both railroads would be combined into a single fleet, with one set of reporting marks. Common management and a unified equipment distribution system would enable the merged system's car distribution staff to allocate this equipment freely across the operating map. To quantify these benefits, applicants performed a study of each carrier's equipment usage patterns, equipment distribution system, and use of special equipment types, plus the proposed Operating Plan to determine how an ATSF-SPT merger would affect equipment utilization. The study indicated equipment utilization benefits in four broad areas:

(1) Peak Use Balancing - Matching one railroad's peak demand periods with the other's non-peak periods would produce an aggregate demand less than the sum of ATSF's and SPT's individual peak demands. Therefore, a merger of ATSF and SPT would be



expected to reduce time-distributed peaks, and to result in a more constant level of demand and a more balanced year-round level of equipment use. This smoothing of car demand peaks purportedly would have allowed the merged carrier to handle its 1982 traffic in 2,634 fewer cars, with a replacement cost of \$141.0 million.

(2) Network Improvements - Through a combination of shorter routes, faster, more frequent train schedules, and fewer time-consuming terminal handlings, an improved network would achieve measurable savings in car-miles, reduced terminal time, and reduced car hours on faster trains using shorter routes. The locomotive fleet would be expected to reduce its mileage and train hours. An estimated reduction of 1.6 percent in loaded and empty car-miles on the merged system would contribute to lowered operating costs and equipment rentals. An average gain in car velocity of about 1 percent was anticipated, and total car handlings would decrease by about 1.2 percent overall. The improved system network would reduce system car needs by 715 cars, at a replacement cost savings of \$37.5 million. These improvements would have enabled a merged system to handle 1983 traffic with 123 fewer locomotives, at a savings of \$99.2 million.

(3) Car Distribution Improvement - Employment of a combined equipment fleet and its central management would help to achieve maximum use of resources through reduced empty mileage, elimination of cross hauls, improved car dispatching, better controls and increased likelihood of having proper equipment on hand when demanded. These improvements in efficiency in managing car distribution would have enabled a merged system to handle its 1983 traffic with 268 fewer cars, with corresponding replacement cost savings of \$15.0 million.

(4) Special Situations - Equipment use arrangements not otherwise possible in a competitive environment would assist the merged system in improving utilization. These situations include use of otherwise idle or bad ordered equipment, changes in pool assignments, and more effective use of special equipment. With respect to several different types of equipment, one carrier's excess cars could compensate for the other carrier's deficiency in them; these include air-slide covered hoppers, woodchip cars, flat cars equipped for pipe loading, automotive parts box cars, and chain tie-down equipped flat cars. Applicants calculate the saved rental payments and avoided investment cost attributable to combination of their car fleets in these areas. In addition, the combined system could achieve better equipment utilization through the ability of each carrier to complement the other's imbalance in multi-level auto and TOFC movements. This coordinated management would produce efficiencies equivalent to 1,262 rail cars and 509 trailers, worth about \$67.4 million in replacement costs.

The overall results of applicants' analysis of maximum equipment utilization are summarized in the chart below:

EQUIVALENT CAPITAL COST SAVINGS (1982 dollars, stated in millions)

SOURCE	RAIL	CARS	LOCOMOTIVES		TRAILERS		TOTAL
	UNITS	VALUE	UNITS	VALUE	UNITS	VALUE	
Peak Use Balancing	2,634	\$141.0	--	--	--	--	\$141.0
Network Results	715	37.5	123	\$99.2	--	--	136.7
Car Distribution	268	15.0	--	--	--	--	15.0
Special Studies							
TOFC	216	12.3	--	--	509	\$4.0	16.3
Multilevel	100	8.1	--	--	--	--	8.1
Other	946	43.0	--	--	--	--	43.0
<b>TOTAL</b>	<b>4,879</b>	<b>\$256.9</b>	<b>123</b>	<b>\$99.2</b>	<b>509</b>	<b>\$4.0</b>	<b>\$360.1</b>

Applicants' studies (SFSP-13, Statement No. 5 at 25-40) indicate that the merged carrier could have handled the traffic analyzed in the study period with a 3.7 percent smaller car fleet and a 3.4 percent smaller locomotive fleet than those used by the individual carriers. Loaded car miles on a merged system were predicted to decrease by about 52 million miles a year, or about 1.8 percent, and empty car miles were predicted to decrease about 65 million miles annually, or about 4.1 percent. Total car miles would decrease by about 2.6 percent, and specific coordination identified in the studies would reduce costs by \$538,875 a year.

Avoided Capital Expenditures

As indicated above, SFSP contended that efficiencies to be derived from combining the two railroads' equipment fleets would avoid the expenditure of over \$360 million on equipment acquisition. The consolidation would also obviate capital improvements to each carrier's operating facilities. The shifting of traffic from SPT's Sunset Route to ATSF's line between Barstow, CA, and Vaughn, NM, assertedly would permit SPT to save \$142 million designated for four projects intended to increase SPT's capacity between southern California and Kansas City. Over 100 ATSF projects, costing \$89.1 million, would be rendered unnecessary. In addition, certain mechanical, engineering, and communications capital expenditures would be avoided.

The following table summarizes the avoided capital expenditures that result from the operating plan and operating-related coordinations.

Avoided Operating-Related Capital Expenditures  
(millions of dollars)

Avoided Equipment Acquisitions	360.0
Avoided SPT Operating Projects	142.0
Avoided ATSF Operating Projects	89.1
Avoided Mechanical Projects	63.6
Avoided Engineering Projects	7.9
Avoided Communications Projects	<u>5.2</u>
TOTAL	667.8

The Operating Plan would transfer a substantial volume of traffic between Los Angeles and Kansas City away from the SPT single-track route to ATSF's double-track route. As a result, the merged railroad would not need the additional capacity on SPT's route and would avoid a capital expenditure of \$142 million SPT had planned for its route. Applicants recognized over 100 operations-related capital projects that could be averted as a result of consolidation, plus the avoidance of tangible capital expenditures in the mechanical and engineering areas. In all of these categories, a total capital savings of approximately \$308 million is projected.

These non-recurring savings, added to the avoided capital expenditures of \$360 million, comprise a total projected capital savings of approximately \$668 million, which, offset by the estimated capital expenditures of \$146.7 million to implement coordination plans, amounts to net capital expenditures avoided of approximately \$521 million.



### Engineering and Mechanical Consolidations

In addition to the one-time savings due to avoided capital expenditures indicated on the chart above, the merger would also result in certain recurring savings in these areas. Consolidation of engineering functions was expected to save \$27 million a year. These savings would be derived from rail welding coordinations, changes in tie treatment and unloading practices, improvement in ballast procurement practices, closure of two maintenance and repair shops, reduced machine ownership, and changes in vegetation control practices. Capital expenditures of \$6.9 million would be incurred to permit realization of these savings.

Consolidation of mechanical functions would produce recurring savings of \$11.2 million one year after the merger and an average of \$12.6 million each year thereafter. The actions to be taken to produce these savings include reorganization or consolidation of heavy and light locomotive maintenance and car repair functions. Estimated capital expenditures of \$41.8 million over 3 years would be undertaken to permit achievement of these savings.

### Passenger Service

Two aspects of the Operating Plan would create changes in passenger train operation, both of them relating to the four Amtrak trains serving the route between Bakersfield and Oakland. Beginning in the third year following consolidation, SPSF would reroute all freight traffic away from the ATSF line between Stockton and Port Chicago, leaving Amtrak the sole user of the line. Applicants suggested that Amtrak acquire the line or move onto the upgraded Mocado line. Second, the rerouting of all trains through Fresno on the SPT line would necessitate relocation of Amtrak's Fresno passenger station.

### Phasing of Benefits

The traffic study (SFSP-4, Vol. 5 at 47) developed by the merging carriers projects that by the close of the first year 60 percent of the anticipated service changes would be implemented, 80 percent by the end of the second year, and 100 percent by the end of the third year. With all facilities, lines and operations coordinated fully at the close of the third year, Year 4 would be the first routine year of the merged system.

## COST ANALYSIS OF OPERATING PLAN

### Applicants' Evidence

Applicants' Summary of Benefits (SFSP-4A at 27) includes savings from traffic rerouted internally over the merged system as well as the net of revenues obtained from new traffic diverted from other railroads and motor carriers.<sup>1/</sup> To measure such benefits, applicants obtained the service unit costs and total expenses for this traffic from an application of the costing methodology of Rail Form A (Statement 1F1-73, Formula For Use In Determining Rail Freight Service Costs).

Using the study year 1982 as an evidentiary base, applicants entered the statistical and expense data for ATSF, SPT and SPT's SSW into a computerized Rail Form A program and produced a consolidated Rail Form A result. Individual carrier results were also obtained from the cost formula.

An adjustment was made to the basic Rail Form A unit costs to exclude the element of return. This was done because the cost of capital is not considered to be an operating expense and the intent of applicants was to provide data that properly appears in

<sup>1/</sup> As stated in our earlier discussion of Public Benefits, we do not treat revenues from diverted traffic as public benefits.

an income accounting statement measuring the merger benefits. However, in accordance with this Commission's Decision No. 4 served February 28, 1984, the variable cost of return on road and equipment at the current cost of capital has also been determined separately.

Another adjustment of unit costs was made to provide for what was considered to be a more appropriate frequency of intertrain/intratrain (I&I) switching. Conventional costing methods call for this activity to take place every 200 miles for routine system traffic. Applicants leaned toward studies that provided more realistic mileage frequency figures for each of the merging carriers, both under conditions of internal reroutes and for divertible traffic situations. The studies demonstrate that intermediate handling on the rail diverted traffic would occur on a much less frequent basis because of its transcontinental nature and being subject to preblocking and runthrough handling. Based on those studies, I&I switching was treated in the costing procedure as occurring roughly every 800 miles.

The consolidated Rail Form A of the merger companies, as well as the individual Rail Form A's of the SPT and SSW, reflect the impact of the change in traffic patterns resulting from SSW's Kansas City-St. Louis trackage rights and traffic solicitation agreement with the DRGW.

The rail diversion study generated by applicants' consultant designed to identify the traffic that would be drawn into the merged system rendered these results:

Divertible Shipments

1 to 5 carloads per shipment	39,256
6 to 49 carloads per shipment	409
49 or more carloads per shipment	<u>1</u>
	39,666

Source: SFSP-12, Statement No. 11 at 6.

Applicants applied the factors for multiple car adjustments found appropriate by the Commission in Ex Parte No. 270 (Sub No. 4), Investigation of Railroad Freight Rate Structure - Coal, for modifying switching, billing and car costs applicable to each of the three categories of shipments.

Tare weights for freight car equipment were used in the shipment costing procedure. Data for car type that correspond to car groups used in Rail Form A were summarized from industry files to develop an average tare weight and car rental rate for each group. The summary results represent a national average tare weight figure for each type of both private and railroad-owned cars that facilitated the costing of the diverted movements.

Ratios for the frequency of empty return of railroad-owned and private cars were developed from Annual Reports (R-1) so that the data could be applied in the cost study. In some cases a consolidation of data for railroad-owned and private equipment was used for individual car groups. A shift of loaded and empty car miles for SSW's Corsicana route to its Tucumcari route is one example of the internal reroute benefits available in the merged company. Internal rerouting of traffic and the improved use of equipment favorably affects the empty return ratios. Studies of improved equipment use identified areas where it could be maximized and where empty cross hauls could be eliminated. All of these factors were taken into account to adjust the empty return ratios of the combined companies and reflect the tighter controls of a merged system.



