

5/19/98

attention : Eleine R. Kaiser,

I was an employee of Southern Pacific Trans. Co. for thirty nine years. I was lucky "leave befor Union Pacific tools over. over.

What they have done to remaining employees from S.P.T. Co. is abominable. What they propose for the City of Keno is equally terrible ! They should be required to lower the tracks through downtrown Reno, Safety first

CENTRAL ADMINISTRATIVE UNIT REC'D: 5-26-98 DOCUMENT 1 6-1-98 10:46:24 am F1)#32760

RL.05

Mancy & Vought

Mrs. Nancy J. Vaught Virginia City Highlands 2315 Goodman Rd. Reno, NV 89511

ENVIRONMENTAL DOCUMENT





San Francisco, California 94107-1372

United States Department of the Interior

32760 UP/SP Men

IN REPLY REFER TO:

H40(PGSO-PC)

May 19, 1998

Ms. Elaine K. Kaiser Chief, Section of Environmental Analysis Surface Transportation Board Washington, DC 20423

Re: Historic American Engineering Record documentation of Southern Pacific Transcontinental Railroad, Donner Pass Route Tunnels, from Sacramento, California to the CA/NV State Line

Dear Ms. Kaiser:

The National Park Service acknowledges the receipt of and accepts the Historic American Engineering Record (HAER) documentation for the Southern Pacific Donner Pass Route Tunnels. This documentation meets the Historic American Engineering Record standards and complies with the agreement between the Surface Transportation Board and the California State Historic Preservation Officer requiring completion of Historic American Engineering Record documentation.

The completed documentation will be transmitted to the Prints and Photographs Division of the Library of Congress. The records are in the public domain and will be accessible through the Library. A copy of the documentation will be provided to the State Historic Preservation Officer.

These records will be a valuable addition to the documentation of America's engineering and industrial heritage.

Sincerely,

David W. Look Team Leader, Cultural Resources

cc: HABS/HAER, WASO SHPO, CA Advisory Council Richard Starzak, Myra L. Frank & Associates, Inc., 811 W. 7th Street, Suite 800, Los Angeles, CA 90017 John Snyder, P.S. Preservation Services, P.O. Box 191275, Sacramento, CA 95819



MACKAY SCHOOL OF MINES

UNIVERSIT OF

Department of Geological Sciences/172 Reno, Nevada 89557-0138 Ph. (702) 784-6050 FAX (702) 784-1833

ENVIRONMENTAL

REC'D: 4-13-98

CENTRAL ADMINISTRATIVE UNIT

DOCUMENT # 6 3-98 12:03:56 pm

3D#32760

April 7, 1998

Elaine Kaiser Program Director Section of Environmental Analysis Surface Transportation Board 1925 K Street NW, 5th Floor Washington, DC 20423

RE: UP/SP Railroad Merger Final Mitigation Plan

Dear Elaine:

As a courtesy, the City of Reno provided me a copy of the Final Mitigation Plan (FMP) dated February 11, 1998. They also informed me that the comment due date has been stayed until sometime in October 1998.

Upon reviewing this FMP, I noted the following:

1) the principal difference between SEA's analysis, as presented in Section 4 of the FMP, and my analysis involves the estimates of conditional probability of contamination; i.e., how often a hazardous materials release will enter the Truckee River should a release occur. My method is conservative (I prepared my study for a public utility charged with providing drinking water to the Reno/Sparks metropolitan area), therefore I assumed a high likelihood of contamination regardless of the size, or type of release;

2) because SEA's analysis is more detailed, therefore more representative, preference is given to their analysis, rather than to mine, even though they used some of my information when conducting their analysis.

In anticipation of commenting on the Surface Transportation Board's use of my study, I would like to request the following information from the FRA accident/incident databases and the Hazardous Materials Incident Reporting System (HMIRS):

1) the number of hazardous materials cars involved in reportable accidents in 1995, 1996, and/or 1997;

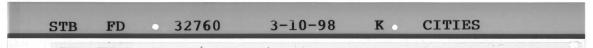
2) of the hazmat cars involved in reportable accidents, the number sustaining releases.

I am requesting these data so that I can attempt statistical tests of the two methodologies, mine and that presented in the FMP.

Thank you in advance for your time and attention to this request.

Sincerely,

James R. Carr Professor, Geological Sciences



Regional Transportation Commission

Planning Department ♦ 600 Sutro Street ♦ Mailing Address: P.O. Box 30002 ♦ Reno, Nevada 89520-3002 Telephone 702-348-0480 ♦ FAX 702-348-0450

Thomas H. Herndon, Chairman John R. Mayer, Vice Chairman

Ms. Elaine K. Kaiser, Chief

Environmental Filing-Reno

Finance Docket No. 32760

Office of the Secretary

Case Control Unit

Section of Environmental Analysis

James M. Shaw, Commissioner Joanne Bond, Commissioner David Aiazzi, Commissioner Celia G. Kupersmith, Executive Director

March 6, 1998

ENVIRONMENTAL DOCUMENT



Surface Transportation Board 1925 K Street NW, Room 700 Washington, DC 20423-0001

RE: COMMENTS ON CITY OF RENO FINAL MITIGATION PLAN-UNION PACIFIC/SOUTHERN PACIFIC MERGER

Dear Ms. Kaiser:

The Regional Transportation Commission (RTC) has received and reviewed the Final Mitigation Plan for the merger between the Southern Pacific and Union Pacific railroads. The RTC sent formal comments on October 14, 1997, concerning the Preliminary Mitigation Plan (PMP). As the Final Mitigation Plan represents the same mitigation measures as the PMP, the RTC's comments remain essentially the same as our October 1997 letter. These comments include:

- According to the Nevada Department of Transportation (NDOT) and RTC forecasts, traffic at the six major crossings between Wells Avenue and Keystone Avenue will increase from 78,000 Average Daily Traffic (ADT) to more than 90,000 ADT. Staff is concerned that even the Final Mitigation Plan's recommendation for faster trains does not address the need for additional grade separations to handle the forecasted traffic increases through the downtown core.
- 2. Concerns over emergency vehicle access with additional train traffic are important. The Final Mitigation Plan identifies actions such as more aggressive behavior by emergency vehicle drivers, the random nature of emergency calls, and emergency operators already having plans in place avoid trains. The Final Plan does not mention real solutions to emergency access, such as the benefit of additional grade separations, so that there would be <u>no chance</u> that emergency vehicles would be delayed by train traffic even on a random basis.
- 3. The accident portion of the Final Plan mentions mitigations such as the elimination of grade crossings through street closures or operational changes such as one-way streets. Again, no mention of the creation of grade separations is mentioned as the best way to eliminate train/vehicle conflicts. Additionally, staff does not recollect any analysis done on street closures or operational changes recommended by the Final Plan.

Page 2

- 4. Citifare operations include more than 700 daily crossings of the tracks carrying an average of nearly 40 passengers per hour of service. Currently, there are already major sight distance problems for Citifare vehicles at Lake Street and Center Street railroad crossings. These concerns obviously become much more critical with the proposal to increase the train speeds. There is no discussion about the mitigation of eliminating train/bus conflicts by providing grade separations throughout the downtown Reno area and, particularly, at the locations with current sight distance problems.
- 5. There is concern about the ability to reach 30 MPH between the required stop in the Sparks yard and the short distance to the Reno downtown area. The inability to reach this speed will increase delays for vehicles waiting at train crossings; thus, benefits of the Final Plan mitigations are overestimated.
- 6. The air quality portion of the Final Plan admits the small but significant rise in post merger emissions from additional train traffic. However, the mitigations measures contained in the report discuss "options," not commitments, by the railroad to convert to cleaner burning locomotives. There is no cost associated with this conversion and no commitment from the railroad to change to different locomotives. As a primary air quality modeling agency, RTC staff is concerned about any increase in emissions that are not fully mitigated through a dedicated process paid for by the merging companies.
- 7. RTC staff, as part of the Mitigation Task Force, feels strongly that the Final Plan removes viable mitigating measures, such as grade separations, from serious consideration. The installation of grade separations can reduce delay and increase safety by eliminating train/vehicle conflicts.

Please call me at 348-0480 if you have any questions regarding RTC staff comments.

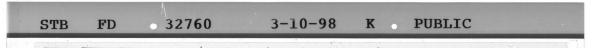
Sincerely,

Celia G. Kupersmith Executive Director

GHK/JML/dsc

cc Regional Transportation Commission Mark Demuth, MADCON Charles McNeely, City of Reno Greg Krause, RTC Derek Morse, RTC Mike Steele, Citifare

J:\TRANSFER\CHOO2.DOC



ENVIRONMENTAL DOCUMENT 76 RECEIVED 11501 MAYFIELD Rd. Apt MAR 10 1998 MAR MAIL MANAGEMENT ClevelANd Ohio 44106 ARMENTHA NESBITT

SURFACE TRANSPONTATION BOARD ELAINE K. KAISER DIR.

I AM WRITTING THIS LETTER. TO EXPRESS MY CONCERN ABOUT "THE PROPOSED, C'SX RAIL ROAD MERGER". I AM VERY MUCH. AGANIST THE PROJECT

THYREASON is, I AMA SENJOR CITLEN THAT LIVE APPROX. 475 Feet, IN A BEAUTIEUL APT. FOR SENJOR CITZEN, NEAR THE RAIL ROAD TRACK CROOSING MAY FIELD Rd. I. DO. NOT. NEED-THE "EXTRA NOISE FROM MORE, TRAINS THOYOUGH MYNEIGABOY HOOD PIEASE-DON'T, FORCE, CSY RAILROAD NOISE UPON APPROX. 270 SENJOR CITZEN IN MY APT. BIDG. THAT IS OUR HOME,"ABINGTON ARMS" APTS.

Mank You. For "Not" INCREASING NOISE & TOXIC FUMES. IN MYNEIGHBORHOOD.

Armentha Mesbitt



CLE-1025

ABINGTON ARMS APARTMENT 11501 Mayfield Road Cleveland, Ohio 44106

Located in Cleveland's world renowned cultural center, University Circle, it was one of the first HUD assisted Senior Apartments built in 1978 and was the prototype for many built after.

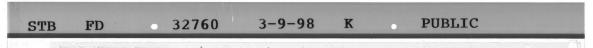
Photograph by resident Richard Kauffman

1 LIVE HERE, IN This Bldg. ENough NOISE" FROM SIREN'S HELITOCOPTER" LANd 149. TOXIC FUMES PLEASE DONT PUTCSX RAILROAD HFRF



FROM

ARMENTHA L NESBITT 11501 MAYFIELD RD APT 707 CLEVELAND, OH 44106



ENVIRONMENTAL DOCUMENT

February 18, 1998

Office of the Secretary Case Control Unit, Room 715 Finance Docket No. 32760 Surface Transportation Board 1925 K Street NW Washington, DC 20423-0001



Attn: Elaine K. Kaiser, Chief of Section, Environmental Analysis Environmental Filing - Reno FMP

Dear Ms. Kaiser,

We do not work for a local casino nor are we associated with the railroads in any way. We have lived in Nevada all of our lives excluding college and military service, and have lived in Reno most of our lives. We feel that this places us in an unusual position since we've been a resident of Reno longer than most of the members of the City Council and our "here today, gone tomorrow" City Manager.

We also have a lifestyle that requires us to cross the railroad tracks on most weekdays a minimum of six times. We honestly cannot see what all the noise regarding the rail merger is about. We don't think that we have to wait for the crossing of a train once in 50 trips across the tracks. The delay we experience has never exceeded three minutes. (We have been timing my wait since the City of Reno has been screaming bloody murder and doom.) We are experiencing more combined delay on a daily basis by the traffic lights along our route through downtown Reno. You wouldn't believe some of the delays we've encountered during the construction phase of some of Reno's newer casinos. Traffic lights and construction doesn't seem to register with the City Council. Their only issue is to do what the casino operators want.

We feel that all of the grade crossings are very well protected, both for vehicles and pedestrians. If people don't try to defeat the existing gating at the crossings, no one will be harmed. One of the local casinos got smart and has already built a pedestrian crossing above the tracks. Any person who absolutely, positively needs to get from one side of the tracks to the other can use that structure. Neither of us can imagine what need would be so urgent for a pedestrian, but a crossing structure is available.

Reno has fire stations, police, and ambulance services on both sides of the tracks. There is a hospital on both sides of the tracks. It might be necessary to resign some equipment to Office of the Secretary February , 1998 Page Two

different stations and reassign some officers, but what's the big deal. Normal growth patterns force such reassignments all the time.

. . . .

We cannot see what additional environmental damage might be incurred with the increase in train traffic. The Truckee River does run adjacent to the tracks most of the way from Truckee, CA into Reno and continues to do so eastward away from the Reno-Sparks area. We feel due to the routing of the tracks through the Sierra Nevada Mountains, the railroads really spend a lot of time and money maintaining the roadbed and tracks. We don't see why this will not continue to be the situation. The railroads certainly don't want derailments or accidents to prevent them from using the tracks. It is in their best interests to continually maintain these tracks to a very high standard, and they seem to do so.

Within our circle of friends and associates, there is this constant question of "what's the big deal about the tracks?". For those of us who are not under the thumb of the casinos, this railroad merger and track situation is a non-performer. We have far greater problems within this valley than the railroad. Those tracks have been here as long as Reno as been here. It was decided that the city would build up around the tracks a long time ago. It has been recent city planners(?) and councils that have allowed the casinos to build right up to the railroad's right-of-way. At this time in the game, it wouldn't be possible to place the train in a "trench" through that area without tremendous inconvenience to the population and would probably require the demolition of many structures that exist near, over and around the tracks. The problem isn't new, it was created in the 1860's and this city never saw fit to remedy this situation earlier. It is ridiculous to try to remedy this situation now. If you want serious environmental damage to be done, lower the tracks through Reno. That would create havoc for the citizenry and the environment. That would truly create a ghost town of downtown Reno.

If it is decided that the solution to the increase in rail traffic is to speed up the trains, so be it. At the present time, they really do go through Reno quite slowly and only speed up once they cross all of the grade crossings. If the railroads were hauling passengers and not freight, the City of Reno would be jumping up and down over the prospects of all these new potential customers. It is amazing to see the volume of freight that actually arrives by Office of the Secretary February 18, 1998 Page Three

train in this valley. To harm that portion of our economy is more foolish than the projected harm to the casino industry might be. We have this problem only because the gaming industry has the ability to generate money for political contributions which exceeds the ability of the other industries within the area and so only the casinos' voice is heard. The City of Reno and its City Council is blind to these other interests in this matter.

We found it interesting that as reported in our local newspaper today, the City of Reno has spent to date \$750,000.00 fighting this merger. That same amount of money could have been used to repair a lot of streets, address the homeless issue, subsidize low-cost housing for our casino workers, build new schools or be used to reduce taxes. We have far greater problems within this city than the merger of the Union Pacific and Southern Pacific railroads and their tracks. It's too bad that our city fathers cannot see that truth.

Respectfully submitted,

Jah Dracke

John Wright & Pat Brackett-Wright 5255 Eisan Avenue Reno, NV 89506-9005 (702) 329-7172



ENVIRONMENTAL DOCUMENT

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Department of Managerial Sciences University of Nevada Reno, NV 89557 February 24, 1998

Ms. Elaine Kaiser Office of the Secretary Case Control Unit—Room 715 Finance docket No. 32760 Surface Transportation Board 1925K Street NW Washington, D.C. 20423-0001

Dear Ms. Kaiser:

I am writing in response to the Surface Transportation Board's request for comments from individuals to the Final Mitigation Plan for Reno, NV. I am making these brief comments from the perspectives of a University of Nevada Professor of Transportation and Logistics, and a citizen of Washoe county.

I believe the proposals of increased train speeds, street overpasses at Keystone and Evans, and pedestrian overpasses on Virginia are sufficient to mitigate the impacts of increased train traffic through Reno. The cost-benefit ratio of reconfiguring the rail line below grade-level is not sufficient to justify such action.

The Surface Transportation Board needs to understand that Senator Reid, the mayor of Reno, his city manager, and most of the city council do not really represent the desires of the average citizen of Reno and Washoe county. Their actions are primarily influenced and motivated by the gaming interests and real estate developers. Most citizens do not want these expenditures made that benefit only a few special interests at the expense of many individuals.

Sincerely,

14, Barry Spinggins

H. Barry Spraggins

march 4, 1998

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RECEIVED

1998

Attention: Sea-Finance Docket 33388 925 K St. NW. Washington, DC. 20423

Avon Lake PTA Council 117 Parkwood Avenue Avon Lake, OH 44012 Att: Jane Conian, President

To Whom it May Concern:

We are writing in support of the Lakewood PTA Council Resolution dated 11-6-97. A copy of which is attached.

ENVIRONMENTAL

DOCUMENT

The increase of train traffic through our communities is of great concern, that it increases the risk of derailments and the risk of hazardous material spills. This, as well other points are noted in the resolution.

Further, U.S. H.R. 1270, The nuclear Waste Policy At, 1997 will increase the risk of nuclear waste spills occurring in heavily populated areas. This poses a substantial risk to our homes in our communities. Furthermore, the rails are currently used heavily, often blocking the intersecting roads. The proposal would gradruple rail traffic, thereby increasing the risk of motorist trying to beat the train, or to have emergency vehicles delayed. the constant use and delays will drive down property values, increase noise levels and pose a safety hazard for our children trying to cross the tracks.

Therefore, we support the Lakewood PTA Councils opposition to increased rail traffic through residential areas and support PTA governmental efforts to curtail additional train traffic.

Sincerely,

tane Conian

Jane Conian President and District 7 Legislation Chairman

cc: Lakewood PTA Council

RESOLUTION

WHEREAS, An objective of PTA is to promote the welfare of children and youth in the community;

WHEREAS, An objective of PTA is to secure adequate laws for the care and protection of youth; and

WHEREAS, The proposed acquisition of Conrail Inc. by Norfolk Southern Corp. and CSX Transportation threatens to drastically increase rail traffic through residential areas throughout the state; and

WHEREAS, Our children's safety while walking to and from school, and while at play would be threatened by the trains themselves; and

WHEREAS, Train traffic blocking the crossings in our communities will cause critical delays for emergency vehicles in reaching their destinations; and

WHEREAS, The increase of freight trains increases the risk of derailments and the risk of hazardous material spills, be it

RESOLVED, That Lakewood PTA Council make known to the Surface Transportation Board PTA's opposition to increased rail traffic through residential areas; and be it further RESOLVED, That PTA work in conjunction with government efforts to curtail additional train traffic which would affect the safety of the communities.

Submitting group Date of adoption President's signature Secretary's signature Contact person: <u>Lakewood PTA Council</u> <u>Alorenber 6,1997</u> <u>Debra B. Swecker</u> Deine Deter

Paula Reed 1208 Manor Park Avenue Lakewood, Ohio 44107 (216)228-8645

SUMMARY RAILROAD TRAFFIC CONCERNS

The proposed acquisition of Conrail Inc. by Norfolk Southern Corp. and CSX Transportation threatens to drastically increase rail traffic through residential areas throughout the state.

Our local concerns center around the tracks that bisect West Cleveland and particularly our suburb, Lakewood, and the other suburbs of Rocky River, Bay Village and Avon Lake.

All of these communities share concerns about delayed response for emergency vehicles, and about the possibilities escape routes being blocked in the case of a hazardous waste spill.

Lakewood alone, however, must deal with safety concerns brought by children of all ages crossing the tracks on their walk to and from school. Students in all the other communities are bussed. Lakewood's boundaries encompass just five square miles, and this area is served by ten elementary schools, three middle schools and one high school. The probability of death or serious injury with these many children moving through the city daily on foot would skyrocket were train traffic to triple.

A related concern is that of the effects of increased traffic on real estate values. Houses near the tracks will decrease in value, having a definite effect on tax revenues generated, and therefore on the funding for schools.

Attached is the West Shore Report--a summary of the problem issued by the office of Representative Dennis Kucinich.

Paula Reed Railroad Safety Concerns Committee Chairman Lakewood PTA Council





ALLEN COUNTY DEPARTMENT OF PLANNING SERVICES

February 27,1998

Office of the Secretary Case Control Unit Finance Docket No. 33388 Surface Transportation Board 1925 K Street N.W. Washington, D. C. 20423-0001

Attention: Elaine K. Kaiser Environmental Project Director

ENVIRONMENTAL DOCUMENT



Re: Conrail Acquisition Impacts on Fort Wayne Urbanized Area, Indiana

Dear Director:

On behalf of the Northeastern Indiana Regional Coordinating Council (NIRCC), the Metropolitan Planning Organization in northeast Indiana, let me assure you that the communities within the Fort Wayne Urbanized Area are in support of the Conrail acquisition by CSX and NS railroads.

The NIRCC also is a strong supporter of safer railroad crossings and a better quality of life for the communities. SEA's recommendation to improve crossing warning equipment at Anthony Blvd. and Engle Rd. is endorsed. NIRCC is recommending that "secured" crossings be provided for the grade crossings near the residential areas bordering the affected lines in Fort Wayne. These crossings are:

Lumbard Street Wabash Avenue Fletcher Avenue Winter Street Brooklyn Avenue Nuttman Avenue

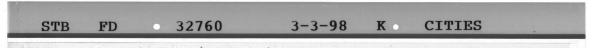
These improvements by the railroad companies will greatly enhance the safety of the transportation systems. These same improvements will negate the use of train horns at the crossings thus making these neighborhoods more livable.

Thank you for your consideration of the Council's recommendations.

Sincerely,

lins 6. Samaan

Elias G. Samaan Director, NIRCC



ELKHART FIRE DEPARTMENT 500 East Street Elkhart, IN 46516



TONY JOHNSON, FIRE CHIEF ANTHONY F. CINELLI, DEPUTY CHIEF BETTE COTI, OFFICE MANAGER

"INDIANA'S MOST OUTSTANDING COMMUNITY -- 1996"

JAMES P. PERRON, MAYOR

February 26, 1998

Office of the Secretary Case Control Unit Finance Docket No. 33388 Surface Transportation Board 1925 K Street, NW, Room 500 Washington, DC 20412-0001



Attention: Elaine K. Kaiser;

We would like to express my concern for the well being of my community during the changes that are occurring on the railroad industry. Elkhart certainly owes a great deal to the railroad. We all want a healthy railroad in Elkhart.

Conrail moves tons and tons of freight, both hazardous and non-hazardous, through our community daily. In the past it was widely felt that there was little regard for the health and well being of the community or the employees. We believe that the Elkhart yard is still our biggest spill potential, but as a result of years of hard work by members of the Conrail staff, like H. "Skip" Elliott, Tom Davis, Tim Manis, Romano Desimone, and others, we are trained to deal with events, not ignored or misdirected. The general feeling is one that the railroad is a working partner in our community.

We are very concerned that the changes that are underway will erode this relationship. Specifically the men mentioned above have spent a large amount of time and energy training members of the emergency response organizations in the Elkhart area.

We sincerely hope that the new operation at the Elkhart Yard will build on this effort and we will continue to grow as a community with the rail industry.

Sincerely,

Jony John-

W. A. Tony Johnson Fire Chief

Tony Pigors Hazardous Material Coordinator

TELEPHONE: (219) 293-8931

FAX: (219) 522-1023 CITY ACCESS: (219) 522-2377





February 14, 1998

Elaine K. Kaiser

Environtent pocumienta

Surface Transportation Board 1925 K Street NW Washington, DC 20423-0001

Office of the Secretary Case Control Unit - Room 715 Finance Docket No. 32760

Ms. Kaiser:

I hold to the view that government is to be viewed as an uncle, such as Uncle Sam, and the people to be governed as adult children. It comes from this that government should view situations as they would view situations with children, with fairness and objectivity. Before us is a case where one child, Union Pacific Corporation, left its place in the living room playground and took its play elsewhere. Another child, the City of Reno and the casino industry, came and took its place.

Union Pacific has now changed its mind and decided it wants to return to its place on the playground. If it hurts the welfare and play of the other children, "Who cares"? They feel that this is part of their right because they played in this section of the living room before. The government, Uncle Sam in the form of the Surface Transportation Board, has been asked to make a decision. How I would handle the situation was given at the hearings last year.

The decision of the Surface Transportation Board is likewise clear. The Lady Justice has taken off her blindfold and decided to listen to big money. She has been bought. All the railroad has to do is speed up its trains and if people are killed, "Who cares"? They do not feel, as I do, that one death is one too many and that every higher number is only an abstraction. They are like the dominant party of 1940's Germany who argued in the 1950's that what they did was acceptable because they killed in the tens of thousands and not millions as the prosecution contended. The first child has a right to return to its place on the playground and can do so at any time, recklessly pushing aside and hurting other children who are in the way. The fact that the Native Americans were here even before them is irrelevant. The railroad stole the land fair and square.

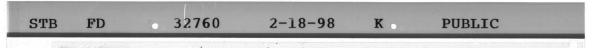
Is this how you handle fights between children at home? If so, I am glad that you are not my parents!

Sincerely,

Charles W. Gill II

Charles W2 P.O. Box 11702

Reno, NV 89510-1702



Is the Trucking and Railany industrie going to be reduced in delivery chat will no more then a 3 day to week supply of any life necessity ordered at one there Dus an aupost cuate more string than an electrical them? " writing to the address listed below no later than March 12, 1998 Due Walker Mudical profes Hight for Sile al request as possible of the secretary aring braduits mare Case Control Unit - Room 715 Finance Docket No. 32760 Conmiced Usin 40 dig Surface Transportation Boarsup dist and busy the 1925 K Street NW Washington DC 20423-0001 Might y way of TRAiston In the lower left hand corner or the envelope indicate: Attention: Elaine K. Kaiser Chief, Section of Environmental Analysis Environmental Filing - Reno FMP FOR FURTHER INFORMATION CONTACT: Harold McNulty, Section of Environmental Analysis, Suite 500, Surface Transportation Board, 1925 K Street NW, Washington DC 20423, (202) 565-1539, TDD for the hearing impaired: (202) 565-1695. Vernon A. Williams To Whom it May Concern Secretary The city of Reno certainly should leave the Transportation necessity of bach Bailway and Isucks This city would have to close all business doors and all residents more away to susveve a sailway of Track's for any failroad Company business at the fine of population in varion by other Countries and a referred Raitung Carquiner as voice to be appreciated of educational advice at the Keno Coursed Treeting - Qo iplaine why and how and under nound railway hack would not could not be even a consideration of wit ellectreal logic due to the tocomplive operation int the need to pick up speed to climit liveak down , of flooding occurs ? Such unseducated people who cannot, tare a viaduect and other Emergency services because a Usain that the city was built around and due to accessability over a mauritain as three a desert passes three should go to a city where the majority of Street Iraffic Walking are panhandless" fell them to

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ENVIRONMENTAL DOCUMENT

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Surface Transportation Board Washington, DC 20423

STB Finance Docket No. 32760

UNION PACIFIC CORPORATION, UNION PACIFIC RAILROAD COMPANY, AND MISSOURI PACIFIC RAILROAD COMPANY--CONTROL AND MERGER--SOUTHERN PACIFIC RAIL CORPORATION, SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP. AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

February 11, 1998

NOTICE TO THE PARTIES:

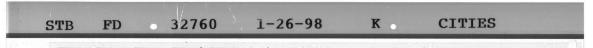
The Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) today has issued the Final Mitigation Plan (FMP) for Reno, NV.

The FMP was prepared by SEA as part of the ongoing Reno Mitigation Study ordered by the Board as a condition of its August 12, 1996 approval of the Union Pacific/Southern Pacific (UP'G?) merger. The FMP contains SEA's proposed recommendations at this time for mitigating the potential environmental effects of increased train traffic through Reno as a result of the UP/SP merger (beyond the environmental mitigation already imposed by the Board in its August 1996 decision). The FMP also contains comments from over 530 commenters on the Preliminary Mitigation Plan (released in September 1997), SEA's responses to those comments, and additional technical analysis conducted by SEA.

SEA invites public review and comment on the FMP during a 30-day review period, which will end on March 12, 1998. Copies of the FMP have been distributed to interested parties, and are also available at the Reno and Sparks branches of the Washoe County Public Library.

SEA will consider all timely comments on the FMP before making final recommendations to the Board. After full consideration of the PMP, the FMP, all public comments, and SEA's final recommendations, the Board will issue a final decision imposing additional specific mitigation measures for Reno and Washoe County that it deems to be appropriate.

Individuals who wish to file a comment may submit one original; government agencies and businesses are asked to submit an original plus 10 copies. Public comments should be submitted in





Public Works Dept. P.O. Box 1900 Reno, NV 89505

STEVE VARELA

Director of Public Works City Engineer (702)334-2215

MICHAEL EINWECK

Traffic Engineer Traffic Engineering Division (702)334-2233

BOB KOCHEL

Fleet Manager Fleet Services Division (702)334-2240

DENNIS KRAUSE

Streets Superintendent Streets Maintenance Division (702)334-2246

JOHN LOETE

Sanitary Engineer Environmental Services Division (702)334-2243

ALICE PARSONS

Building Technical Services Manager

Building Technical Services Division

(702) 334-2240

GARY STOCKHOFF

Principal Engineer Capital Projects General Services Division (702)334-3830

ENVIRONMENTAL DOCUMENT

January 21, 1998

Ms. Elaine Kaiser, Program Director, Legal Counsel Mr. Harold McNulty, Study Director Surface Transportation Board Section of Environmental Analysis 1925 K Street NW, 5th Floor Washington, DC 20423

VIA FACSIMILE AND U.S. MAIL

UP/SP Railroad Merger - Reno Preliminary Mitigation Plan (PMP); Finance RE: Docket No. 32760

Dear Ms. Kaiser and Mr. McNulty:

Please consider this letter a supplement to our comments filed on October 16, 1997 on the Preliminary Mitigation Plan, UP/SP Merger - Reno Mitigation Study - Reno, Nevada - September 1997 - Finance Document No. 32760, Union Pacific Corp., et al. - Control and Merger - Southern Pacific Rail Corp., et al. September 15, 1997.

The following comments were not possible prior to October 16, 1997, because they are derived as a direct result of the Draft Environmental Impact Statement - Proposed Conrail Acquisition- December 12, 1997 - Finance Docket No. 33388 (hereinafter referred to as "Conrail Draft EIS") prepared by the Surface Transportation Board, Section of Environmental Analysis (SEA).

CRITERIA FOR ASSESSING POTENTIALLY SIGNIFICANT IMPACTS FOR MANDATORY UP/SP MITIGATION

The City of Reno ("The City") has on numerous occasions (both orally and in written form) requested from SEA criteria for assessing all potentially significant impacts with particular emphasis on traffic at highway/rail at-grade crossings which would require mitigation. The City has often noted that the increase in average delay per stopped vehicle is one such criteria which must be considered by SEA. Further, the Level of Service (LOS) as defined by the Transportation Research Board's Highway Capacity Manual (1994) should also be considered.

SEA defined traffic delay significance criteria in the Conrail Draft EIS as follows:

... SEA established criteria for assessing potentially significant impacts on traffic delay at highway/rail at-grade crossings ... For average delay for all vehicles, SEA considered the impact significant if the post-Acquisition traffic

Harold McNulty 3 muary 21, 1998 Page 2 of 5

> level of service at a highway/rail at-grade crossing would be a Level of Service (LOS) "E" or "F" regardless of the pre-Acquisition LOS, or would decline from a pre-Acquisition LOS of "C" or better to a post-Acquisition LOS of "D". (Conrail EIS Vol. 4, chapter/page 7-4 to 7-5).

The City's October 16, 1997 Comments to the PMP incorporated by reference Appendix D, a lengthy report completed by Meyer, Mohaddes Associates, Inc., in 1997, entitled UP/SP Railroad Merger Impact Analysis: Traffic/Delay Analysis. This study specifically analyzed the LOS changes in Reno. Table 1 below summarizes the changes in LOS for the City of Reno pre-Merger and post-Merger.