### 1983 Operating Changes

While 1982 expense and revenue studies were used as a base year, the same data were employed for a special study to chart the effect of two important operating changes experienced by SPT and SSW effective January 1, 1983. On that date the SSW commenced operations over Missouri Pacific tracks between Kansas City and St. Louis. At the same time the SPT trackage solicitation agreement with the DRGW permitted a shift in routing from the Golden State route via Tucumcari to the Overland route via Ogden on traffic destined for Chicago. The first arrangement allowed a shift in traffic from the Corsicana, TX route to the Golden State route. Substantial expense reductions result due to a shortening of the El Paso to St. Louis corridor by 400 miles. Applicants' study calculated the operating impact of both these changes. The combination of the two traffic shifts indicated reductions in revenues of \$26.1 million and reductions in expenses of \$43.7 million, with the bulk attributable to the switch from the Corsicana route to the Tucumcari route. However, the net gains from these changes have not been included as a benefit of the merger.

### Internal Reroutes

To determine the reduction in expenses resulting from internal rerouting of traffic over the merged system, applicants had a consultant perform a statistical survey to develop specific data on route changes. SFSP-12, Statement No. 11 at 11. This information was used to develop costs based on changes in train miles, locomotive miles, gross ton-miles and loaded and empty car miles. In the process, applicants diverged from the conventional method of determining intertrain/intratrain switching savings. To avoid double counting of savings in this area, applicants removed all cost savings associated with the I&I switching function, except for the car hire or car costs related to intermediate handlings, and substituted for that the cost savings associated with the reduction in yard engine assignments envisioned in the Operating Plan.

In measuring the change upon freight train car costs as a result of internal reroutes, applicants applied an adjustment to the private car rental data. The adjustments provide for use of the actual 1982 payments per loaded car mile for tank cars, covered hopper and refrigerated cars, and the actual payment per mile and per day for the TOFC/COFC flatcars. To determine expense differences from the train car days and miles of the rerouted traffic on the balance of the rail equipment, applicant used actual average car hire rates by types of car as shown in the national car fleet index. The same procedure was used in the costing of traffic diverted from trucks and other rail carriers.

Changes in car miles by car type were produced by the Operating Plan and represent actual route car miles. Where the Operating Plan failed to develop the appropriate car days for the rerouted traffic, the time elements were based upon Rail Form A performance statistics with an average of 655 miles used for a car day. The conventional Rail Form A time elements were used for originating, terminating, interchange and intertrain/intratrain functions.

Internally rerouted traffic over the merged system would have resulted in reductions of \$47.2 million in operating expense and of \$10.5 million in car rents. Applicants employed unit costs derived from their combined Rail Form A results to measure those savings.

Traffic diversions from trucks and other railroads involve additional expenses as well as revenues. Diverted traffic includes extended rail hauls on previously handled traffic as well as new traffic attracted to the merged system. SFSP used a computer application of Rail Form A to cost the rail-to-rail

diverted traffic. The costing program combined the diverted traffic details with the input data (unit costs, tare weights, empty return ratios) provided by the ATSF and SPT. Rail diversion data were then furnished to the traffic consultant firm for inclusion in the Operating Model to determine pre- and post-merger routes and miles. Id. at 14. Applicants performed a separate truck-to-rail diversion study, which estimated diversions by volume in specific traffic corridors. SFSP-14, Statement No. 7 at 2. Unit costs from the rail formula application were used to develop variable operating expenses for those diverted movements.

Reduced expenses from improved car distribution opportunities were concluded by applicants to be an element contributing to the overall economic benefits of merger. SFSP-12, Statement No. 11 at 15. Savings in operating costs and car hire would be realized with improved freight car distribution primarily through reductions in empty miles. The operational savings available from improved equipment utilization include: (1) reduction in empty car miles for 100 multi-level auto rack cars; (2) reduction of empty TOFC trailer movements eliminating empty trailer miles, together with the flat car movements necessary to handle those trailers; (3) elimination of cross haul of empty cars; (4) reduced equipment rents on specialized cars where seasonal needs were previously satisfied through rental (per diem) of foreign cars; (5) reduced TOFC inventory needs; and (6) reduced repair expense through lowered requirement of freight cars.

In addition to the variable expense savings attainable through improved car movement management, applicants' study indicates value of equipment savings as well. The merged railroad could have handled its 1982 business in 4,879 fewer freight cars, 509 fewer trailers and 123 fewer locomotives which have a combined replacement value of \$360.1 million.

The summary of savings calculated in applicants' cost studies, as part of the total pro forma statement of economic benefits, is contained in the following table.

Rail-to-Rail Diversion Study	
Increased Revenues	\$221,222,000
Increased Expenses	<u>155,327,000</u>
Net of Revenue Gain	\$ 65,895,000
Truck-to-Rail Diversion Study	
Increased Revenues	\$ 45,354,000
Increased Expenses	<u>37,839,000</u>
Net Revenue Gain	\$ 7,515,000
Yard Engine Assignment Savings	\$ 25,349,000
Internal Reroute Savings	\$ 57,645,000
Car Management Savings	\$ 24,756,000

Source: SFSP-12, Statement No. 11, p. 19.

#### Protestants' Evidence

Several railroad protestants (UP, DRGW, KCS, MKT, & TM) submitted evidence showing anticompetitive effects of the merger over certain traffic corridors, as well as the significant losses of traffic and revenues that would be sustained by them as a result of traffic being diverted to other carriers. They allege that the traffic diversion projected by the SFSP Operating Plan has been understated. To counter the alleged negative impact



upon competition and to offset the potential revenue loss from an SFSP merger, protestants recommended that they be granted certain protective conditions in the form of trackage rights, independent rate making authority, and the purchase or lease of SFSP trackage. Assuming the granting of these conditions, protestants prepared studies of potential "gained" traffic and applied revenue and cost calculations to them. The basis for the cost calculations was the same Rail Form A methodology employed by applicants, with modifications to suit the circumstances of each carrier's individual operations.

#### Discussion

The parties are not separated by issues of costing methodology. The cost of service calculations that underlie the diversion study results are accurate for the purpose of assessing the benefits of diversion to the merged system and the losses where protestants could make inroads through the award of conditions. All parties have adopted and adhered to the costing guidelines prescribed by the Commission at the outset of this proceeding. No attempt was made by any of the protestants to restate the amount of private benefits from diversion appearing in applicants' Summary of Benefits, and we conclude that they believe the methodology is fundamentally sound. It is the amount of traffic that is in dispute, rather than the associated costs.

It is our opinion that applicants' treatment of the internal reroute savings and diverted traffic elements of the merger is based upon sound costing methodology and that the estimates developed to show the dollar benefits from those factors are reasonably accurate. Some comment regarding the procedures of the parties is warranted.

Because 1982 was the base year applicants employed to develop their studies, actual expense and statistical data for 1982 were available for use. This precludes the necessity of updating a prior base year to current cost levels through an expense indexing process. In developing Rail Form A unit costs for 1982 it was necessary for SPT and its subsidiary SSW to use a conversion process to translate their current Uniform System of Accounts (in effect since January 1978) data into the prior account formula to make it compatible with the cost formula. The data exchange is patterned on a widely used conversion procedure introduced by the railroad industry that the Commission has found acceptable. Applicants' operating expenses related to maintenance of way and structure reflect the retirement-replacement-betterment (RRB) accounting basis. This approach complies with the Commission's decisions in March and May of 1984 that the use of depreciation accounting be temporarily held in abeyance and not used as a costing device in any phase of this proceeding.

In applying costs to the diversion shipments, applicants were directed by the Commission in its Decision No. 4 to use the operating parameters for unit trains where there was a need for unit train adjustments. However, applicants' diversion study identified only one 1982 shipment that involved more than 49 cars, but it did not qualify as a unit train movement. Where they were applicable, adjustment factors for switching, billing and car costs were used for the three principle carload categories of shipments in the diversion study. Applicants' use of the factors for multiple car adjustments allowed in Ex Parte No. 270 (Sub No. 4), Investigation of Railroad Freight Rate Structure - Coal, is appropriate.

For traffic that would be internally rerouted within the merged system, applicants established the dollar savings by a measurement of costs applicable to carload movements where the Santa Fe and the Southern Pacific operated separately, and when operating in a combined fashion. Basically, the shortened mileage from the use of short line segments available through merger and the reduced operating costs are the source for the internal reroute savings. The unit costs developed by applicants

to measure the operating costs for the carloads that would be internally rerouted were derived from a combined Rail Form A application of the data of the participating merger carriers. This, we believe, is appropriate for the current situation where so many aspects of a parallel merger exist. There would be carloads, for example, between Oregon and Kansas City, which when rerouted internally, would be transported over six separate track segments, three of the ATSF and three of the SPT, of the pre-merger lines. It would be burdensome to apply individual carrier costs to each separate track segment and would accomplish little. On the other hand, to obtain the operating cost for shipments before reroute, where the carriers operated independently, the unit costs for transporting these shipments should reflect RFA application of the individual data of the carriers. Under these circumstances the measurement of savings available through the economies of internal reroute would be more accurate.

It was the mandate of the Commission in its Decision No. 4 at the outset of this proceeding that the applicants' variable costs be adjusted to reflect the element of return on road and equipment property at the current before-tax cost of capital level. Both existing plant and equipment and any new plant or equipment required due to the merger were to be treated that way. Variable costs include capital costs at the embedded debt rate, but in the Commission's judgment those costs should be adjusted to reflect the current cost of capital.

It was applicants' intention to develop operating costs separately for the purpose of producing a pro forma statement that summarized the economic benefits of merger. They view capital as being non-relevant on the statement because return on investment is not considered to be an operating expense. To deal with the Commission's requirement and at the same time provide the expenses they consider to be meaningful in terms of a pro forma summary, applicants chose to produce figures from two applications of the cost formula. One version contained zero cost of capital while the second version included capital costs. The difference between the two values represents the return on investment adjustment. The version containing zero cost of capital was used in summarizing the operating benefits (reduced expenses). The results of the cost of capital version appear in the cost testimony and exhibits. The addition of return on road and property equipment at the current cost of capital (28.28 percent for 1982) equals \$73.1 million in cost savings in the operating categories.

Applicants have satisfied the Commission's requirement of providing the return on investment element in their evidence. We agree with applicants that non-operating costs should be excluded from the pro forma accounting statement of savings. The acceptance of the exclusive savings figure presumes that the three combined railroads would require no acquisition of equipment or any significant expansion in plant to handle the diverted traffic, a view that applicants have attested to on the record.

The charts that follow indicate the specific areas of cost savings identified by SFSP, and where there would be additional and avoided capital expenditures.



TABLE 1

Mechanical Coordination Benefits Due to Consolidation of  
Mechanical Departments of the Two Companies and  
Elimination of Redundant Facilities and Functions  
(Dollars Stated in Millions)

YEAR:	Annual Net Savings			Avoided Capital Expenditures			Additional Capital Expenditures		
	1	2	3	1	2	3	1	2	3
I. Lines West of Albuquerque and El Paso									
A. San Bernardino supplying system components	6.3	6.44	6.72	.50	6.25	3.25	-	1.29	-
B. Sacramento supplying lines west	-	-	-	-	-	-	.50	1.00	1.00
C. Consolidation of car repair functions at RAMAC	-.45	(1.15)	-	-	-	-	.52	.48	3.00
D. Reorganization of locomotive maintenance functions	0.14	0.23	1.13	4.70	5.10	7.70	2.0	2.50	-
E. Consolidation of light repair functions	0.58	0.48	0.38	-	-	2.50	0.5	.25	-
II. Lines East of Albuquerque and El Paso									
A. Reorganization of locomotive maintenance functions	3.75	3.84	3.83	.95	.50	3.0	1.53	4.0	4.0
B. Reorganization of car repair functions	.20	.20	.20	.80	6.20	15.40	-	1.0	1.5
C. Consolidation of light repair functions	.23	1.25	1.53	2.50	.80	4.0	3.0	5.0	7.0
TOTAL	11.2	11.99	12.64	9.45	18.85	35.85	8.0	15.52	16.5

TABLE 2

Engineering - Maintenance of Way  
 Coordination Benefits From Consolidation  
 of Functions and Facilities

<u>Coordinations</u>	<u>Annual Net Savings</u>	<u>Avoided Capital Expenditures</u>	<u>Additional Capital Expenditures</u>
1. Rail Welding	\$ 711,450	\$ 568,700	\$ -
2. Tie Treatment	2,946,000	-	5,500,000
3. Tie Unloading	2,700,000	-	564,000
4. Ballast Procurement	16,500,000	-	-
5. Houston Shop Closure	1,586,400	755	-
6. Reduced Machine Ownership	1,801,330	7,302,300	-
7. Vegetation Control	674,000	-	854,000
8. San Bernardino Shop Closure	98,000	-	-
	<hr/>	<hr/>	<hr/>
TOTALS	\$27,017,180	\$ 7,889,755	\$6,918,000



TABLE 3

Equipment Utilization Reduced Expenses  
With Improved Car Distribution

<u>Areas of Savings</u>	<u>Amount of Savings</u>
(Dollars stated in Millions)	
1. Multi-Level Auto Rack Cars (5 million empty car-mile reduction for 100 multi-level cars)	
a. reduction in annual operating costs	\$ 1.7
b. reduction in car hire costs	0.5
2. TOFC Study (Reduction of empty trailer movements will eliminate 10,285,000 empty trailer miles)	
a. reduced costs in line-haul and terminal	3.9
b. reduced car hire costs	1.0
c. reduced car mile requirements	2.0
3. Elimination of Cross Haul of Empty Cars (Based on projected annual empty car mile reductions of 26,776,000)	
a. reduction in annual operating services	6.7
b. car hire savings	2.5
4. TOFC Inventory Needs (Ramp consolidation results in reduced need of 2,700 trailer-days and 675 rail car days per week)	
a. reduced car hire savings on trailers	1.1
b. reduced car hire savings on flat cars	0.4
5. Reduced Repairs on Freight Cars (As a result of improved equipment utilization there will be a reduced equipment requirement of 5,000 cars)	4.8
TOTALS	\$24.8

TABLE 4

Summary of Recurring Annual Savings  
(in Millions of Dollars)

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Normalized</u>
<b>NON OPERATING ECONOMIES</b>				
Traffic-Marketing and Sales	\$ 3,300	\$13,220	\$13,220	\$13,220
Freight Claims and Shipper Assistance				
a. Personnel	800	2,995	2,995	2,995
b. Reduced Loss and Damage Claims	-	1,500	3,000	4,575
Treasury	270	545	545	545
Purchasing				
a. Transportation	3,000	6,000	9,000	9,000
b. Purchasing	2,600	5,200	5,200	5,200
c. Personnel	(15)	360	1,015	1,280
Communications				
a. Circuits	60	120	130	180
b. Personnel	365	1,430	3,965	5,530
Police	(30)	680	1,185	1,750
Insurance	1,000	1,000	1,000	1,000
Accounting	-	1,800	7,000	10,595
Avoidance, Automobile Replacement	350	350	350	350
Executives	2,400	2,400	2,400	2,400
Total Non-operating Economies	14,100	37,600	51,055	58,620
<b>ANCILLARY OPERATING ITEMS</b>				
Car Management	440	890	890	890
Division Structure	1,450	2,900	2,900	2,900
Yardmasters, Supervisory Officers	280	805	1,055	1,055
Agency Clerical	1,255	3,535	4,560	4,560
Total Ancillary Items	\$ 3,425	\$ 8,130	\$ 9,405	\$ 9,405
<b>Total Economies</b>	<b>\$17,525</b>	<b>\$45,730</b>	<b>\$60,460</b>	<b>\$68,025</b>



Applicants' Rebuttal Evidence

In their evidence in rebuttal, applicants countered the allegations raised by DOJ and other protestants on the merits of the Operating Plan and its attendant benefits. Applicants sought to neutralize the assertion that many of the claimed merger benefits could be achieved by SPT and ATSP by cooperative efforts short of merger. Applicants explored in detail the non-merger mechanisms suggested by DOJ in a manner which convinces us that there are practical, legal and competitive problems which would substantially lessen the effectiveness of such arrangements. It seems clear to us that without the unified management resulting from merger, few if any of the operating economies projected under the Operating Plan are attainable. See UP Control 366 I.C.C. at 492-493.

Applicants' rebuttal evidence contains a restatement of the summary of merger benefits originally projected that amounted to \$295.0 million annually following full implementation of the Operating Plan. SFSP-50, Statement No. 1. In this revision, there is an attempt to isolate what can be considered public benefits of the merger and to quantify them in response to DOJ assertions that there would be no benefit to the public from a merger of the ATSP and SPT systems. Applicants then applied the dollar amount of public benefit attributable to operating economies as a base against which to compare the alleged public harms resulting from a lessening of competition and increased freight rates.

The following outline identifies the areas in which applicants concede that the merger benefits would be private.

<u>Merger Economies Which DOJ Claims Would Be Private Benefits Only</u>	<u>Amount of Savings (in thousands of dollars)</u>
<u>Equipment Utilization</u>	
Reduced Equipment Rents	539
<u>Engineering Coordinations</u>	
Rail Welding	783
Tie Treatment	2,946
Ballast Procurement	16,500
Vegetation Control	539
<u>Mechanical Coordinations</u>	
Components to be manufactured at San Bernardino	6,720
Locomotive Maintenance (East of Albuquerque and El Paso)	4,100
<u>Non-Operating Savings-Purchasing Activities</u>	
Purchasing	5,200
Transportation	9,000
TOTAL	<u>46,327</u>
LESS: Ballast Procurement Savings	16,500
Amount of Private Benefits to be Deducted from Total Merger Benefits	<u>29,827</u>

Source: SFSP-50, Statement No. 1 at 30 (Appendix A).

The adjustment which reduces the itemized private benefits by \$16.5 million to \$29.8 million stems from a misconception on the part of DOJ regarding applicants' ballast procurement savings under the merger. While ballast consumption would remain constant and there would be no reduction in resource use there, the savings under merger would consist of reduced transportation costs. These lower costs would result from the shorter distances that ballast would be transported to the consuming locations after the merger.

Using as a base the originally projected merger savings, applicants restated those figures by extracting the strictly private benefits that would flow from the Operating Plan. The following [outline provided by applicants] reflects the separation of private benefits from the overall economic savings.

Projected Annual Merger Savings	Exhibit SFSP-4 (Amounts)	Exhibit SFSP-33 in Millions of Dollars)	Restated Savings Exhibit SFSP-50
Internal Reroutes	57.6	57.7	57.7
Yard and Local Switching	25.3	22.3	22.3
Equipment Utilization	24.8	25.6	25.1
Engineering Coordinations	27.0	26.2	21.9
Mechanical Coordinations	12.6	12.6	1.8
Non-Operating and Miscellaneous	68.0	67.3	53.1
Information Systems	6.3	6.3	6.3
TOTAL	221.6	218.0	188.2
Plus Traffic Diversion "Benefits"			56.2
Total Public Merger Benefits			244.4

Source: SFSP-50, Statement No. 1 at 31 (Appendix B).

The summary of operating savings shown above has excluded net gains from diverted rail traffic and net gains from diverted truck traffic amounting to \$73.4 million annually. Because the increased net operating income of revenues over variable costs in handling the additional traffic is purely a private gain to the merged system and involves no reduction in resources, it is properly omitted from the summary of restated social benefits. In lieu, applicants have calculated what is termed as traffic diversion benefits amounting to \$56.2 million. To obtain this figure applicants performed studies intended to show that the rail traffic diversions resulting from the merger would reduce all railroads' variable costs by that amount. This approach conforms to the DOJ approach that where traffic diversions produce efficiency gains and reduced operating costs, they may be regarded as public benefits. DOJ-6, V.S. of Harris at 21.

In this effort to estimate the change in costs of all carriers associated with the diversions, applicants used the Rail Form A costing methodology with individual 1982 carrier data. They applied each railroad's unit costs to traffic identified in their rebuttal rail traffic diversion study as likely to be diverted to SPSF's new competitive routes. By comparing the total variable costs incurred by all railroads in handling the diversion model's traffic prior to SPSF merger with the total



variable costs which would be incurred by all railroads in handling the same traffic on a post-merger basis, applicants attempted to estimate the social benefits attributable to the more efficient movement of diversion traffic.

The application of the carriers' unit costs through the computer cost program produced study results indicating that the total variable costs incurred by all railroads in handling the involved traffic prior to the ATSF-SPT merger amounted to \$691.3 million at the 1982 level. The total variable costs which would be incurred by all railroads in handling this same traffic, if the merger were permitted and the projected rail traffic diversions occur, would be approximately \$635.1 million at the 1982 level. Hence, according to applicants there would be efficiency gains and public benefits totalling \$56.2 million from SPSF rail diversions as a result of this reduction in total variable costs for all involved carriers.

Applicants' study also calculated the reductions in loaded car miles and interchanges resulting from the movement of the diverted traffic. A potential benefit to the public from operational savings could be available as a result of reductions of 5.47 million loaded car miles annually, translating to 78,800 train miles per year and the elimination of over 240,000 annual interchanges among railroads.

Applicants also applied the estimated cost savings of \$244 million from the proposed merger as a base against which to compare the purported competitive harms to the public. They measured the extent of the social costs caused by the merger in a special consumer loss analysis which defined the deadweight loss to society arising from the exercise of monopoly power created by the merger in certain areas. Social costs were calculated by multiplying the amount of traffic which, according to applicants, potentially could be subject to monopoly pricing by an increase in rates for such traffic due to non-competitive conditions following a merger. Applicants' study considered various factors to reflect competitive conditions in the areas where ATSF and SPT operate, one of which was that of the merged carrier's total traffic of approximately 186 million tons, only 3.14 million tons of traffic would be exposed to hypothetical rate increases above competitive levels due to merger. Parties opposed to the merger conducted their own studies which differed in result from applicants' analysis as to the adverse effects of the merger upon competition. Applicants performed a revised impact study (SFSP-49) that refined the methodology used by DOT to measure the social cost from loss of competition. Based on the DOT study principles, applicants concluded that only 2.2 million tons of their traffic would be subject to adverse competitive effects as a result of merger. The parties' studies are discussed more fully in our discussion of the effects of the proposed merger on competition.

Shown below is a table that outlines the estimates of problem tonnage calculated by the parties and the relationship of economic benefits to public harm. The ratios are produced by dividing the figure of \$244 million by the estimated welfare loss.