Table 1Comparison Between Pre-Merger and Post-MergerLevel of Service at 12 Downtown At-grade Crossings			
Rail Crossing Location	Pre-Merger 1995 LOS with 12.7 trains/day	Post-Merger 2000 LOS with 24.0 trains/day	Level of Impact
Keystone	С	D	SIGNIFICANT
Vine	С	D	SIGNIFICANT
Washington	С	D	SIGNIFICANT
Ralston	С	D	SIGNIFICANT
Arlington	С	D	SIGNIFICANT
West	С	D	SIGNIFICANT
Sierra	D	D	
Virginia	С	D	SIGNIFICANT
Center	D	Е	SIGNIFICANT
Lake	С	D	SIGNIFICANT
Morrill	D	D	
Sutro	С	D	SIGNIFICANT

Source: MMA, 1997; Figure 4-16; Figure 4-20

Mr. Harold McNulty January 21, 1998 Page 3 of 5

Applying SEA's definition of significant impacts on traffic at highway/rail at-grade crossings (set forth in the Conrail Draft EIS), it would appear that 10 out of 12 of the downtown Reno at-grade crossings will qualify as significantly impacted by the Merger which must be mitigated by the UP/SP. The City respectfully requests that identical criteria be critically evaluated by SEA for each grade crossing in the Reno mitigation study.

Additionally, many of the criteria for significance established by the STB in the Conrail Draft EIS for safety, energy, air quality, noise, cultural resources, hazardous waste, natural resources and land use/socioeconomics differ markedly from those employed in the Reno Preliminary Mitigation Plan (PMP). The City respectfully requests that these differences be explained in detail in the Reno Final Mitigation Plan (FMP).

MITIGATION OF SIGNIFICANT IMPACTS - INCREASED TRAIN SPEED

SEA's criteria for mitigation via "increasing train speed" in the Conrail Draft EIS is given as:

> Where local operating conditions allow for increased train speeds without compromising safety, ... SEA recommends that the Board impose on any decision approving the proposed Conrail Acquisition a condition requiring the acquiring railroad to implement the necessary physical and operating improvements to increase train speeds...[emphasis added] (Conrail Draft EIS, Vol. 4, chapter/page 7-5)

It appears that the SEA's safety/increased speed criteria in the Conrail Draft EIS would be inconsistent to SEA's criteria used in the Reno PMP. For example, SEA concedes that "accidents are likely to be more severe with increased train speeds". However, SEA has recommended increased speed through downtown Reno as mandatory mitigation in the PMP. Please refer to Figure 7.2.1-2 which shows that anticipated fatality rates (number of fatalities per accident) increase as train speeds increase (Reno PMP, page 7-10 and page 8 - 8). The City submits that the proposed train speed increase in downtown Reno **does** compromise safety.

The City respectfully requests that this criteria be used to determine the feasibility of increased train speed through downtown Reno as a mitigation measure. Specifically, a critical element of the Reno FMP must include a determination of whether an increase in train speed through downtown Reno can occur without compromising safety.

Mr. Harold McNulty January 21, 1998 Page 4 of 5

MITIGATION OF SIGNIFICANT IMPACTS - SEPARATED GRADE CROSSINGS MANDATORY UP/SP MITIGATION

SEA states in the Conrail Draft EIS:

... [SEA] developed three criteria to identify the highway/rail at-grade crossings where a separated grade crossing appears warranted. SEA's preliminary determination is that a separated grade crossing may be warranted if each of the following criteria is met:

- 1. Acquisition-related train traffic would increased by at least eight trains per day.
- 2. Estimated post-Acquisition roadway traffic LOS would fall to an "E" or "F" because of increased post-Acquisition train traffic.
- Sufficient increase in train speeds needed to mitigate Acquisitionrelated traffic delay impact would not be feasible. (Conrail Draft EIS Vol. 4, chapter page 7-6 to 7-7)

The City submits that had this same criteria been applied to the Reno PMP, SEPARATED GRADE CROSSINGS WOULD BE WARRANTED TO MITIGATE SIGNIFICANT IMPACTS FROM THE INCREASED MERGER RELATED TRAIN TRAFFIC UNDER REQUIRED MITIGATION.

For instance, the City will experience at least an 11.3 train per day post-Merger increase in train traffic (Reno PMP page 4-5) with roadway traffic LOS falling to an LOS "E" (Center Street) because of increased post-Merger train traffic (Reno PMP Comments, Appendix D, Figure 4-16 and Figure 4-20). Further, sufficient increase in train speeds is not feasible under SEA's criteria that anticipated fatality rates (number of fatalities per accident) increase as train speeds increase thus compromising safety (Reno PMP, page 7 - 10 and page 8 - 8). Mr. Harold McNulty January 21, 1998 Page 5 of 5

Because SEA's new criteria was only recently disclosed to the public via the Conrail Draft EIS, the City requests that the above discrepancies between the Conrail Draft EIS and the Reno PMP be thoroughly discussed in a response letter to the City prior to the issuance of the Reno FMP. Specifically, the discussion should include the criteria for determining significance; the establishment of 10 out of 12 of Reno's at-grade crossings as significantly impacted; the establishment that increased train speed through downtown Reno would compromise safety; the establishment of 1 out of the 10 significantly impacted at-grade crossings meets the criteria for a separated grade crossing; and that the other 9 out of 10 significantly impacted atgrade crossing, in the absence of a separated grade crossing, would still be problematic and require further mitigation to bring the level of impact to pre-merger conditions.

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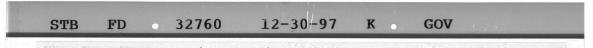
We look forward to your timely response to these issues. Please contact me at (702) 334-2215 or you may contact the Deputy City Attorney Merri Belaustegui-Traficanti at (702) 334-2050 or the City's Environmental Consultant Mark A. Demuth at (702) 829-1126 should you have any specific questions or comments. Per Elaine Kaiser's instruction, the City requests that this letter be made a part of the record in this matter.

Sincerely.

Vale

Steve Varela Director of Public Works/City Engineer

Jeff Griffin, Mayor cc: Pierre Hascheff, Council Member At-Large Tom Herndon, Council Member Ward 1 Candice Pearce, Council Member Ward 2 Bill Newberg, Council Member Ward 3 Judy Herman, Council Member Ward 4 Dave Aiazzi, Council Member Ward 5 Senator Harry Reid Senator Richard Bryan Representative Jim Gibbons Representative John Ensign Charles McNeely Merri Belaustegui-Traficanti Mark Demuth. The Environmental Team J. Michael Hemmer, Counsel UP/SP

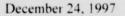




GARY E. JOHNSON GOVERNOR

OFFICE OF CULTURAL AFFAIRS HISTORIC PRESERVATION DIVISION DOCUMENT

VILLA RIVERA BUILDING 228 EAST PALACE AVENUE SANTA FE. NEW MEXICO 87501, (505) 827-6320



Ms. Elaine K. Kaiser Chief, Section of Environmental Analysis Surface Transportation Board Washington, D. C. 20423-0001

Re: Union Pacific/Southern Pacific railroad merger, Section 106 Compliance

Dear Ms. Kaiser:

I em writing in reference to the above project to give you my comments on the proposed undertaking as provided for under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 CFR 800.

As you know, the proposed railroad merger will involve construction at 19 locations in New Mexico within existing Southern Pacific right-of-way from Cochise, AZ to Lordsburg, NM to El Paso, TX and from El Paso, TX to Dalhart, TX. Following my recommendation, the project area has been surveyed by Ecology and Environment. Inc. which examined 12 of the 19 locations in 1996 and the remaining seven locations in 1997. A single report incorporating the results of both surveys was produced and a draft was went to my office last summer. I did not review the draft until this Fall; when I did, I found that the draft contains serious omissions in the information that must be collected during cultural resources survey work in New Mexico. Those problems relate specifically to a lack of detailed descriptions for the eight archaeological sites that were recorded, and a lack of precise locational information for each (UTM coordinates, PLSS I egal descriptions, plotting on a USGS 7.5 minute series quad sheet). As a result of these problems, my ability to provide your agency with guidance on eligibility and effect for this undertaking has been greatly complicated.

I spoke with Mr. Leonid Shmookler of Ecology and Environment about these concerns on several occasions in October and November and he informed me that the authors of the survey report are no longer working for his firm and are not available to make corrections. Given the time that this consultation has already taken and in light of the need to move forward, I present below my determinations of eligibility, as best as I can make them with the information available, and my recommendations for how to resolve the outstanding problems that remain.

Ecology and Environment recorded each of the affected rail segments as a site and additionally recorded other archaeological sties as they were encountered. I have read the report and looked at the site forms and find that none of the rail segments themselves are eligible for listing on the National Register of Historic Places due to their having been substantially modified over the years. Rail segments found not

Site Number	Rail Segment	Site Number	Rail Segment
114451	Lordsburg to Ulmoris	114464	Leoncito
114454	Separ to Wilna	114465	Arabella
114456	Gage	114468	Palomas
114457	Tunis	116048	Anapra to Lizard
114458	Deming	116049	Strauss
114459	Carne	116050	Lanark
114460	Tularosa	116051	Afton
114461	Oscura	116052	Aden
114463	Robsart	116053	Doña
		116054	Akela

eligible are identified by Laboratory of Anthropology (LA) site number and geographic location as follows:

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Eight other sites were recorded during the surveys which are identified by site number and rail segment. Sites LA 5171 (Separ to Wilna) and LA 86735 (Tularosa) were previously recorded and have both been recommended as eligible to the National Register under criteria d for their potential to yield important information on the history or prehistory of New Mexico; LA 5171 encompasses the historic town of Separ and may also be eligible for listing to the National Register under criterion a, as well. Newly recorded site LA 114462 (Oscura) is also National Register eligible under d. Sites recommended as eligible are as follows:

Site Number	Rail Segment	Site Number	Rail Segment
5171	Separ to Wilna	86735	Tularoasa
114462	Oscura		

Sites LA 114452 (Lordsburg to Ulmoris), LA 114455 (Separ to Wilna), LA 114466 (Arabella) may be eligible for listing; however additional information on each would be needed to make an actual determination. The information value of these sites may be contained primarily in historic and archival records on the history of the railroad rather than in their physical character per se, such as artifact assemblages and features. Additional information from both sources, however, is needed to complete site recording and to an make accurate determination of eligibility. Sites recommended as <u>potentially eligible</u> are as follows:

Site Number	Rail Segment	Site Number	Rail Segment
114452	Lordsburg to Ulmoris	114455	Separ to Wilna
114466	Arabella		

Sites LA 114453 (Lordsburg to Ulmoris) and LA 114467 (Arabella) do not meet the criteria of eligibility, in my opinion, and do not warrant further consideration. Sites recommended as <u>not eligible</u> are as follows:

Site Number	Rail Segment	Site Number	Rail Segment	
114453	Lordsburg to Ulmoris	114467	Arabella	

The survey report identifies three additional sites in the Anapra to Lizard rail segment: LA 18381, LA 21533d, and LA 21553e. A review of our records indicates that these three sites do not exist anywhere

near the project area and it is unclear how or why they were identified within the ROW for this rail segment. These sites will not be effected by the undertaking nor will any other known sites in the vicinity of this rail segment.

Of the six eligible or potentially eligible sites only LA 5171 (the town of Separ) is noted in the survey report as likely to be affected by the undertaking; however since good locational information for the four newly recorded sites is unavailable, and since design specifications for the actual construction in the vicinity of all six sites is also not available, I cannot really comment on effect other than to say that site LA 5171 (Separ) will probably be affected, and sites LA 86735 (Tularoasa), LA 114462 (Oscura), LA 114452 (Lordsburg to Ulmoris), LA 114455 (Separ to Wilna), LA 114466 (Arabella), may be affected.

In order to correct the locational problems that exist with the site records, I recommend that those sites found to be eligible or potentially eligible, as described above, be relocated and re-recorded by an archaeological contracting firm local to New Mexico. Only new site forms would need to be filled out. This way accurate information about the location of the sites and their nature and content can be collected in a manner that meets our data needs. With this information, I can provided you with our final recommendation on site eligibility and can then make more meaningful recommendations about effect and avoidance of effect. The actual design plans for the track construction in the vicinity of the sites would greatly assist us in making recommendations regarding effect, but I understand that these plans have not yet been drafted.

To conclude, the consultation on this project in New Mexico has been long and cumbersome and for what ever part we played in this, I apologize; however, I want to resolve the few outstanding problems that remain so that we can conclude the Section 106 consultation process. To that end, I will not reject the survey report prepared by Ecology and Environment, even though there are grounds to do so. What I want is the updated site information on the eligible and potentially eligible sites, along with any information that can be provided about the actual construction of the new track so that I can give you meaningful recommendation on avoidance, or if need be, treatment of effect.

If you have any questions, please call me.

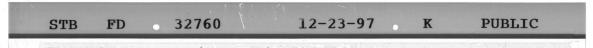
Sincerely,

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David Cushman Deputy State Historic Preservation Officer

cc: Mr. Richard Starzak
 Myra L. Frank And Associates, Inc.
 811 West 7th Street
 Suite 800
 Los Angeles, CA 90017

Mr. Leonid Shmookler Ecology and Environment, Inc. Bufalo Corporate Center 368 Pleasant View Drive Lancaster, NY 14086



ENVIRONMENTAL DOCUMENT

Tuyet Nhung Thi Tran 972 Yori Avenue Reno, NV 89502

Office of the Secretary Surface Transportation Board Finance Docket 32760 1925 K Street, NW- Room 700 Washington, DC 20078-5646 Attention: Elaine K. Kaiser Chief, Section of Environmental Analysis

Dear Mrs. Kaiser:

I am writing you in concerns to the depressing of the railroads in the Truckee Meadows Community. I feel as a resident of the community the importance of addressing the safety and quality of life of our residents concerning the Union Pacific merger.

We as a community have a right to a secure and safe quality of life. It is imperative that residents be informed about possible health and safety issues that concern this merger.

More trains equal more public nuisance. There are many problems more trains will bring to our community. Longer trains equal more locomotives and engine noise, and more wheel/track noise, creating additional disturbances to both our residents and tourists. Longer and faster trains could block crossings and delay police, fire and medical response teams. An increase in train traffic will jeopardize our community's way of life by tainting the Truckee Meadows' blue skies and clear water. More trains causes traffic delays which causes emissions to rise and effect our community later in potentially new and costly air quality compliance measures not to mention health hazards to citizens. My foremost concern is the health issues that deal with the increase in more trains as well as the shipment of hazardous waste materials. The increase in trains in our community poses a threat to our safety let alone the consequences of accidental hazardous spills. More trains is of no benefit to the Truckee Meadows area. With this in mind, we must all consider plans of action before they are taken as to inform and educate the community in issues that impact our quality of life.

Our community's economy is largely tourist based and the increase in trains can threaten our community's special events like Hot August Nights and the Reno Rodeo. The Truckee Meadows economy could suffer drastically with fewer tourists.

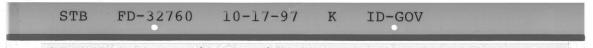
Truckee Meadow residents take pride in their community and want the opportunity and the ability to make informed decisions and take action on subjects that effect or impact the quality of our lives as well as our safety.

An environmental impact statement should be conducted and released prior to any train way plan being implemented to give the residents of the Truckee Meadows a voice in the future of our community. We take pride in our homes, in our communities, and in our country. The pride of ownership reflects that we all want to be secure that which effects our lives. We need to be assured that our air and water quality and emergency response issues are fully studied prior to an increase in trains in our community.. Our needs as a concerned and caring community must be acdressed just as the Surface Transportation Board has addressed their needs and concerns.

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Juyet Thung Thi Than Tuyet Nhung Thi Tran



BOB MILLER Governor JOHN P. COMEAUX Director



DOCUMENT

DEPARTMENT OF ADMINISTRATION

Capitol Complex Carson City, Nevada 89710 Fax (702) 687-3983 (702) 687-4065



October 13, 1997

Office of the Secretary Case Control Unit Surface Transportation Board 1925 K Street, NW, Room 700 Washington, DC 20423-0001 CENTRAL ADMINISTRATIVE UNIT REC'D: 10-17-97 DOCUMENT # 10/20/97 5:31:02pm J)# 32760 RL.04

Attn : Elaine K. Kaiser Chief. Section of Environmental Analysis Environmental Filing – Reno, NV

Re: SAI NV # E1998-045

Project: UP/SP Merger Finance Docket No. 32760 Preliminary Mitigation Plan: Reno, NV

Dear Ms. Kaiser:

Enclosed are the comments from the Nevada Division of Environmental Protection concerning the above referenced project. These comments constitute the State Clearinghouse review of this proposal as per Executive Order 12372. Please address these comments or concerns in your final decision. If you have any questions please contact me at (702) 687-6367.

Also, please note our new mailing address:

Nevada State Clearinghouse Department of Administration 209 East Musser Street. Room 200 Carson City, NV 89701-4298

Sincerely.

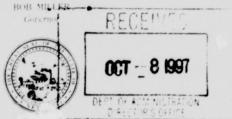
Julii Butter

Julie Butler, Coordinator Nevada State Clearinghouse/SPOC

Enclosure

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STATE OF NEVADA



Waste Management Corrective Actions Federal Facilities

Foundation Water Quality Planning Facsimile 687-6396

¹⁰ sing Regulation and Reclamation water Pollution Control Facsimile 687-5856

ETER C MORROS, Director

L.H. DODGION, Administrator

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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138 Carson City, Nevada 89706-0851

ENVIRONMENTAL DOCUMENT

October 7, 1997

CLEARINGHOUSE COMMENTS

NDEP # 1998-045 SAI NV # E1998-045

TITLE: USDOT/STB - Union Pacific/Southern Pacific Merger "Reno Mitigation Study"

The Division of Environmental Protection has reviewed the aforementioned State Clearinghouse item and has the following comments:

The Division in conjunction with the US EPA and the State of California have been cooperating in the development of a spill contingency plan for the Truckee River. The Surface Transportation Board is reminded that increased rail traffic the corridor will substantially expand the potential for spills into the Truckee River. This river is very important to Northern Nevada, since it is the prime drinking water source for the Reno metro area. In addition, lowering the railroad tracks will likely encounter polluted groundwater in the affected corridor.

6. Course Thurante

David R. Cowperthwaite Clearinghouse Coordinator Division of Environmental Protection



DARYL E. DRAKE 1111 Marsh Avenue Reno, Nevada 89509 (702) 322-1648(h) (702) 322-4044(o)

October 14, 1997

ENVIRONMENTAL Office of the Secretary Case Control Unit Surface Transportation Board 1925 K Street, NW, Room 700 Washington, DC 20423-001

Attention:

Elaine K. Kaiser Chief, Section of Environmental Analysis

DOCUMENT

Environmental Filing (SEA)-RENO, NEVADA

RE: Response to September 15, 1997 Preliminary Mitigation Plan (PMP)

Dear Ms. Kaiser.

My comments are categorized in two parts and set forth my views on the fundamental shortcomings of the Surface Transportation Board's (STB) process to mitigate the impacts of the Union Pacific Railroad's merger with the Southern Pacific Railroad. An elaboration of each premise is presented below.

- PMP Limitations--In my opinion, the STB has A. imposed limitations on itself to the extent that the fundamental concerns of our community are disregarded. The long-term impacts to our community extend well beyond the willingness or the authority of the STB to act.
- B. Capacity and Safety -- In my opinion, capacity and safety are the fundamental issues facing the Truckee Meadows and are relevant throughout the continental US. If the STB lacks the authority to implement capacity and safety improvements, the US Congress must intercede.

A. PMP Limitations

In the "Guide to the Reno Open House and Public Meeting" made available for the October 9, 1997 public hearing, model questions are suggested on the page entitled. "Purpose of Meeting". My answers follow:

Are There Mitigation Options You Support? Answer: Yes, the depressed trainway.

Elaine K. Kaiser, Chief Section of Environmental Analysis October 14, 1997 page 2

Are There Mitigation Options You Suggest? Answer: Yes, the depressed trainway.

Have the Key Issues Been Addressed in the PMP? Answer: No.

The last question is the most telling of the three. It is my opinion that the Surface Transportation Board does not have the authority to act on, or, has used its authority to issue decisions that effectively disregard the fundamental issues facing our community. Unlimited rail traffic through the core of Reno's central business district has the potential of devastating the unique economic engine of our community.

- 1) The PMP cites on Page 7, Appendix A, "An existing railroad can increase its level of operations without coming to us, and without limitation." In other words, the Southern Pacific Railroad (SP) had the authority to increase its rail operations through the Truckee Meadows without STB or SEA review. The STB is conducting this analysis only because the Union Pacific Railroad (UP) offered to buy the SP, and the SP agreed to sell to UP. Is it possible that the STB has considered the predecessor entity's "authority for unlimited traffic" as the principal factor to limit the Mitigation Measures to be imposed on the successor entity?
- 2) The STB is required by its own rules to look at the impacts anticipated within a five-year window only, beginning with the merger, September 12, 1996. The primary generator of incremental rail traffic through the Truckee Meadows may not be the merger of UP/SP itself but the completion of the "land bridge across the United States". The STB addresses on Pages 4-8 through 4-9 of the PMP the implications of final build-out of the Port of Oakland's Joint Intermodal Facility (JIT) which will not be completed and in service until the year 2005. The STB states, "In light of these factors, major expansion at the Port of Oakland plans appears to be beyond the reasonable foreseeable Year 2000 train projection horizon." Is the STB justified in not considering the potential traffic increases because the increases cannot be "reasonably projected" that far out or because major traffic increases from the JIT are not expected within the fivevear window anyway?
- 3) The STB's Decision 44 states on Page 8, Appendix A, "Mitigation of conditions resulting from pre-existing development of hotels, casinos, and other tourist-oriented businesses...are not within the scope of the studies." If the STB has the authority to exclude the economic impacts to our community's unique economic engine, does that not imply it has the authority to include them? The impacts of unlimited rail traffic on pedestrian and vehicular traffic in downtown Reno are severe and it is blatantly improper to ignore such impacts. Does this not border on a "taking without fair compensation?" Nevada Revised Statutes.

Elaine K. Kaiser, Chief Section of Environmental Analysis October 14, 1997 page 3

Chapter 705.010 authorizes railroads to exercise the right of eminent domain. Could this not be construed as "inverse condemnation"?

4) Page 6-59 of the PMP asserts that "Railroad profitability is not germane to the environmental review process and is clearly beyond the Board's directives for this study." I do not disagree with this premise; however, dismissing this aspect of the issue should not relieve the STB of the responsibility of measuring the damages to incidental business activity and mitigating such damages fairly, even if the damages exceed the net benefit to UP. If the damages are not readily apparent, as in this case, should there not be a reservation for future liability? If there are mutual beneficiaries to the mitigation, such as capacity improvements, should they not, by all rights, be compelled to participate in the improvements as well (see B below)?

5) The Independent Third-Party Contractor, described on Page 2-9 of the PMP, assisted the SEA with the Reno Mitigation Study. "Although retained by UP/SP, SEA selected the contractor." While specific guidelines are set forth to ensure that no conflict of interest exists, "...information relating to compensation was not provided, because SEA is not involved in matters of compensation for third-party contractors." While I have no reason to believe the results of the study were biased, I believe it is important for all parties to have access to the agreement between UP/SP and the contractor as well as records of payments to the contractor. I submit to the STB that a more appropriate relationship with the Third-Party Contractor is through a contract between the STB and the contractor directly. Would this not eliminate even the appearance of a conflict of interest for the contractor in producing an objective, comprehensive report?

As you can see, my comments relate more to the deficiencies of the process itself rather than the sufficiency of the analysis or data that were included in the report. Again, it is my opinion that the process is fundamentally flawed.

B. Capacity and Safety

In reviewing the Mitigation Measures, one could conclude that the STB has completed its task satisfactorily, if measured by its own rules, decisions, and guidelines. Nonetheless, the continuing concerns of this community remain unmitigated. We heard testimony from a UP representative at the October 9, 1997 hearing and from many other UP supporters that "the railroad was here first." That I cannot deny. Yes, the railroad propelled our community into the 20th century and it remains a vital link between the East and West coasts. The rail is critical as well to the success of the Truckee Meadows' economic diversification efforts today. It is, perhaps, as important to the community as is the Reno/Tahoe International Airport. Elaine K. Kaiser, Chief Section of Environmental Analysis October 14, 1997 page 4

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Both the railroad and the airport have corresponding regulatory agencies, the FRA and the FAA. Not surprisingly, the FAA was created to promote air commerce as well as aviation safety. In the 19th century the federal government promoted the rail industry through incentives of land grants. The FRA promotes rail safety through regulation. The airports and the railroads have similar challenges--capacity and public safety. Only the FAA facilitates capacity improvements through its US Airports and Airways Trust Fund by matching local funds on a 90-10 basis to improve airport and airway capacity and aviation safety. It is funded through airline ticket and aviation fuel taxes and disburses billions of dollars annually. Isn't this what stares Wichita and Reno directly in the face: a compelling issue of capacity and safety that extends well beyond the SEA's five-year window? It's not a Union Pacificcreated problem or a Truckee Meadows-created problem. The problem has been nurtured by our collective prosperity over the last 130 years and we must now plan for the next 130 years. Impacts to communities along every active railway will increase as railroads and communities prosper. Because of our free enterprise system, economic opportunity should expand for all transportation systems (rail, highways, waterways, and airways) and population centers across the country. If, however, stakeholders are unable to agree to an equitable sharing of costs, then the US Congress must become involved. A Railways Trust Fund must be established to fund the upgrading of railway facilities to increase capacity and public safety. I suggest this be funded with rail fuel or freight taxes and be administered in a manner similar to the Federal Highway Administration or the Federal Aviation Administration.

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In conclusion, it is my opinion that the UP/SP merger Mitigation Measures set forth in the PMP have been limited because of the STB's unwillingness or lack of authority to act. I believe the fundamental concerns of the Truckee Meadows will remain unmitigated. Our community has no alternative but to press the issue through litigation or to invite the Congress of the United States to intercede.

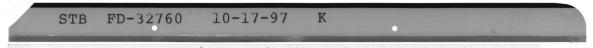
Sincerely,

Day ED

Daryl Drake

ce: Sen. Richard Bryan
 Sen. Harry Reid
 Rep. Jim Gibbons
 Gov. Robert Miller
 Joanne Bond, Chair, Washoe County Commission
 Jeff Griffin, Mayor, City of Reno
 Rodney Slater, Secretary of Transportation
 Jolene M. Molitoris, Administrator, Federal Railroad Administration

DARYL E. DRAKE---1111 Marsh Avenue Reno, NV 89509





Washoe County Department of Community Development 1001 E. Ninth St., Bldg A

Post Office Box 11130 Reno, NV 89520-0027 Tel: 702-328-3600 Fax: 702-328-3648

ENVIRONMENTAL DOCUMENT October 16, 1997

Office of the Secretary Case Control Unit Finance Docket No: 32760 Surface Transportation Board 1925 K Street, NW, Room 700 Washington, DC 20423-0001

Attn: Elaine K. Kaiser Chief, Section of Environmental Analysis Environmental Filing - Reno

CENTRAL ADMINISTRATIVE UNIT REC'D: 10-10-97 -> By Fax DOCUMENT # 10-17-97 2:33:30pm +)#32760 RL.04

Formal Comments from the Washoe County Commission on the Preliminary Subject: Mitigation Plan (Reno) for the UP/SP Merger, Finance Docket No. 32760

The Washoe County Board of County Commissioners (BCC) held a public hearing on Tuesday, October 14, 1997 to review, and provide formal comments on, the Reno Mitigation Study Preliminary Mitigation Plan (PMP) for the Union Pacific (UP) and Southern Pacific (SP) merger. A copy of the staff report prepared for the public hearing is attached to his letter. Additionally, one (1) copy of a tape recording for this item on the BCC agenda is included as part of the formal comments from Washoe County on the PMP. The tape recording should be made part of the public record for this case. This letter will highlight the BCC action taken during the public hearing.

The Washoe County Commission unanimously voted (4 voting for with 1 absence) to adopt the following motion concerning formal comments on the Reno Mitigation Study PMP for the **UP/SP** merger:

- 1. Based on information provided to the Washoe County Board of County Commissioners during the public hearing concerning the Reno Mitigation Study Preliminary Mitigation Plan (PMP) for the Union Pacific (UP) and Southern Pacific (SP) merger, the Board supports and endorses the City of Reno comments on the PMP. The City of Reno comments are recorded within the City of Reno Preliminary Mitigation Plan Comment Document submitted on October 15, 1997 for Finance Docket No. 32760. A copy of the text of this comment document was provided to the County Commissioners during their public hearing on October 14, 1997.
- The Board of County Commissioners further supports County staff comments on specific 2. items within the PMP which are inadequate. These staff comments were noted in the staff report prepared for the public hearing and are as follows:
 - a. No time limit is provided in the PMP for the Union Pacific Railroad to complete its inspection of railroad tracks and railroad crossings within Washoe County. Additionally, the PMP should contain specific mitigation measures requiring the Union Pacific Railroad to repair any noted deficiencies within a specified time period.

John B. Hester, AICP Director

Jess S. Traver, P.E. **County Building** Official



Letter to: Office of the Secretary, Surface Transportation Board, Docket No. 32760 Subject: Formal Comments from the Washoe County Commission on the Preliminary Mitigation Plan (Reno) for the UP/SP Merger

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- b. The PMP should include a specific mitigation measure to inform residences and businesses on the south side of the railroad tracks serviced by Woodland Avenue of the emergency access route available should the railroad crossing be blocked.
- c. The PMP should provide specific mitigation measures to provide for emergency access to the residential communities serviced by the following roads: Stag Lane, Del Curto Lane, and Canal Road. The PMP does not evaluate emergency access for either Stag Lane or Canal Road. Although the PMP does evaluate emergency access for Del Curto Lane, the plan does not provide costs nor alternatives to provide emergency access to that area. Additionally, the conclusion of the PMP to not mandate the construction of an emergency access route for the Del Curto Lane area is unacceptable.
- d. The PMP does not discuss merger related impacts on the community of Gerlach, Nevada which lies along the Feather River route. Of particular concern is the potential for hazardous material spills and subsequent slow response times to an emergency due to the remoteness of Gerlach. The PMP should fully evaluate environmental impacts in the Gerlach area.
- e. HAZMAT mitigation measures specific to the Truckee Meadows (Reno, Sparks, and south Washoe County) are not contained in the PMP. The PMP relies upon system wide mitigation conditions imposed by the STB in its Decision 44 as adequate to address HAZMAT spills in the Truckee Meadows. Mitigation measures should be specific to the Truckee Meadows area and should contain identified time periods for the Union Pacific Railroad to complete the measures. Additionally, the PMP should evaluate the potential for either ground or surface water contamination through normal operations on the railroad tracks or in the railroad yards at Sparks (e.g., oil or diesel fuel spills).
- f. The PMP does not evaluate nor analyze noise impacts on the community of Verdi, Nevada. A noise evaluation, analysis, and appropriate mitigation measures for Verdi should be part of the PMP.
- 3. There are serious and real economic damages resulting from increased train traffic through Reno and Washoe County that need to be mitigated, whether through the Reno Mitigation Study process or outside of the process, but in some definitive manner.
- 4. The Preliminary Mitigation Plan inadequately addresses public safety, specifically with regard to response for maintenance and preventive maintenance.
- 5. The time frame for allowing increased train traffic through the Reno and Washoe County area is too short and will occur too soon. This short time frame is a disincentive to any reasonable negotiations to resolve the serious problems noted in this public hearing. The time period before allowing increased train traffic should be extended.
- 6. An additional reason to not proceed with increased train traffic through Reno and Washoe County, and to illustrate the inadequacy of the PMP mitigation measures, is that the PMP does not take into account that the existing rail system is inadequate for present levels of train traffic. The evidence shown in the video (taken along the railroad tracks from the Nevada State line toward Reno) highlights rotting railroad ties and totally unsafe conditions next to our water supply. The Southern Pacific Railroad knew that it was financially in trouble, so they were not making adequate repairs nor were they improving their system because they were short of cash flow. The Board of County Commissioners is opposed to expanding the train traffic levels on a system that is already inadequate for its current train traffic loads.

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- 7. The Board of County Commissioners emphasizes the importance of an Environmental Impact Statement under the National Environmental Protection Act (NEPA) being completed for the Reno, Sparks, and Washoe County area as part of the merger.
- 8. Air Quality concerns noted by Dr. Jennison (Air Quality Officer for the Washoe County District Health Department) during the public hearing are not adequately addressed in the PMP. These concerns include:
 - a. The railroad currently represents between 4 and 5 percent of the total inventory of oxides of nitrogen in Washoe County. If the Union Pacific Railroad increases the number of trains in the Truckee Meadows (Reno, Sparks and south Washoe County), there will be a concentration of the impacts of emissions from locomotives in the area where the majority of our citizens live.
 - b. Washoe County District Health Department would like to see an air quality model run to characterize the possible impacts of the increase in oxides of nitrogen. This model would preferably be included as part of an EIS on the merger.
 - c. If additional train traffic is approved as part of the merger and the Reno Mitigation Study, then mitigation measures should be enacted which will require the Union Pacific Railroad to only use their most modern and "cleanest" locomotives in the Truckee Meadows area (Reno, Sparks, and south Washoe County).
- 9. The Board of County Commissioners feels that the exclusion of pre-existing conditions from the Reno Mitigation Study is inadequate and does not recognize current conditions within Reno and Washoe County. The Board believes that several of the conditions proposed to be imposed as Tier 1 measures (e.g., improvements on tracks and in yards to accommodate increased train speeds, installation of four quadrant gates, installation of detectors, etc.) address pre-existing conditions and would probably be implemented by the Union Pacific Railroad as sound operational practices, or to limit their liability, regardless of the PMP.
- 10. The above comments will be forwarded to the Surface Transportation Board as the formal comments of the Washoe County Board of County Commissioners on the Reno Mitigation Study Preliminary Mitigation Plan for the UP/SP Merger. These comments will also be forwarded to other interested agencies and local governments, such as the City of Reno.

If you have any questions on these formal comments from the Washoe County Board of County Commissioners, please do not hesitate to call me at (702) 328-3623.

Sincerely,

Bob Webb Community Coordinator

CRW:bw

cc: City of Reno City of Sparks Washoe County Board of County Commissioners John MacIntyre, County Manager



October 2, 1997

Washoe County Department of Community Development

1001 E. Ninth St. Bldg A Post Office Box 11130 Reno. NV 89520-0027 Tel: 702-328-3600 Fax: 702-328-3648

TO:	Washoe County Commission
FROM:	Bob Webb, Community Coordinator
SUBJECT:	Background Report and Possible Action on the Preliminary Mitigation Plan. UP/SP Merger - Reno Mitigation Study

This memorandum provides background information on the Preliminary Mitigation Plan (PMP) prepared by the Surface Transportation Board, Section of Environmental Analysis (SEA) on the Reno Mitigation Study for the Union Pacific/Southern Pacific Railroads (UP/SP) merger. The memorandum also summarizes correspondence from Washoe County concerning the UP/SP merger and the subsequent Reno Mitigation Study.

Recommendation

Staff recommends the Washoe County Commission review the background information and recommendations from the Section of Environmental Analysis contained in the Preliminary Mitigation Plan. Staff asks the County Commissioners to provide formal comments on the PMP as part of the public review process for that document. Staff will transmit County Commission comments in writing to the Section of Environmental Analysis. All public comments on the PMP must be postmarked by October 16, 1997 to meet public review requirements imposed by the SEA.

Background

The Surface Transportation Board (STB)approved the merger of the Union Pacific and Southern Pacific railroads on August 12, 1996. The Board's decision was recorded in Decision No. 44, which contained several conditions specific to the Reno area. A copy of that decision is attached to this memorandum as enclosure 1. Condition No. 22 of the STB's decision imposed a number of measures specific to Reno, to include the requirement for SEA to conduct an additional 18 month mitigation study in Reno (condition 22c). The purpose of this study, as outlined in the PMP, was:

John B. Hester, AICP Director

W Dean Diederich, AICP Planning Manager

Jess S. Traver, P.E. County Building Official



"...to develop additional mitigation measures, in addition to those system-wide and corridor-specific environmental mitigation measures already imposed in Decision No. 44, that are specifically tailored to address the unique circumstances of Reno, Washoe County, and the surrounding area encompassing the former SP rail line. ...the study should focus only on *merger-related* train traffic and that mitigation of conditions resulting from the preexisting development of hotels, casinos, and other tourist-oriented businesses on both sides of the existing SP rail line in Reno...are not within the scope of the study."

Mitigation measures in the PMP are divided into two distinct levels, or tiers, as established by Decision No. 71 issued by the STB on April 15, 1997. Tier 1 are those "measures that will be mandated mitigation for UP to implement and fund entirely". Tier 2 are those "measures that are

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more far-reaching and for which implementation and funding would require voluntary participation of UP and other interested parties and can therefore not be mandated by the Board". A copy of Decision 71 is attached as enclosure 2.

SEA will consider all public comments on the PMP and issue a Final Mitigation Plan (FMP). Public review and comments on the FMP will be considered by SEA in its final recommendations to the STB. The STB will then decide what additional mitigation measures (if any) to impose on UP as part of the UP/SP merger.

Tier 1 Measures

SEA's preliminary Tier 1 recommendations for mitigation measures to the STB are shown in enclosure 4.

Tier 2 Measures

Possible Tier 2 mitigation measures are shown in enclosure 5.

Reno Study Mitigation Task Force

A Reno Study Mitigation Task Force was established by SEA on January 15, 1997. A roster of task force members is included at enclosure 3. I represented Washoe County at the majority of the task force meetings. I prepared a memorandum to the task force members in early January 1997 outlining the impacts to Washoe County of the merger. These impacts mirror the concerns expressed by the County Commission during a public hearing to discuss the merger held on March 26, 1996. A copy of that memorandum is attached as enclosure 6; however, a brief outline of those impacts is:

Public Safety:

- emergency access for isolated communities (Woodland Avenue, Stag Lane, Del Curto Lane, and Canal Road)
- existing, substandard railroad crossings
- long trains blocking multiple crossings
- speed of trains in outlying areas

Economic:

- delay to tourists at railroad crossings
- potential negative publicity to tourist based economy in the event of a major traffic accident or HAZMAT spill

Environmental:

- HAZMAT spills at railroad switching yards and/or along the railroad tracks
- potential contamination of surface and/or ground water supplies
- increased HAZMAT shipments through Gerlach
- · air quality impacts of idling vehicles at railroad crossings
- · air quality impacts of switch yard railroad traffic

Miscellaneous:

- noise from train whistles
- noise from passing trains
- · future of the Reno Branch line and Reno intermodal facility at Parr Boulevard

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I was unable to attend the last meeting of the mitigation task force on July 9, 1997 and so sent a letter to SEA outlining what I believed to be appropriate mitigation measures to consider for the PMP. A copy of that letter is at enclosure 7; however, an outline of the proposed mitigation measures (sorted according to SEA categories) is:

Pedestrian Safety/Emergency Vehicle Access/Train-Vehicle Accidents:

- evaluate and repair, as appropriate, railroad crossings in Washoe County
- inform residents and business owners of the emergency access road providing secondary access to the Woodland Avenue area
- provide emergency access to the Stag Lane, Del Curto Lane, and Canal Road areas
- provide a system which alerts emergency responder dispatch centers as to when trains are on the tracks

Derailments/Spills/Water Quality:

- · develop a plan to respond to HAZMAT spills/accidents in or near Gerlach
- develop a plan to address the impact of spills and leaks of HAZMAT along railroad tracks and in railroad yards (e.g., catch basins)
- develop a plan to address train derailments and/or HAZMAT spills in the proximity
 of the Truckee River (includes control of train speeds and location of appropriate
 spill containment equipment in the Truckee Meadows)

Evaluation of PMP and Proposed Mitigation Measures

The Tier 1 and Tier 2 measures should be the primary focus when evaluating the PMP. However, other areas not mentioned as either a Tier 1 or Tier 2 measure (and not previously mentioned in the STB's Decision 44) should be brought to the attention of the SEA as public comments for possible inclusion in the PMP.

I have reviewed the main parts of the PMP and offer the following observations on the proposed mitigation measures as outlined in my letter to SEA dated July 8, 1997:

1. Evaluate and repair, as appropriate, railroad crossings in Washoe County.

SEA noted my comment. Condition A1 from Decision 44 discusses system wide measures for track inspection and Condition A3 requires the posting of an 800 number on certain railroad crossings. However, no time line is given for track inspection and I could not find any reference to evaluating existing railroad crossings, either system wide or specifically in Washoe County.

- 2. Inform residents and business owners of the emergency access road providing secondary access to the Woodland Avenue area
- 3. Provide emergency access to the Stag Lane, Del Curto Lane, and Canal Road areas.

Tier 1 mitigation measure number 4 would require UP to discontinue the use of "helper" locomotives in the Woodland Avenue area (note: UP officials have publicly stated that they stopped such practices in January of 1997). This measure should help alleviate railroad caused delays at the Woodland Avenue crossing. The PMP also mentions that a road south of the railroad tracks connecting Woodland Avenue to Mayberry Drive has been recently widened, paved, and a gate which restricted access has been removed. This road provides emergency access to the Woodland Avenue area if Woodland Avenue is blocked by a train. The PMP does not address public information measures to notify residences and businesses of this emergency access road.

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7.

The PMP discusses Del Curto Drive and states that. "given the low vehicular traffic levels using Del Curto Drive, that no mitigation is warranted, particularly with the possible adverse impacts to parklands and the Truckee River. Therefore, SEA does not recommend that mitigation measures for Del Curto be imposed".

There is no analysis, and therefore no discussion of possible mitigation measures, for either the Stag Lane or the Canal Road areas.

 Provide a system which alerts emergency responder dispatch centers as to when trains are on the tracks.

Tier 1 mitigation measure number 3 proposes the installation of cameras and video monitors showing the rail line between Keystone Avenue and Lake Street.

- 5. Develop a plan to respond to HAZMAT spills/accidents in or near Gerlach.
- 6. Develop a plan to address the impact of spills and leaks of HAZMAT along railroad tracks and in railroad yards (e.g., catch basins).
 - Develop a plan to address train derailments and/or HAZMAT spills in the proximity of the Truckee River (includes control of train speeds and location of appropriate spill containment equipment in the Truckee Meadows).

The system wide mitigation measures numbered A1, A2, A5, A7, and A12 in Decision No. 44 address safety and potential HAZMAT spills. According to the PMP, SEA believes that these system wide mitigation measures "provide a high level of protection from hazardous materials events in the Reno and surrounding area". However, in order to augment these system wide measures, Tier 1 mitigation measures 13 and 14 would require SP to install an additional high, wide, shifted load detector and a hot box detector at milepost 40 (about three miles west of Reno). These additional measures would provide "optimum detection capability" in the Reno area.

The PMP does not indicate whether any of the system wide measures have been implemented in the Truckee Meadows. The PMP does not address mitigation measures for potential contamination of surface and/or ground water through normal operations along the rail lines nor at the railroad yards in Sparks. Additionally, the PMP does not evaluate the Feather River route and any potential HAZMAT occurrences in the vicinity of Gerlach.

I also evaluated the PMP with regard to comments I made to the Reno Mitigation Task Force (also included SEA representatives) in my memorandum dated January 21, 1997. I offer the following from portions of that memorandum:

a. Economic concerns (i.e., delay to tourists at railroad crossings and potential negative publicity to tourist based economy in the event of a major traffic accident or HAZMAT spill).

According to the PMP, the STB directed a review of potential environmental impacts of merger-related increased train traffic levels. Therefore, SEA determined that additional economic analysis was not required as part of the PMP.

b. Air quality impacts.

I provided a copy of the PMP to Brian Jennison, Director for the Air Quality Management Division with the District Health Department. I asked Mr. Jennison to provide his comments directly to SEA in accordance with their deadlines. As of the

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submittal of this staff report. I do not have a copy of comments he may have written. If I receive a copy of his comments. I will provide them to the County Commission prior to their public hearing on October 14, 1997.

c. Noise impacts in the Verdi area.

The PMP did extensive evaluation of noise related impacts (both from train whistles and passing trains) in the Reno area. The STB was concerned about noise levels during its review of the UP/SP merger; however, the Board noted that any attempt to significantly "reduce noise levels at grade crossings would jeopardize safety, which we consider to be of paramount importance". Therefore, possible mitigation measures outlined in the PMP are included in possible Tier 2 mitigation measures.

I should note that no noise analysis was conducted in the Verdi area, though even if such analysis was done it is likely that the PMP recommendations would remain the same.

I will attend the caucus on October 13, 1997 to answer any questions you may have, to the best of my ability, on this staff report or the PMP. Please do not hesitate to call me at 328-3623 for questions or clarification on the staff report in the interim.

Community Coordinator

CRW:bw

Enclosures

cc: Charles McNeely, Reno City Manager John MacIntyre, County Manager Merri Belaustegui-Traficanti, Deputy City Attorney, City of Reno, Mitigation Task Force contact for the City of Reno

Enclosure 1

EXCERPTS RELATING TO RENO MITIGATION STUDY

SURFACE TRANSPORTATION BOARD

Finance Docket No. 32760

UNION PACIFIC CORPORATION, UNION PACIFIC FAILROAD COMPANY, AND MISSOURI PACIFIC RAILROAD COMPANY--CONTROL AND MERGER--SOUTHERN PACIFIC RAIL CORPORATION, SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP., AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

Decision No. 44

Decided: August 6, 1996

ENVIRONMENTAL CONSIDERATIONS.

Extensive Environmental Review Process. Under the National Environmental Policy Act (NEPA) and related environmental laws, the environmental effects of the merger and the ancillary abandonment and construction projects that were proposed by applicants must be considered, and we have thoroughly done so. Our environmental staff, the Section of Environmental Analysis (SEA), conducted various public outreach activities to inform the public about the proposed merger and to encourage and facilitate public participation in the environmental review process.¹

As part of its environmental review, SEA prepared detailed analyses not only of the systemwide effects of the proposed merger, but also of particular merger-related activities that would affect individual rail line segments, rail yards, and intermodal facilities to a degree that would meet or exceed our thresholds² for environmental analysis. See 49 CFR

² These thresholds ensure that those rail line segments and facilities that would experience a substantial increase in traffic as a result of the transaction are thoroughly analyzed for potential air quality, noise, transportation, and safety impacts.

¹ SEA sent approximately 400 consultation letters to various agencies seeking their comments. In addition, SEA consulted with federal, state, and local agencies, affected communities. UP and SP, and UP/SP's environmental consultants to gather and disseminate information about the proposal, identify potential environmental impacts, and develop appropriate mitigation measures.

1105.7(e)(5)(i) and (ii).³ SEA conducted a thorough independent analysis, which included verifying projected rail operations; verifying and estimating noise level impacts; estimating increases in air emissions; assessing potential impacts on safety; and performing land use, habitat, surface water and wetlands surveys, ground water analyses, and historic and cultural resource surveys.

Based on the information provided by the parties and other agencies, SEA issued a comprehensive Environmental Assessment (EA) on April 12, 1996. SEA received approximately 160 comments following issuance of the EA. To address those comments and the other environmental comments received throughout the environmental review process (approximately 400 in total), SEA undertook additional environmental analysis, which culminated in the issuance of a detailed Post Environmental Assessment (Post EA) on June 24, 1996, refining some of the discussion and mitigation recommended in the EA.

As a result of its investigation, SEA concluded that the merger would result in several environmental benefits, including a systemwide net reduction of 35 million gallons of diesel fuel consumption (based on 1994 figures) from rail operations and truck-to-rail operations, systemwide improvements to air quality from reduced fuel use, and a reduction in long-haul truck miles, highway congestion and maintenance, and motor vehicle accidents.

SEA also concluded that the merger and related rail abandonments and constructions could have potential environmental effects regarding safety, air quality, noise, and transportation, including the transportation of hazardous materials, and, in the EA, SEA proposed mitigation measures addressing the environmental concerns that were raised. In the Post EA, based on further analysis and review of the environmental comments, SEA developed more comprehensive and specifically tailored mitigation recommendations. As a result of consultations with SEA, UP/SP agreed to undertake particular mitigation measures. In addition, several local communities negotiated memoranda of understanding with UP/SP to implement mitigation measures and take other appropriate actions to address their particular environmental concerns.

SEA concluded that, with the Post EA mitigation measures, the proposed merger would not significantly affect the quality of the human environment on a systemwide, regional, or local basis. We agree that the conditions recommended in the Post EA will

³ SEA and its independent third-party consultant conducted approximately 150 site visits. They also analyzed UP/SP's Environmental Report, operating plan, Preliminary Draft Environmental Assessment and other pleadings, all of the settlement agreements entered into during the environmental review process, and technical studies.

adequately mitigate the potential environmental impacts identified during the course of the environmental review, and we will impose those conditions here (see Appendix G).* We also adopt SEA's environmental analysis and the conclusions reached in the EA and the Post EA.

No Need for Environmental Impact Statement. We have considered the arguments of some parties that an environmental impact statement (EIS) is required here, but do not believe that one is needed. An EIS is required only for "major federal actions significantly affecting the quality of the human environment." 42 U.S.C. 4332(2)(C).⁵ Under our environmental rules, 49 CFR 1105.6(b)(4), an EA is normally sufficient environmental documentation in rail merger cases to allow us to take the requisite "hard look" at the proposed action.⁶ Moreover, interested parties received essentially the same benefits they would have received with an EIS. As the EA and Post EA show, SEA conducted a thorough and comprehensive environmental review. There was extensive notice and opportunity for input from the public and appropriate agencies throughout the process. In addition to the EA, SEA issued a detailed Post EA which contains SEA's individual responses to the comments on the

We note that the mitigation recommended in the Post EA for two proposed abandonments in Colorado (Sage to Leadville and Malta to Cañon City) has been modified to reflect our decision to permit only discontinuance of rail service, and not abandonment, at this time. Other clarifying changes have been made as well.

⁵ The identification of such actions is a matter for the agency to determine, as long as the determination is not arbitrary or capricious. <u>See Goos v. ICC</u>, 911 F.2d 1283, 1292 (8th Cir. 1990), <u>citing Marsh v. Oregon Natural Resources</u> <u>Council</u>, 490 U.S. 360, 377 (1989).

⁶ While this merger involves somewhat more trackage than other merger proposals that have come before our predecessor agency, the ICC, that does not mean that the qualitative environmental effects of this merger are greater (or different) than those of the other railroad mergers that have been considered. Similarly, the extensive trackage rights that we are granting in this decision to preserve competition generally will not create additional traffic (or potentially significant environmental impacts). Traffic that can be efficiently handled by train would be handled by train whether or not the trackage rights at issue here were granted.

EA and thus reflects not only the work of SEA but also the critical views of interested parties and agencies.

Finally, the environmental mitigation we are imposing here is far reaching and comprehensive.⁷ As appropriate, it addresses impacts on a variety of levels: systemwide, rail corridor-specific, and local. There is mitigation for particular rail line segments, rail yards, intermodal facilities, and rail abandonments and constructions. In short, no EIS is required because our environmental mitigation conditions specifically address the potential environmental impacts associated with the merger and ensure there will be no significant environmental effects.⁸

Reno and Wichita. As discussed in the Post EA, in developing mitigation for two cities, Reno, NV, and Wichita, KS, SEA concluded that further, more focused mitigation studies are warranted, notwithstanding the extensive analysis (including site visits and meetings with city officials, emergency response representatives and business interests) that already has been done to identify environmental concerns and arrive at appropriate mitigation for these two communities. Nothing in the record here, however, suggests that the potential environmental effects of the merger in Reno or Wichita are so severe that implementation of the merger should not proceed prior to the

See, e.g., Sierra Club v. DOT, 753 F.2d 120, 127 (D.C. Cir. 1985); Cabinet Mountains Wilderness v. Peterson, 685 F.2d 678, 682 (D.C. Cir. 1982).

⁷ For example, with respect to safety, our mitigation includes more frequent track and train car inspections, signs on grade crossings identifying toll free numbers to call in the event of a signal malfunction, and a requirement that UP/SP provide emergency response personnel with information regarding anticipated train movements and work with communities to develop plans to deal with the transportation of hazardous materials, emergencies, and the upgrading of grade crossing signals. In addition, UP/SP will be required to equip certain trains carrying hazardous materials with two-way end-of-train devices to enhance braking capabilities on particular line segments. In response to concerns involving air pollution, UP/SP will have to reduce idling of locomotives, close box car doors on empty cars, and use more efficient locomotives when the equipment becomes available.

completion of the studies.⁹ To the contrary, in both Reno and Wichita the environmental impacts are limited to the effects of an increase in traffic on existing rail lines. Also, the mitigation conditions that we are imposing now assure that, while SEA conducts these studies, the environmental status quo will essentially be preserved in Reno and Wichita.¹⁰

As the EA and Post EA show, SEA already has carefully assessed the impact of the merger on Reno and Wichita and identified its likely environmental effects. Based on its analysis, SEA concluded that, with the systemwide and corridorspecific mitigation already imposed and the conditions to be arrived at following the independent mitigation studies, there will be no significant environmental impacts to Reno and Wichita, and we agree.

The sole purpose of the mitigation studies will be to arrive at specifically tailored mitigation plans that will ensure that localized environmental issues unique to these two communities are effectively addressed. For example, with respect to vehicular and pedestrian safety, SEA has determined that separated grade crossings and pedestrian overpasses and/or underpasses will be needed to address safety concerns on the existing rail lines in Reno and Wichita. Accordingly, the studies will identify the appropriate number and precise location

⁹ We note that the Supreme Court has rejected arguments that NEPA demands the formulation and adoption of a plan that will fully mitigate environmental harm before an agency can act. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352-53 (1989). Rather, the deferral of a decision on specific mitigation steps until more detailed information is available is embraced in the procedures promulgated under NEPA. See Public Utilities Comm'n of California v. FERC, 900 F.2d 269, 282-3 (D.C. Cir. 1990). NEPA "does not require agencies to adopt any particular internal decisionmaking structure." Baltimore Gas & Electric Co. v. NRDC, 462 U.S. 87, 100 (1983). It is well settled that NEPA does not repeal other statutes by implication and that if the agency meets NEPA's basic requirements, it may fashion its own procedural rules to discharge its multitudinous duties. Vermont Yankee v. NRDC, 435 U.S. 519 (1978); United States v. SCRAP, 412 U.S. 669, 694 (1973).

¹⁰ The courts have recognized that there is no violation of NEPA where proposed actions will not effect a change in the status quo. <u>See Sierra Club v. FERC</u>, 754 F.2d 1506, 1509-10 (9th Cir. 1985).

of highway/rail grade separations and rail/pedestrian grade separations in Reno and Wichita. With respect to air quality, we have imposed mitigation measures that reduce locomotive fuel consumption and air pollution, call for more efficient railroad equipment and operating practices, and require consultation with air quality officials.¹¹ As further insurance, the studies will consider additional mitigation to address the air quality effects unique to Reno and Wichita. In this merger, noise impacts would greater intensity of sound. No additional types of noise would be introduced. To address noise impacts, we are requiring UP/SP to consult with affected counties to develop focused noise abatement plans. As the Post EA notes, however, safety dictates that railroads sound their horns at grade crossings.¹² Any would jeopardize safety, which we consider to be of paramount

The studies will be conducted by SEA with the assistance of an independent third party contractor. Although retained by UP/SP, SEA will select the contractor. The contractor will work under the sole supervision, direction, and control of SEA.

The mitigation studies will include consultations with the affected communities, counties, and states, Native American tribes, the FRA, and other appropriate agencies, as well as UP/SP. There will be public notice and participation. The public will be consulted regarding the range of additional mitigation to most effectively address increased rail traffic on the existing rail lines in Reno and Wichita. SEA will prepare draft mitigation studies and make them available to the public for review and comment. After SEA assesses the comments, it will design the most effective mitigation for these particular communities to add to the mitigation that has already been

SEA's final mitigation studies and its recommended mitigation plans for Reno and Wichita will be made available to

¹¹ Because trains are mobile, rather than stationary sources, air quality impacts associated with locomotive emissions are spread over a large area. Therefore, the impacts at any individual location are typically relatively minor.

¹² SEA indicates that FRA has been directed by the Swift Act generally to require that horns be sounded at all grade crossings.

the public and will be submitted to us for our review and approval. We will then issue a decision imposing specific mitigation measures. This entire process will be completed within 18 months of consummation of the merger.

In the meantime, as explained in the Post EA, during the 18-month study period UP/SP will be permitted to add only an average of two additional freight trains per day to the affected rail line segments (Chickasha, OK, to Wichita and Roseville, CA, to Sparks, NV),¹³ which is below the threshold level for environmental analysis.¹⁴ UP/SP will be prohibited from increasing traffic to the levels they projected under the merger (11.3 daily trains for Reno and 7.4 trains for Wichita) without our approval.¹⁵ Thus, there will be no significant adverse environmental impacts to these communities while SEA, the Board, and the parties work to arrive at additional tailored mitigation for those cities.

It should be noted that the studies will focus only on the mitigation of the environmental effects of additional rail traffic through Reno and Wichita resulting from the merger.

¹³ For nonattainment areas such as Reno, our rules permit railroads to operate up to three additional trains per day. The threshold for attainment areas such as Wichita is normally an increase of eight trains or more a day. Here, we are taking a more conservative approach and will permit for Wichita only an average increase of two trains per day. In short, these limited increases for Reno and Wichita are at or below the threshold levels, and the environmental status quo will essentially be maintained. This addition of an average of two trains a day includes BNSF trains but does not include Amtrak trains, which are unrelated to the merger.

¹⁴ We note that an existing railroad can increase its level of operations without coming to us, and without limitation. Thus, if UP and SP had not proposed this merger, SP on its own could have increased the number of trains on its line in Reno to any level it considered appropriate. Allowing an increase of up to two trains per day during the interim period takes into account that the number of trains going through Reno and Wichita might have been increased even without the merger.

¹⁵ UP/SP will be required to file verified copies of station passing reports of train movements for Reno and Wichita on a monthly basis with SEA for the duration of the study period. We will review them to ensure compliance.

Mitigation of conditions resulting from the preexisting development of hotels, casinos, and other tourist-oriented businesses on both sides of the existing SP rail line in Rano, or the preexisting switching operations that are a primary source of the congestion associated with the existing UP line in Wichita, are not within the scope of the studies. Similarly, the construction of a new rail line now under consideration by Reno is too preliminary to be assessed now.¹⁶

The studies will carefully examine private and public funding options, as we believe that the cost of mitigation for Reno and Wichita should be shared. Finally, the studies will provide the parties with additional time to pursue and agree to independent and innovative mitigation plans (such as the memorandum of understanding executed by UP/SP and Truckee, CA, whereby UP/SP will share in the cost of an underpass construction project and contribute to a fund to buy back obsolete wood burning stoves).

In sum, pending determination of the exact mitigation measures to be required for Reno and Wichita, UP/SP will be subject to a traffic cap on the affected rail lines to ensure that no adverse effects to the environment will occur and existing environmental conditions will essentially remain unchanged. Because we already know the nature and general parameters of the appropriate mitigation measures for Reno and Wichita, based on our analysis of the environmental impacts and imposition of systemwide and regional mitigation, we find that, with the more specific mitigation that will be developed, the merger will not significantly affect the quality of the environment in those two locations.

Comments of EPA. On July 12, 1996, we received comments from the United States Environmental Protection Agency (EPA) on various aspects of the EA and the Post EA.¹⁷ EPA notes that, in

¹⁷ SEA agreed to EPA's request for an extension of time to comment on the Post EA. We welcome EPA's input after reviewing (continued...)

¹⁶ Plans for such a line are only in the development stage. SEA indicates that such a project could take up to 10 years to finalize. If the contemplated construction reaches the stage of an actual proposal requiring our approval, SEA would prepare an appropriate environmental document at that point. <u>See Kleppe v.</u> <u>Sierra Club</u>, 427 U.S. 390, 410 n.20 (1976); <u>Crounse Corp. v. ICC</u>, 781 F.2d 1176, 1193-96 (6th Cir. 1986).

analyzing air quality, the EA failed specifically to identify "maintenance" areas,¹⁸ which it believes may have caused air quality concerns to be overlooked.¹⁹ But maintenance areas were not ignored in SEA's analysis. For those areas that were not classified as nonattainment, SEA applied the EPA conformity emission threshold levels applicable to maintenance areas. This means that SEA analyzed both attainment and maintenance areas under the more rigorous standards applicable to maintenance areas, and that, if anything, the anticipated effects of the proposed merger on air quality are conservative. We believe that air quality has been thoroughly analyzed, and that the mitigation we are imposing here, along with the more specific measures which will be arrived at in the further mitigation studies for Reno and Wichita,²⁰ adequately mitigates any potential adverse air impacts.

¹⁷(...continued) our environmental analysis, since, as EPA notes, it generally does not comment on EAs.

¹⁸ There are three classifications for air quality: attainment areas, in which levels of certain pollutants are considered equal to or better than federal and state ambient air quality standards; nonattainment areas, in which levels of one or more pollutants do not meet federal and state ambient air quality standards; and maintenance areas, which were at one time nonattainment areas but have subsequently improved their air quality and are now in attainment for the relevant pollutant(s).

¹⁹ We note that EPA does not disagree with SEA's determination that the proposed merger is not subject to EPA's regulations entitled "Determining Conformity of General Federal Actions to State or Federal Implementation Plans" (General Conformity). The General Conformity criteria do not apply directly to railroad operations, except for future locomotive emission standards. SEA properly concluded that the proposed merger does not meet the definitions in the General Conformity regulations at 40 CFR 51.852 because, as a regulatory agency, the Board does not maintain program control over railroad emissions as part of its continuing responsibilities.

²⁰ SEA will take into account EPA's concerns and consult with them in conducting its mitigation studies for Reno and Wichita.

EPA further states that the EA used the terms NO_2 and NO_2 incorrectly. We recognize that NO_2 is not a criteria pollutant under EPA and state ambient air quality standards. In assessing air quality emissions, SEA looked at emission factors applicable to NO_2 , instead of NO_2 , because NO_2 emission factors are readily available through EPA documents and other sources, while NO_2 emissions are not. SEA based its calculations on the conservative assumption that all NO_2 emissions are composed of NO_2 . This conservative approach, which is widely accepted, ensured that the criteria pollutant NO_2 was adequately assessed in SEA's analysis. Moreover, by using this approach, SEA used higher NO_2 emissions than would actually be emitted.

EPA also expressed some difficulty understanding SEA's estimates of the projected net increase and decrease in air emissions with the mitigation measures we are imposing. While we believe that the text of the Post EA adequately explains the data in Tables 3-5 and 4-4, we have generated and attached as Appendix H an additional table to further clarify the net emissions reflecting mitigation.

EPA notes that some of the proposed rail line abandonments in Colorado run through or near EPA-designated Superfund sites. EPA is troubled that soil in and around the railroad lines could require remediation, that UP/SP might not be obligated to honor a consent decree, and that possible future trail use could expose the public to hazardous substances. These concerns are premature because, as discussed above, we are permitting only the discontinuance of rail service, and not abandonment of the involved lines. Thus there will be no salvage of these lines or opportunity for trail use unless and until UP/SP obtains our authority to abandon these lines.²¹

While trail use requests can be made if the abandonments are granted, any trail arrangement would not supersede the requirements of the specific laws that govern Superfund sites.²² Nor would we thereby become involved in negotiating or enforcing consent decrees involving remediation of those sites.

²¹ At that point, we will analyze the potential environmental impacts of the proposed abandonments.

²² See Union Pac. R.R. -- Abandonment -- Wallace Branch. ID, Docket No. AB-33 (Sub-No. 70) (ICC served Dec. 2, 1994).