Benefit-to-Cost Ratios  
For Estimates of Exposed Tonnage

Exposed Tonnage Millions	Source	Pct. of Exposed Tonnage to Total	Welfare Loss (\$ Millions)	Benefits-to-Cost Ratios
2.2	(SFSP-49)	1.2%	\$3.26	75:1
3.14	TBS(SFSP-16)	1.7%	4.66	52:1
4.8	(DOT-3)	2.6%	7.12	34:1
15.7	(DOJ-7)	8.4%	23.30	10:1

Applicants' rebuttal testimony on these aspects of the transaction concludes that the merger is plainly in the public interest because it would yield economy-wide benefits far in excess of any costs resulting from the loss of competition and at the same time bring about efficiencies and cost savings that would afford the applicants the opportunity to become a stronger provider of transportation service.

#### Discussion

While the parties opposed to the merger have expressed only limited criticism of the accuracy of the public benefits calculated by applicants, there is considerable dispute as to the extent of the public harm that would be caused. A critical element of the issue is the tonnage that would be exposed to rail rate increases due to a reduction in intramodal competition in a single railroad corridor. Because applicants' estimate of the alleged dollar amount of welfare loss due to potential revenue increase is based upon estimates of the specific amount of exposed tonnage, the exercise is not a useful one. For one thing, attempts to calculate the specific volume of exposed tonnage assumes unrealistically a static economic environment. Furthermore, as noted in our discussion of competition, there are significant flaws in applicants' economic studies, upon which their attempt to quantify social costs is based.

Protestants argue that the quantification of diversion benefits takes no account of the potential increase in real resource costs that might be experienced by other railroads as a consequence of merger-related traffic diversions. They dispute applicants' notion that a loss of revenue from diverted carloads is offset by a one-to-one reduction in expenses for no longer handling that traffic. In addition to the financial harm stemming from a transfer of resources, diversion losses contribute to a lessening of the traffic density required by competitors on their system lines to maintain profitability. Loss of density implies a deterioration of frequency and quality of service. It is alleged that these are social costs that must be netted out against the cost-savings claimed by applicants. Provided that the traffic subject to diversion is being handled by protestants at favorable revenue-to-variable cost ratios, the private revenue benefits to the merged system from the added traffic do represent economic losses to those carriers. At the same time these revenue losses are not offset on a dollar-for-dollar basis by a corresponding decrease in variable costs. As pointed out correctly by protestants, a train schedule reduced to 50 percent of its normal carload capacity by diversions to the merged system will not have its expenses reduced by one half for the balance. The same number of train crews, for example, would be required for the assignment, and while there would be no additional expenses incurred, the unit costs for the remaining traffic would increase because train expenses are spread over fewer carloads. The Commission has stated in prior decisions that revenue transfers caused by traffic diversions to a newly merged system are to be considered neutral as to the public; some diversions result from efficiency gains and some from an exercise or abuse of market power. See UP Control, 366 I.C.C. at 487-8.

Applicants have asserted that the shift of revenues to a merged system may also be viewed as a cost benefit to the public. By a procedure that costed the transportation of the projected divertible traffic in a pre-merger situation with the costs of handling the same traffic under a merged system, reduced expenditures on the more efficient routes were demonstrated. These economic savings were calculated to be on the order of \$56 million. In a practical sense, these reduced expenditures on the diverted traffic cannot be viewed as a benefit to the shipping public in terms of reduced freight charges unless the revenue structure of the merged system is reduced proportionately to conform to the former revenue-cost relationship that existed on the pre-merger basis. Moreover, the \$56 million expenditure savings demonstrated by applicants are attributable in whole or



in part to the internal rerouting and other efficiency features reflected in the original public benefits estimates and should not be used to augment those savings. Furthermore, any economic losses to respondent applicants must be weighed in relation to reduced transportation costs on the faster and more efficient routes available under the merger. At best, applicants' \$56.2 million public benefit from diversion is an intangible savings that must be offset by costs to respondent applicants. This has not been done.

We conclude that the annual savings reasonably considered public benefits as a consequence of the proposed merger amount to \$188.2 million. The estimated amount of net capital expenditures avoided, a non-recurring savings, is approximately \$521 million.

## APPENDIX D

## COMPETITION

TABLE 1

INTERCITY TRUCK LENGTH OF HAUL DISTRIBUTION (percent)

STCC	0- 499	500- 999	1000- 1499	1500- 1999	2000- 2499	2500- 2999	Over 3000
1 FARM PRODUCTS	75.3	11.1	5.4	3.2	2.8	1.8	0.4
8 FOREST PRODUCTS	64.1	27.0	1.2	4.1	1.8	1.6	.
9 FRESH FISH OR MARINE	19.8	18.0	22.1	10.8	6.2	16.9	6.1
10 METALLIC ORES	.	90.2	.	.	9.8	.	.
11 COAL	56.7	38.1	.	5.3	.	.	.
13 CRUDE PETROL, NAT GAS	98.3	1.4	0.3	.	.	.	.
14 NONMETALLIC MINERALS	93.0	4.9	1.2	0.5	0.1	0.1	0.1
19 ORDINANCE OR ACCESS	59.2	15.3	13.2	6.7	3.8	1.8	.
20 FOOD OR KINDRED PROD	76.1	16.0	4.9	1.4	0.9	0.5	0.1
21 TOBACCO PRODUCTS	75.6	23.5	.	.	.	0.9	.
22 TEXTILE MILL PRODUCTS	65.5	22.8	6.7	1.3	2.6	1.0	0.1
23 APPAREL OR RELATED	75.2	16.9	4.4	0.9	1.5	1.1	.
24 LUMBER OR WOOD PROD	69.5	21.5	5.6	1.5	1.4	0.5	0.0
25 FURNITURE OR FIXTURES	62.1	25.6	6.8	2.1	2.0	1.4	0.1
26 PULP PAPER OR ALLIED	69.7	23.2	5.2	0.8	0.8	0.3	0.1
27 PRINTED MATTER	42.6	40.5	9.4	2.7	3.2	1.2	0.4
28 CHEMICALS OR ALLIED	78.5	14.6	4.8	0.8	0.8	0.5	0.1
29 PETROLEUM OR COAL PROD	95.4	3.6	0.6	0.2	0.1	0.1	.
30 RUBBER OR MISC PLASTIC	79.2	15.7	3.1	0.2	0.8	0.3	0.0
31 LEATHER OR LEATHER PROD	67.1	.	11.0	0.6	5.5	14.2	1.5
32 CLAY CONC GLASS OR STONE	84.4	11.2	3.0	0.7	0.5	0.2	0.0
33 PRIMARY METAL PRODUCTS	76.9	17.0	3.9	1.0	0.8	0.2	0.0
34 FABRICATED METAL PROD	77.5	15.9	4.4	0.8	0.6	0.6	0.1
35 MACHINERY	69.5	20.4	5.8	1.8	1.6	0.8	0.2
36 ELECTRICAL EQUIPMENT	73.4	17.0	4.6	1.8	1.8	1.1	0.2
37 TRANSPORTATION EQUIP	75.1	18.6	3.3	1.4	1.0	0.5	0.1
38 PHOTOG OPTICAL INSTR	62.8	16.1	8.7	8.6	1.3	2.0	0.6
39 MISC MANUFACTURING PROD	75.3	18.5	3.4	0.8	1.3	0.5	0.1
40 WASTE OR SCRAP MATERIALS	80.0	16.2	3.0	0.2	0.5	0.1	.
41 MISC FREIGHT SHIPMENTS	37.0	28.5	11.7	8.3	6.7	6.7	1.1
42 SHIPPING CONTAINERS	85.8	12.4	1.3	0.4	.	0.1	.



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 Appendix D cont'd

43 MAIL OR CONTRACT TRAFFIC	98.4	1.0	0.4	.	0.0	0.1	.
46 MISC MIXED SHIPMENTS	87.1	8.8	1.9	1.0	0.6	0.5	.
47 SMALL PACKAGED FRT SHIP	96.2	2.3	0.4	0.5	0.4	0.1	0.1
49 HAZARDOUS MATERIALS	.	35.9	10.6	53.5	.	.	.
50 UNIDENTIFIABLE	.	67.0	9.0	10.3	6.9	6.2	0.6
99 COMMODITY UNREPORTED	48.7	41.2	7.3	0.3	1.3	0.9	0.2

TABLE 2  
Examples of Modal Traffic Shares in Southern Corridor Traffic  
Flows at Issue

<u>Traffic Flow</u>	<u>Percentage Share by Mode</u>			
	<u>Rail</u>	<u>Motor</u>	<u>Water</u>	<u>Air</u>
From Los Angeles to:				
Houston*	30	21	48*	-
Dallas	64	35	-	-
New Orleans*	42	27	31*	-
Atlanta	53	45	-	-
To Los Angeles from:				
Houston	61	27	11	-
Dallas**	23	76**	-	1
New Orleans*	45	40	45*	-
Atlanta	50	50	-	-
From San Francisco to:				
Houston*	58	11	31*	-
Dallas***	41***	58	-	1
New Orleans***	49***	26	24	-
Atlanta	54	45	-	1
To San Francisco from:				
Houston*	66	19	15*	-
Dallas**	27	72**	-	1
New Orleans*	44	7	49*	-
Atlanta***	48***	51	-	-

Note: Dash indicates 0 to 1 percent share.

\*Water carrier traffic is comprised primarily (50 to 100 percent) of movements of crude petroleum and petroleum and coal products.

\*\*The large (70 to 80%) truck shares of these traffic flows are comprised primarily of raw cotton, food products, and miscellaneous plastic products.

\*\*\* See text.



TABLE 3

Traffic Originated or Terminated  
by ATSF in Northern California  
by Interchange Points to  
Eastern Connections

<u>Carload</u>	<u>Eastbound</u>	<u>1982</u>		<u>Total</u>	<u>Eastbound</u>	<u>1983</u>	
		<u>Westbound</u>	<u>Total</u>			<u>Westbound</u>	<u>Total</u>
Interchanged at California Jctns.							
Total	100	600	700	240	200	440	
Interchanged at Colorado Jctns.							
Total	100	300	400	0	100	100	
Interchanged at El Paso, Texas							
Total	0	0	0	0	100	100	
Interchanged at Sweetwater, Texas, Avard, Oklahoma and all junctions east thereof							
Total	<u>15,100</u>	<u>11,200</u>	<u>26,300</u>	<u>17,188</u>	<u>13,170</u>	<u>30,358</u>	
Total Carload	<u>15,300</u>	<u>12,100</u>	<u>27,400</u>	<u>17,428</u>	<u>13,570</u>	<u>30,998</u>	
<u>TOFC/COFC Trailer Containers</u>							
Interchanged at California Jctns.							
Total	0	0	0	0	0	0	
Interchanged at Colorado Jctns.							
Total	0	0	0	0	0	0	
Interchanged at El Paso, Texas							
Total	0	0	0	0	0	0	
Interchanged at Sweetwater, Texas, Avard, Oklahoma and all junctions east thereof							
Total	88,721	93,115	181,836	92,142	89,045	181,187	
Total TOFC/COFC Trailer/Containers	<u>88,721</u>	<u>93,115</u>	<u>181,836</u>	<u>92,142</u>	<u>89,045</u>	<u>181,187</u>	

Source: ICC 1% Waybill Samplings

## APPENDIX E

### ANALYSIS OF TRAFFIC DIVERSION STUDIES

#### General Background

Traffic studies have been prepared to: estimate gains and/or losses of traffic as a result of the merger and trackage rights; provide a basis on which to estimate the changes in rail operations resulting from changed traffic flows; provide a basis on which to estimate the added or avoided costs resulting from the changed traffic flows; and assess the environmental impacts resulting from the consolidation.