Finance Docket No. 32760

EPA does not view requiring UP/SP to comply with existing federal, state, and local regulation as mitigation. We believe, however, that requiring compliance with other laws and regulations, such as FRA's safety regulations, can assist in reducing the potential environmental impacts of the actions before us. If the railroad fails to comply with conditions that we have imposed, parties can notify us and request that we (as well as the agency that has promulgated the regulation) take appropriate action.

In any event, the mitigation we are imposing here goes well beyond requiring compliance with other laws and regulations. For example, it includes more frequent track and train car inspections to reduce anticipated safety impacts and reduced idling of locomotives and the use of more efficient locomotives to offset air pollution emissions associated with the merger. Moreover, to enhance safety, UP/SP will be required to equip certain trains carrying hazardous materials with two-way end-oftrain devices to improve braking capabilities on particular line segments.

EPA suggests that we failed to discuss the environmental impacts associated with the handling and disposal of waste materials for the proposed abandonments and constructions. But we have included detailed mitigation for these actions. See Appendix G, including conditions \$26, \$27, \$62 and \$63.

EPA questions whether SEA considered all the settlement agreements reached with competing railroads and trade associations. SEA specifically took all settlement agreements into account in its analysis, as the EA and Post EA show.

Finally, we disagree with EPA's suggestion that SEA should revisit its consultation efforts with Native American tribes. SEA's efforts to contact and consult with Native American tribes have been extensive. As part of its outreach activities, SEA contacted approximately 11 area offices of the Bureau of Indian Affairs to inform them about the proposed merger; three offices commented and provided the names of tribes that should be contacted. Both the EA and Post EA were distributed to 31 American Indian tribes. In addition, there was newspaper and Federal Register notice to inform all affected tribes and communities about the proposed merger and how they could participate. To ensure continued participation, SEA will contact the affected Native American tribes when initiating its mitigation studies for Reno and Wichita and invite them to participate.

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APPENDIX G: ENVIRONMENTAL MITIGATING CONDITIONS

The environmental mitigating conditions imposed in Finance Docket No. 32760 are categorized as follows: (A) Systemwide, (B) Corridor-Specific, (C) Rail Line Segments, (D) Rail Yards and Intermodal Facilities, (E) Proposed Abandonments, and (F) Construction Projects. These mitigation conditions are numbered sequentially.

A. SYSTEMWIDE MITIGATION

The following systemwide mitigation conditions apply to rail line segments, rail yards, intermodal facilities, and rail line construction projects on new right-of-way.

- 1. UP/SP shall adopt UP's existing formula-based standards for track inspection for all rail lines of the merged system, which will increase the frequency of inspections on SP rail lines.
- 2. UP/SP shall adopt UP's existing tank car inspection programs for all appropriate facilities on the merged system.
- 3. For all highway grade crossing signals, UP/SP shall provide visible instructions designating an 800 number to be called if signal crossing devices malfunction.
- 4. UP/SP shall provide 300 numbers to all emergency response forces in all communities. These numbers shall provide access to UP/SP supervisors who shall provide train movement information and work cooperatively with communities in emergency situations. These numbers are not to be disclosed to the general public.
- 5. UP/SP shall participate on a systemwide basis in the TRANSCARE program to develop hazardous material and emergency response plans in cooperation with communities.
- 7. UP/SP shall adopt UP's training program for community and emergency response personnel for locations on the SP rail lines, and include personnel from SP served locations in UP's school at Pueblo, CO, for additional emergency response training.
- 8. UP/SP shall adopt existing UP training and operating practices that are designed to reduce locomotive fuel consumption and air pollution. These include: throttle modulation, use of dynamic braking, increased use of pacing and coasting trains, isolating unneeded horsepower, shutting down locomotives when not in use for more than an hour when temperatures are above 40 degrees, and maintaining and upgrading SP locomotives to UP standards.
- 9. As suggested by UP/SP, UP/SP shall extend to SP rail lines UP's program of closing boxcar doors on empty cars before movement on

the system in order to reduce wind resistance and, thereby, fuel consumption.

- 10. As suggested by UP/SP, UP/SP shall use its own security forces to conduct its own arrests and bookings, reducing reliance on local police forces.
- UP/SP shall convert all railroad locomotives to the standards for 11. visible smoke reduction that are established in the South Coast Air Quality Basin.
- UP/SP shall adopt UP's existing policy of using head-hardened rail 12. on curves in mountainous territory for SP rail lines to promote safer operations.
- UP/SP shall comply with all applicable FRA rules and regulations 13. in conducting rail operations on the merged system.
- CORRIDOR MITIGATION B.

General

The following mitigation conditions apply to the Central, Southern, Northern, Illinois-Gulf Coast, and Pacific Coast (I-5) Corridors.

- UP/SP shall implement the draft emissions standards for diesel-14. electric railroad locomotives that the Environmental Protection Agency (EPA) has developed. It is the Board's understanding that EPA plans to propose these standards and make them available for public comment in December 1996. Under these standards, UP/SP shall utilize newly manufactured or re-built locomotives that are more fuel efficient and produce less emissions. When this equipment becomes available, UP/SP shall assign these locomotives on a priority basis to the corridors or portions thereof specified below:
 - . Southern Corridor:
 - Fort Worth, TX, to West Colton, CA.
 - . Central Corridor:
 - Cheyenne, WY, to Hinkle, OR.
 - Chicago, IL, to Fremont, NE.
 - Ogden, UT, to Roseville, CA.
 - Denver, CO, to Grand Junction, CO.
 - · Pacific Coast (I-5) Corridor:
 - Seattle, WA, to West Colton, CA.
 - Sacramento, CA, to Bakersfield, CA.
- To further facilitate the improvement of air quality for specific locations, UP/SP shall consult with appropriate state and local 15.

air quality officials in the States of Arizona, California, Colorado, Illinois, Nevada, Oregon, Texas, Washington, and Wyoming, through which the Pacific (I-5), Southern, Central, and Northern Corridors extend in part. UP/SP shall advise SEA as to the status and the results of these consultations.

16. To address noise impacts, UP/SP shall consult with the affected counties that have communities that would experience an increase of 3 dBA or more as a result of the increased rail traific over rail lines in the States of California, Colorado, Illinois, Kansas, Louisiana, Nebraska, Nevada, Oklahoma, and Texas. If appropriate, UP/SP shall develop a noise abatement plan. UP/SP shall submit the result of these consultations to SEA who will review these findings with FRA.

Specific

The following mitigation conditions apply to specific rail line segments within the Central, Southern, and Illinois-Gulf Coast Corridors.

17. UP/SP shall give priority to equipping key trains, as defined by Union Pacific Railroad Form 8620, on the corridor segments listed below with two-way end of train devices. This requirement also applies to BNSF key trains operating between Iowa Junction, LA, and Avondale, LA.

· Central Corridor

- North Platte, NE, to Oakland, CA (UP and SP).
- Cheyenne, WY, to Denver, CO (UP).
- · Southern Corridor
 - Houston, TX, to Avondale (New Orleans), LA (SP).
 - Iowa Junction, LA, to Avondale, LA, via Kinder and Livonia (UP).
 - Houston, TX, to West Colton, CA (SP).

· Illinois-Gulf Coast Corridor

- St. Louis, MO, and East St. Louis/Salem, IL, to Houston, TX, and Avondale, LA (UP and SP).

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Finance Docket No. 32750

C. RAIL LINE SEGMENT MITIGATION

General

The following mitigation conditions apply to all of the rail line segments in the states identified below.

18. UP/SP shall consult with the states and appropriate local officials as well as FRA to develop a priority list for upgrading grade crossing signals, where necessary, due to increases in rail traffic resulting from the proposed merger. This process shall be undertaken for all rail line segments in the States of Arkansas, California, Colorado, Kansas, Nevada, Oregon, and Texas. UP/SP shall advise SEA as to the status and the results of these consultations.

Specific

The following detailed mitigation conditions apply to the specific rail line segments and/or locations identified below.

City of Reno

- 22a. UP/SP shall operate no more than a daily average count of 14.7 freight trains per day through the City of Reno. (This reflects the Base Year daily average of 13.8 trains -- 12.7 freight trains and 1.1 passenger trains -- plus 2 additional freight trains.) The addition of two freight trains per day does not exceed the Board's threshold for environmental analysis at 49 CFR 1105.7(e)(5)(ii). The 14.7 average freight train count per day does not include the following types of movements: (1) maintenance-of-way trains, (2) light locomotive movements, (3) local and industry switching train movements, (4) emergency trains operated under detour authority, for snow removal, for fire or other natural disaster purposes, and wreck removal purposes. This condition will be effective upon consummation of the merger and will continue in effect for 18 calendar months in total.
- 22b. For the purpose of monitoring the preceding condition, UP/SP shall file on a monthly basis with the Board verified copies of station passing reports of train movements through Reno, NV, for each day of each preceding month in the specified 18-month period. These reports shall also identify those train movements, specified in the above condition, that are excluded from the 14.7 trains per day average count.

22c. UP/SP, in consultation with and subject to the approval of SEA, shall retain an independent, third-party consultant to prepare a specific mitigation study to address the environmental effects on the City of Reno of the additional rail freight traffic projected as a result of the proposed merger. This study shall be prepared under the sole direction and supervision of SEA. It shall include a final mitigation plan based on a further study of the railway, highway, and pedestrian traffic flows and associated environmental effects on the City of Reno. This study would tailor mitigation to address environmental effects such as safety, hazardous materials transport, air quality, noise and water quality. UP/SP shall comply with the final mitigation plan developed under this study.

The study, which shall be completed within 18 months from the date of consummation of the merger, shall include the following:

- Projected post-merger increases in rail freight traffic on the Sparks to Roseville line segment.
- Consultations with the City of Reno, Washoe County, the Federal Railroad Administration, affected Native American Tribes, and other appropriate Federal, state and local agencies, and other interested parties.
- · Consultations with UP/SP.
- Review of all existing information and studies including those prepared by the City of Reno, Washoe County and UP/SP.
- · Independent analyses.
- With respect to vehicular and pedestrian safety, mitigation measures that identify the number and location of highway/rail grade separations and rail/pedestrian grade separations in downtown Reno.
- · Funding options.
- Submission of a draft study to the public for review and comment and then issuance of a final mitigation study.
- 22d. SEA will submit the final mitigation study and its recommendations to the Board, which shall then issue a decision imposing mitigation. In the event UP/SP and the City of Reno and other appropriate parties reach agreement on a final mitigation plan, UP/SP and the City of Reno shall immediately notify SEA, and the Board will take appropriate action consistent with such an agreement.

Enclosure 2

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15447 28

SERVICE DATE - APRIL 17. 1997

SURFACE TRANSFORTATION BOARD'

DECISION

Finance Docket No. 32760

THION PACIFIC CORPORATION, UNION FACIFIC FAILROAD COMPANY. AND MISSOURI FACIFIC RAILROAD COMPANY-CONTROL AND MERGER-SOUTHERN FACIFIC RAIL CORPORATION, SOUTHERN FACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP., AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

[Decision No. 71]

Decided: April 15, 1997

In Decision No. 44 (served August 12. 1996), we approved the common control and merger of the rail certiers controlled by Union Pacific Corporation (Union Pacific Railroad Company and Missouri Pacific Railroad Company) and the rail certiers controlled by Southern Pacific Rail Corporation (Southern Pacific Transportation Company, St. Louis Southwestern Railway Company, SPCSL Corp., and the Denver and Rio Grande Western Railroad Company) (collectively UP/SP), subject to various conditions. As pertiment here, the anvironmental mitigating conditions. As pertiment here, the anvironmental conditions plans for Wichitz. Exarrive at specifically tailored mitigation plans for Wichitz. Exand Rano, NV, in addition to the environmental mitigation that already has been imposed, to assure that localized environmental issues unique to those two communities are effectively addressed.

After Decision No. 44 was issued, the City of Wichita and the Board of County Commissioners of Sedgwick County, KS (Wichita/Sedgwick) filed an environmental court challenge in the United States Court of Appeals for the District of Columpia Circuit. No. 96-1293. <u>City of Wichitz v. Surface Transportation</u> Board (pet. for review filed Aug. 21, 1996) (<u>Wichita</u>).⁴ From pleadings filed in that litigation, it because apparent that the <u>Wichits</u> appeal is addressed solely to the sentence in Decision No. 44 (at p. 223) stating, "The (mitigation) studies (that are

¹ Proceedings pending before the Interstate Commerce Commission (ICC) on January 1, 1996, must be decided under the law in effect prior to that date if they involve functions retained by the ICC Termination Act of 1995, Pub. L. 104-68, 109 Stat. 803. 'This proceeding was pending with the ICC prior to January 1, 1996, and to functions retained under Surface Transportation Board (Board) jurisdiction pursuant to new 49 U.S.C. 11223-27. Clustions are to the former sactions of the statute, unless otherwise indicated.

¹ Another environmental court challenge is pending in the D.C. Circuit in No. 96-1418, <u>City of Reno v. Surface</u> <u>Transportation Roard (Bend)</u>. The D.C. Circuit, on its own motion, ordered the <u>Reno and Wichits</u> appeals consolidated with the petitions for review resising issues other than environmental issues that were filed in that court. The Beard and the United States have moved to sever the <u>Reno</u> and <u>Wichits</u> appeals from the other cases seaking review of Decision No. 44 and to hold briefing in absyance in these two cases because, unlike the other petitions are environmental court challenges that are not ripe or final for judicial review at this time. That Botion remains pending in the court. now underway for Wichita and Reno; will carefully examine private and public funding options, as we believe that the cost of mitigation for Reno and Wichita should be shared.' Then, following an inquiry looking toward settlement of the Wichita litigation, petitioners' counsel in the Wichita case advised our General Counsel, by letter dated April 7, 1997.' that if the Board issues a decision clarifying that UP/SP will be required to pay 100% of the cost of mandated environmental mitigation, Wichita/Sedgwick will withdraw their appeal.

Petitioners' counsel states that Wichitz/Sedgwick understands that, consistent with Decision No. 44, the Board is considering both 'base line' mitigation, i.e., mitigation including, but not limited to, the type discussed in Decision No. 44, that UP/SP would be required to implement and fund in order to increase the number of through trains operating through Wichitz/Sedgwick, and alternative mitigation. i.e., more expensive options. As to the latter, Wichitz/Sedgwick understands that the Board may suggest funding alternatives, but such suggestions would be in no way binding. See Addendum A.

Having ascertained that UP/SP has no objection to the issuance of a decision clarifying the intent of the sentence at page 223 of Decision No. 44, quoted above, in the manner requested by Wichits/Sedgwick, it appears to us appropriate to clarify our intent with respect to developing final mitigation for Wichits and Runo. Specifically, the final environmental mitigation that will be developed for Wichits and Rano following the completion of the ongoing mitigation studies will include (in addition to the mitigation that has already been imposed) both (1) mandated or base line mitigation, which the Board will require UP/SP to implement and entirely fund, and (2) alternative mitigation that might be a more far reaching solution for all concerned, but which will not be binding absent a voluntary agreement by the parties to share costs or expend greater resources.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

It is ordered:

1. The discussion of environmental mitigation in Decision No. 44 is clarified as set forth in this decision.

2. This decision is effective on the date of service.

By the Board, Chairman Morgan and Vice Chairman Oven.

Verson A. Williams Secretary

' A copy of that letter is attached as Addendum A.

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Enclosure 3

UP/SP MERGER RENO MITIGATION STUDY TASK FORCE MEMBERSHIP LIST

STB Section of Environmental Analysis Representatives and/or Contacts Elaine K. Kaiser Program Director/Legal Counsel		
Harold McNulty	Vicki Rutson	
Reno Co-Study Director	Reno Co-Study Director	
Dave Mansen	Kay Wilson	
Reno Mitigation Study Project Manager	Reno Mitigation Study Community Coordinator	
City of Reno Representatives	City of Reno Alternates	
Manager's Office	Manager's Office	
Merri Belaustegui	Michael E. Halley	
Deputy City Attorney	Deputy City Attorney	
Engineering	Engineering	
Steve Varela, City Engineer	Tom Gribbin	
City of Reno Public Works	Pyramid Engineering	
Environmental	Environmental	
Mark Demuth	Colleen Henderson	
MADCON Consultation Services	Environmental Management Associates	
Emergency Services	Emergency Services	
Larry Farr, Fire Marshall	Chuck Lowden	
Reno Fire Department	Fire Chief	
Jim Weston, Chief of Police	Tom Robinson	
Reno Police Department	Reno Police Department	
Reno Citizeas Representative	Reno Citizens Alternates	
General Interests	General Laterests	
Steve Bradhurst	No Alternate Named	
River Banks Homeowners	River Banks Homeowners	
Richard Vitali	No Alternate Named	
Native American Representatives	Native American Alternate	
Paula Berkeley	Arian Melendez, Director	
Paula Berkeley and Associates	Reno-Sparks Indian Colony	

UP/SP MERGER RENO MITIGATION STUDY TASK FORCE MEMBERSHIP LIST

Business Community Representative	Business Community Alternate
Bill Osgood, Chairperson	Harry York
Reno Downtown Improvement Assoc.	Reno-Sparks Chamber of Commerce
NFRA Representative	NFRA Alternate
Bob Burn, Chairperson	John Frankovich
Nevadans for Fast & Responsible Action	
Washoe County Representative	Washoe County Alternate
Bob Webb, Community Coordinator	Dean Diederich
Washoe Co. Dept. Of Comprehensive	Principal Planner of Washoe County
Planning	Department of Community Development
Regional Transportation Commission Rep. Greg Krause, Planning Manager Regional Transportation Commission	Regional Transportation Commission Alt. Jack Lorbeer
State of Nevada Representative	State of Nevada Alternate
Tim Crowley, Executive Assistant	No Alternate Named
Nevada Governor's Office	
Nevada Public Service Commission Rep	Nevada Public Service Commission Alt.
Galen Denio, Commissioner	Craig Wesner, Mgr. Engineering Svcs.
Nevada Public Service Commission	Nevada Public Service Commission
City of Sparks Representative	City of Sparks Alternate
Rob Pyzel, Senior Planner	Randy Mellinger
Planning & Community Development	Community Development Director
UP Railroad Representative	UP Railroad Alternate
Mike Hemmer	Joe Guild
Covington & Burling	Union Pacific Railroad
Amtrak Representative	Amtrak Alternate
Ron Scolaro	Raymond Lang
Amtrak	Amtrak Intercity Rail Service
State Economic Interest Representative	State Economic Interest Alternate
Ken Lynn	No Alternate Named
Economic Dev Authority of Western Nevada	

UP/SP MERGER RENO MITIGATION STUDY TASK FORCE MEMBERSHIP LIST

Warehousing/Distribution Representative David Loring Dermody Properties

Warebousing/Distribution Alternate Scott L. Hutcherson Eagle-Picher Minerals, Inc.

Enclosure 4

FORMAL CONDITIONS FOR BOARD CONSIDERATION

The preliminary Tier 1 mitigation measures proposed in Section 8 by the Surface Transportation Board's (Board's) Section of Environmental Analysis (SEA) are restated here for public review and comment and for Board consideration as additional conditions to the UP/SP merger decision.

Table 10-1 Preliminary Tier 1 (Fully Funded by UP) Mitigation Measures for Consideration by the Board and Public		
Mitigation Measure	Proposed Board Conditions	
Increased Train Speeds	1. UP shall make the necessary operating changes and capital improvements such as centralized traffic control (CTC), track reconfiguration, and track rehabilitation. as appropriate in the Reno/Sparks, Nevada area, to enable trains to operate over the rail line segment between the east end of the Sparks yard (approximately Mile Post [MP] 247) and a point just west of Keystone Avenue (approximately MP 242) in Reno at a speed of 30 miles per hour. UP shall then operate, and require BN/SF to operate, all trains over the described rail line segment at a speed of 30 miles per hour consistent with safe operating practices dictated by conditions present at the time each train traverses the segment.	
Train Location Color Video Displays	2. Subject to the written concurrence of the City of Reno, UP shall install in the new City of Reno emergency communications center (or another location if desired by the City) color video displays coordinated with the UP signal system circuitry showing the location of each train present on the rail line segment from approximately MP 245 on the west side of the Sparks Yard to MP 238 (approximately Woodland Avenue) on the west side of Reno.	
Cameras and Video Monitors Showing Rail Line	3. Subject to the written concurrence of the City of Reno, UP shall install television cameras over or near the rail line along with corresponding video monitors at the same emergency communications center location that continuously show real-time conditions on the right-of-way through downtown Reno in the area bounded by and including the grade crossings at Keystone and Lake Streets.	
Discontinued Use of the Addition of "Helper" Locomotives in Woodland Area	4. UP shall discontinue the practice of adding "helper" locomotives in the Woodland Avenue area.	
Four-quadrant Crossing Gates at Nine Locations	5. UP shall install four-quadrant crossing gates at rail-highway crossings at Sutro, Lake, Virginia, West, Arlington, Ralston, Washington, Vine, and Keystone streets	

Table 10-1Preliminary Tier 1 (Fully Funded by UP) Mitigation Measuresfor Consideration by the Board and Public	
Mitigation Measure	Proposed Board Conditions
Enhanced Rail Safety Programs	 6. UP shall augment its safety training programs for drivers and pedestrians including: A. Supplementing its participation in the "Operation Lifesaver" Program, and B. Supplementing existing school educational programs in Reno and Washoe County (e.g., driver's training), and C. Establishing a safety training program for Reno's downtown employees.
Pedestrian Crossing Gate "Skirts" at Six Locations	7. UP shall install devices known as pedestrian crossing gate "skirts" on pedestrian crossing gates at Lake, Center, Virginia, Sierra, West, and Arlington streets.
Electronic Warning Signs for Pedestrians at Six Locations	8. UP shall install electronic warning signs for pedestrians at Lake, Center, Virginia, Sierra, West, and Arlington streets. These signs shall be designed and constructed so that they are clearly visible and easily read by pedestrians.
Construction of a Pedestrian Grade Separation at Virginia Street	9. UP shall construct a pedestrian overpass or underpass at Virginia Street with street level access on both sides of the tracks
Construction of a Pedestrian Grade Separation at Sierra Street	10. UP shall construct a pedestrian grade overpass or underpass at Sierra Street with street level access on both side of the tracks
Prehistoric and Historic Survey for Pedestrian Underpass(es) and Monitoring During Construction for Archeological Rescurces	11. Prior to construction of a pedestrian underpass at either Virginia or Sierra streets, UP shall conduct a survey of potential historic and prehistoric resources in consultation with the Nevada State Historic Preservation Office (SHPO). If any such resources are discovered during construction, UP shall cease construction and consult with the SHPO.
Consultation with Native Americans	12. Prior to construction of a pedestrian underpass at either Virginia or Sierra streets, UP shall consult with Native American interests regarding possible impacts to Native American resources from underground construction. If any such resources are discovered during construction, UP shall immediately stop construction and consult with Native American interests and the SHPO.
Installation of a high, wide, shifted load detector at MP 240	13. UP shall install a high, wide, shifted load detector at MP 240 for both mainline tracks.
Installation of a Hot Box Detector at MP 240	14. UP shall install an additional hot box detector on the westbound track at MP 240.

Table 10-1 Preliminary Tier 1 (Fully Funded by UP) Mitigation Measures for Consideration by the Board and Public		
Mitigation Measure	Proposed Board Conditions	
Establishment of a Community Advisory Panel	15. UP shall establish a Community Advisory Panel, consisting of representatives of the Reno/Sparks/ Washoe County community, including Native Americans, who are willing to work with UP management on a regular basis to review safety, environment, and health issues associated with rail operations, particularly as they relate to the transport of hazardous materials.	
Certification to the Board and Notice to the City of Reno and Washoe County of UP's Compliance with Certain Installation Requirements	i5. When compliance has been completed for each of the installations required in Conditions 1, 2, 3, 5, 7, 8, 9, 10, 13, and 14 above, UP shall certify such completion to the Board, with copies to the City of Reno, and Washoe County. Each certification shall be made within two weeks of the date of compliance for each condition.	
Environmental Mitigation Status in Quarterly Reports	17. UP's quarterly reports to the Board shall include the status of compliance with the environmental mitigation measures pertaining to Reno and Washoe County for the duration of the Board's oversight proceeding. Copies of these reports shall also be provided to the City of Reno and Washoe County.	

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Enclosure 5

quality mitigation measures would certainly be considered by the Board, as was done in Truckee, California for its air quality mitigation agreement.

Table 8.5-1 provides a summary list of possible Tier 2 mitigation measures.

Table 8.5-1 Measures Identified as Potential Tier 2 Mitigation	
Mitigation Measures	Comments
Depressed Railway	 Would reduce potential environmental impacts related to the merger, but also pre- existing conditions. Rail impacts on surrounding land uses pre-date the merger, so it would not be appropriate to require UP alone to absorb extensive costs of a depressed railway. Casinos and hotels have consistently built their facilities next to the existing UP (formerly SP) tracks. Impact of rail operations has been a matter of local concern for decades. In a 1980 ballot measure, the citizens of Reno considered the issue of a depressed railway. (In the 1980 ballot measure, the citizens of Reno voted down a bond issue for construction of a depressed railway through downtown Reno.) A depressed railway would bestow substantial benefits on the City as well as private property owners in the area of the existing track. A depressed railway would benefit the railroad. Would involve secondary environmental impacts; (e.g., construction, groundwater, emergency vehicle access). Cannot equate benefits of a depressed railway to potential merger-related impacts only. SEA urges the parties to continue negotiations with respect to the depressed railway, if appropriate. If a mutually acceptable agreement were reached for a depressed railway, SEA could recommend that the Board impose an obligation upon UP to comply with such agreement.
Rail/Highway Grade Separations	 Tier 1 mitigation measures comprise a package that provides substantial additional mitigation beyond that already imposed in the Board's Decision No. 44. Grade separations would have major property acquisition, displacement, and other impacts. Grade separations would adversely affect vehicular access to properties that front on the adjoining streets. Increasing train speeds serves to reduce the vehicular delay associated with merger-related increases in train traffic to below pre-merger levels, and none of the highway/rail grade separations would achieve this level of delay reduction. The City of Reno has stated its opposition to grade separations as a mitigation measure.
Elevated Railway	 Downtown business interests and the City have raised concerns about potential adverse environmental impacts associated with an elevated railway in Reno, including the visual barrier that would be created, the associated division of the City, possible derailments and spills of hazardous materials from elevated trains, and the need to demolish existing structures over the tracks. As with the depressed railway, a shoofly track would be needed to permit the construction.

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Table 8.5-1 Measures Identified as Potential Tier 2 Mitigation	
Mitigation Measures	Comments
I-80 Bypass	 No support in the Board's precedent or case law for requiring a railroad seeking merger authority to construct a new railroad line to bypass a City. No source of funding. Questionable feasibility. The City has indicated that, while it does not want to drop the bypass from consideration, the depressed railway is a priority in Reno. Private parties could pursue and fund an I-80 bypass. Doing so would require that the appropriate authority to construct and operate be sought from the Board. At that time, the Board would undertake the environmental review that was warranted for a bypass alternative.
Grade Crossing Safe	ty Measures (Vehicular)
 Street median barriers 	 Would reduce the width of the street traffic lanes and could introduce access problems from adjoining land uses. Not be needed with four-quadrant gates (proposed as Tier 1 mitigation).
 Conversion of existing two- way streets to one-way 	 Far-reaching implications for downtown traffic circulation and businesses. Should be part of a broader transportation, land use, and property access planning process for the areas surrounding the grade crossings. One-way street couplets (pairs of one-way streets) were reviewed during a 1995 analysis of downtown traffic and parking to reduce traffic conflict and increase intersection capacity. Study notes that one-way streets offer some advantages but can confuse motorists, especially visitors, and can be frustrating to local motorists. Local businesses may also oppose one-way streets because of potential access problems. Four-quadrant gates proposed as Tier 1 mitigation eliminate advantages from the standpoint of railroad/highway safety.
Grade Crossing Safe	ty Measures (Pedestrians)
Crossing guards	 Proposed Tier 1 mitigation measures include pedestrian crossing gate skirts, electronic warning signs, and pedestrian/rail grade separations, all in addition to the pedestrian warning signals and gates that currently exist at the heavily-used pedestrian crossings in Reno. Would entail unnecessary ongoing costs.

Table 8.5-1 Measures Identified as Potential Tier 2 Mitigation	
Mitigation Measures	Comments
Air Quality Measures	
 Implementing the proposed EPA locomotive emission standards 	
 Concentrating operation of new EPA- certified low- emission locomotives in Reno 	 EPA regulations not yet in place. Would be applicable to all locomotives operating through Reno and introduce unknown costs. Inadequate information exists to recommend at this point. Other system-wide mitigation measures that are already imposed appear to mitigate impacts.
Early Introduction of low-emission locomotives	
Diesel engine modifications	
 Improved diesel fuels 	
Diesel exhaust after treatment	
• Use of alternative fuels	
Offsetting the Increase in Locomotive Emissions	 Would not directly mitigate effects of the increased train levels. Goes beyond authority of the Board and requires voluntary compliance, e.g., Truckee Memorandum of Understanding (MOU). Other system-wide mitigation measures that are already imposed appear to mitigate impacts.

In conclusion, SEA would certainly review and consider any of the above Tier 2 mitigation measures if they were agreed upon voluntarily and became part of a memorandum of understanding between UP and appropriate interested parties.

8.6 Noise

Noise is a distinct and separate area of environmental concern, because of its paramount role in providing for the public safety. The overwhelming majority of noise generated by rail operations in Reno is that which emanates from warning horns located on the locomotives. The Board addressed the public safety implications of the train horn noise in its Decision No. 44. Specifically, the Board noted that "[a]ny attempt significantly to reduce noise levels at grade crossings would jeopardize safety, which we consider to be of paramount importance."

Enclosure 6 WASHOE COUNTY

To Protect and To Serve



PHONE 702 328-3600 FAX # 702 328-3648

POST OFFICE BC +

DEPARTMENT OF COMPREHENSIVE PLANNING

January 21, 1997

- TO: Reno Mitigation Task Force
- FROM: Bob Webb, Community Coordinator
- SUBJECT: Impacts on Washoe County

As part of the preliminary mitigation and evaluation criteria, task force members were asked to consider the impacts of the railroad merger in order to better evaluate potential mitigation measures. The following list of impacts is derived from staff reports prepared for the Washoe County Commission, comments by County Commissioners during public meetings, and the staff report prepared for the Environmental Assessment on the merger. Impacts are divided into three general categories: public safety, economic, environmental, and miscellaneous.

Public Safety:

- emergency access for isolated communities served by Woodland Avenue, Stag Lane, Del Curto Lane, and Canal Road. Canal Road is located off the Interstate 80 Patrick Exit and provides access for about 35 residences in Storey County. Concern is two fold: first, blockage of tracks during normal operations for emergency response agencies. Second, blockage during a train accident and/or hazardous material spillaga for community access/ evacuation.
- existing, substandard railroad crossing throughout Washoe County.
- long trains blocking multiple crossings (particularly should a train stop and block two or more railroad crossings).
- speed of trains in outlying areas. Information supplied by Union Pacific officials show that trains will be traveling at 65 mph on tracks east of Reno (i.e., through the east Truckee Canyon) and at 45 mph on tracks west of Reno (i.e., through the Verdi area). Obviously, faster trains mean longer braking distances in case of vehicles or pedestrians on the tracks.

Economic:

- delays to tourists (pedestrian and vehicle) at railroad crossings.
- potential negative publicity to tourist based economy in the event of a major traffic accident or HAZMAT spill (similar to effects of national media attention during the 1997 floods).

Environmental:

 hazardous material spills at railroad switching yards (Sparks and Parr Boulevard) and along the railroad tracks. This impact also involves clean up of hazardous materials, even if accumulation of small amounts occurs over a long period of time. Memo to Reno Mitigation Task Force Subject: Impacts on Washoe County January 21, 1997 Page 2

- potential contamination of surface water (primarily Truckee River where municipal water intakes are located very close to the railroad) and groundwater supplies. This concern includes contamination due to normal operations (e.g., oil leaks from engines on the railroad bed).
- increased HAZMAT shipments on the Feather River railroad route and potential impacts to the Gerlach community.
- air quality impacts of idling vehicles waiting at railroad crossings.
- air quality impacts of switch yard railroad traffic (e.g., switching engines, adding additional engines for the climb up Donner summit).

Miscellaneous:

- noise from train whistles (County staff reports highlighted the Verdi area as a primary concern, but noise also effects nearby residences near the tracks through both Reno and Sparks).
- noise from passing trains (particularly at slow speeds, for instance in the downtown area).
- future of the Reno Branch line and the Reno intermodal facility at Parr Boulevard (particularly should there be increases in rail traffic).

Community Coordinator

CRW:bw

cc: John MacIntyre, County Manager

Enclosure 7



Washoe County Department of Community Development

1001 E. Nimth St. Bldg A Post Office Box 11130 Reno. NV 89520-0027 Tel: 702-328-3600 Fax: 702-328-3648 July 8, 1997

Elaine K. Kaiser, Chief Harold McNulty, Reno Co-Study Director Section of Environmental Analysis Surface Transportation Board 1925 K Street NW 5th Floor Washington, DC 20423

Subject: Recommended Mitigation Measures

Dear Ms. Kaiser and Mr. McNulty:

In your letter of July 2, 1997 to Charles McNeely, City Manager for the City of Reno. you stated that the Reno Mitigation Study Task Force would not meet in August as your section will be finalizing the Preliminary Mitigation Plan. Your section will issue the plan in September and the process will then move into a formal public review phase. As a member of the study task force, I have waited for the appropriate task force meeting to raise issues of concern to Washoe County as a whole and it appears as if opportunities to discuss these issues in a task force meeting will be slim (particularly since I will be unable to attend the task force meeting on July 9, 1997).

The following comments are mitigation measures which I believe should be considered as part of a larger mitigation plan for Washoe County (to include the Cities of Reno and Sparks). The comments are segregated by the appropriate categories for evaluation (provided to task force members during the meeting on June 11, 1997). These mitigation measures have appeared in a letter to you dated April 30, 1996 and were reiterated in a memorandum to the Reno Mitigation Study Task Force dated January 21, 1997.

Pedestrian Safety and/or Emergency Vehicle Access and/or Train/Vehicle Accidents

- 1. Evaluate existing railroad crossings (public and private) in Washoe County and repair those crossing which do not meet appropriate Federal or State regulations. Southern Pacific Railroad repaired the railroad crossing at Woodland Avenue prior to the merger and a similar effort should be provided for all crossings in Washoe County.
- 2. Inform residents and business owners of the emergency access road which provides secondary access should Woodland Avenue be blocked at the railroad crossing. Information should include agencies to contact should an emergency arise which would cause the need for secondary emergency access.
- 3. Provide emergency access to residents in the Stag Lane, Del Curto Lane, and Canal Road areas. There should be, at a minimum, discussion between railroad officials, the Public Service Commission, and appropriate County staff as to measures to be taken to provide emergency access and/or evacuation should the railroad crossings at those locations be blocked.



John B. Hester. AICP

Jess S. Traver, P.E.

County Building Official

Director

4.

Provide a system which alerts emergency responder dispatch centers as to when trains are on the tracks. This system should be able to divide the Donner Pass corridor through Letter to: Elaine Kaiser and Harold McNulty Subject: Recommended Mitigation Measures July 8, 1997 Page 2

> Washoe County into discrete segments so that dispatchers can keep track of the progress of a train. Such a system would alert emergency responders when a crossing will be blocked so they can plan alternate routes.

Derailments/Spills/Water Quality

- 5. Develop a plan to respond to hazardous material spills and/or accidents in or near Gerlach, Nevada (Feather River route). The plan should identify the equipment needed for minimum response and the location of this equipment, the agency(s) (both public and private) charged with responding to an incident, and response times to an incident.
- 6. Develop a plan to address the impact of spills and leaks of hazardous/toxic material along the railroad tracks. The plan should provide mitigation measures to minimize the migration of leaks and spills into the ground water supply and/or into surface drainage facilities which eventually empty into the Truckee River. The plan should also address the need for structures similar to catch basins (which are required for parking lots) for the railroad tracks and railroad yards.
- 7. Control the speed of trains in the Truckee Canyon (Wadsworth to Verdi) adjacent to municipal water intakes on the Truckee River. Develop a plan to address train derailment and/or hazardous/toxic material spills which endanger either ground water or Truckee River water supplies. Situate appropriate emergency response and spill containment equipment in the Truckee Meadows region.

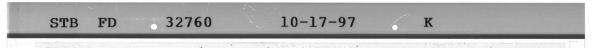
I would appreciate a written response to each of these items either separately or within the Preliminary Mitigation Plan. I also request that this letter be made part of the public record. If you have any questions, please do not hesitate to call me at (702) 328-3623.

Sincerely,

Bob Webb Community Coordinator

CRW:bw

cc: Grant Sims, Chair, Washoe County Board of County Commissioners John MacIntyre, County Manager John Hester, Director Reno Mitigation Study Task Force members



STATE OF KANSAS





GARY SHERRER LIEUTENANT GOVERNOR

October 16, 1997

Office of the Secretary Attn: Elaine K. Kaiser Case Control Unit Surface Transportation Board 1925 K Street, NW, Room 700 Washington, D.C. 20423-0001

Dear Ms. Kaiser:

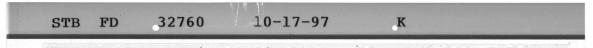
I want to go on record saying the Primary Mitigation Plan offered by the Section of Environmental Analysis of the Surface Transportation Board is inadequate. The reasons include:

- 1. The plan uses the single-solution, short-term approach of increasing the speed of the trains and refuses to consider long-term solutions in grade separations.
- 2. The report is inadequate because it doesn't discuss the impact of trains whose average speeds are below 30 mph.
- 3. Incredibly, there is nothing in the plan that provides effective monitoring to ensure the trains do average 30 mph, nor is there anything that holds the railroads accountable for maintaining said speed.
- 4. There is absolutely no enforcement mechanism charged with holding the railroads to any provision of this report.

I am disappointed with the SEA/STB's preliminary mitigation plan. Unless significant changes are made it will remain unacceptable.

DOCUMENT

Sincerely, IMEN Gary Sherrer Kansas Lieutenant Governor





October 16, 1997

via Federal Express

DOGLENI

ENVIR

Ms. Elaine Kaiser Program Director Legal Counsel Surface Transportation Board Section of Environmental Analysis 1925 K Street N.W. 5th Floor, Room 700 Washington, DC 20423 -0001



Re: UP/SP Railroad Mitigation Study/Finance Docket No. 32760

Dear Ms. Kaiser:

This letter will act as Harrah's Operating Company, Inc. dba Harrah's Casino Hotel Reno's official comment to the Preliminary Mitigation Plan ("PMP") also made on behalf of our 2100 employees who are citizens living throughout the region impacted by this merger. An original and ten (10) copies are included, as required.

Harrah's has had an opportunity to review the PMP as well as the City of Reno's official comment document. Harrah's fully supports the issues raised in the City's official comment document. Harrah's supports the City's position requesting appropriate mitigation for the City of Reno, but not opposing the merger of the Union Pacific and Southern Pacific railroads. As you are aware, the City of Reno has unique impacts from the merger which, unmitigated, will cause a great disruption in the economic future and quality of life for the Reno community. While Harrah's supports all the comments raised in the comment document, there are certain issues which Harrah's believes should be highlighted.

The primary mitigation proposed by the PMP is to increase the speed of the trains which now go through Reno as well as those trains which will go through Reno once the merger is put into full effect by ten (10) miles an hour. Harrah's appreciates the efforts which have been put in by a great number of interests in trying to reach the appropriate mitigation for the impacts of the merger. Harrah's has followed closely with great interest the efforts. After hearing of the various solutions, relocation of the tracks to I-80, grade separations and a depressed railway, the proposed mitigation of increasing the train speed seems to be somewhat meager and ineffective.

Even assuming the trains speed could be increased as proposed and it had the predicted impact on traffic delay, train speed simply does not mitigate the other impacts

Letter to Ms. Kaiser October 16, 1997 Page 2

of this merger on other vital concerns: air quality, noise and emergency vehicle response time. It is Harrah's understanding that the objective of the mitigation task force was to develop a mitigation scheme which mitigated the above factors.

In our reading of the PMP, at best the only factor which is mitigated is traffic delay. The City's response raises serious questions as to the scientific integrity and methodologies used in determining that the increased speed would mitigate even the traffic delays. Since this appears to be the keystone upon which all the other mitigation is premised, if this is flawed, it would appear to Harrah's that the rest of the report must be flawed and that a critical look must be taken by the STB during the time between the closing of the comment period and issuing of the Final Mitigation Plan ("FMP"). Additionally, it not only does not mitigate any safety issues, it creates safety issues.

Another item that appears to be lacking in the PMP is any ability to enforce those mitigation measures which are ordered by the STB. Even assuming the railroad can comply with an average increased speed of ten (10) miles per hour, and this has the desired effect, the PMP is devoid of any consequence should the railroad fail to comply. It is unrealistic to assume that issues will not occur which will cause the railroad to not be able to meet an average increase of ten (10) miles per hour for all trains. Issues which might arise include weather, track conditions, accidents, and stalled vehicles on the track as examples.

Additionally, there is no limit as to the number of trains which the railroad could operate through this corridor once the merger takes full effect. Therefore the increased benefits outlined in the PMP by the increased train speed would appear to diminish as the number of trains increases and therefore the traffic delays and the intended affect on air quality would not be mitigated. At that point there should be some consequence to the railroad such as running trains on other routes or exploring less operationally based mitigation like grade separations.

Another telling issue raised by the PMP is the apparent willingness of the STB to serve the economic needs of the railroad by placing the citizens of and visitors to Reno at greater risk by proposing increased train speed as the primary mitigation. While other mitigation is proposed such as pedestrian overpasses at Virginia and Sierra Streets, as well as improved barriers at the gate crossings, Harrah's believes it is unrealistic to fail to recognize human nature and the fact that people will always challenge safety measures put in place for their protection.

Even without this trait of human nature, the PMP itself recognizes that even if the system were to work perfectly, there is an increased danger to both pedestrians and vehicular traffic in regard to accidents. It is difficult for Harrah's to understand how

Letter to Ms. Kaiser October 16, 1997 Page 3

mitigation, which is supposed to decrease or eliminate this issue, but actually increases the issue, can be acceptable.

It appears that one of the primary considerations leading to the proposal to increase train speed as the primary source of mitigation is a cost/benefits analysis. It is Harrah's understanding that the issue of cost/benefit was discussed at the mitigation task force meetings. Harrah's provided a representative to speak with the economic expert hired by the STB consultants in this matter. Despite discussions which indicated that the economic expert was beginning to recognize the need to do an economic benefits analysis, that issue was never fully presented to the task force, and not part of the PMP. It appears the only cost benefit analysis done was in regard to the cost of mitigation as it affected the railroad. It seems illogical to indicate that grade separations or a depressed railway would not be considered because of cost, yet the economic cost to the City of Reno occasioned by increased train traffic was not part of the analysis. It would seem that one of the goals of the task force would be fairness in making its determination and it does not appear that this was the case.

Another issue that seems particularly clear from the PMP is the fact that the consultants were quick to point out that the mitigation to be ordered could not have any positive impact on conditions which existed prior to the date of the merger. This is an unrealistic standard as proven by the mitigation suggested by the PMP. If the PMP is to believed, traffic delay will be reduced to below pre-merger levels by increasing train speed. Therefore if the proposed mitigation of increased train speed can have a positive impact on pre-merger conditions, why was that used as a factor to preclude consideration of such mitigation measures as the depressed railway and/or grade separations.

Finally, it appears that there are many inconsistencies in the analysis as evidenced by the PMP. In reading the analysis, it appears that when necessary the consultants would utilize very specific data to support the conclusion that train speed was the best mitigation plan (e.g. gate downtime looks at each episode rather than the total number of hours increasing). However when specific information pointed away from that solution, the consultants would then look at averages and broad-based information in which to prove their point (e.g. the discussion regarding air pollution attempts to dilute the impact on Reno by looking at county-wide impact). It would appear that consistency was lacking in that a decision should have been made to utilize either specific information or averages in making all determinations.

As a corporate citizen of the City of Reno, Harrah's has an interest in seeing the best mitigation possible for the benefit of not only the railroad but the City of Reno. Obviously, Harrah's business interests are severely affected, but more importantly the quality of life of the citizens of this community are impacted by the railroad's business

Letter to Ms. Kaiser October 16, 1997 Page 4

decision to merge with the Southern Pacific railroad. It seems blatantly unfair that decisions are being based on economic factors and yet the economic benefit impact is not considered for all sides.

The railroad, in its own documentation, has indicated that it will recognize \$750 million dollars of savings on an annual basis from the merger, yet when mitigation proposals such as grade separations or the depressed railway are considered, that they are deemed to have too much of an economic impact on the railroad to be considered.

Harrah's Reno shares the interest of the other citizens of Reno in seeing a fair and effective process completed through the mitigation study. For the reasons highlighted in the City's official comments document, Harrah's believes that this has not occurred, and urges the Surface Transportation Board to take a more critical hard look at the process and the analysis which led to the conclusion that increased train speed is the primary mitigation to be recommended in regard to this merger and its impact on the City of Reno. When Harrah's as a business has an adverse impact on the community in which it operates, it is expected to compensate the community for that impact. It is difficult to understand why the railroad, who has the economic ability and will reap the greatest economic benefits of this merger, is not being required to do the same. Thank you for your opportunity to comment and should you have any further questions about my comments, please do not hesitate to contact me at (702) 788-3647.

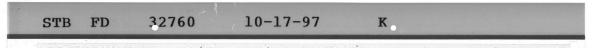
Very truly yours,

James D. Rogers Senior Vice President and General Manager Harrah's Reno

/frr

rr.ltr

cc: Hector Mon Senator Harry Reid Senator Richard Bryan Charles McNeely Mayor Jeff Griffin





BOB MILLER, Governor

DEPARTMENT OF TRANSPORTATION

1263 S. Stewart Street Carson City, Nevada 89712

October 14, 1997

Office of the Secretary Case Control Unit Finance Docket No. 32760 Surface Transportation Board 1925 K Street, NW, Room 700 Washington, DC 20423-0001

UP/SP Merger-Reno Mitigation Study Preliminary Mitigation Plan-Comments

Attn: Elaine K Kaiser Chief, Section of Environmental Analysis Environmental Filing - Reno ENVIRONMENTAL

Dear Ms. Kaiser,

The outcome of the City of Reno's Mitigation of the UP/SP Merger will affect NDOT's Railroad Safety Program. The following comments are provided in regards to elements of the plan.

Tier 1 Recommendations (improvements mandated by the STB)

Increased Train Speeds

The train speed is regulated by the class of track as determined by the Railroad. Since the State does not regulate train speeds, our comments have been restricted to operation of existing warning devices and other human factors.

The approach speeds of the trains provide the necessary warning time for higher speeds. According to the UPRR, the proposed circuitry has already been installed for all crossings impacted by the higher speeds. The automatic warning devices compensate for changes in speed. Traffic signal preempt timing is automatically adjusted for those traffic signals close to the tracks.

Reaction time for vehicle and pedestrian trespassers (those who choose to violate the warning devices) will be reduced. Preventing the opportunity for these occurrences is addressed in other areas of the plan.

Office of the Secretary October 14, 1997 Page 2

Train location video displays

Video displays and detection may ultimately facilitate signal coordination which could reduce congestion and related traffic crashes. The displays could also warn pedestrians of the oncoming trains in some areas. However, without enforcement, the safety benefits may not be achieved.

Cameras and Monitors showing Rail Line

These devices could be utilized to enforce right-of-way violations. Enabling legislation will be required but has been successful in Southern California. Providing lighting and signing to dissuade trespassers should also be considered. Again, without enforcement pedestrians will continue to take risks in front of oncoming trains.

Four-Quadrant Crossing Gates at Nine Locations

The proposed FRA criteria for four quadrant gates include median barriers. Median barriers were not proposed by the City since traffic flow on Third St. and Commercial Row will be inhibited, to the detriment of casinos and their valet parking services. Additionally, the proposed FRA regulations preclude foul-quadrant gates when preemption for traffic signals exists. The regulations do allow for regular gates with median barriers. This will be less expensive and require no additional maintenance.

The concept of preventing vehicles from bypassing the warning devices with gates is good but four quadrant gates are not acceptable in many of the suggested locations.

Pedestrian Crossing Gate Skirts

The pedestrian gates were installed under the Railroad Safety Program. Like all material installed under this program, NDOT maintains authority over the use and disposal of the property. The skirts will add weight that could run down the emergency battery system in the gates. Battery operation is required by the FRA, which would be extremely expensive with heavy gates. Pedestrians ride the gates when they ascend. There is space for pedestrians to walk between the gates and the fence. Gates only serve as a warning, not a blockade. The skirts will not improve this. The bizarre pedestrian behavior, captured on video and presented to the STB, demonstrated that skirts will be ineffective. Educational billboards and active enforcement are more likely to have an impact.

Electronic Warning Signs for Pedestrians

This is an enhancement for pedestrian safety but will have a minimal impact on pedestrian behavior.

Office of the Secretary October 14, 1997 Page 3

Pedestrian Grade Separations

It is questionable whether the available right-of-way will allow for the construction of "effective" overpass or underpass pedestrian facilities at the suggested locations. Escalators and elevators would be required to meet ADA requirements. Proper design and location will encourage pedestrian use only by restricting access to the roadway.

Tier 2 Recommendations (not mandated by the STB)

More costly solutions, such as the depressed train way, will eliminate safety problems. Grade separations need to be addressed. Whenever grade separations are constructed, they should occur with the closure of adjacent crossings. The possibility of closures is never mentioned in this study. In the past, the City was reluctant to close even the least used crossing.

The national policies all indicate closure of crossings that are close together with low ADT. Crossings suggested for closure in the City of Reno include:

Sage St. (1,500 ADT)	Needs to be closed if the Sutro St. grade separation is constructed.
Vine St. (4,000 ADT) Washington St. (2,000 ADT) Ralston St. (4,000 ADT) West St. (4,700 ADT)	Likely candidates for closure if grade separations are constructed at Keystone Ave. and Arlington St.

Evans Ave. is not currently an open crossing. The City obtained permission from the PSC, to open an at-grade crossing at this location. A grade separation is not proposed for this location. If a grade separation is not built, an at-grade crossing should not be opened.

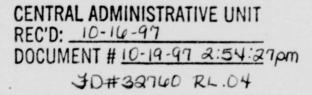
The proposals for closures will be extremely unpopular, but it is inappropriate for them not to at least receive consideration. Closures, combined with grade separations will eliminate most train horn noise in downtown, without instituting a whistle ban, which requires installation of medians, etc. There are no crashes where there are no at-grade crossings.

Sincerely,

Aim Gallegos, PE Chief Safety Engineer Administrator, NDOT Railroad Safety Program

JAG:dmg





NAAN

10-7-97

To the STR.

My name is Jeffrey Wyman, I am A life time resident of Reno Nevada. I am writing this letter because I am very concerned about the railroad impact on Reno, and your Mitigation plan.

1. I would like to know how someone could suggest increasing the speed of the trains as An answer to the problem, this is Outrageous, to make A Dangerous situation even more Dangerous.

2. I have heard very little talk about the noise pollution created by the trains, the Reno Truckee Meadows has somewhat of A bowl effect between the mountains, and much of the path the train takes threw Reno is near residential Homes, And when this plain gets up to full speed we will have A train on An Average of every 45 Minutes, and the engine and Obnoxious train whistle carries 2 and 3 miles from the track, and we would be enduring this 24 hours A day, even know you can hear the whistle at four in the mourning.

3. We must have A Environmental Impact Statement to see the real effect on our community, Reno is A beautiful place to live, it is not some industrial zone.

Your thoughtful consideration on this matter would be greatly appreciated.

Signature,

Jeffrey Wyman PO Box 33323 Reno NV. 89533

-) effrey higman

ENVIRONMENTAL





GENERAL COUNSEL

400 Seventh St., S.W. Washington, D.C. 20590

October 16, 1997

Attention: Elaine K. Kaiser Chief, Section of Environmental Analysis Environmental Filing - Reno

Dear Ms. Kaiser:

Office of the Secretary Case Control Unit

Finance Docket No. 32760 Surface Transportation Board

1925 K Street, N.W. Room 700

Washington, D.C. 20423-0001

Pursuant to the directions of the Section of Environmental Analysis in the abovereferenced proceeding, enclosed berewith are an original and ten copies of the Comments the United States Department of Transportation in this matter. Please date-stamp the additional copy so that the messenger may return it to the Department.

Respectfully submitted,

Paul Samuel Smith

Paul Samuel Smith Senior Trial Attorney

Enclosures

DOCUMENT

DOT-5 DOT-5 DECEND OCT 1 6 1997] MAIL MANAGEMENT STB [7]

Before the SURFACE TRANSPORTATION BOARD Washington, D.C.

UNION PACIFIC CORPORATION, UNION PACIFIC RAILROAD COMPANY AND MISSOURI PACIFIC RAILROAD COMPANY -- CONTROL AND MERGER --SOUTHERN PACIFIC RAIL CORPORATION, SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP. AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

Finance Docket 32670

RENO MITIGATION STUDY PRELIMINARY MITIGATION PLAN

Comments of the UNITED STATES DEPARTMENT OF TRANSPORTATION

Introduction

The Surface Transportation Board ("STB" or "Board") in this proceeding approved the consolidation of the Union Pacific Railroad Company ("UP") and the Southern Pacific Transportation Company ("SP"), subject to a number of conditions. Decision No. 44, August 12, 1996. One condition directed a staff unit of the STB, the Section of Environmental Analysis ("SEA"), to conduct studies to determine whether additional mitigation measures would be appropriate to address further the environmental impacts of merger-related increases in train traffic on the City of Reno and Washoe County, Nevada. <u>Id</u>., Condition No. 22. The UP projected an increase in train traffic occasioned by the merger of 11.3 trains per day (from a pre-merger average of 12.7 through freight trains per day to 24.0 post-merger). On September 15, 1997, SEA issued its Preliminary Mitigation Plan for the City of Reno and Washoe County ("PMP"). ¹

The United States Department of Transportation ("DOT" or "Department") hereby offers these comments on the Preliminary Mitigation Plan. DOT is concerned that the analysis used by the SEA in developing its proposed mitigation may not be based on a sufficiently robust sample of conditions in the Reno area to assure the adequacy of the mitigation process. We also wish to encourage continued dialogue between representatives of Reno and the UP. Finally, DOT understands that state law may require sounding of train horns in the interest of safety. However, the Federal Railroad Administration ("FRA"), an operating administration within DOT, will soon propose federal rules on this subject under a statutory mandate enacted in 1994. Under the circumstances the Department recommends that the STB retain jurisdiction until after the conclusion of the pending rulemaking on train horns; this would allow the Board to consider whether to impose additional conditions after the FRA has brought its expertise to bear on the subject. The Department further urges that these communities and the UP consider participation in the FRA's "Operation Respond" program to further mitigate the risks from potential hazardous material releases.

PRELIMINARY MITIGATION PLAN FOR THE CITY OF RENO AND WASHOE COUNTY

I. Environmental Impacts on Reno and Washoe County

As more fully discussed below, for Reno and Washoe County the PMP considered the environmental impacts of the UP/SP merger on eleven specific areas: traffic delay, emergency vehicle access, pedestrian safety, train-vehicle accidents, derailments (including the risk of the release of hazardous materials), train operations, biological resources, air quality, noise, vibration, and Native American issues. PMP at 6-1.

Traffic Delay

Among the significant impacts noted is the additional vehicular delay;

¹/ The Board also directed the SEA to conduct an assessment of merger-related impacts and mitigation measures with respect to the City of Wichita and Sedgwick County, Kansas. Our comments on this study are being filed simultaneously.

without any mitigation, SEA estimates an increase from 189 vehicle-hours per day under pre-merger conditions to 373 under post-merger conditions. Id. at 6-6. The average crossing blockage time would increase from 1.98 minutes for each of 5,740 vehicles to 2.01 minutes for each of 11,130 vehicles. Id. Coupled with increased train traffic, this would add to the potential delay faced by emergency vehicles, with attendant health and safety impacts. Id. at 6-6.

Pedestrian Safety

Pedestrian safety in the PMP primarily concerns pedestrian crossing of the tracks in downtown Reno. Crowds at periodic special events downtown would exacerbate possible safety impacts. <u>Id</u>. at 6-10.

Train-Vehicle Accidents

Using a methodology developed by FRA, the SEA estimates that the predicted frequency of train-vehicle accidents at all 16 grade crossings combined would increase from 0.795 accidents per year pre-merger to 0.952 accidents per year post-merger. <u>Id</u>. at 6-19.

Other Environmental Impacts

The SEA generally did not find the merger's other likely impacts to be severe. Air quality impacts were expected to result from increased locomotive emissions, due to increases in the number of trains, and from additional vehicular emissions, due to increased vehicular delay at grade crossings. Id. at 6-53. The increase in total emissions is very small (id. at 6-56, 6-57), except for oxides of nitrogen ("NOx"), which would grow from 1.63 percent to 3.08 percent of total county-wide emissions. Id. at 6-56. The SEA study team believes that the NOx increase due to the merger is unlikely, by itself, to result in a change from attainment to nonattainment under current air quality standards. Id. at 6-55. Within the Truckee Meadows nonattainment area, in which Reno is situated, carbon monoxide and particulate matter increases are small when compared to the overall emissions inventory, and they are not expected to have a detrimental impact on air quality within the air basin. Id.

II. Recommended Mitigation Measures

The Board directed the SEA to consider two different mitigation levels: one would redress adverse environmental impacts from the merger's increased train operations, and the means adopted for this purpose would be mandatory and funded solely by UP; the second would entail "more far-reaching" measures where implementation would be dependent upon a voluntary agreement among

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the parties. Decision No. 71 (April 15, 1997). The PMP contains both levels, denominated as "Tier I" and "Tier II." The Department takes no position on Tier II measures insofar as the Board will not impose them absent agreement among UP and the communities.

The SEA put forth a number of recommendations in its proposed Tier I Mitigation Package (Table 8.4.4-1, PMP at 8-19 through 8-22), addressing each of the previously noted significant areas, except noise. Proposed requirements include increasing train speed (requiring improved track and train movement controls), improving communications to better coordinate emergency responses, discontinuing the practice of adding "helper" locomotives in the Woodland Avenue area, installing pedestrian crossing gate "skirts" at certain sites, installing four-quadrant crossing gates (extending across two lanes of traffic on both sides of the track) at nine locations, instituting safety education and training programs, consulting with Native Americans, constructing two pedestrian grade separations in downtown Reno (and conducting prehistoric and historic surveys during their construction), installing additional equipment to detect potential train defects, establishing a community advisory panel, and issuing quarterly status reports. PMP at 8-19 through 8-22.

III. Noise Impacts

The SEA's evaluation indicates that the noise impact from the additional trains in Reno will increase from 31 to 44 the number of noise-sensitive receptors subject to Ldn of 65 dBA or greater. ² PMP at 6-43; Table 6.2.9-3. The number of casinos and hotels subject to Ldn of 65 dBA or greater is expected to increase from 34 to 61. <u>Id</u>.

The PMP notes that, "[t]he overwhelming majority of noise generated by rail operations in Reno is that which emanates from warning horns located on the locomotives." <u>Id</u>. at 8-28. The recommended mitigation package does not include any measures designed to reduce this noise, however, because of various legal and safety concerns. Nevada law requires the sounding of a bell or whistle at least 80 rods (1320 feet) from a highway-rail crossing. Nev. Rev. Stat. Ann. § 705.430 (1991). Moreover, although federal regulations do not currently specify when warning devices are to be used, they do require that locomotives be

²/ "Ldn" is the day-night average sound level or the average noise levels in a 24 hour period; "dBA" is the term for decibel; a "receptor" is considered to be a discrete structure with people inside on a regular basis, such as a school, residence, hospital, church, etc. <u>Id</u>. at 6-40.

equipped with audible warning devices that provide a warning of 96 dBA at 100 feet in front of the locomotive. 49 C.F.R. § 229.129. Recognizing that state laws and railroad operating rules generally specify use of the horn as a warning at highway-rail crossings, the Environmental Protection Administration's Railroad Noise Emission Standards exclude horn noise from limitations at the perimeter of railroad property. 49 C.F.R. § 201.10.

The SEA also correctly notes that, pursuant to 1994 statutory requirements (49 U.S.C. § 20153), FRA is now preparing proposed rules that would require that train horns be sounded when approaching and going over public highway-rail crossings. PMP at 8-29. Exceptions will be proposed for "quiet zones" where "supplementary safety measures" compensate for loss of the train horn as a warning device, but the final shape of those exceptions will be determined through the rulemaking process. The SEA suggests that when these regulations are issued, officials within Reno and Washoe County will have the opportunity to apply to the FRA to establish "quiet zones" and other alternatives to sounding horns. <u>Id</u>.

Finally, the SEA quotes the Board's view, expressed in Decision No. 44, that "any attempt significantly to reduce noise levels at grade crossings would jeopardize safety, which we consider to be of paramount importance." PMP at 8-28. As a consequence, the SEA did not seek to reduce merger-related noise impacts because any decrease in the sounding of horns would lead to an increase in safety risk. DOT agrees that a reduction in this particular noise, whether in loudness or duration, may have a negative impact on safety under existing circumstances.

We also appreciate the difficulties facing the SEA and the Board on this subject: the most noteworthy source of train noise in Reno is required to continue in the interests of safety. In these circumstances DOT believes that the STB should not now reach a final decision on this point, but should retain jurisdiction of at least this aspect of the instant proceeding until FRA completes its impending rulemaking. Once FRA has assessed the evidence, arguments, and alternatives relating to the creation of quiet zones, its final decision should clarify the extent to which such zones may be available to mitigate the noise at issue here. At that time, SEA can assess the cost and effectiveness of any options provided for establishing quiet zones in the subject communities and make recommendations to the Board. Since the noise impacts at issue are a direct consequence of the merger, assuming the actions required to implement quiet

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zones meet the standards established in Decision 44, UP should be responsible for funding such improvements, unless the cost of such modifications unduly interferes with UP's right to conduct business and provide rail freight service to its customers. PMP at 8-3. Although the Department understands the desire of the Board, the UP, and the communities to resolve this issue expeditiously, the fact that the Board retained oversight of the entire proceeding for five years indicates that in a matter of this complexity, a rapid resolution of all problems is not always possible.

IV. Additional Recommendations

Operating more trains through a corridor increases the risk of a derailment, absent other measures. The percentage of cars carrying hazardous materials through the Reno and Washoe County areas is anticipated to remain at the current level of 3.3 percent, and therefore as the total number of such cars rises, the risk of a derailment and subsequent release of hazardous materials is expected to increase post-merger. <u>Id</u>. at 6-24. The SEA estimates that the risk of a hazardous materials release in the corridor between Truckee, California, and Fernley, Nevada (which includes the rail line through Reno), increases from 0.02514 per year to 0.03650, or an expected release every 27.4 years post-merger compared to every 39.8 years pre-merger. <u>Id</u>. at 6-27. The PMP also notes that a number of the system-wide mitigation measures ordered by the Board in Decision No. 44 address concerns about the increased risk of derailments and subsequent releases of hazardous materials.

Although the increased risk is still slight, the potential risk to endangered fish species and other impacts of a release lead the Department to suggest that the City of Reno and Washoe County join with the UP as participants in "Operation Respond." This FRA program is designed to reduce the impact of accidental releases of hazardous materials through an improved information system, which provides fire and police officials quick, accurate information on the correct contents of rail and motor vehicles, as well as information on emergency procedures. FRA will provide technical assistance to the parties in this area, as needed.