The purpose of traffic diversion studies is not to establish damages to affected railroads; this is much too narrow a viewpoint. Instead, traffic diversion studies have as their purpose the quantitative measurement of the expected general, short-term changes in the relative competitive strength of a merged rail system in relation to competing carriers. These estimated changes are then considered as factors to be weighed in determining whether or not a proposed transaction is in the public interest. We emphasize that traffic diversion studies result in only estimates. While an acceptable traffic sample is drawn on an objective basis, the evaluations of divertibility of sample units are strictly judgmental, based on facts surrounding the sample unit.

We will only examine the traffic diversion estimates which are in contention. In those instances where one traffic witness has made a traffic evaluation that is clearly more reliable than a similar evaluation made by an opposing party, we accept the more reliable judgment and the amount of diversion involved. In this manner, a finding is made of the estimated dollar amount of potential gross revenue diversions. The final figure, however, remains an estimate based on the expert opinions of the carriers' traffic evaluators. It is an estimate only of the impact on traffic flows resulting from the merger and from no other factors. Thus, the final diversion figure must be viewed as a short-term impact reflecting changes in competitive relationships resulting from the newly unified operations.

The full impact of the SFSP merger would not occur until the third year following consummation, according to applicants' predictions. While the full impact would be reached in the third year, some of the competitive impacts would continue through ensuing years. However, the traffic diversion estimates must be viewed as short-term projections because so many economic and operational changes take place annually in the rail industry that the competitive impacts of a specific rail unification in time become blurred, if not totally unidentifiable. These other economic and operational factors include: (1) other rail unifications; (2) upward and downward changes in national and regional economies; (3) changes in operations throughout the industry through use of new routes; (4) institution of run-through train schedules; (5) changes in specific rates or even rate levels; (6) increases (or decreases) in the intensity of competition from other modes of transportation; (7) abandonments; and (8) changes in the level of cooperation between two or more railroads competing with the newly merged railroad (in short, the retaliatory actions by the competitors).

The foregoing factors represent some of the reasons why traffic diversion estimates cannot be construed as damages or as economic factors to be cast in concrete. To conclude otherwise,



we would be forced to consider the transportation industry as static, an unrealistic viewpoint.

Our analysis embraces the traffic studies of the applicants and all protestant railroads. In addition, we have examined certain traffic studies that relate to pertinent trackage rights requests.

#### ATSP-SPT

Applicants conducted a traffic diversion study to estimate the traffic and revenues which a merged ATSP-SPT rail system would gain from other railroads as a result of their consolidation. The traffic study was performed by using a computerized diversion model which was developed and operated by DNS Associates, Inc. The sample used in applicants' study included a ten percent sample of all 1982 Santa Fe and SPT waybills relating to shipments involving five or fewer cars per waybill, and a twenty percent sample of Santa Fe and SPT waybills relating to shipments of six or more cars per waybill. The sample also included all waybills from the ICC 1982 Waybill Sample which were related to movements that did not involve either Santa Fe or SPT. The sample as a whole consisted of 441,626 records representing 17,997,538 carloads of freight moving in 1982.

Because our waybill sample data show only the total revenues for all rail carriers involved in a move, applicants developed a mileage based formula to allocate the revenues to the traffic as it moved or as it might move under various route closings and merger and diversion scenarios. Under the formula, the total revenue of a waybill did not change. If the allocation formula increased the revenue for one railroad in a move, it decreased the revenue for one or more other railroads relative to what was originally shown on the waybill. In the aggregate for all railroads in the supplemental sample used to develop the allocation formula, originated traffic was overstated by 0.7 percent, terminated traffic was understated by 0.4 percent, and bridge traffic was understated by 0.6 percent.

The computer model used for the study was based on a detailed rail system network, replicating the entire rail system of the continental United States, and basic through rail routes in Canada. The network contained approximately 18,500 line segment links and 15,500 terminal and connection nodes. The network was updated to reflect the changes in ownership of sections of the former Rock Island rail system and sections of the Milwaukee Road rail system, including the creation of many new short-line railroads in the West; all rail consolidations which were in effect before December, 1982; and all consolidated rail systems actually operated as separate railroads. Line segments in the network were classified either as A main, B main, A branch or B branch lines. A main lines were efficient, competitive through routes. B main lines were also through rail routes but were generally used less frequently, and therefore were considered less competitive than A main lines. Often used branch lines were designated as A branch lines, while infrequently used branch lines were classified as B branch lines. The model assigned relative weights to line segments in the network to reflect each line segment's operator's relative ability to compete for rail traffic. The network also contained junction impedances at each network terminal. These impedances, which ranged from 300 to 1,800 miles, were designed to reflect the relative service inefficiencies and competitive disadvantages of interline rail routes. Terminal delays, additional car handlings, lack of schedule coordinations between connecting

carriers, and lack of cooperation in solicitation and marketing efforts of connecting carriers over many interline junctions all were implicitly reflected in these impedance calculations, which were stated in miles as a standard unit for use in the diversion program. Finally, the network contained specific information on whether an individual rail station is open or closed to reciprocal switching for carload traffic, according to the following rules: (1) All stations east of Ohio and north of the Mason-Dixon line were assumed to be closed, unless they were served by a terminal or industrial railroad and (2) all remaining stations were assumed to be open to all railroads serving the same 6-digit Standard Point Location Code (SPLC), if they were shown to be served by other railroads in the Open and Prepaid guide. For TOFC traffic, stations were shown as open to all other carriers serving the same metropolitan area as reflected in the network.

In operation, the model selected a potential diversion route by choosing the route with the lowest weighted mileage (including any junction impedances) between the rail origin and the rail destination. The model eliminated all former junction impedances between merging carriers, and adjusted the new merged system's weighted miles in order to reflect new competitive efforts and to identify all rail traffic that would be attracted to the merged rail system's new competitive routes. As a result, according to applicants, the model selected the most efficient route available, consistent with the principle of maximizing the merged system's longhaul route participation.

Next the model checked potential diversions for reasons why the diversion should be rejected. Potential diversions were rejected where on and off junctions were unchanged, maximum routing circuitry was exceeded, an origin or destination carrier was shorthauled substantially, or the post-diversion route would result in a revenue loss to the new merged system. Movements which passed this screen then were treated by the diversion percentage matrix developed by applicants, which considered the class of traffic (forwarded, received, overhead, or third-party gain), number of carriers in the route, competition at origin and destination, type of traffic (automotive, TOFC, expedited or all other), specialized equipment ownership and the likelihood of greater percentage diversions to significantly improved rail service. The matrix integrated these factors in a consistent pattern established by the applicants in order to cover the entire range of traffic diversion possibilities. The diversion matrix used in applicants' study contained 46,721 individual cells, each representing a specific combination of the factors being analyzed as likely to affect a shipper's routing behavior.

Using the computer model, applicants performed four study iterations (base case adjustment study) to account for the probable impacts of recent major ICC decisions on 1982 rail traffic flows. The four iterations included (1) Eastern line route closings; (2) Union Pacific System merger; (3) Southern Pacific trackage rights between Kansas City and St. Louis; and (4) Rio Grande's trackage rights between Pueblo and Kansas City, along with the SPT-Rio Grande solicitation agreement. According to applicants, these adjustments had to be made before the study could estimate properly the incremental impact of the SFSP merger upon rail traffic flows and revenues. While these adjustments were parts of a single base case adjustment study, in practice, they were run through the computer model sequentially.

The Eastern line route closings study was based on the unadjusted 1982 rail traffic data as applied to the consultant's diversion criteria for eastern route closings, as modified by



Santa Fe and SPT traffic experts. This study projected the extent to which 1982 rail traffic would be rerouted away from major eastern rail systems' interior gateways to their long haul. Sample output of the final computer run was reviewed to confirm that the model properly applied judgments of applicants' traffic experts concerning the effects of eastern route closings on major rail traffic flows such as automotive, coal and all other traffic.

Before studying the Union Pacific System merger adjustment, applicants made a few minor adjustments to the impedances in order to reflect the competitive situation being measured. After the initial sample review, circuitry rules were specified which addressed time-sensitive UP-CNW traffic via Fremont. Further sample review led to redesignation of certain MP and UP line segments to more appropriately reflect their post-merger competitive capabilities. Final sample review satisfied the applicants' traffic evaluators that the model was reflecting reasonably the probable impact of the UP rail consolidations and, as a result, the full data base was processed.

The next adjustment reflected the impact of SPT's acquisition of trackage rights between Kansas City and St. Louis. Post-UP impedances were reviewed, adjustments were specified and a decision was reached not to use the merged system long-haul mileage multiplier in this study iteration. The purpose of the .7 merged system mileage multiplier was to reflect some of the more intangible marketing benefits associated with a merged system's new entry into a market. In the case of SPT trackage rights, no new market entry was accomplished. Samples were reviewed until the traffic evaluators were convinced that the model appropriately reflected this event. At this point, the data base was processed once again. Sample output was reviewed by applicants' evaluators and individual movement judgments were found to be reasonable.

Applicants' final base case adjustment reflected both Rio Grande's new trackage rights between Pueblo and Kansas City, and the traffic solicitation agreement between SPT and Rio Grande which went into effect in the Spring of 1983. Post-SPT trackage rights impedances were reviewed and adjustments were made. After initial sample review, the program was adjusted to treat SPT stations within the solicitation agreement territory as "open" to Rio Grande. Further sample review was continued until the traffic evaluators confirmed that the model appropriately treated the major central corridor traffic flows potentially affected by these marketplace events. Sample outputs of these evaluations against the full data base were reviewed and found to be reasonable. Finally, the data base was processed again producing the 1982 base case adjustment study.

Once the base case adjustment study was completed, the applicants were then able to develop the estimate of incremental rail traffic and revenue gains which may occur as a result of their SFSP merger. For this study, applicants applied the same traffic diversion percentage matrix and the same evaluation approach which they used for their base adjustment study, subject only to a few specific refinements. Post-adjusted base case traffic volumes provided the basic impedances. A few of these impedances were changed to reflect how certain traffic was being handled today, as well as how the merged system intended to handle traffic after consummation. The applicants also made several adjustments to the Santa Fe and SPT line segment designations to reflect the new merged system's post-merger operating plans. After initial sample review, evaluators decided that a special "Oregon Rule" was required to treat appropriately

certain transcontinental traffic moving to and from Oregon. The rule, applying only to traffic moving between Oregon and Kansas City or the Northeast and routed via the Ogden gateway in the pre-diversion route, multiplied the otherwise calculated diversion percentage in the matrix by a factor of .1 for expedited traffic, and by a factor of .3 for all other traffic. The rationale for the rule was that the new merged system would be able to offer only equal service for this traffic via its southern corridor longhaul route, so that the merger would not cause a significant shift in Oregon shipper's routing behavior. Program logic was also modified to allow diversion from Santa Fe interline routes to SFSP direct routing between western stations and major Mississippi River gateways. With this modification, all diverted movements were treated by the diversion percentage matrix. Further sample review continued until applicants were satisfied that the model appropriately evaluated traffic in view of the efficiencies expected to be brought to the marketplace by the Santa Fe and SPT merger. The base case adjustment study data base then was run against the computer model. A sample printout consisting of 940 pages containing individual study movements was reviewed by applicants. This review indicated that the model had properly evaluated the entire study sample.