The Department is concerned about a number of issues that have been raised about the accuracy of the analysis on which the choice of mitigation measures is based and on the adequacy of the coordination process that was used in preparing the PMP. We believe that in a matter where such serious public

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health and safety concerns are raised, a careful review of the study, including the adequacy of the limited observations conducted to predict the potential health, safety, and delay impacts, and a broader examination of mitigation options is warranted. We urge that SEA address the issues raised to assure the citizens of Reno that the <u>UP/SP</u> merger will not casuse them harm.

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V. Conclusion

The Department appreciates the difficulty facing SEA in providing a comprehensive mitigation analysis in a limited time period. In the interests of safety and community viability, we urge the SEA to expand the study to assure that it meets all the concerns of the citizens of Reno. We further urge the Board to encourage constructive discussions between the parties and to facilitate an agreement satisfactory to all. The Department stands ready to assist SEA or the Board by providing additional information on the SEA's recommendations and our suggestions, and by offering DOT's expertise to review safety impacts of the measures recommended in the PMP.

Respectfully Submitted

Rusalind A Frege

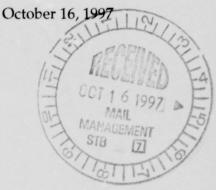
ROSALIND A. KNAPP eputy General Counsel





GENERAL COUNSEL

400 Seventh St., S.W. Washington, D.C. 20590



Office of the Secretary Case Control Unit Finance Docket No. 32760 Surface Transportation Board 1925 K Street, N.W. Room 700 Washington, D.C. 20423-0001

DOCUMENT

ENVIRONMENTAL

Attention: Elaine K. Kaiser Chief, Section of Environmental Analysis Environmental Filing - Wichita

Dear Ms. Kaiser:

Pursuant to the directions of the Section of Environmental Analysis in the abovereferenced proceeding, enclosed herewith are an original and ten copies of the Comments the United States Department of Transportation in this matter. Please date-stamp the additional copy so that the messenger may return it to the Department.

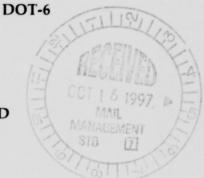
Respectfully submitted,

al Samuel Smith

Paul Samuel Smith Senior Trial Attorney

Enclosures

ENVIRONMENTAL



Before the SURFACE TRANSPORTATION BOARD Washington, D.C.

UNION PACIFIC CORPORATION, UNION PACIFIC RAILROAD COMPANY AND MISSOURI PACIFIC RAILROAD COMPANY -- CONTROL AND MERGER --SOUTHERN PACIFIC RAIL CORPORATION, SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP. AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

Finance Docket 32670

WICHITA MITIGATION STUDY PRELIMINARY MITIGATION PLAN

Comments of the UNITED STATES DEPARTMENT OF TRANSPORTATION

Introduction

The Surface Transportation Board ("STB" or "Board") in this proceeding approved the consolidation of the Union Pacific Railroad Company ("UP") and the Southern Pacific Transportation Company ("SP"), subject to a number of conditions. Decision No. 44, August 12, 1996. One condition directed a staff unit of the STB, the Section of Environmental Analysis ("SEA") to conduct studies to determine whether additional mitigation measures would be appropriate to address further the environmental impacts of merger-related increases in train traffic on the City of Wichita and Sedgwick County, Kansas. <u>Id</u>., Condition No. 23. The UP projected an increase in train traffic occasioned by the merger of 5.6 trains per day (from a pre-merger average of 4.0 through freight trains per day to 9.6 post-merger). On September 15, 1997, SEA issued its Preliminary Mitigation Plan for the City of Wichita and Sedgwick County ("PMP").¹

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The United States Department of Transportation ("DOT" or "Department") hereby offers these comments on the Preliminary Mitigation Plan. DOT is concerned that the analysis used by the SEA in developing its proposed mitigation may not be based on a sufficiently robust sample of conditions in the Wichita area to assure the adequacy of the mitigation process. We also wish to encourage continued dialogue between representatives of Wichita and the UP. Finally, DOT understands that state law requires sounding of train horns in the interest of safety. However, the Federal Railroad Administration ("FRA"), an operating administration within DOT, will soon propose federal rules on this subject under a statutory mandate enacted in 1994. Under the circumstances the Department recommends that the STB retain jurisdiction until after the conclusion of the pending rulemaking on train horns; this would allow the Board to consider whether to impose additional conditions after the FRA has brought its expertise to bear on the subject. The Department further urges that these communities and the UP consider participation in the FRA's "Operation Respond" program to further mitigate the risks from potential hazardous material releases.

PRELIMINARY MITIGATION PLAN FOR THE CITY OF WICHITA AND SEDGWICK COUNTY

I. Environmental Impacts on Wichita and Sedgwick County

As more fully discussed below, for Wichita and Sedgwick County the PMP considered the environmental impact of the merger in three broad categories encompassing a total of ten specific areas: Safety (including traffic delay, public transit delay, emergency vehicle access, pedestrian safety, train vehicle accidents and derailments, and the risk of the release of hazardous materials), Air Quality (in terms of total county-wide emissions and localized carbon monoxide concentrations), and Noise (from passing trains and associated vibrations). PMP at 6-1.

Safety

¹/ The Board also directed the SEA to conduct an assessment of merger-related impacts and mitigation measures with respect to the City of Reno and Washoe County, Nevada. Our comments on this study are being filed simultaneously.

There are 26 major roadways in the communities crossed at grade by the subject UP rail line. <u>Id</u>. at 6-3 The PMP identified these crossings as the points most likely to suffer vehicular traffic delays as well as other safety-related consequences as the result of merger-based increases in rail operations. <u>Id</u>. at 6-3. In the absence of any mitigation, the SEA calculated that the merger would produce the following quantitative impacts:

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Traffic delays -- an additional 192.79 vehicle-hours per day. Id. at 6-5.

Public transit delays -- an additional 5.22 person-hours per day. Id. at 6-7.

Average emergency vehicle crossing delay -- an additional 0.5 minutes per vehicle. <u>Id</u>. at 6-10.

Total crossing blockage -- an additional 9.7 hours per day. Id. at 6-12.

Train-vehicle accidents -- an additional 0.3 accidents per year. Id. at 6-16.

Derailments -- an additional .248 per year. Id. at 6-21.

The primary safety concern identified is the potential risks to the 259 school children who cross the tracks to reach elementary schools. <u>Id</u>. at 6-14.

Air Quality

The PMP projected increases in emissions from locomotives, due to the greater number of trains, and from motor vehicles, due to the increases in time that grade crossings would be blocked by trains. <u>Id</u>. at 6-23. The increase in emissions arising from the merger is less than one percent of total County-wide emissions. <u>Id</u>. Since the communities comfortably meet the current National Ambient Air Quality Standards ("NAAQS"), this increase would not jeopardize public health or welfare. <u>Id</u>. at 6-24-25.

II. <u>Recommended Mitigation Measures</u>

The Board directed the SEA to consider two different mitigation levels: one would redress adverse environmental impacts from the merger's increased train operations, and the means adopted for this purpose would be mandatory and funded solely by UP; the second would entail "more far-reaching" measures where implementation would be dependent upon a voluntary agreement among the parties. Decision No. 71 (April 15, 1997). The PMP contains both levels,

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denominated as "Tier I" and "Tier II." The Department takes no position on Tier II measures insofar as the Board will not impose them absent agreement among UP and the communities.

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The SEA put forth a number of requirements in its proposed Tier I Mitigation Package (Table 8.4.5-1, PMP at 8-13), addressing each of the previously noted areas, except noise. Proposed requirements include a recommended increase in train speed (requiring improved track and train movement controls), elimination of crew changes for through trains, improved communications to better coordinate emergency responses, installing automatic grade crossing gates where there are now flashing lights, installing fences and pedestrian crossing gates at certain sites, safety education and training for schools and businesses near the tracks, installing train defect detectors, and the establishment of a community advisory panel and quarterly status reports. <u>Id</u>.

III. Noise Impacts

The SEA's evaluation of the proposed Tier 1 Mitigation Package indicates that the noise from the additional trains in Wichita will increase from 295 to 434 the number of noise-sensitive receptors subject to Ldn of 65 dBA or greater. Id. at 6-27.² The PMP notes that "[t]he overwhelming majority of noise generated by rail operations is that provided by warning horns for safety purposes" and that "[u]nlike other adverse environmental impacts, train horn noise is a deliberately created annoyance." Id. at 8-9. The recommended mitigation package does not include any measures designed to reduce this noise, however, because of various legal and safety concerns. The State of Kansas requires trains to give an audible warning (air whistle) at least four times beginning at least 80 rods (1320 feet) from the crossing. Kan. Stat. Ann. § 66-2,120 (1992). Moreover, although federal regulations do not currently specify when warning devices are to be used, they do require that locomotives be equipped with audible warning devices that provide a warning of 96 dBA at 100 feet in front of the locomotive. 49 C.F.R. § 229.129. Recognizing that state laws and railroad operating rules generally specify use of the horn as a warning at highway-rail crossings, the Environmental Protection Administration's Railroad Noise Emission Standards

²/ "Ldn" is the day-night average sound level or the average noise levels in a 24 hour period; "dBA" is the term for decibel; a "receptor" is considered to be a discrete structure with people inside on a regular basis, such as a school, residence, hospital, church, etc. <u>Id</u>. at 6-25, 26.

exclude horn noise from limitations at the perimeter of railroad property. 49 C.F.R. § 201.10.

The SEA also correctly notes that, pursuant to 1994 statutory requirements (49 U.S.C. § 20153), FRA is now preparing proposed rules that would require that train horns be sounded when approaching and going over public highway-rail crossings. PMP at 8-9. Exceptions will be proposed for "quiet zones" where "supplementary salety measures" compensate for loss of the train horn as a warning device, but the final shape of those exceptions will be determined through the rulemaking process. The PMP notes that when these regulations are issued, officials within Wichita and Sedgwick County will have the opportunity to apply to the FRA for alternatives to sounding horns. Id.

It is thus clear that the SEA did not seek to reduce merger-related noise impacts because any decrease in the sounding of such horns would lead to an increase in safety risk. DOT agrees that a reduction in this particular noise, whether in loudness or duration, may have a negative impact on safety at this time.

We also appreciate the difficulty facing the SEA and the Board on this subject: the most noteworthy source of train noise in Wichita is required to continue in the interests of safety. In these circumstances DOT believes that the STB should not now reach a final decision on this point, but should retain jurisdiction of at least this aspect of the instant proceeding until FRA completes its impending rulemaking. Once FRA has assessed the evidence, arguments, and alternatives relating to the creation of quiet zones, its final decision should clarify the extent to which such zones may be available to mitigate the noise at issue here. At that time, SEA can assess the cost and effectiveness of any options provided for establishing quiet zones in the subject communities and make recommendations to the Board. Since the noise impacts at issue are a direct consequence of the merger, assuming the actions required to implement quiet zones meet the standards established in Decision 44, UP should be responsible for funding such improvements, unless the cost of such modifications unduly interferes with UP's right to conduct business and provide rail freight service to its customers. PMP at 8-2. The Department understands the desire of the Board, the UP, and the communities to resolve this issue expeditiously, but the fact that the Board has retained oversight of the entire proceeding for five years indicates that in a matter of this complexity, a rapid resolution of all problems is not always possible.

IV. Additional Recommendations

Operating more trains through any rail corridor increases the risk of a derailment, absent other measures. The SEA estimates that the risk of a derailment in the Wichita area increases as a result of the merger from 0.186 per year to 0.434 per year, and that the risk of a hazardous material release caused by a derailment increases (in terms of releases per year) from 0.003 to 0.0105. PMP at 6-21 and 6-22. The PMP notes that a number of the system-wide mitigation measures ordered by the Board in Decision No. 44 address concerns about the increased risk of derailments and subsequent releases of hazardous materials.

Although the increased risk is slight, the Department suggests that the City of Wichita and Sedgwick County join with the UP as participants in "Operation Respond." This FRA program is designed to reduce the impact of accidental releases of hazardous materials through an improved information system, which provides fire and police officials quick, accurate information on the correct contents of rail and motor vehicles as well as information on emergency procedures. FRA will provide technical assistance to the parties in this area, as needed.

The Department is concerned about a number of issues that have been raised about the accuracy of the analysis on which the choice of mitigation measures is based and on the adequacy of the coordination process that was used in preparing the PMP. We believe that in a matter where such serious public health and safety concerns are raised, a careful review of the study, including the adequacy of the limited observations conducted to predict the potential health, safety, and delay impacts, and a broader examination of mitigation options is warranted. We urge that SEA address the issues raised to assure the citizens of Wichita that the <u>UP/SP</u> merger will not casuse them harm.

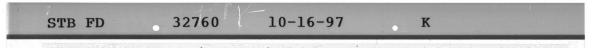
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V. Conclusion

The Department appreciates the difficulty facing SEA in providing a comprehensive mitigation analysis in a limited time period. In the interests of safety and community viability, we urge the SEA to expand the study to assure that it meets all the concerns of the citizens of Wichita. We further urge the Board to encourage constructive discussions between the parties and to facilitate an agreement satisfactory to all. The Department stands ready to assist SEA or the Board by providing additional information on the SEA's recommendations and our suggestions, and by offering DOT's expertise to review safety impacts of the measures recommended in the PMP.

Respectfully Submitted

ROSALIND A. KNAPP Deputy General Counsel



BEFORE THE SURFACE TRANSPORTATION BOARD



Finance Docket No. 32760

UNION PACIFIC CORPORATION, UNION PACIFIC RAILROAD COMPANY AND MISSOURI PACIFIC RAILROAD COMPANY -- CONTROL AND MERGER --SOUTHERN PACIFIC RAIL CORPORATION, SOUTHERN PACIFIC TRANSPORTATION COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, SPCSL CORP. AND THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

CITY OF RENO'S MOTION FOR WAIVER OF SERVICE REQUIREMENT RENO MITIGATION STUDY

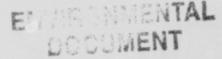
ENVIRONMENTAL DOCUMENT

Paul H. Lamboley 1020 Nineteenth Street, NW Suite 400 Washington, DC 20036-6105 Telephone: 202-496-4920 Facsimile: 202-293-6200

Patricia A Lynch, City Attorney Michael K. Halley, Deputy City Attorney Reno City Hall 490 South City Street Reno, Nevada 89501 Telephone: (702) 334-2050 Facsimile: (702) 334-2420

October 16, 1997

Counsel for The City of Reno



MOTION FOR WAIVER OF SERVICE REQUIREMENTS FOR COMMENT PURPOSES

The City of Reno, hereby moves for waiver of service requirements of 49 C.F.R. § 1104.12(a) for purposes of Comment related to the "Reno Mitigation Study" ordered in Decision No. 44. By waiver request, the City of Reno seeks authorization to limit service to counsel of record for the Union Pacific/Southern Pacific (UP/SP) applicants,¹ for the reason that there are no other parties of record (POR) who have interest or participate in the Reno Mitigation Study.

The Board has previously granted similar waiver requests. See Decision Nos. 45 and 70.

Dated this 16th day of October 1997.

Paul W.Lamboley 1020 Nineteenth Street, NW Suite 400 Washington, DC 20036-6105 Telephone: 202-496-4920 Facsimile: 202-293-6200

Patricia A Lynch, CityAttorney Michael K. Halley, Deputy City Attorney Reno City Hall 490 South City Street Reno, Nevada 89501 Telephone: (702) 334-2050

Counsel for The City of Reno

¹ Union Pacific Corporation is referred to as UPC. Union Pacific Railroad Company (UPRR) and Missouri Pacific Railroad Company (MPRR) were formerly referred to collectively as UP. On January 1, 1997, MPRR merged into UPRR, <u>see</u> Decision No. 67, slip op. at 1 n.3; and, for the period beginning January 1, 1997, the acronym "UP," as used in this motion, shall be understood to refer to UPRR.

Southern Pacific Rail Corporation is referred to as SPR. Southern Pacific Transportation Company (SPT), St. Louis Southwestern Railway Company (SSW), SPCSL Corp. (SPCSL), and The Denver and Rio Grande Western Railroad Company (DRGW) are referred to collectively as SP. UPC, UP, SPR, and SP are referred to collectively as applicants. See Decision No. 44,

slip op. at 7 n.3. Common control was consummated September 11, 1996.

Certificate of Service

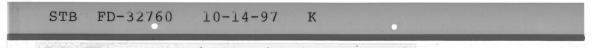
This is to certify that I have this <u>by</u>day of October, 1997, served a copy of the foregoing Motion for Waiver of Service Requirement, Reno Mitigation Study via the most expeditious means first-class mail, postage prepaid on:

Paul A Cunningham Richard B. Herzog James M. Guinivan Harkins Cunningham 1300 Nineteenth Street, NW Washington, DC 20036

Counsel to Southern Pacific Rail Corp. Southern Pacific Transportation Co. St. Louis Southernwestern Railway Co. SPCSL Corp. and The Denver and Rio Grande Western Railroad Co. Arvid E. Roach, II J. Michael Hemmer 1201 Pennsylvania Avenue, NW P.O. Box 7566 Washington, DC 20044-7566

Counsel to Union Pacific Corp. Union Pacific Railroad Co., and Missouri Pacific Railroad Co.

amboley



ENVIRONMENTAL DOCUMENT

CENTRAL ADMINISTRATIVE UNIT REC'D: Oct 14, 1997 DOCUMENT # 10-16-97 2 51.33pm 51)#32760 RL.04

Oct. 9, 1997

To: Surface Transportation Board From: M. Lee Dazey, Citizen Alert

Comments on the Preliminary Plan for the U.P. Merger at Public Hearing in Reno, Nevada

Citizen Alert is a statewide grassroot organization working on nuclear issues in Nevada. Let it go on record today that Citizen Alert stands opposed to the recommendation of this board that U.P trains be simply sped up to minimize the impacts of the increased number of trains upon service providers, commuters and air quality. Given the toxic nature of a large percentage of the trains through Reno, which will double or triple as a result of the merger, and U.P.'s declining safety record, this recommendation is sheer folly and will increase the likelihood of a serious accident. When we drive near elementary schools, do we avoid hitting a child by speeding past the school? No, we slow down to 15 miles per hour.

Heavy criticism fell upon Union Pacific recently, after 7 fatalities in 3 months occurred with U.P. trains. After an investigation by the Federal Railroad Administration, in which 57 % of the locomotives inspected were found to be defective; supervisors had ordered crews to move trains with defective equipment; employees had been told not to report defects or injuries; and dispatchers and managers had given conflicting instructions that could have resulted in head-on collisions, the FRA arrived at the following conclusion, " U.P had a fundamental breakdown in basic railroad operating procedures and practices, essential to a safe operation."

Certainly, as the federal board which oversees the merger of U.P and S.P., these facts should not be overlooked when looking at risks and impacts of the merger. Just because U.P. is a preexisting railroad company with trains through Reno, they shouldn't be outside of scrutiny by this board. In our opinion, U.P.'s track record doesn't warrant them to increase their trains through town.

Union Pacific is the railroad company whose trains will carry high level nuclear waste from foreign reactors next Spring through our community. The rail runs runs parallel to 79 miles of the Truckee River, the single source of water for 300,000 people in Washoe County alone and hundreds of farmers, in the Lahontan Valley. The Truckee is the source which empties Theo Pyramid Lake, traditional homelands to the Paiute Nation whose culture is based upon the lake and the ancient cul ul fish.

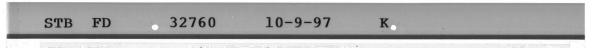
According to the Department of Energy's own study, a serious accident which results in a release of a nuclear cask's contents in an urban area, would contaminate a 42-square mile area, cost billions of dollars, and take several years to clean up. A spill in the Truckee or an explosion or fire near the Truckee in which radionuclides fell-out into the river would be difficult, if not impossible to clean.

Union Pacific is a dangerous railroad company, which is why in another report, the city of Reno was identified as the most at-risk urban area in the U.S. for a major accident involving hazardous material affecting large populations of people. The Good Neighbor Project's report, entitled, "Hazardous Materials on the Rails, A Case Study of the Union Pacific Reailroad, The Nation's Largest Chemical Hauler stated that at any given moment, a hazardous spill, could directly harm 60,000 residents and tourists in proximity to a downtown spill.

Accidents can and do routinely happen, sometimes more routinely, as in the case of U.P. But we are the people who would have to live with a toxic spill. It is our duty to say no to this board's solution to the U.P. merger in order to avert the kind of accident that occured near Dunsmuir in which a train derailed containing chemicals and spilled tons of chemicals into the Sacramento River, a river once full of life, now sterile.

The fact that this board came up with a finding that no serious human impacts would result from the merger speaks again for the need for a more comprehensive environmental review, one that deals with U.P.'s track record and one that actually deals with the hazardous contents of these trains, in other words an Environmental Impact Study (EIS.) What these trains transport is "merger related" and should have not been tossed out by the STB in the backround study.

To merely address the number of trains in isolation of the environment and the community in which the trains will move is irresponsible and leads us to believe that this Board is more concerned with cutting costs to U.P. rather than to the costs to the toxpayers, who would have to pay to clean up a nuclear spill. It's a plain case of corporate welfare.





EN

VIRONMENTAL UP/SP Merger

Reno Mitigation Study

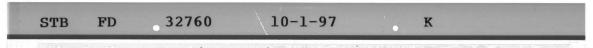
BECEIVED OCI - 9 1997 MANAGEMENT STB

Please use this page to submit your comments about the Reno Mitigation Study. Please be as specific and concise as possible. Identify page numbers where applicable. We thank you for your interest in the UP/SP Merger Reno Mitigation Study.

Name Katherine Kershaw Phone/Fax 702/825-9382
Organization & Title (if applicable)
Address 2900 Pinebough Ct
City/State/Zip_Reno NV 89509
Please mail completed comment sheet to: Office of the Secretary, Surfact Transportation Board, Finance Docket 32760, 1925 K Street, NW, Room 700 Washington, DC, 20423, Attention: Elaine Kaiser, Chief, Section of Environmental Analysis.
Because of the profound effect the Railwood mergen
will have on the Trucker Meadows, it is important
that a full EIS be conducted at the expense of
those who will profit by this change - i.e., the U.P.
The quality of life will charge regardless of whither tracks
are submered or not - obrions by this is the best alternative
however. Our primary economy rests in sourtown Pens,
& the attractiveness of this area must be antheosel - 38 fast
moving trains per day will not exactly and ambiance , y
the increased risk of train accidents is of great concern.
Such accidents "affect not only our sown town econory but
very likely the health of the river and subsequently the
health of all living sownstream.
(aver)

(I'necessary please continue your comments on the other side)

While the mergen is a fast we have to deal with, it is necessary to make the most of an unfortunate situation - 10% have the Els, let's see up contribute at least 1/2 of the cast to lower the tracks - let's sel UP take into consideration the many lives affected by their protitable mergen.



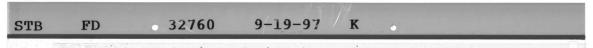


ENVIRONM Comment Sheet DOCUMENT UP/SP Merger

T UP/SP Merger Reno Mitigation Study

Please use this page to submit your comments about the Reno Mitigation Study. Please be as specific and concise as possible. Identify page numbers where applicable. We thank you for your interest in the UP/SP Merger Reno Mitigation Study.

Name GEOLGE WORDBRY Phone/Fax 702-827-2073
Organization & Title (if applicable)
Address 4620 SORDI COURT
City/State/Zip RENO, NEUADA 89502-6234
Please mail completed comment sheet to: Office of the Secretary, Surfact Transportation Board, Finance Docket 32760, 1925 K Street, NW, Room 700 Washington, DC, 20423, Attention: Elaine Kaiser, Chief, Section of Environmental Analysis.
9-26-97
DEAR MS KAISER:
I AM A LONG TIME RESIDENT OF REND, NEURDA AND I MUCH
PREFER THE TRANSCONTINENTAL RAILWAY IN A TUNNEL RATHER THAN
A TRENCH. I HAVE BEEN AT THIS CONCEPT FOR SEVEN YEARS. I'VE
TALKED TO ALL KINDS OF PEOPLE IN ALL WALKS OF LIFE, AND
MOST PREFISE A TUNNEL FOL THE TRAIN. I KNOW THE COST
WOULD BE FIVE FOLD FOR A TUNNEL, BUT MUCH MORE
PLEASING FOR REND AND ALL CONCERNED.
PLEASE TAKE MY SUGGESTION UNDER CONSIDERATION
THIS TUNNEL WOULD CREATE LONG TERM WELL PAYING JOBS FOR
All. Sincerely
(If necessary please continue your comments on the other side)





September 19, 1997

MEMORANDUM

- Ann Newman, Director's Office TO : Office of Proceedings
- Section of Environment A White FROM
- SUBJECT : Finance Docket cases reviewed from September 1 through September 19, 1997.

RECOMMENDATION: No conditions.

The following proceedings are exempt from environmental reporting requirements under 49 CFR 1105.6(c) and from historic reporting requirements under 1105.8(b). Theses transactions will have no effect on historic properties.

FD	33451
FD	33452
FD	33453
FD	33458
FD	33455
FD	33454
FD	33459
FD	33456
FD	33444
FD	33461
FD	33463
FD	33460
FD	32760

Secretary's Office (Rm 711) cc: SEA Chron V. Rutson D. White



ENVIRONMENTAL SURFACE TRANSPORTATION BOARD DOCUMENT Washington, DC 20423

Section of Environmental Analysis

CENTRAL ADMINISTRATIVE UNIT REC'D: <u>8-22-97</u> DOCUMENT # 8-22-97 9:39:41 am

August 21, 1997 JU#32760 RC.03

Reno Mitigation Study Task Force Members and Alternates:

RE: Public Review Process for Preliminary Mitigation Plan

The purpose of this memo is to update you on the public review process which is planned for the UP/SP Merger Preliminary Mitigation Plan (PMP) for Reno. This letter also serves as a response to the August 8th letter submitted to SEA by several task force members regarding the review for the PMP.

Please note the following important dates:

Week of September 15, 1997:	Planned date for SEA release of PMP
Wednesday, October 8, 1997: (1:00 p.m.)	Reno Task Force meeting to receive Task Force comments on the PMP
Thursday, October 9, 1997: (specific times to be determined)	Two public meetings on the PMP, one meeting in the afternoon and one in the evening

SEA has developed this schedule to specifically respond to task force requests for sufficient time to review the PMP prior to the task force meeting. This schedule allows approximately two to three weeks for task force members to review the PMP prior to the task force meeting. In addition, the task force meeting on October 8th is the date of a previously scheduled task force meeting, so hopefully this will maximize participation. Please note that no task force meeting will be held in September. There will be a 30 day review period for the PMP from the date of service in the week of September 15th. Regarding the public meetings, SEA is scheduling two public meetings to maximize attendance by residents and interested parties. This approach worked well for the public meetings held in February.

We have received an inquiry as to whether SEA will be distributing the PMP by electronic mail. SEA will distribute the PMP in printed form and will not distribute it electronically.

SEA is planning broad distribution of the actual PMP. In this past week, Mark Demuth has supplied SEA the latest, updated version of the City of Reno's *Environmental Mitigation Stua*, *Interested Parties/Contact List*. SEA appreciates receiving the updated list and will be using it as part of its master distribution list for the PMP. Page 2 Reno Mitigation Study Task Force Members and Alternates August 21, 1997

SEA would also like to emphasize that the PMP will contain SEA's preliminary staff recommendations. SEA will consider the public comments received on the PMP and then release a Final Mitigation Plan (FMP) for public review. After the review process is complete on both the preliminary and final mitigation plans, the Surface Transportation Board will review and consider all comments prior to making its final decision, which is currently scheduled for February, 1998.

Thank you for your continued interest in the study.

Sincerely yours,

Plaine K. Kaiser

Elaine K. Kaiser Chief, Section of Environmental Analysis

cc: Charles McNeely, Reno City Manager Dave Mansen Kay Wilson

Merri Belaustegui-Traficanti Deputy City Attorney City of Reno PO Box 1900 Reno, NV 89505

.....

Paula Berkley Paula Berkley and Associates 908 Nixon St. Reno, NV 89509

Steve Bradhurst 4720 Canyon Drive Reno, NV 89509

Bob Burn Chairperson Nevadans for Fast & Responsible Action 77 Pringle Way Reno. NV 89520

Tim Crowley Executive Assistant Nevada Governor's Office Capitol Complex Carson City, NV 89710

Mark Demuth Principal MADCON Consultation Services 280 Island Ave., Ste. #1602 Reno, NV 89501-1806

Galen Denio Commissioner Nevada Public Service Commission 727 Fairview Drive Carson City, NV 89710

Dean Diederich Principal Planner Washoe Co. Dept. of Community Dev. 1001 E 9th Street, PO Box 11130 Reno, NV 89520

Larry Farr Fire Marshall Reno Fire Department PO Box 1900 Reno. NV 89505

John Frankovich Nevadans for Fast & Responsible Action PO Box 2670 Reno, NV 89505 Tom Gribbin Pyramid Engineers 330 Crampton St. Reno, NV 89502

C. Joseph Guild Attorney Union Pacific Railroad 432 Court Street Reno, NV 89501

Michael E. Halley Deputy City Attorney City of Reno PO Box 1900 Reno, NV 89505

J. Michael Hemmer Attorney Covington & Burling 1201 Pennsylvania Ave., NW Washington, DC 20044

Colleen Henderson Environmental Management Associates 100 West Grove Street, Ste. #100 Reno, NV 89509-4026

Scott L. Hutcherson Traffic Manager Eagle-Picher Minerals, Inc. 6110 Plumas St. Reno, NV 89509

Greg Krause Planning Manager Regional Transportation Commission 600 Sutro St. Feno, NV 89512

Raymond B. Lang Government & Public Affairs Officer Amtrak Intercity Rail Service 210 S. Canal St., Ste. #540 Chicago, IL 60606

Jack Lorbeer Principal Planner Regional Transportation Commission 600 Sutro St. Reno, NV 89512

David Loring Dermody Properties 1200 Financial Blvd. Reno, NV 89502 Chuck Lowden Fire Chief Reno Fire Department PO Box 1900 Reno, NV 89505

Ken Lynn Economic Dev Authority of Western Nevad: 5190 Neil Road Reno, NV 89509

Arlan Melendez Director of Reno-Sparks Indian Colony Reno-Sparks Indian Colony, Tribal Council 98 Colony Road Reno, NV 89502

Randy Mellinger Community Development Director City of Sparks 431 Prater Way Sparks, NV 89431

Bill Osgood Chair Reno Downtown Improvement Association 1 E. First St., Ste. #1409 Reno, NV 89501

Rob Pyzel Senior Planner Planning & Community Development 431 Prater Way Sparks, NV 89431

Tom Robinson Deputy Chief Reno Police Department PO Box 1900 Reno, NV 89505

Ron Scolaro Amtrak 530 Water St., 5th Floor Oakland, CA 94607

Steve Varela City Engineer/Maintenance Director City of Reno Public Works 450 Sinclair Reno, NV 89501

Richard Vitali Associate General Counsel Harrah's Reno 219 N. Center St. Reno, NV 89501 Bob Webb Community Coordinator Washoe Co. Dept. of Comp. Planning 1001 E. 9th Street Reno. NV 89520

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Craig L. Wesner Manager, Engineering Services Nevada Public Service Commission 727 Fairview Drive Carson City, NV 89710

Jim Weston Chief of Police Reno Police Department PO Box 1900 Reno. NV 89505

Harry York Executive Director Reno-Sparks Chamber of Commerce 405 Marsh Ave. Reno. NV 89509



11:43:39an CENTRAL ADMINISTRATIVE UNIT つうしてき #0カ REC'D: <u><u><u>Uugust</u> 8'1,^{1'}</u> DOCUMENF#<u>8-21-41</u></u> N1.05

4. August 27, 1997 McNeely, Teamsters want Reno included in Fed probe of railroad

By Mike Handerson RENO GAZETTE-JOURNAL

Reno City Manager Charles McNeely and the national Tcamsters Union called Tuesday for the Federal Railroad Administration to make Reno part of its investigation of Union Pacific Railroad.

Sixty federal and state railroad inspectors began a nationwide probe this week in the wake of Union Pacific accidents which have killed seven people in three crashes in the past three months and five other railroad employees since January.

Reno was not among the top frouble-spots targeted in the investigation to be completed in seven to 10 days.

Wethinkweoughttobeincluded." McNeely said. "We have raised the trate on Los Angeles, Chicago, Denissue of safety from day one."

The railroad, he said, has been insensitive to Reno's concerns that plans to at least double the 14 trains a day through town pose a safety risk to residents, sourists and the Truckee River. source of much of the area's

drinking water. Officials also fear a track blockage would hamper emer-. gency response.

The Teamsters director of corporate affairs said Tuesday that Reno must be included in the safety study.

The problem is acute if hazardous waste were to somehow be involved in an accident in Reno." said Bart Navlor. "We'reveryconcerned that in the Reno situation UP is deploying its considerable lobbying resources to delay the important solution that needs to take place

"I can't taink of anything more pressing in the UP network than Reno. One has to simply come to Reno and see where that train is to realize that this is not tolerable."

The probe is expected to concenver, Kansas City, Mo .: Omaha, Neb .: Pocatello, Idabo: Portland, Ore : and Houston. San Antonio and Fort Worth, Texas.

Among recent accidents:

A crew reportedly failed to set the brakes property on an unmanned

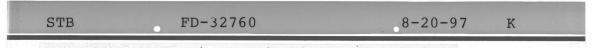
train in Fort Worth Aug. 20. The train rolled mine miles and slammed into a westbound freight train. killing two locomotive engineers.

A freight carrying hazardous materials failed to stop at acrossing in Rossville, Kan., July 2 and smashed into another train, killing acrewmember and injuring the conductor. Twenty cars from both trains derailed and more than 1,000 people left their homes for more than six hours.

On June 22. (we UP freight trains collided head-on in the middle of the night in Devine. Texas, and exploded in a huge fireball. Four people were killed.

"The FRA's investigations of the recent collisions on the Union Pacific Railroad have led us to believe there are critical safety deficiencies present at some locations and immediate action across the UP system is necessary." said FRA Administrator Jolene Molisons.

"We have nothing to hide and look forward to them coming." Union Pacific spokesman Mark Davissaid.



STATE OF CALIFORNIA - THE RESOURCES AGENCY



OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942896 ACRAMENTO 94296-0001

(916) 653-6624 FAX: (916) 653-9 ENVIRONMENTAL August 11, 1997 DOCUMENT

Reply to:

Elaine K. Kaiser, chief Section of Environmental Analysis Surface Transportation Board WASHINGTON D.C. 20423-0001

CENTRAL ADMINISTRATIVE UNIT REC'D: Qualist 20,97 DOCUMENT # 8-25-97 12:33:21 pm H.03 JD#32760

201997

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ICC970725A

MAIL

MANAGEMENT STB

Subject: Union Southern Pacific Railroad Merger, Lassen County

Dear Ms. Kaiser:

Thank you for consulting me in accordance with 36 CFR 800, implementing regulations for Section 106 of the National Historic Preservation Act (NHPA).

The Surface Transportation Board (STB) submittal requests that I concur with the following determinations:

- Three historic archaeological sites (trinomials pending) are (1) not eligible for the National Register of Historic Places (NRHP);
- Five prehistoric sites will be evaluated against NRHP (2) criteria if it is determined they cannot be avoided during implementation of the undertaking. If activities will occur within site boundaries NRHP eligibility evaluations will be conducted and effects determinations will be reassessed in consultation with the State Historic Preservation Officer. Total avoidance of the sites will constitute a no effect determination.

Based on the information provided, I do not object with the preceding determinations. None of water towers surveyed in this submittal appear to be eligible for the NRHF. The towers were constructed after Southern Pacific Railroad Company (SP) took over the Nevada, California, and Oregon Railroad (NCO) in 1927. They have no associations with the NCO in its historic period of significance (1880 - 1930), and are not outstanding examples of architectural or engineering design or function. An archaeological monitor will ensure that activities are not carried out within the prehistoric sites. If such activities are necessary they will be conducted after additional consultation under 36 CFR 800.

.Ms. Kaiser August 11, 1997 Page two

Thank you for considering historic properties during project planning. If you have questions, please do not hesitate to contact Steven Grantham of my staff at (916) 653-8920.

sincerely, U Gentberg

Ms. Cherilyn E. Widell State Historic Preservation Officer



UNION PACIFIC RAILROAD COMPANY

UNION PACIFIC 1416 DODGE STREET ROOM 1230 OMAHA: NEBRASKA 68179-1230 (402) 271-3595 FAX: (402) 271-4048



JERRY DAVIS

PRESIDENT AND CHIEF OPERATING OFFICER

August 14, 1997

The Honorable Bob Knight Mayor of Wichita City Hall - 1st Floor 455 North Main Wichita, KS 67202

CENTRAL ADMINISTRATIVE UNIT REC'D: 8-20-97 DOCUMENT # 8-22-97 12:02:30pm HD#32760 WG.01 4W.

Mr. Tom Winters County Chairman 525 No. Main, Suite 320 Wichita, KS 67203

Re: Finance Docket No. 32760, Wichita Mitigation Study

Dear Mayor Knight and Chairman Winters:

Thank you for your letter dated August 8, 1997, which I found promising. I appreciate its constructive tone and straightforward presentation of City and County concerns, without attacks on our motives. In the hope of continuing the dialogue that you have opened, I will respond in kind.

Union Pacific understands that one of your primary concerns is the extent to which rail operations might expand after the time period covered by our merger traffic predictions. We are, and always have been, willing to meet with you to discuss ways to address this concern, in connection with discussions about reasonable mitigation measures to offset the effects of our proposed operating plan.

It may be useful to describe our perspectives on this concern. Had there been no UP/SP merger, Union Pacific would have been able to increase train service via Wichita without any mitigation costs, other than those resulting from normal negotiations between railroads and governmental entities about grade crossings and grade separations. This would have allowed us to respond competitively, and without extraordinary costs, to changes in demand for rail transportation to and from the Wichita area and central Kansas, which naturally flows through Wichita. We do not know whether this traffic will expand, as we always hope, or decline, but we need to be able to hand!e it if the market gives us the opportunity.

The increased traffic resulting from the merger is a different matter, because the Surface Transportation Board has authority over railroad mergers and reviews them for environmental effects. Our revised operating plan, which reflects our best judgment and was developed in part to reduce the effects of the merger on Wichita and Sedgwick County, increases train traffic beyond what Union Pacific would have operated as a separate railroad by about five and one-half trains per day. (Some coal shippers are now criticizing us for this change in their comments to the STB.) This is the traffic that the STB apparently will ask us to mitigate. We are quite willing to talk with you about how to deal with a future increase -- which I do not expect to happen -- in the number of merger-related trains through Wichita beyond that level. I know that you are concerned about Powder River Basin coal shippents, which could be the focus of those talks.

I hope that this provides a useful framework for discussions. I look forward to receiving your upcoming proposal and to meeting with you in a constructive review of our mutual interests.

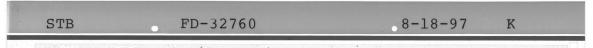
Sincerely



Copies:

Governor Bill Graves Lt. Governor Gary Sherrer Congressman Todd Tiahrt Senator Pat Roberts Senator Sam Brownback City Manager Chris Cherches County Manager Bill Buchanan Elaine Kaiser, SEA Michael J. Dalton, SEA Steve Kalish. Attorney for Wichita-Sedgwick County

- 2 -



, AUG 18 '97 01:43PM PUBLIC AFFAIRS MGMT

Kansas Department of Eransportation

ENVIRONMENTAL August 5, 1997 DOCUMENT

CENTRAL ADMINISTRATIVE UNIT REC'D: 8-18-97 DOCUMENF # 8-21-97 11:01:50am -30++32760 WE.15

MEMORANDUM TO: Gary Sherrer Lieutenant Governor

FROM: Secretary E. Dean Carlson, Kansas Department of Transportation

REFERENCE: IDOT Staff review of the STB's mitigation study team crossing delay report

Attached for your review is a copy of my staff's analysis of the STB's mitigation study team crossing delay report. Using an independent analysis, KDOT staff came to the same general conclusions as the STB's mitigation study team. Though the calculated vehicle hours of delay KDOT derived differ from those developed by the STB's mitigation team, speeding the UP trains to 30 mph will reduce the vehicle crossing delays caused by the increased number of trains in Wichita.

My staff would be available to discuss their conclusions with you and the rest of the Governor's Task Force at your convenience.

Attachments

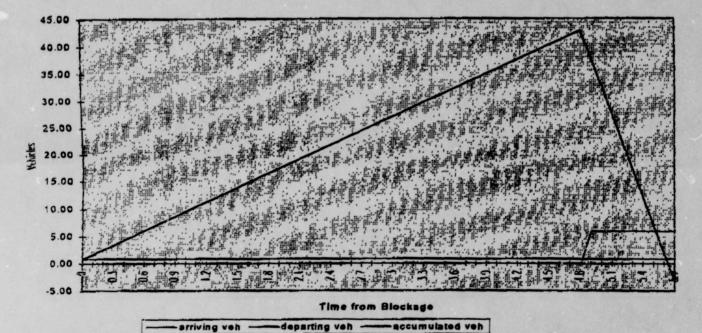
CC: Mayor Bob Knight, City of Wichita Chairman Tom Winters, Sedgwick County Task Force Members Bill Stockwell, Wichite Metropolitan Area Planning Department - w/a Phil Braum, DeLeuw Cather - w/a; P.2/6

Per the request of the Governor's Railroad Task Force, KDOT has reviewed the data (information provided to the Mitigation committee in April, May, and June, 1997) presented by the Surface Transportation Board's Study Team regarding the Union Pacific/Southern Pacific Railroad merger impacts on vehicle traffic in Wich and the mitigation thereof. The KDOT has used the data provided by the STB study team and information provided by the City of Wichita. To develop an independent analysis, KDOT used traffic engineering assumptions to reach its conclusions. Some of these assumptions may be the reason the vehicle hours of delay KDOT has calculated are different from those provided by the STB study team. While the calculated vehicle hours of delay derived by KDOT and those derived by STB are different, the general conclusion on the mitigation is the same' that is, the vehicle hours of delay will be mitigated if the railroads can operate their trains at the proposed mitigated speeds of 30 mph.

Analysis Procedure:

The first step in the analysis was to assimilate the input data necessary to calculate amounts of time trains will block the roadways and the vehicles wanting to use those roadways by hour by location. Data that was missing and had to be derived or assumed for the analysis included: speeds for local trains (assumed a flat 8 mph for all locals), additional time pre- and post-blockage for gates and/or stop and start time (assumed 0.5 minutes per train), mitigated through train speed (converted 12 mph sections to 30 mph and prorated all other locations), distribution of post merger trains (used exiting distribution of through trains), vehicle distributions at each location (used an average from several locations near the crossings), vehicle distribution within the hour (assumed uniform). Also, some of the consultant's graphics were used to estimate values for input into the analysis. A simplifying assumption that all trains were of the average length and were running at the average speed was incorporated in the analysis.

The analysis used the arrival rate of vehicles, the amount of time the trains blocked the road, and the departure rate of the vehicles once flow was reestablished. The graphic below depicts a sample calculation:



Sample Graphic for 7am at Central

Using 7 am at Central Avenue	
arriving vehicles per minute	8.75
departing vehicles per minute	60.00
blockage time for thru trains	4.78

Associated equations include:

Maximum vehicles in the queue = arriving rate " blockage time

Total time of impact per train = (blockage time * departing time)/(departing rate - arriving rate)

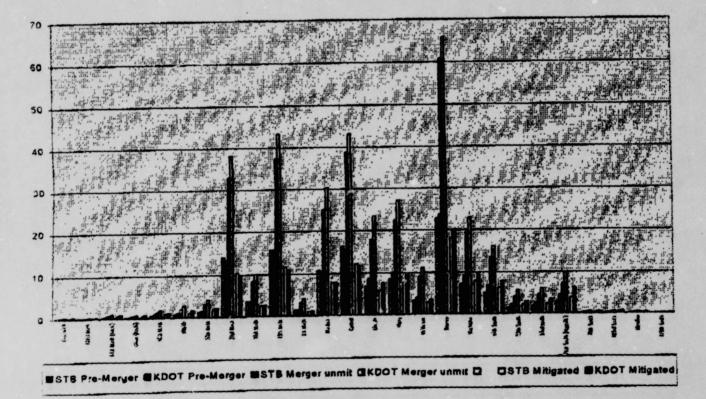
Vehicles affected = arriving rate * total time

Total vehicle time = 1/2 arriving rate * blockage time2 + 1/2 arriving rate * blockage time * (total time - blockage time) = (the area under the blue line]

Maximum vehicles in the queue Total time of impact per train Vehicles affected	41.83	
	5.60 minutes	
	48.97	
Total vehicle time	117.03 minutes	

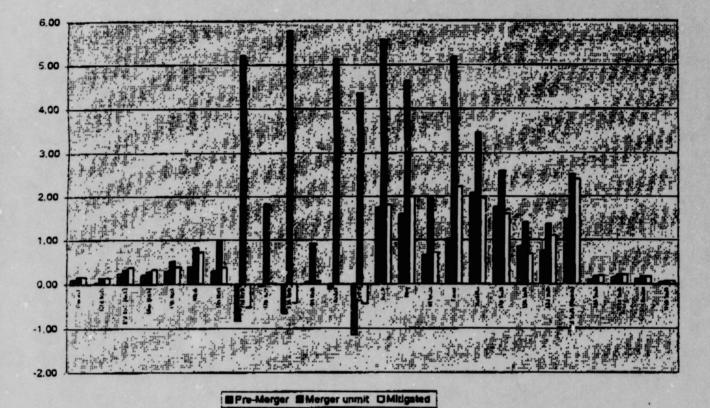
The calculation of total vehicle time was completed for each of the crossings for each hour of the day assuming one through and one local train per hour. The results of these hourty computations were multiplied by the likelihoods of the through and local trains in that hour and summed to get a total vehicle hours of delay for the location for a day.

Vehicle hours of delay were calculated this way for three scenarios (pre-merger, post merger unmitigated, and post merger mitigated) at each location. These values are compared to the values provided by the consultant in the graphics below.



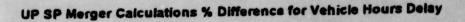
UP SP Merger Vehicle Hours Delay

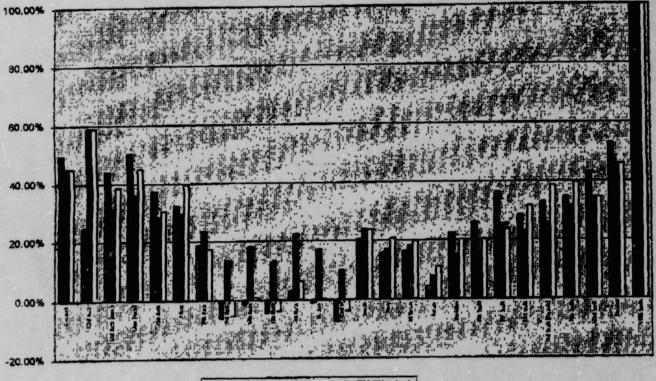
The previous figure (when blown up and examined) shows a comparable trend between the results provided by the consultant and the results generated by these equations and assumptions. While the total vehicle hours of delay are mitigated by the change in operating speeds, some crossing locations still indicate increased vehicle hours of delay over the pre-merger condition.



UP SP Merger KDOT Calcs - STB Calcs for Vehicle Hours Delay

The graphic above indicates these assumptions and procedures generally yield larger vehicle hours of delay that those given by the consultant, but once again the comparison is generally okay.





Pre-Merger Merger unmit CMitigated

This chart shows that the percentage differences between the consultants calculations and those derived here are fairly high. The greatest difference is at the extremes of the city. This may be strongly related to the inputs for local trains.

Conclusion:

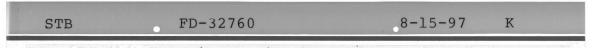
This analysis shows that an increase in train speed can offset the increase in the number of trains. The key to the accumulated vehicle hours of delay is based on the length of the vehicle queue. Because the vehicle queue is related to the square of the amount of time the road is blocked, the blockage time is more critical than the number of trains. As stated earlier, if the train speeds can be increased to 30 mph, the sum of the crossing delays will be less even though there are to be more trains.

AUG 18 '97 01:43PM PUBLIC AFFAIRS MGMT				
<u>Administrative</u> UP/SP M FAX TRAN	<u>ierger</u> IERGER ISMITTAL	URGENT		
DATE: 8-18-97 FROM: Olivia				
COMPANY: Public Affairs Management				
PHONE #: (415) 969-1446				
FAX #: (415) 291-8943				
SEA OFFICES CENTRAL UNIT FAX # (202) 565-9000 FAX # (202) 955-1436	DCCO (Washington, DC) FAX# (202) 775-3389	DCCO (San Francisco, CA) FAX# (415) 546-1602		
MIKE DALTON				
HAROLD MCNULTY				
OTHER:	FAX #:			
TRANSMITTING COVER PLUS 5 PAGE(S)				
Michelle - This wa	s sent direct	thy to Phil		
Braum- I'm sendino	you a copy	so it can		
be logged + processe	d Uhrongh '	the database.		
	Divia			

P.1/6

Wereing: This fax communication may contain information that is privileged or confidential. It is intended for the sole use of the individual or entity to whom it is addressed. If you have received this communication in error, please notify us immediately by telephone and return the original message via U.S. Melt. If you are not the intended recipient, you are nereby notified that any dissemination, distribution or copying of this communication is strictly prohibited.

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ENVIRONMENTAL BOARD DOCUMENT

SURFACE TRANSPORTATION BOARD Washington, DC 20423

Section of Environmental Analysis

CENTRAL ADMINISTRATIVE UNIT

DOCUMENT # 8-22-97 4:59:44 pm

August 14, 1997

RC. 03 JD# 32760

Reno Mitigation Study Task Force Members and Alternates:

Since the Reno Mitigation Study Task Force is not scheduled to meet during August 1997 because we are in the process of completing the Preliminary Mitigation Plan (PMP), I wanted to take this opportunity to update you on a few key items and provide you with copies of some recent correspondence.

SEA will be distributing the PMP to the Task Force, the City of Reno, and other interested parties in September 1997. Both 5. Task force meeting and a public meeting will be held after the release of the PMP. The dates for both of these meetings will be announced soon. Upon receipt and review of all comments submitted in response to the PMF, SEA will prepare a Final Mitigation Plan (FMP) for distribution to the public in December 1997. SEA will consider all comments received on the FMP in preparing its final recommendations to the Surface Transportation Board (Board).

I have enclosed a copy of a recent letter dated August 1, 1997 from the U.S. Department of Transportation (DOT) to Charles McNeely. This letter provides a good description of the role of both the DOT and the Board in relation to the ongoing mitigation study being conducted in Reno. Also enclosed is a copy of a letter dated July 9, 1997 from the Nevada State Office of the U.S. Department of the Interior, Fish and Wildlife Service (the Service) regarding endangered species in the Reno and Washoe County area. In page three of the letter, the Service concurs that the increased traffic from the UP/SP merger is not likely to adversely affect the Cui-ui and the Lahontan cutthroat trout as long as the train safety improvements are continued and the emergency response plan is implemented if needed.

Thank you for your continued participation in this mitigation study.

Sincerely,

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Elaine K. Kaiser Chief, Section of Environmental Analysis

Enclosure



THE SECRETARY OF TRANSPORTATION WASHINGTON, D.C. 20590

August 1, 1997

Mr. Charles E. McNeely City Manager City of Reno P.O. Box 1700 Reno, Nevada 89505

Dear Mr. McNeely:

I was pleased to meet with you on July 19, 1997, to discuss the impacts on the City of Reno from the merger of the Union Pacific and Southern Pacific Railroads. I was interested to learn of your assessment that a depressed trainway, estimated to cost approximately \$180 million, appears to offer the most viable, long-term approach to mitigating the effects of increased train traffic in your downtown. In that regard, you outlined the efforts you have made to cover the costs of that mitigation through direct negotiations with Union Pacific, communications with the Surface Transportation Board (STB), and by obtaining State legislative authority to finance the City's share. At that meeting, I offered to contact the STB and the Union Pacific Railroad regarding your concerns and to look into possible sources of federal funding assistance.

As a result of those contacts, I am informed that the STB has reaffirmed that its Preliminary Mitigation Plan for the Reno area will be released for comment in September 1997. We were advised that the Section of Environmental Analysis of the STB intends to conduct public meanings on the plan after is is released and will receive written comments, which will be considered in drafting the Final Mitigation Plan due for action by the Board by February 1998. We participated in the initial assessment of this issue as part of the general proceedings on the merger and continue to follow the STB's mitigation process closely. We intend to review the Preliminary Mitigation Plan when it is issued and will provide comments to the Board based on our review.

We also contacted officals at the Union Pacific Railroad. They have informed my staff that they are continuing to work with the STB's environmental staff in providing rail operating data for the Reno Preliminary Mitigation Plan and intend to provide comments on that plan. They indicated interest in resuming direct discussions with the City. With regard to the availability of additional funding assistance, I recommend that you discuss this with the Nevada Department of Transportation. As mentioned in your meeting here in Washington with the Federal Railroad Administration, funds from the Intermodal Surface Transportation Efficiency Act of 1991(ISTEA) may be used to support these mitigation projects. This could include funding from either the National Highway System, the Congestion Mitigation/Air Quality or the Surface Transportation Programs. State funds may also be available. As you are aware, the Nevada Department of Transportation together with your Metropolitan Planning Organization, the Regional Transportation Commission, play key roles in determining which transportation-projects receive ISTEA funding. The Federal Highway Division Office in Carson City, Nevada, stands ready to help facilitate discussions on this issue.

One matter that does concern me is that recent news reports appear to have gone beyond what we actually discussed on July 19. I refer specifically to speculation that I may intervene to mediate directly between you and Union Pacific, as you have now requested in your letter. This may, in part, stem from a misunderstanding of the respective roles played by the U.S. Department of Transportation (DOT) and the STB which, although nominally a part of DOT, is entirely independent. Congress has assigned the STB the authority to examine, condition, and approve proposals for rail mergers and under the National Environmental Policy Act to assess and mitigate adverse environmental impacts on communities like Reno that may result from a merger. The STB does this in a quasi-judicial process where the public as well as the parties with a direct stake in the outcome have access to the information being considered and have the opportunity to comment.

After contacting the STB and Union Pacific, as you requested, we have determined that direct intervention by the Department would be inappropriate while this matter is still pending before the Board. I want to assure you of DOT's commitment to assuring an equitable solution to this issue. However, it is necessary to await issuance of the STB's Preliminary Mitigation Plan to have a complete record on which to base our recommendations. Please be assured we will continue to remain involved and will continue to support appropriate mitigation.

Thank you again for the opportunity to meet and discuss this matter with you. If we can be of further assistance, please feel free to contact Assistant Secretary for Governmental Affairs Steven Palmer at (202) 366-4573 or Federal Railroad Administrator Jolene Molitoris at (202) 632-3114.

Sincerely,

Rodney E. Slau



United States Department of the Interior

FISH AND WILDLIFE SERVICE NEVADA STATE OFFICE 4600 KIETZKE LANE, SUITE 125C RENO, NEVADA 89502-5055

> July 9, 1997 File No. 1-5-97-I-281

Elaine K. Kaiser, Chief Section of Environmental Aralysis Surface Transportation Board 1925 K Street, N.W. Washington, DC 20423-0001

Dear Chief Kaiser:

Subject:

Informal Consultation on the Union Pacific/Southern Pacific Railroad Merger

The Fish and Wildlife Service received your June 24, 1997, letter regarding the merger of the Union Pacific (UP) and Southern Pacific (SP) railroads which will approximately double train traffic along the Truckee River and through the cities of Sparks and Reno. Your letter requests our concurrence that the proposed merger will not adversely affect the endangered cui-ui (*Chasmistes cujus*) and threatened Labortan cutthroat trout (LCT) (*Oncorhynchus clarki henshawi*) which spawn in the Truckee River and reside in Pyramid Lake downstream approximately 15 miles from the closest UP tracks. This material was submitted to us for informal consultation pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act).

The cui-ui was listed as endangered on March 11, 1967, without critical habitat (32 FR 4001). Cui-ui are large (up to 28 inches and 8 pounds), long-lived (40+ years) lake suckers endemic to Pyramid Lake and the Truckee River in Washoe and Storey Counties, Nevada. They are obligatory stream spawners, and each spring mature adults gather in a prespawning aggregate near the mouth of the Truckee River. Typically cui-ui occur in the Truckee River from March through June and may occupy the river at a minimum distance approximately upstream of Numana Dam. The actual spawning migration typically begins in either April or May, depending upon timing of spring runoff, river access, and water temperature, and generally spawning occurs over a 1 to 2-week period. Larval cui-ui can be expected in the river for

Elaine K. Kaiser, Chief

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approximately 30 days after the adult cui-ui have finished spawning. A more detailed account of the species' life history is provided in the revised Cui-ui Recovery Plan (Service 1992).

LCT are also obligatory stream spawners. Historically, populations of LCT in Pyramid Lake reportedly migrated over 100 miles up the Truckee River and into Lake Tahoe. Spawning generally occurs in riffle areas from April through July, depending on flow, elevation, photoperiod, and water temperature. To date, approximately 30 LCT have been passed upstream of Marble Bluff Dam. However, high water temperatures (above 60° F) in the lower Truckee River may preclude LCT eggs from hatching. LCT mature between 2 and 4 years of age and may live 5 to 9 years. Post-spawning mortality rates as high as 90 percent have been reported for LCT; consecutive year spawning is rare. An excellent account of the species' life history is provided in the Final LCT Recovery Plan (Service 1995).

The Surface Transportation Board's Section of Environmental Analysis maintains that an increase in train traffic will not appreciably increase the likelihood of an accidental hazardous material spill in the Truckee River. In a recent risk assessment conducted for them, it was reported that the risk of river contamination from rail transportation is once every 154.15 years. Additionally, there have been no catastrophic rail spills affecting the Truckee River in over the past 10 years. The only rail spills to require clean-up action were for those that did not result in contamination of the river. Since 1971, only 26 incidents have occurred along the Truckee River in California and Nevada, the most serious of which was a 40 gallon spill of hazardous material of which none entered the river. The information submitted suggests that based on the infrequency of derailments and the geography of the area, it is unlikely that hazardous material would enter the Truckee River from a rail accident.

To further reduce the likelihood of a hazardous material spill affecting the listed species found in the Truckee River, improved train safety actions have been enacted and an emergency response plan has been developed. Track and tank car inspections have been increased and improved. Hazardous material will be hauled in doubled steel drums. All signal crossing devices contain visible instructions designating an 800 number to be called if the device is malfunctioning. Every community that UP/SP operates through has been issued an emergency response number as part of their "Operation Respond" program. UP/SP has reallocated their hazardous material response personnel to those areas most in need. Lastly, UP/SP has begun replacing all rails with head-hardened rail on all mountain curves to further prevent derailments or accidents.

Elaine K. Kaiser, Chief

File No. 1-5-I-281

Based on the information provided in the letter, UP/SP Progress Reports (UP/SP-284, UP/SP-290, UP/SP-300), and the discussions with Harold McNoutly of Section Environmental Analysis, the Service concurs that the increase traffic from the UP/SP merger is not likely to adversely affect cui-ui and LCT as long as the train safety improvements are continued and the emergency response plan is implemented if needed. Therefore, formal consultation pursuant to section 7 of the Act is not required. In the unlikely event of a spill, consultation would be conducted under the emergency provisions for consultation as discussed in 50 CFR § 402.05.

Please contact Stephanie Byers at (702) 784-5227 if you have any questions or comments.

Sincerely,

allen R. Spister

Chester C. Buchanan Acting State Supervisor

LITERATURE CITED

Fish and Wildlife Service. 1992. Cui-ui (Chasmistes cujus) Recovery Plan. Second revision. Portland, Oregon. 47 pp.

Fish and Wildlife Service. 1995. Recovery Plan for the Lahontan Cutthroat Trout (Oncorhynchus clarki henshawi) (Salmonidae). Portland, Oregon. 103 pp.

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Reno Task Force Members

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Mr. Galen Denio Commissioner Nevada Public Service Commission 727 Fairview Drive Carson City, NV 89710

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Mr. Bill Osgcod Chair Reno Downtown Improvement Assoc. 1 E. First Street, Ste. 1409 Reno, NV 89501

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Mr. David Loring Dermody Properties 1200 Financial Blvd. Reno, NV 89502

Mr. Ken Lynn Economic Development Authority of Western Nevada 5190 Neil Road Reno, NV 89509

Mr. Randy Mellinger Community Development Director City of Sparks 431 Prater Way Sparks, NV 89431

Mr. Rob Pyzel Senior Planner Planning & Community Development 431 Prater Way Sparks, NV 89431

Mr. Ron Scolaro Amtrak 530 Water Street, 5th Floor Oakland, CA 94607 Mr. Steve Varela City Engineer/Maintenance Director City of Reno Public Works 450 Sinclair Reno, NV 89501

Mr. Bob Webb Community Coordinator Washoe Co. Dept. Of Comp. Planning 1001 E. 9th Street Reno, NV 89520

Mr. Jim Weston Chief of Police Reno Police Department P.O. Box 1900 Reno, NV 89505 Mr. Richard Vitali Associate General Counsel Harrah's Reno 219 N. Center Street Reno, NV 85501

Mr. Craig L. Wesner Manager, Engineering Services Nevada Public Service Commission 727 Fairview Drive Carson City, NV 89710

Mr. Harry York Executive Director Reno-Sparks Chamber of Commerce 405 Marsh Avenue Reno, NV 89509





ENVIRONMENTAL

DOCUMENT

Ms. Elaine Kaiser, Program Director, Legal Counsel Mr. Harold McNulty, Study Director Surface Transportation Board Section of Environmental Analysis 1925 K Street NW, 5th Floor Washington, DC 20423

REC'D: 8-15-97

RE: UP/SP Railroad Merger Preliminary Mitigation Study Report

CENTRAL ADMINISTRATIVE UNIT

JD#32760 RE.15 + R.

DOCUMENT # 8-20-97 4:22:30pm

Dear Ms. Kaiser and Mr. McNulty:

August 8, 1997

The undersigned Task Force members and alternates reiterate their collective concerns and seek reassurance regarding disclosure of information in a timely manner. In this regard, we request that we receive the Preliminary Mitigation Study on or before September 5, 1997 for anticipated discussion at the September 10, 1997 task force meeting.

This request is in response to the information we received from Kay Wilson and Dave Mansen at the July 9, 1997 task force meeting that task force members would have "ample time" to review the Preliminary Mitigation Study prior to the scheduled September 10, 1997 task force meeting. Accordingly, we would request expressed clarification that we will in fact receive the draft plan on or before September 5, 1997.