Because of the criticisms made by protestant railroads during the course of the proceeding, applicants on rebuttal redid their rail traffic diversion study. According to applicants, the restudy took into account all arguably correct criticisms made by the protestants. The following are examples of modifications made by applicants to the original traffic study in order to stem this criticism. All movements in the study were assigned an identification number. The Eastern route closings iteration was applied to the entire data base instead of just 90 percent of the sample data as in the initial study. After the Eastern route closings iteration, the sequence of the three remaining adjusted base case iterations was changed to this order: the Southern Pacific trackage rights iteration, then the Rio Grande trackage rights-solicitation agreement iteration and finally the Union Pacific merger iteration. In the Rio Grande trackage rights iteration, the model treated all SPT-served origins and destinations in California, Oregon, Nevada and Utah as though they were served by Rio Grande, for purposes of assigning diversion percentages. In the Union Pacific merger iteration, certain station designations were revised to show them as UP-served for automotive matrix purposes. In the SFSP rail merger study, applicants made some minor changes to the model network, the diversion rules and the impedances. Also, a number of additional changes were made to the non-diversion rules. Finally, applicants made some changes to the diversion percentage rules used in the SFSP merger study. Based upon the results of the restudy, applicants projected that the merger would result in shippers choosing to divert from other railroads to SFSP's new competitive routes traffic amounting to \$237.5 million in gross revenues each year. This is a little more than 7 percent higher than the traffic diversions to SFSP which were projected in applicants' initial study. The results of the restudy are set forth in the following table.



Applicants' estimates of revenue changes for other railroads  
(Millions of dollars)

<u>Railroad</u>	<u>Gross Revenue Change</u>
BN	\$(46.00)
CNW	(19.20)
CR	( 1.50)
CSX	0.10
DRGW	(20.90)
ICG	(16.10)
ICS	(19.20)
MILW	( 4.40)
MKT	( 5.90)
NI	( 6.20)
SCO	( 0.30)
TEX MEX	( 0.03)
UP	(97.10)

Several protestant railroads criticized the applicants' computerized rail traffic diversion study and argued that the study has many flaws and deficiencies. Many of these protestants contend that the revenue losses derived from this study are understated. MKT goes one step further and asserts that the applicants' study is so tainted that it cannot be accepted and cannot be restated. Some of these criticisms are as follows: (1) applicants manipulated their procedures and assumptions to produce the results they desired; (2) the computer model selected only one candidate diversion route for analysis and did not consider alternative diversion routes; (3) the study assumed that western rail routes would remain open; (4) applicants' "Oregon Rule" contributed to unrealistic results by automatically reducing by as much as 90 percent the diversions of Oregon traffic from the central corridor that the model itself would have diverted under its standard diversion criteria; (5) the study did not examine the merger's impact on international US-Mexico traffic, nor did it include Tex Mex in the universe of carriers studied; (6) the computer model did not take into consideration each shipper's facility status -- exclusive service, open or closed to reciprocal switching, etc.; (7) the study was inadequately documented and cannot be authenticated, tested, audited, reproduced or restated; and (8) the computer output was designed to conceal vital information by not providing any breakdown of diversions by flows, by areas or in any other way.

We agree with the protestant railroads that the applicants' rail traffic diversion study understates the amount of diversion that could occur. However, we do not agree with MKT's allegation that the applicants' study can not be authenticated, tested, audited, reproduced or restated and therefore, should not be accepted. The record indicates that UP/MP was able to understand applicants' traffic study and to use, for purposes of its own restatement, the data reflected in applicants' "adjusted base case." UP/MP instructed DNS Associates to segregate from applicants' adjusted base case records all traffic in which UP/MP participated. To ensure that this file contained all such traffic, UP/MP instructed DNS to verify the UP/MP losses by running applicants' computer model against the newly created data base. The total UP/MP losses from this run matched the losses from the full data base projected by the applicants, thereby confirming that applicants' rules were correctly applied by the computer programs and that the programs did what applicants claimed that they did. As for the understatement of the amount of diversion, the record reveals several reasons why the

applicants' study underestimates its traffic gains. One of the principal reasons for understatement was the fact that the computer model failed to select an alternative candidate route. The study selected only a single efficient candidate diversion route. If this route was rejected for diversion due to the operation of an exclusion rule, the study assumed no diversion would occur even if another route may have been a viable diversion route. Another reason for understatement was that because efficient interline rail routes in the West generally are open today, the study did not explicitly make adjustments to close any of these rail routes. This approach in itself leads to conservative estimates because there may be certain competing routes in which applicants now participate which may be closed in the future in order for applicants to acquire additional traffic over a new longer route. Another factor which caused the underestimate of diversions was applicants' "Oregon Rule." This rule placed a limit on diversions of traffic moving from Oregon through the Ogden gateway and the central corridor. The traffic affected by this limit would have been diverted to SFSP under the diversion criteria applied by applicants' computer model to all other traffic. For traffic moving over the Ogden gateway to and from Oregon, applicants' "Oregon Rule" reduced by 90 percent for expedited traffic and by 70 percent for all other traffic the diversion percentage otherwise prescribed by applicants' model. Applicants' rationale for this rule was that the new merged system would only be able to offer equal service for this traffic via its southern corridor longhaul route. We believe there may have been some justification for the "Oregon Rule." However, in light of the shipper benefits derived from single-line routing and the offer of equal service via the southern corridor, we suspect that the factors (.1 for expedited traffic and .3 for all other traffic) used to multiply the otherwise calculated diversion percentage were set too low. If these factors had been set higher, a more realistic amount of diversion would have occurred on traffic now moving to/from Oregon via the central corridor. For the above reasons, we find that applicants' rail traffic diversion study understates the revenue gains that the merged system would achieve and that the results indicate the minimum changes in revenue which would be experienced by the protestant railroads.

#### Applicants' Non-Rail Traffic Study

Applicants performed a truck-to-rail diversion study to estimate the annual volume of revenues which could be gained from truck competitors as a result of the merger. To measure the extent of truck-to-rail diversion, applicants selected a consulting firm to assist in the preparation of the study. This consulting firm had developed the "Transearch" data base that applicants considered the most complete and accurate information on truck traffic flows in the United States. The firm also had information on truck transit times and truck costs between city-pairs that might be affected by the SFSP merger. Further, the consulting firm was able to distinguish differing competitive characteristics involved in truckload and less-than-truckload traffic, and the data indicating the time of day truck-competitive traffic was available for loading.

The first step in the study was the development by applicants' marketing personnel of a broad list of city-pairs where truck traffic might be divertible as a result of the merger. For each city-pair initially included in the study, ATSF and SPT separately provided the consultant both their volumes of TOFC traffic and their rates for 1982. The next stage of the process involved identifying which of the potential city-pair



truck flows would be appropriate candidates for a study of truck-to-rail diversions. To this end, applicants obtained from the consulting firm information on truck loads, by direction, between each of the city-pairs. This data enabled applicants to select those flows where truck volumes would be sufficient to justify new or improved rail TOFC service. While the truck tonnage data was being adjusted, applicants compiled a detailed report comparing existing ATSF, SPT and other rail carriers' TOFC schedules for the key city-pairs to be studied. From the service standpoint, applicants wanted to be certain to take credit only for truck traffic that would be diverted because of incremental service improvements made available by the proposed merger and that were not available to truck shippers in a given city-pair at the time of the study.

The next stage involved the identification of the TOFC service improvements needed to enable the new merged system to compete more effectively against trucks. Once the applicants identified where sufficient profitable TOFC traffic could be handled on new, improved train schedules, the operating plan was modified to add new TOFC train schedules. These new schedules were reported to the consulting firm, which put the data into its shipper-preference model, to be considered along with the rail cost to shippers, truck costs, and truck service information which the consultant already had. The shipper-preference model compared overall rail versus truck transit time service, considered specific rail departure times, and compared rail versus truck cost to shippers. It then projected the maximum incremental effect that the SFSF merger could be expected to have on the marketplace.

This initial estimate was then multiplied by a factor of 0.5 to reflect potential competitive price and service responses by truck competitors and other rail TOFC competitors operating in the specific city-pair. In addition to competitive responses, the factor accounts for incomplete market knowledge of new TOFC service, certain shippers' inertia in shifting their traffic to rail TOFC service, and other institutional constraints. According to applicants, this adjustment provided a reasonable estimate of the likely truck-to-rail traffic diversions in this case.

Applicants next went through a series of analyses, focusing on markets where they could attract sufficient volumes of truck traffic to warrant new or improved rail TOFC service, and where their analyses of rail rates suggested that the new traffic would be profitable. Many short-haul, low-volume city-pairs were omitted from their study at this point. Based upon these analyses, applicants decided to adopt 29 new or improved TOFC schedules. Although a large number of pricing adjustments were considered only one was made, and that was in applicants' service from Dallas to Los Angeles. In that market applicants determined that a 10 percent price reduction would be warranted to balance their current traffic flow of TOFC business between Dallas and Los Angeles.

The study indicated that there were 27 traffic lanes, or origin-destination pairs where truck diversions might occur as a result of the merger. These diversions would constitute 45,948 truckloads of freight traffic each year, yielding \$45.4 million annually to the applicants.

No party to the proceeding submitted evidence contesting the results of applicants' truck-to-rail traffic diversion study. We have carefully reviewed the record including the assumptions and procedures employed, the description of the shipper-preference

model, and the cross-examination of applicants' witnesses. The study appears to be well conceived and executed. Thus, it is concluded that the results of the study give a fair indication of the amount of revenues which the merger could divert from the motor carrier industry.

#### Denver and Rio Grande Western

DRGW conducted a traffic diversion study to assess the carload and revenue impact of the proposed merger of SPT and ATSF on Rio Grande. The diversion study used both 1982 and 1983 as study years. The year 1983 was added as a study year to reflect the DRGW's Kansas City access, the St. Louis Southwestern's Kansas City to St. Louis route, and the effects of the UP/MP/WP merger. The 1982 traffic study data base consisted of all DRGW interline revenue waybills for traffic delivered or received in interchange by the DRGW for the accounting settlement period January 1, 1982 through December 31, 1982. All DRGW's local traffic, company materials, express traffic handled at contract rates, interline forwarded (I/F) and interlined received (I/R) traffic received from or delivered to connections at Colorado, Kansas or Missouri junctions were considered to be unaffected by the proposed transaction and were not studied. All other interline traffic was divided into two classes of traffic: intermediate (I/M) movements and I/F plus I/R traffic. These two classes of traffic constituted the sample frames. These sample frames were divided into four strata each with stratum boundaries determined from a frequency distribution of revenues per car in \$10 increments using the "cum square root of f rule." Sample sizes were determined by DRGW's statistical consultant and random samples from each stratum were drawn. The total sample for the 1982 study consisted of 2,031 car movements. The sample frames and procedures for sample selection for the 1983 diversion study were identical to those described above relating to the 1982 study, except that the data base referred to the accounting settlement period, January 1, 1983 through December 31, 1983. The total sample for the 1983 traffic study contained 2,085 car movements.

All traffic evaluations were made by the General Sales Manager of DRGW. The following assumptions were relied upon: (1) DRGW's routes and service would remain as they are now between Ogden and Kansas City, Denver and Pueblo; (2) ATSF would serve St. Louis, Memphis, New Orleans, Portland and additional Mexican border crossings, and SPT would have extensions to Chicago and Denver and a north-south route serving Kansas City; (3) There would be no SPT-DRGW solicitation agreement; and (4) The traffic to be considered was traffic diverted from the DRGW as a result of the ATSF-SPT merger, whether or not such traffic was diverted to the merged system. A list of factors which influence the routing of traffic was developed and then used for making divertibility determinations. When the evaluation was completed, the mean revenue loss per car and the sample variance for these losses were calculated for each stratum. On the basis of these statistics, the 1982 study resulted in an annual gross revenue loss of \$65,228,000 for DRGW. For the 1983 study, DRGW's estimated gross revenue loss amounted to \$85,340,000.

In addition to the basic traffic study, DRGW conducted a supplemental study to take into account the "domino effect" of successive reductions in service levels which would result from the traffic losses that were projected in its original traffic study. Based upon traffic densities remaining on SPSF's line after the merger, DRGW anticipates that the current service levels will drop from 5 - 6 through trains per day to 1 through



train per day each way between Ogden and Roseville, CA. According to DRGW, this service reduction will result in an additional loss of 31,755 cars/trailers or 1983 gross revenues of \$36,419,784. In sum, DRGW estimates that it will lose annual gross revenues of approximately \$121.8 million (1983) if its conditions are not granted.

Applicants contend that DRGW adopted unreasonable and unrealistic assumptions in its traffic study. The only evidence which applicants submitted in support of this contention was a footnote contained in the rebuttal statement of SFSP's traffic witness. The footnote stated that DRGW's diversion decisions, like KCS's judgments, were made on an all-or-nothing basis. The applicants argue that these decisions caused a misrepresentation of the final results of the study. Further, the applicants have the same criticism of DRGW's diversion study that they had of the traffic studies of MKT and KCS. Applicants believe that the assumption that SPSF would close interline routes is unrealistic.

The closed route assumption is permissible, although it is prone to create a degree of overstatement of the revenue losses which a protestant railroad may suffer. Applicants' criticism of DRGW's diversion decisions is immaterial. We have concluded in previous decisions that the same procedure used by DRGW, as well as KCS, is acceptable, provided this approach is used on the entire sample of relevant movements. Chicago, M., St. P. & Pac. RR -- Reorganization -- Acquisition by Grand Trunk Corp., F.D. No. 28640 (Sub-No. 9) (Sept. 9, 1984), slip op. Appendix E at 34. Applicants presented no evidence refuting the reliability of DRGW's traffic study or the validity of its diversion judgments. Therefore, we conclude that the maximum gross annual revenue loss which DRGW could incur would be approximately \$121.8 million (1983).

#### Purchase and Trackage Rights Traffic Analysis

##### DRGW

DRGW performed a traffic diversion study which examined all rail traffic moving via all routes to/from those markets in which DRGW now participates and in which it could continue to exert a competitive influence following a SPSF merger if Rio Grande's purchase and trackage right conditions were granted. Thus, DRGW's study involved a determination of its projected market share of the universe of traffic to and from the areas served by the lines over which it is seeking access. To project the transcontinental carload traffic DRGW would handle if its conditions were granted, Rio Grande began with 1982 total rail transcontinental carload traffic to/from Central Pacific served counties in California, Oregon, Nevada and Utah. This 1982 carload traffic was developed from the applicants' enhanced waybill sample.

After adjusting the 1982 data to account for eastbound agricultural products traffic that DRGW did not anticipate handling in significant volumes even if its conditions were granted, Rio Grande then redistributed the traffic by state based upon its July-December 1983 traffic composition. This redistribution was necessary because there has been a transformation in DRGW's traffic composition as a result of the Union Pacific merger and the trackage rights granted to Rio Grande as a condition of that merger. The changes in traffic composition caused by the merger were that DRGW's traffic to/from northern California and Oregon has increased, and its traffic to/from Nevada has decreased. The redistribution of 1982 traffic data reflected these changes. The next step was to adjust the redistributed traffic data to eliminate traffic to/from Central

Pacific-served counties that is not to/from Central Pacific-served points within those counties. This was done because DRGW anticipates that it will only handle transcontinental traffic to/from points directly served by the lines affected.

DRGW anticipates that the competition for traffic from the markets where it is seeking conditions would be among SPSF, Union Pacific and Rio Grande. Therefore, in order to determine how DRGW would fare in that competitive environment, and to project the amount of such traffic Rio Grande could be expected to handle, the DRGW examined its market share in the most nearly comparable existing competitive environments. The market shares analyzed were between Utah common points (Salt Lake-Ogden-Provo areas) and points east of Colorado; between Denver and Central Pacific served counties in northern California-western Oregon; between northern Nevada and points east of Colorado; and between Utah common points and Central Pacific served counties in northern California and western Oregon. These areas were chosen as instances where DRGW as a smaller railroad is competing with a much larger railroad as the only other railroad, and where both the much larger railroad and Rio Grande originated or terminated traffic in these markets or, in the case of Nevada, were both essentially overhead carriers.

Using the 1982 carload traffic data, DRGW determined that on Utah-east of Colorado traffic described above, Rio Grande's 1982 market share was 42 percent; on Nevada traffic, 47 percent; on Denver traffic, 60 percent; and on Utah-California/Oregon traffic, 50 percent. DRGW's total market share for all of the above was 47 percent. Once these existing market shares were established, DRGW's traffic expert, in consultation with the company's sales officers, determined that Rio Grande should generally obtain, through vigorous competitive efforts, approximately 40 percent of the total rail market susceptible to DRGW handling to/from points served by the proposed access lines where there would only be the SPSF as a competitor, and 25 percent where there would be SPSF and another railroad as Rio Grande's competitors. In making these judgments as to DRGW's projected market share, Rio Grande considered its ability and incentive to compete as a small railroad against a much larger railroad or railroads, the support it would get from its eastern connections, and the desire of shippers for a competitive alternative. Adjustments were made to the Rio Grande's projected market shares with respect to specific traffic segments over the proposed access lines to reflect particular factors which indicate that the Rio Grande's market share would be likely to differ from the projected norm. To determine the actual volumes of carload traffic that would be affected by DRGW's conditions, DRGW then applied its projected market shares to the redistributed 1982 traffic data.

With regard to diversion of TOFC traffic, DRGW found that the foregoing methodology was not feasible because the available data do not account for the practice of rebilling TOFC traffic, and because such traffic is not tied to points on particular lines. However, DRGW states that a reasonable estimate can be made based on judgment and experience. Rio Grande's conditions would give it direct access to Central Pacific ramps and would allow it to act independently of SPT to/from the southeast/southwest, where SPT does not now cooperate with Rio Grande. The traffic data DRGW relied upon indicated that the addition of the southeast and southwest (excluding Texas) to the midwest and eastern markets where SPT does cooperate with Rio Grande adds 20 percent to DRGW's market potential. Based upon this fact, DRGW estimated that it would increase its volume of



TOFC traffic to/from east of Colorado by 20 percent if its conditions were approved.

To project Rio Grande on-line and adjacent area overhead carload traffic, DRGW analyzed its 1983 Colorado/Utah traffic. Because Rio Grande's Colorado/Utah common point-northern California/western Oregon/northern Nevada market share is already nearly 50 percent for Utah common points with one rail competitor and 60 percent for Colorado common points with one or two rail competitors, DRGW concluded that it would retain, but not increase, its current market share, and would receive an extended haul over Central Pacific lines of any traffic originating or terminating on Southern Pacific, Santa Fe, Burlington Northern, or their short-line connections. Utah common point-southern California traffic market share was also projected to remain at 1983 levels, with any traffic moving via northern Nevada being converted to a Rio Grande extended haul.

To estimate coal and unit train traffic, DRGW reviewed 1983 westbound coal movements and divided the receiving markets west of its present line into four basic categories: (1) Idaho; (2) Oregon and Washington; (3) northern California/Nevada; and (4) southern California. Based upon its analysis of these areas, DRGW projected that it would be able to increase its volume of coal movements.

As for truck competition, DRGW examined its experience with motor carriers in 1983 when its route was extended into Kansas City. Rio Grande found that it gained approximately 2,300 trailers between Kansas City and Rio Grande's Colorado and Utah ramp points in the miscellaneous freight and freight-all-kinds categories and approximately 200 more in specific commodities, most of which moved during the last half of 1983. About 70 percent of this traffic had previously moved over the highway. If its conditions were to be granted, DRGW anticipates, based on the ability Rio Grande would then have to provide single-line service between Kansas City and the west coast, that it would attract at least as much business from over the highway movements as its 1983 experience reflects.

Subsequent to its initial traffic study, DRGW prepared a supplemental extension traffic study in order to estimate the traffic changes if its trackage rights were extended to Bakersfield and San Francisco. DRGW utilized generally the same methods and procedures as were used in its initial study. Based upon the results of its initial and supplemental traffic studies, DRGW projects that it would gain gross annual revenues amounting to \$213.7 million. The following table shows the gross annual revenue changes on affected carriers.

Revenue Changes of DRGW's  
Requested Conditions on  
Affected Carriers

<u>Railroad</u>	<u>Gross Revenue Changes</u> (000)
SP-ATSF	(\$169,493.8)
UP-MP	(44,194.4)
5 Other Carriers	(18.6)

As with DRGW's opposition traffic study, applicants submitted no evidence refuting the reliability of DRGW's gains traffic study or the validity of its diversion judgments. Furthermore, no party to the proceeding disputed DRGW's estimate of traffic gains. Hence, DRGW's diversion projection is accepted as a reliable estimate of the amount of traffic it would gain if its requested conditions were granted.

Kansas City Southern and Louisiana & Arkansas

KCS conducted a traffic study to determine the impact on its traffic and revenues resulting from the proposed SFSP merger. The traffic study data base consisted of all KCS line haul movements with settlement dates during the calendar year 1982. Once the data base was created, KCS identified certain traffic as not being affected by the proposed merger. The non-relevant traffic included company material, unit coal trains, certain sulphur and petroleum coke shipments, pulpwood & chips and traffic that was local to KCS. Of a total of 457,656 line haul movements, 371,401 were excluded as non-relevant. The remaining 86,255 cars constituted the relevant universe from which study samples were drawn. KCS divided the 86,255 movements into four revenue strata. Based upon a judgment as to the proportion of traffic that would likely be diverted and various statistics developed from the four revenue strata, sample sizes for each stratum were calculated, using traditional statistical formulas applicable to stratified random sampling. A total of 1,960 sample car movements was selected from the relevant universe.

To conduct the study, KCS determined that the decision making process would be confined to the members of its Merger Study Group. The rationale for proceeding in this manner was that since the passage of the Staggers Act, and in light of the upheaval in traditional relations between railroads, the current and perceived future policies of "mega" railroad organizations would revolve around their ability to exercise market power. KCS deemed that the best persons within its organization to judge the effects of the SFSP merger on KCS's existing traffic base were those faced on a daily basis with competitive issues created by the exercise of such market power. Examples of such competitive issues were matters of pricing, preferred route policies, preferred interests in specific markets, coupled with the ability to use greater market access in making broader coverage contracts with the intent to drive smaller competitors from the market place, the ability to close joint routes with minimal recourse to the closed carrier, the ability to downgrade train schedules to the detriment of competing carriers, the closing of industries to reciprocal switching when it is advantageous to the newly formed carrier, the ability to create non-competitive conditions for customers served by smaller competing railroads, and the ability by the new merged system to exert greater control over broader market areas.

Study movement sheets (SMS) were developed for each sample car movement. KCS's Auditor of Revenue Department furnished all available papers (i.e., waybills, abstracts, statement of differences) for each SMS. Subsequently, KCS performed a three stage evaluation of each SMS. The initial evaluation was made by the Senior Analysts of the Merger Study Group. Their evaluation included answering four questions on each SMS and specifying the post-merger route for each movement determined to be a diversion. Subsequently, KCS's Senior Assistant Vice President-Pricing evaluated the movements, noting any disagreements with the initial evaluations, following which all papers were made available to the Vice President-Market Development for his final evaluation. In determining the loss on



each sample study movement, the specific percentages of 0% and 100% were used.

The basic design of KCS's traffic study related to traffic that would have a geographic configuration consistent with that presented by the merging companies and would cover market pairs where KCS would compete with either or both of the merging parties. Since part of the territory, and hence movements for the applicable markets, would have had the potential of being included in its study results for the UP/MP/WP merger, and would have been subject to losses to that merged system, KCS had to take such possibilities into account in the evaluation given to traffic in the SPSP merger. Therefore, included in its analysis was an evaluation of whether each particular movement in the study sample would have been judged to be a whole loss or partial loss to the merged UP/MP/WP system. KCS used the same standards in making such decision as it used in that proceeding. If any movement would have been judged to be a total loss to UP/MP/WP, it no longer was a candidate for consideration in this merger. However, if any movement would have been judged only as partial loss to UP/MP/WP, it was given consideration in this proceeding, but only that portion remaining after application of KCS's findings as to UP/MP/WP.

Once the evaluation process was completed, revenues were assigned to each sample movement for which a loss was determined. The revenue loss was then expanded to the universe, thus producing an estimated gross annual loss of \$27,125,743 for KCS. According to KCS, this estimated gross loss would translate into an annual net revenue loss of \$1,953,916.

Applicants assert that KCS embraced unreasonable and unrealistic assumptions in its traffic diversion study. The only evidence applicants submitted in support of this claim was a footnote contained in the rebuttal statement of SPSP's traffic expert. The footnote pointed out that all KCS's diversion decisions were made on an all-or-nothing basis. The applicants believe that these judgments distorted the results of the study. In addition, applicants have the same criticism of KCS's traffic study that they had of MKT's study. Applicants claim that the assumption that SPSP will close interline routes is unrealistic.

We state, infra, in our analysis of MKT's opposition traffic diversion study that the closed route assumption is permissible. However, we have found that this assumption has a tendency to cause a degree of overstatement of the revenue losses a protestant railroad may experience. As for applicants' criticism about KCS's diversion judgments being on an all-or-nothing basis, we have found in prior decisions that this procedure was an acceptable approach provided this approach was used on the entire sample of relevant movements. Chicago, M., St. P. & Pac. RR -- Reorganization -- Acquisition by Grand Trunk Corp., F.D. No. 28640 (Sub-No. 9) (Sept. 9, 1984), slip op. Appendix E at 34. Applicants presented no evidence disproving the reliability of KCS's traffic study or the validity of its diversion judgments. Consequently, we find that the maximum gross annual revenue loss which KCS could experience would be \$17.1 million.

#### Missouri-Kansas-Texas

Katy prepared a traffic study to estimate the revenue losses that the MKT and Oklahoma, Kansas and Texas (OKT) would suffer as a result of the proposed consolidation of ATSF and SPT. The study covered all movements (carloads and trailer loads) that were settled during 1983, including both local and interline.

Katy divided the MKT and OKT traffic into 23 and 21 distinct strata, respectively. A pilot study consisting of 30 randomly selected movements from all relevant strata was conducted. The pilot study provided results (estimates of variances within strata) upon which the actual sampling plan was based. Further, the pilot study gave MKT an opportunity to check data collecting and the computational procedures. The results of the pilot study showed that the size of the final sample should be 3,224 movements. All rock movements and volume coal movements were viewed as not affected by the proposed consolidation and were not given any further consideration. In order to avoid duplication of joint MKT-OKT movements, three strata of OKT traffic which involved MKT movement participation were excluded from the study. For each sample movement, a study movement sheet (SMS) was produced containing the information and data recommended for traffic studies in earlier merger cases by the Commission.

Katy's Vice President-Traffic and Assistant Vice-President-Administration evaluated each sample movement for possibility of diversion. In making their traffic study, the evaluators considered the many factors which influence shippers' routing of cars and choice of carriers. In addition to the factor of single-line service, single-line control of rates and routes, MKT also considered other items which influence shippers, such as tracing shipments, avoidance of interchanges, which railroad serves the industry, and the shippers' desire for competitive routes. Further, MKT considered the ability of applicants to close, and the past history of applicants closing joint routes in assessing what the applicants would do in the future. A list of factors containing 10 reasons for diversion and 6 reasons for nondiversion was compiled and used in making divertibility judgments. In making their diversion judgments, MKT used diversion percentages of 100%, 75%, 50% and 25%.

MKT found that 631 movements out of its 3,224 car sample were divertible. Expansion of 100 percent yielded 20,288 cars which could be lost to the merged system, for an estimated gross annual revenue loss of \$19,379,310 for MKT-OKT. The protestant expects that 90 percent of the diversion loss would occur in the first year following the proposed consolidation and the remainder would occur in the second year.

Applicants claim that MKT utilized unreasonable and unrealistic assumptions in its diversion study. However, the only evidence which applicants submitted in support of this allegation was a footnote contained in the rebuttal statement of SPSP's traffic witness. The footnote stated that MKT's assumption that SPSP would close interline routes was unrealistic given the actual competitive environment in which SPSP would operate, and totally inconsistent with the applicants' expressed policy of maintaining all through routes, and maintaining competitive rates and efficient service via all efficient interline rail routes. Applicants contend that this assumption alone was a fatal flaw in MKT's diversion study.

We disagree with applicants that MKT's closed route assumption is a fatal flaw. For many years, railroads have used this assumption in their traffic diversion studies submitted as evidence in different rail consolidation proceedings. We have found this assumption to be permissible. However, we have concluded that it has a tendency to cause a degree of overstatement of the revenue losses protestant railroads may experience. Applicants presented no evidence refuting the reliability of MKT's traffic study or the validity of its



diversion judgments. Hence, we conclude that the maximum annual gross revenue loss which MKT could experience would be approximately \$19.4 million.

#### Trackage Rights Traffic Analysis

##### MKT

MKT conducted traffic studies to estimate the additional traffic that it would gain by the acquisition of trackage rights over the lines of the applicants. To determine this traffic gain, MKT decided to look not only at the traffic it would gain from ATSF and SPT, but at traffic it would gain from other railroads as well. To accomplish this task, MKT first made a traffic study based on a sample of traffic carried by the applicants in 1983. This study was based on a traffic tape obtained from ATSF and SPT through discovery. MKT's second traffic study was based upon our 1982 Waybill Sample, which was the most recent data base available at that time. For the first study, MKT selected a sample of 3,309 movements, while its second study was based upon 1,421 movements. Once these movements were identified, computer printouts of the relevant information for each movement were used.

MKT's Vice President-Traffic and Assistant Vice President-Administration of the Traffic Department evaluated each movement for possibility of a gain. In making their traffic study, MKT considered many factors which influence shippers' routing of cars and choice of carriers. In addition to the factor of single-line service and equipment, MKT also considered other items which influence shippers, such as tracing shipments, avoidance of interchanges, single line control of rats, and the shipper's desire for competitive routes. MKT developed some general assumptions to govern their judgments. Furthermore, a list of factors containing 9 reasons for diversion and 7 reasons for nondiversions was compiled and used in making divertibility judgments. For each movement viewed as potentially divertible, MKT applied percentages of either 100, 50, 25, 15 or 10 percent to represent the amount of diversion.

Before the evaluation of the traffic printouts took place, MKT decided to make two examinations of each sample. The first assumed MKT obtained all of the trackage rights requested except for Eagle Pass. The second assumed a grant of trackage rights except for Corpus Christi. The two examinations were necessary because MKT was seeking Corpus Christi rights with Eagle Pass only as an alternative. In the first examination (all except Eagle Pass) of the ATSF and SPT sample, MKT found that 1,053 movements would be diverted to it. The second examination (all except Corpus Christi) of that sample revealed that 1,051 movements would be rerouted. The results of these examinations indicated that the total 1983 revenue gain was \$21.3 million for the first examination and \$22.1 million for the second examination. As for the 1982 Waybill Sample, MKT judged that 60 movements were potentially divertible if all except Eagle Pass were granted, and that 54 movements were potentially divertible if all except Corpus Christi were approved. The results of the examinations of the Waybill Sample showed a total 1983 revenue gain of \$4.0 million for all except Eagle Pass and a revenue gain of \$2.8 million for all except Corpus Christi.

MKT made two adjustments to its estimates of gain from the Liberal-Topeka trackage rights request. While these two adjustments were not strictly derivable from examination of applicants' traffic moving on the line in 1983, MKT believes their inclusion gives a more accurate forecast.

(1) The present single-line SSW service from the Liberal-Topeka line to Texas points and Gulf ports is highly circuitous. Accordingly, MKT believes that its direct single service with trackage rights would be more attractive to shippers and would generate traffic not reflected by its examination of the applicants' traffic in 1983. MKT estimates that it could generate 800 carloads a year of grain from the segment of the line west of Hutchinson to Liberal destined to Gulf ports. These cars would take transit en route at Hutchinson, KS, or Enid, OK, resulting in 800 carloads from local elevator origins to transit points and 800 beyond transit points. Gross revenues from these 1,600 cars would amount to \$1,708,800.

(2) The data provided by applicants did not include any overhead traffic (with the exception of Texas North Western Railway traffic connecting at Liberal, KS). MKT believes that it would be able to handle some of the movement of soybeans from eastern Nebraska and Iowa points to Wichita, KS. After shipper discussion, MKT determined that it could obtain approximately 700 cars for \$798,000 gross revenue.

The results of all of the studies and examinations indicate that if MKT were granted all of its trackage rights requests except Eagle Pass, it would gain \$28.0 million additional revenue. If all trackage rights requests were granted except Corpus Christi, the revenue gain would be \$27.5 million. The table below shows MKT revenue gains from operations over the trackage rights sought excluding Eagle Pass:

MKT Annual Gross Revenue Gain

Segment	Revenue Gains from Applicants	Revenue Gains from Applicants and Other Carriers
Mexico/Corpus Christi	\$ 3.2	\$ 4.2
Liberal Line	5.3	5.8
Beaumont	2.6	5.3
Bayport Line	11.6	11.6
Ward Spur Line	1.0	1.1
Total	\$23.7	\$28.0

Applicants submitted evidence in opposition to the MKT traffic diversion study. However, it was withdrawn without comment. No other party filed evidence refuting MKT's diversion estimates. Accordingly, MKT's diversion projections are accepted as fair estimates of the amount of gross revenues that MKT could realize if its trackage rights were approved.

Texas Mexican Railway

TM performed a traffic diversion study to assess the revenue impact of the proposed ATSF/SPT merger, and the UP/MP merger on the Texas Mexican Railway. The diversion study used as a data base all the 26,897 waybills included in TM's accounting system between January 1, 1982 and December 31, 1982. Prior to the study, the waybills were classified as north, south and local waybills. This classification was maintained in the study because all the traffic was considered relevant. An inventory of