In the event this critical document is not received on or before September 5, 1997, the task force meeting currently scheduled for September 10, 1997 will have to rescheduled in order to adequately complete our review. If this is the case, the comment period should also be extended. Should either of you have any specific questions, please contact Mr. Mark Demuth at (702) 829-1126. Per Elaine Kaiser's instructions, we request that this letter be made part of the record in this matter. Ms. Elaine Kaiser Mr. Harold McNulty Surface Transportation Board August 8, 1997 Page 2 of 2

Respectfully Submitted,

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Merri Belaustegui-Traficanti Deputy City Attorney, City of Reno Manager's Office Representative

Steve Varela

City Engineer, City of Reno **Engineering Representative**

Mark A. Demuth MADCON Consultation Services Environmental Representative

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GAL Chief Jim Weston Reno Police Department, City of Reno

14 Steve Bradhurst

Reno Citizen Representative

Bill Osgood Reno Downtown Improvement Assoc. Business Community Representative

Bot Busis NFRA Representative

CC:

Charles McNeely, City Manager Jeff Griffin, Mayor Pierre Hascheff, Council Member At-Large Tom Herndon, Council Member Ward 1 Candice Pearce, Council Member Ward 2 Bill Newberg, Council Member Ward 3 Judy Pruett, Council Member Ward 4 Dave Aiazzi, Council Member Ward 5 Senator Harry Reid Senator Richard Bryan **Representative Jim Gibbons Representative John Ensign**

Mitail Halley

Michael Halley Deputy City Attorney, City of Reno Manager's Office Alternate

Tom Gribbin Pyramid Engineering **Engineering Alternate**

Cun Oudenon

Colleen Henderson Environmental Management Associates Environmental Alternation

Chief Larry Farr Reno Fire Department, City of Reno

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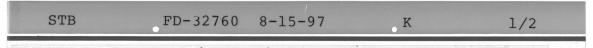
Richard Vitali Reno Citizen Representative

Harry York **Reno-Sparks Chamber of Commerce Business Community Alternate**

Franko **NFRA Alternate**



Ms. Elaine Kaiser Surface Transportation Board Section of Environmental Analysis 1925 K Street NW, 5th Floor Washington, DC 20423



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August 15, 1997

Elaine K. Kaiser Chief, Section of Environmental Analysis Surface Transportation Board 1925 K Street, N.W. Mercury Building Washington, D.C. 20423-0001

Re: Reno Mitigation Study

DOCUMENF # <u>8-19-97 4: 25:45pm</u> RE. 15 + R. JUH 32760

REC'D: 8-15-97

CENTRAL ADMINISTRATIVE UNIT

DOCUMENT

Dear Ms. Kaiser:

Enclosed for your consideration is a report prepared last year for Sierra Pacific Power Company regarding the risks of a hazardous materials incident in the Truckee River Valley. As you will see, the report concludes that the realistic risk of a spill from motor carriers on Interstate 80 are much greater than the risks of an incident caused by a train derailment, and the risk of a rail incident is modest indeed. These low levels of risk arise from lengthy segments of the transport corridor, far longer than the short segment through Reno.

Sincerely,

to Hammer

J. Michael Hemmer, Attorney for Union Pacific Railroad Company

Enclosure

MACKAY SCHOOL OF MINES

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Department of Geological Sciences/172 Reno, Nevada \$9557-0138 Ph. (702) 7\$4-6050 FAX (702) 7\$4-1833 3

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August 7, 1996

John Erwin Sierra Pacific Power Company 6100 Neil Road P.O. Box 10100 Reno, NV 89520-0400

Dear John:

Attached with this letter is an addendum to my final report. This addendum answers the question about risk posed to the Truckee River from transport of hazardous substances on the Southern Pacific Rail line, or Interstate-80, or U.S. 395. I will refer to this as total risk. In summary, the total risk to the Truckee River is as follows:

Ubstream of the CA/NV border:

1 contamination event every 30 years (total risk).

Downstream of the CA/NV border:

1 contamination event every 50.5 years (total risk).

Total risk reflects the risk from both hail and highway transport. These values suggest expected frequencies of contamination, regardless of the volumes of hazardous substances involved.

Should you have any questions regarding this addendum, please do not hesitate to contact me at 784-4244.

Yours truly, Carr

Addendum To:

Development of an Integrated Computer Platform for the Evaluation of Contamination Mitigation Scenarios along the Truckee River

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Risk of Transporting Hazardous Substances Adjacent to the Truckee River

A question has been raised regarding the total risk to the Truckee River from contamination by a hazardous substance released by an accident occurring on the Southern Pacific Rail Line, <u>or</u> Interstate-80, <u>or</u> U.S. 395. This addendum is written to answer this question.

In the analysis of probability, the probability of event A <u>OR</u> event B occurring is defined by the union of events A and B: P(AUB). The probability of the union of two events, A or B, is computed as:

 $P(AUB) = P(A) + P(B) - P(A \cap B)$.

The probability, $P(A \cap B)$, is the <u>intersection</u> of events A and B; that is, this is the probability of outcomes common to both A and B. If, however, events A and B are <u>mutually exclusive</u>, then $P(A \cap B)$ is equal to zero. In this case, $P(A \cup B)$ is computed simply as the sum, P(A) + P(B).

When analyzing the risk to the Truckee River posed by transport of hazardous substances along the Southern Pacific Rail line, Interstate-80, and U.S. 395, the valid assumption is made that accidents on any one of these transportation corridors are mutually exclusive of (have nothing to do with) accidents on the other transportation corridors. The only time this assumption is not valid is when an accident on one of these transportation corridors also causes an accident on another transportation corridor or corridors. Such a circumstance is deemed to be so rare that its influence on the analysis of risk to the Truckee River is insignificant. Therefore, with respect to the analysis of risk to the Truckee River from contamination by a hazardous substance, the probability, $P(A \land B)$, is determined to be zero (negligible).

This determination allows the following calculations to be made:

California, upstream of the CA/NV border:

. . .

Total Risk = P(contamination by rail) + P(contamination by I-80)

= 1/(80.8 years) + 1/(45.2 years)

= 1/30 years

That is, the total risk to the Truckee River upstream of the CA/NV border is one accident every 30 years causing contamination.

Nevada (Truckee Meadows), downstream of the CA/NV border:

Total Risk = P(contamination by rail) +

P(contamination by I-80) +

P(contamination by U.S. 395)

= 1/(154.75 years) + 1/(93 years) +
1/(383.5 years)

= 1/50.5 years

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That is, the total risk to the Truckee River downstream of the CA/NV border is one accident every 50.5 years causing contamination.

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DEVELOPMENT OF AN INTEGRATED COMPUTER PLATFORM FOR THE EVALUATION OF CONTAMINANT MITIGATION SCENARIOS ALONG THE TRUCKEE RIVER

Risk of Transporting Hazardous Substances Adjacent to the Truckee River

Author: James R. Carr Professor, Geological Engineering Department of Geological Sciences University of Nevada, Reno Reno, NV 89557

Reviewers: John Warwick Director, Hydrological Sciences Program Department of Environmental and Resource Sciences University of Nevada, Reno Reno, NV 89557

> Matthew Chesley Desert Research Institute Water Resources Center P.O. Box 60220 Reno, NV 89506

Presented to Sierra Pacific Power Company May, 1995

DISCLAIMER

Interpretations of data presented in this report pertain only to the potential for contaminating the Truckee River by an accident involving material classified as a hazardous substance. Although these data may additionally be useful, in general, for assessing risk to the public health, such an assessment exceeds the scope of this report.

Executive Summary a. Data Resources b. Summary of Report Findings c. Recommendations for Future Work d. Tables Exec-1 through Exec-6 Appendix A: Detailed Report 16 Other Appendices: Appendix B: Rail Accident Data (graphs) for California, upstream of the California/Nevada border Appendix C: Rail Accident for Nevada (entire state); tabular data for time period: 1975-1990. Appendix D: Highway accident data: I-80, CA/NV border eastward to Vista Boulevard; U.S. 395, Bower's Mansion cutoff northward to N. McCarran Total VMT data: I-80, CA/NV Appendix E: border eastward to Vista Boulevard; U.S. 395, Mill St. northward to Oddie Boulevard. Appendix F: Detailed Nevada rail accident data Appendix G: Hazardous substance transport by rail, February 28, 1996; Southern Pacific rail line.

Page

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Development of an Integrated Computer Platform for the Evaluation of Contaminant Mitigation Scenarios along the Truckee River

Risk of Transporting

Hazardous Substances Adjacent to the Truckee River

May, 1996

EXECUTIVE SUMMARY

A study was conducted to identify the risk to the Truckee River from contamination by a hazardous substance released during an accident on I-80, U.S. 395, or the Southern Pacific rail line. Data were collected from the following sources to aid the assessment of risk:

1. State of California, Public Utilities Commission: rail accident data for mileposts 106-228 (upstream of the California/Nevada border), Southern Pacific rail line;

 Nevada Bureau of Mines and Geology, University of Nevada,
 Reno: rail accident data for mileposts 229 - 263 (downstream of the California/Nevada border), Southern Pacific rail line;

3. State of Nevada, Department of Transportation: a) highway accident data, Interstate-80 from the California/Nevada border eastward to the Vista Boulevard exit; b) highway accident data, U.S. 395 from Bower's Mansion cutoff northward to N. McCarran Avenue; c) VMT data showing traffic volume on I-60, California/Nevada border eastward to Vista Boulevard; d) VMT data, U.S. 395, between Mill Street and the Oddie Boulevard exit; e) information describing the proportion of hazardous substances, by class, transported on Nevada highways;

4. Reno Gazette-Journal (quoting data from the Reno Fire Department): information describing the number of rail cars of particular hazardous substances transported daily along the Southern Pacific rail line. These data pertain to one specific date, February 28, 1996; herein, because no other information is available, these data are taken to be representative of the average daily transport of hazardous substances along the Southern Pacific rail line.

Using these data, values of risk were computed in two ways. First, maximum absolute risk was computed simply as the numerical product between the probability of having an accident and the probability of transporting a particular hazardous substance. Second, a minimum value of risk is computed by multiplying the maximum absolute risk by both the probability that an accident occurs at a physical location where contamination of the Truckee River is possible and the probability that an accident is severe enough to cause a release of a hazardous substance into the environment. These values of risk are summarized in Tables Exec-1, Exec-2, and Exec-3.

From these tables, it is evident that when an accident occurs involving a hazardous substance, the five (5) most likely substances to be involved (in order of decreasing likelihood) are: 1. sulfuric acid; 2. (tie) phosphoric acid, diesel fuel, and ammonium nitrate; 3. anhydrous ammonia; 4. sodium hydroxide; and

5. butyl ether. Eight (8) additional substances are equally likely, but are less likely than butyl ether: butane, calcium carbide, carbon disulfide, methyl alcohol, methyl ether, naptha, potassium hydroxide, and propane.

Summary of Report Findings:

Maximum Absolute Risk:

- rail cars carrying hazardous substances have a statistical certainty of an accident every:
 - a) 944 days (California; Truckee River upstream of the CA/NV border); this value does not appear to be consistent with information presented in Table Exec-1; information presented in this table shows actual probability values; the value

in Table Exec-1 for maximum risk probability for total chemical transport is 1.07E-03 accidents per day, the inverse of which is 934.6 days per accident by which the Truckee River is likely to be contaminated. This differs from the 944 day value only because values in Table Exec-1 are rounded to two places after the decimal (for convenience in designing Table Exec-1).

- b) 1300 days (Nevada; Truckee River downstream of the CA/NV border; all accident data);
- c) 4211 days (Nevada; Truckee River downstream of the CA/NV border; exclusive of accidents within the

Sparks, Nevada rail yard).

- highway vehicles carrying hazardous substances have a statistical certainty of an accident causing property damage every:
 - a) 157 days (I-80; anywhere adjacent to the Truckee River);
 - b) 2381 days (U.S. 395; in the zone between Glendale Avenue northward to I-80).

Actual Values of Risk

- 3) actual risk of contaminating the Truckee River from rail or highway accidents involving hazardous substances further depends on:
 - a) accident location;
 - b) accident severity (whether or not a release will occur caused by the accident);
 - c) type of hazardous substance involved.
- 4) including information for accident location and severity (acknowledging that this information is less precise than accident data and frequency of hazardous substance shipments) may suggest that risk:
 - a) rail transport: is as low, or lower, than a statistical certainty of 1 contamination event of the Truckee River every 29,500 days (80.8 years) for California, upstream from the CA/NV border;

- b) rail transport: is as low, or lower, than a statistical certainty of 1 contamination event of the Truckee River every 56,522 days (154.75 years) for Nevada, downstream of the CA/NV border;
- c) highway transport, I-80: is as low, or lower, than a statistical certainty of 1 contamination event of the Truckee River every 513.1 days (1.4 years) for California, upstream of the CA/NV border; but, this value assumes a probability of breach equal to 45% (0.45). This report demonstrates that the probability of breach is an important parameter for determining with fair precision the actual risk to the Truckee River of contamination from an accident involving hazardous substances. This parameter, however, has proven difficult to determine with certainty. Whereas accident data are readily available for rail and highway (Appendices B - F), these data are not comprehensive enough to allow probability of breach to be accurately determined. Therefore, probability of breach (an assumed rare event) is related to other events (probability that an accident causes injury, or death (a rare event)). For I-80, if probability of breach is related to the probability of a fatal accident, then actual risk is computed to be a statistical certainty of

1 accident every 16,491.6 days (45.2 years) that will contaminate the Truckee River;

- d) highway transport, I-80: is as low, or lower, than a statistical certainty of 1 contamination event of the Truckee River every 1057.2 days (2.9 years) for Nevada, downstream of the CA/NV border, assuming a probability of breach equal to 0.45; if probability of breach is chosen equal to 0.014, then actual risk changes to a statistical certainty of 1 accident every 33,982.7 days (93 years) that will contaminate the Truckee River;
- e) highway transport, U.S. 395: is as low, or lower, than a statistical certainty of 1 contamination event of the Truckee River every 5291 days (14.5 years) for the location where U.S. 395 crosses the Truckee River. This value assumes a probability of breach equal to 0.45. If, instead, a value of 0.017 is used, then the actual risk decreases to a statistical certainty of contamination of the Truckee River every 140,058.8 days (383.5 years).

Recommendations for Future Work:

1. This report clearly demonstrates the need to develop improved highway and rail accident data bases to better define the probability of breach (rupture) should an accident occur that affects a hazmat carrier. Analysis of actual risk primarily depends on accident frequency, total hazmat volume with respect to total traffic volume, location of an accident, and probability of breach should an accident occur. Data defining accident frequency, total hazmat volume, total traffic volume, and accident location are well developed in this report. The only parameter not well developed in this report is that for probability of breach.

2. Improved highway accident data are needed to define where accidents have occurred (milepost locations). This information is available in this report for rail, but not for highway. One question that arose in this report was the location of accidents on U.S. 395 in proximity to its bridge crossing of the Truckee River. Without information showing accident locations (mileposts), it is not possible to answer this question with the current data base (Appendix D). Therefore, analyses in this report assumed that accidents could occur anywhere on I-80 or U.S. 395; moreover, for a conservative analysis, all accidents were assumed to occur on U.S. 395 at the bridge crossing. 3. Accident data bases should be made comprehensive enough to enable a characterization of accident probability as a function of weather conditions; contamination of the Truckee River is more problematic in the summer, when water demand is higher, than during winter, when water demand is lower. Accident data used in this study are not sufficient to allow an assessment of variation in risk with weather [or seasonal] conditions.

Table Exec-1.	Summary daily risk of contaminating the Truckee River.
	Values show probability, per day, of having an accident
	upstream of the California/Nevada border.

	_	Risk Hazmat Rail Highway (I-80)							
Substance	Hazmat Class	Ra: Minimum	Maximum	Minimum	Maximum				
Ammonium Nitrate	9	5.09E-06	1.59E-04	0.30E-06	0.32E-04				
Anhydrous Ammonia	2	3.74E-06	1.17E-04	7.65E-06	8.04E-04				
Butane	3	0.35E-06	0.11E-04	0.30E-04	0.32E-02				
Butyl Ether	3	2.37E-06	0.74E-04	0.30E-04	0.322-02				
Calcium Carbide	4	0.35E-06	0.11E-04	7.23E-07	0.762-04				
Carbon Disulfide	3	0.35E-06	0.11E-04	0.30E-04	0.322-02				
Diesel Fuel	3	5.09E-06	1.59E-04	0.30E-04	0.322-02				
Methyl Alcohol	3	0.35E-06	0.11E-04	0.30E-04	0.322-02				
Methyl Ether	3	0.35E-06	0.11E-04	0.30E-04	0.322-02				
Naptha	3	0.35E-06	0.11E-04	0.30E-04	0.322-02				
Phosphoric Acid	8	5.09E-06	1.59E-04	1.24E-05	1.30E-03				
Potassium Hydroxide	8	0.35E-06	0.11E-04	1.24E-05	1.30E-03				
Propane	3	0.352-06	0.11E-04	0.30E-04	0.322-02				
Sodium Hydroxide	8	3.39E-06	1.06E-04	1.24E-05	1.30E-03				
Sulfuric Acid	8	6.78E-06	2.12E-04	1.24E-05	1.30E-03				
Total	All	3.42E-05	1.07E-03	6.09E-05	6.40E-03				

Table Exec-2. Summary daily risk of contaminating the Truckee River. Values show probability, per day, of having an accident downstream of the California/Nevada border (including accidents inside the Sparks, Nevada rail yard).

		Risk					
Substance	Hazmat	R Minimum	ail Maximum	Highway	(I-80) Maximum		
Ammonium Nitrate	9	2.65E-06	1.15E-04	1.48E-07	0.32E-04		
Anhydrous Ammonia	2	1.93E-06	0.84E-04	3.71E-06	8.04E-04		
Butane	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Butyl Ether	3	1.24E-06	0.54E-04	0.15E-04	0.32E-02		
Calcium Carbide	. 4	0.18E-06	0.08E-04	3.51E-07	0.76E-04		
Carbon Disulfide	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Diesel Fuel	3	2.65E-06	1.15E-04	0.15E-04	0.32E-02		
Methyl Alcohol	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Methyl Ether	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Naptha	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Phosphoric Acid	8	2.65E-06	1.15E-04	6.01E-06	1.30E-03		
Potassium Hydroxid	le 8	0.18E-06	0.08E-04	6.01E-06	1.30E-03		
Propane	3	0.18E-06	0.08E-04	0.15E-04	0.32E-02		
Sodium Hydroxide	8	1.77E-06	0.77E-04	6.01E-06	1.30E-03		
Sulfuric Acid	8	3.52E-06	1.53E-04	6.01E-06	1.30E-03		
Total	A11	1.78E-05	7.75E-04	2.95E-05	6.40E-03		

Table Exec-3. Summary daily risk of contaminating the Truckee River. Values show probability, per day, of having an accident downstream of the California/Nevada border (including accidents inside the Sparks, Nevada rail yard).

	_	Risk				
Substance	Hazmat Class	R Minimum	ail Maximum	Highway (Minimum	U.S395) Maximum	
Ammonium Nitrate	9	2.65E-06	1.15E-04	3.40E-08	0.022-04	
Anhydrous Ammonia	2	1.93E-06	0.84E-04	0.90E-06	0.53E-04	
Butane	3	0.18E-06	0.08E-04	3.51E-07	0.21E-04	
Butyl Ether	3	1.24E-06	0.54E-04	3.51E-07	0.21E-04	
Calcium Carbide	, 4	0.18E-06	0.08E-04	8.50E-08	0.05E-04	
Carbon Disulfide	3	0.18E-06	0.08E-04	3.51E-07	0.21E-04	
Diesel Fuel	3	2.65E-06	1.15E-04	3.51E-07	0.21E-04	
Methyl Alcohol	3	0.18E-06	0.08E-04	3.51E-07	0.212-04	
Methyl Ether	3	0.18E-06	0.08E-04	3.51E-07	0.21E-04	
Naptha	3	0.18E-06	0.08E-04	3.51E-07	0.212-04	
Phosphoric Acid	8	2.65E-06	1.15E-04	1.50E-06	0.88E-04	
Potassium Hydroxic	ie 8	0.18E-06	0.08E-04	1.50E-06	0.88E-04	
Propane	3	0.18E-06	0.08E-04	3.51E-07	0.21E-04	
Sodium Hydroxide	8	1.77E-06	0.77E-04	1.50E-06	0.882-04	
Sulfuric Acid	8	3.52E-06	1.53E-04	1.50E-06	0.88E-04	
Total	All	1.78E-05	7.75E-04	7.14E-06	4.20E-04	

Table Exec-4. Summary risk of contaminating the Truckee River. Values show number of years between accidents causing contamination, upstream of the California/Nevada border.

	Hazmat	Rat	Risk	Highway	(7-80)	
Substance	Class	Minimum	Maximum	Minimum	Maximum	
Ammonium Nitrate	9	538	17	9126	86	
Anhydrous Ammonia	2	732	23	358	3	
Butane	3	7822	249	91	1	
Butyl Ether	3	1155	37	91	1	
Calcium Carbide	4	7822	249	3787	36	
Carbon Disulfide	3	7822	249	91	l	
Diesel Fuel	3	538	17	91	1	
Methyl Alcohol	3	7822	249	91	1	
Methyl Ether	3	7822	249	91	1	
Naptha	3	7822	249	91	1	
Phosphoric Acid	8	538	17	221	2	
Potassium Hydroxide	8	7822	249	221	2	
Propane	3	7822	249	91	1	
Sodium Hydroxide	8	808	26	221	2	
Sulfuric Acid	8	404	13	221	2	
Total	All	81	2.6	45	0.4	

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Table Exec-5. Summary risk of contaminating the Truckee River. Values show number of years between accidents causing contamination, downstream of the California/Nevada border (including accidents inside the Sparks, Nevada rail yard).

			Risk		
Substance	Hazmat	Ra Minimum	Maximum	Highway Minimum	(I-80) Maximum
Ammonium Nitrate	9	1033	24	18499	86
Anhydrous Ammonia	2	1419	33	738	3
Butane	3	15210	342	183	1
Butyl Ether	3	2208	51	183	1
Calcium Carbide	4	15210	342	7800	36
Carbon Disulfide	3	15210	342	183	1
Diesel Fuel	3	1033	24	183	1
Methyl Alcohol	3	15210	342	183	1
Methyl Ether	3	15210	342	183	1
Naptha	3	15210	342	183	1
Phosphoric Acid	8	1033	24	456	2
Potassium Hydroxi	de 8	15210	342	456	2
Propane	3	15210	342	183	1
Sodium Hydroxide	8	1547	36	456	2
Sulfuric Acid	8	778	18	456	2
Total	A11	155	3.5	93	0.4

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Table Exec-6. Summary risk of contaminating the Truckee River. Values show number of years between accidents causing contamination, downstream of the California/Nevada border (including accidents inside the Sparks, Nevada rail yard).

			Ris		
Substance	Hazmat Class	Minimum	Maximum	Highway (U Minimum	Maximum
Ammonium Nitrate	9	1033	24	80525	1369
Anhydrous Ammonia	2	1419	33	3042	52
Butane	3	15210	342	7800	130
Butyl Ether	3	2208	51	7800	130
Calcium Carbide	4	15210	342	32210	548
Carbon Disulfide	3	15210	342	7800	130
Diesel Fuel	3	1033	24	7800	130
Methyl Alcohol	3	15210	342	7800	130
Methyl Ether	3	15210	342	7800	130
Naptha	3	15210	342	7800	130
Phosphoric Acid	8	1033	24	1825	31
Potassium Hydroxid	le 8	15210	342	1825	31
Propane	3	15210	342	7800	130
Sodium Hydroxide	8	1547	36	1825	31
Sulfuric Acid	8	778	18	1825	31
Total	All	155	3.5	383	6.5

Notes regarding Tables Exec-1 through Exec-6: 1) these

values are based on the method 1 (Appendix A) procedure for computing risk; 2) risk values for highway transport are based on Tables A.7 and A.8 (Appendix A), and as such generalize risk by class, not substance; therefore, risk probabilities for highway transport quoted in these tables do not sum to the values associated with total hazmat - substance transport (the last row in each table); values of risk reported for total highway transport of hazmat

substances are consistent with Tables A.7 and A.8.

APPENDIX A: DETAILED REPORT

Introduction

Maximum absolute risk of contaminating the Truckee River by a hazardous material during transport is initially developed in this report as the joint probability of two events: the event that a hazardous substance is being transported, and the event that the vehicle transporting the hazardous substance has an accident. As is explained herein, this joint probability represents the maximum absolute risk that the Truckee River will be contaminated as a result of an accident involving a hazardous substance. Including additional events in this assessment of risk, such as the probability that an accident occurs at a location where physical contamination of the Truckee River is possible, suggests that actual risk is substantially lower than the maximum absolute risk. Values of maximum absolute risk are herein reported for both rail and highway transport of hazardous substances.

Maximum Absolute Risk Computations: Methods

Maximum absolute risk is developed as the joint probability of having a vehicle transporting a hazardous substance and that vehicle being involved in an accident. This is expressed mathematically as:

p(hazmat, accident) = p(hazmat) x p(accident) (Eq. 1)

The probability that a vehicle is transporting a hazardous substance, p(hazmat), is developed as:

p(hazmat) = (Volume of hazmat)/(Total Traffic Volume) (Eq. 2) where Volume of hazmat is that volume of the substance transported over an interval of time (day, month, or year), and Total Traffic Volume is the total number of vehicles (cars for rail, total Vehicle Traffic Miles, VMT, for highway) over the same interval of time.

The probability, p(accident), is developed from accident data. These data are included in Appendix B for rail (California), Appendix C for rail (Nevada), and Appendix D for highway (I-80, Nevada, from the CA/NV border eastward to Wadsworth, and US-395, Nevada, from Bower's Mansion Road northward to North McCarran Boulevard). The probability, p(accident), is developed in two ways as follows:

p(accident) = (Number of Accidents/Time) (Eq. 3)
For example, if 10 accidents occur over a 1000 day period, then the
probability, p(accident), of having an accident during any
particular day is equal to 10/1000, or 0.01;

p(accident) = (Number of Accidents)/(Total Traffic) (Eq. 4) For example, if 10 accidents occur for 2000 trains, then the probability, p(accident), that a train will experience an accident is equal to 10/2000, or 0.005; or, if 30 accidents occur for 30,000 rail cars, then the probability, p(accident), that a rail car will experience an accident is equal to 30/30000, or 0.001.

Risk, as computed herein, is assumed to define the maximum absolute risk for the following reasons:

1. accident data do not identify the type of vehicles

involved; on highways, for instance, it is possible that vehicles transporting hazardous substances have a lower accident rate in comparison to passenger cars;

2. actual accident rates for trains transporting hazardous materials may be lower than what is used to compute accident probabilities because rail personnel may use extra precaution when operating and handling such trains;

3. the actual risk of contaminating the Truckee River when an accident occurs involving a hazardous material may be lower because the accident must also occur at a location where contamination of the Truckee River is physically possible; therefore, the actual risk of contaminating the Truckee River is less than or equal to the maximum absolute risk values quoted in this report;

4. accident data available for this report are not sufficiently comprehensive to determine the frequency of accidents serious enough to breach hazmat cars or trucks causing possible contamination of the Truckee River; risk values quoted in this report are based on all accidents, however serious.

COMPUTATION OF MAXIMUM ABSOLUTE RISK: RESULTS

Rail Transport

Greatest risk of contaminating the Truckee River by an accident involving a train is found for Mileposts 106 - 228 (California: from the western-most point at which the Southern Pacific rail route could potentially affect the Truckee River, eastward to the California/Nevada State line(milepost 228)). The rail accident frequency in this interval of track is approximately 1 accident every 100 days (the exact probability is 0.0106 accidents per day). The probability that a train car is carrying a hazardous substance is 10% (0.10); i.e., 10% of the total amount of goods transported by rail along this section of track are classified as a hazardous substance.

Probability values defining risk for this section of S.P. track are shown in Table A.1. The present (May, 1996) traffic volume along this section of track is 14 trains per day. Table A.1 assumes a linear increase in accidents with traffic volume to hypothesize risk up to 35 trains per day. At the present rate of 14 trains per day, risk in transporting the total amount of hazardous material is equal to approximately 10.594/10000, or 0.00106 (0.106%); this represents a 100% chance (a statistical certainty) that 1 accident will occur every \$44 days involving a train car cariying a hazardous substance. At 35 trains per day, this risk increases to 0.00268 (.268%), or a 100% chance (a statistical certainty) that an accident will occur every 374 days involving a train car carrying a hazardous substance (assuming that accident frequency will increase linearly as traffic volume increases).

Once in Nevada (Table A.2), risk decreases for 14 trains per day to 7.7/10000, or 0.00077 (0.077%) based on records of a decreased accident rate in the corridor between the California/Nevada State Line eastward to Wadsworth. This represents a 100% chance (a statistical certainty) of having 1

accident in 1300 days involving a train car carrying a hazardous substance. However, this value is based on 42 accidents occurring in a 15 year time span (1975-1990); 29 of these accidents occurred inside the Sparks, Nevada rail yard. Excluding these accidents (Table A.3), the 14-train-per-day risk decreases to a 100% chance (a statistical certainty) of an accident in 4211 days involving a train car carrying a hazardous substance.

It is evident (Tables A.1 through A.3) that the risk of transporting hazardous substances by rail is lower for the Nevada corridor in comparison to the California corridor. The primary reason for this is physical. The California corridor is associated with numerous sections of track having a relatively high degree of curvature and relatively high grade. The Nevada corridor is associated with longer segments of straight track. Curvature and grade increase the chance of a rail accident caused by derailment. Moreover, because train speed is reduced through the Reno/Sparks metropolitan corridor, the chance for an accident is likewise reduced. Accident frequency is high inside the Sparks rail yard. Presumably, cars carrying hazardous materials are most vulnerable to damage therein.

As noted earlier in this report, two approaches to computing the probability of having an accident are used. The approach just presented divides the total number of accidents by the number of days over which accident data were collected; this accident probability is that which is used to develop Tables A.1 through A.3. Risk of transporting hazardous material by rail is expressed

in a different context in Tables A.4 through A.6. This second approach involves dividing the number of accidents by the total number of trains traveling through the observational period; this second accident probability is used to develop Tables A.4 through A.6. These tables show the risk to each train posed by accidents should they be carrying hazardous substances. Again, the California corridor (mileposts 106 - 228) is associated with the greater risk. At 14 trains per day, the risk to each train is approximately 1/9500 that it will experience an accident while carrying a hazardous substance.

If an accident should occur on the S.P. line and a hazardous substance is released, the following substances are most likely to be involved (Tables A.1 through A.6, and assuming equal volume containers for the most frequently transported substances): sulfuric acid, phosphoric acid, diesel fuel, and ammonium nitrate. Sulfuric acid, phosphoric acid, and diesel fuel are liquids and have the greatest chance of flowing a certain distance to reach the Truckee River.

A summary of maximum absolute risk to the Truckee River by rail transport of hazardous substances follows:

- a. Mileposts 106-228, [California]: 1 accident every 944
 days involving a train car carrying [a] hazardous
 substance[s] causing contamination of the river;
- b. Mileposts 229 257 [Nevada]: 1 accident every 1300 days involving a train car carrying [a] hazardous substance[s]; or, excluding the Sparks, Nevada rail yard,

1 accident every 4211 days involving a train car carrying
[a] hazardous substance[s] causing contamination of the
river.

Highway Transport

Interstate 80 and U.S. 395 pose the greatest threat to the Truckee River for highway-based transport of hazardous substances. Interstate-80 parallels the Truckee River for approximately the same distance as does the Southern Pacific rail line, and for this reason poses the most significant highway threat. U.S. 395, though, crosses the Truckee River in Reno; moreover, U.S. 395 parallels Steamboat Creek from the north end of Washoe Valley to just south of the Mount Rose Highway; Steamboat Creek is a potential contaminant source for the lower Truckee River (albeit, this is not necessarily a threat to the drinking water used in Reno/Sparks).

Accident frequency on highways is significantly greater than on rail lines. Based on data supplied by the Nevada Department of Transportation (Appendix D), accident frequency on I-80 is 1.14 accidents per day, and for U.S. 395 is 0.42 accidents per day. [Important note: these data are based on values for <u>property</u> <u>damage</u> accidents reported in Appendix D]. As was done for risk computations for rail transport, the two approaches to computing the probability of having an accident noted earlier in this report are used to compute risk for highway transport of hazardous material (Tables A.7 and A.8). Table A.7 reports risk for I-80 in Nevada from the California/Nevada State Line eastward to Wadsworth; risk for I-80 upstream in California is assumed to be somewhat higher because of road grade and curvature.

Based on VMT data supplied by the Nevada Department of Transportation (NDOT; Appendix E), the probability of any vehicle carrying hazardous substances is 0.0056 (I-80) and 0.001 (U.S. 395). Using these values and the accident frequencies reported in the previous paragraph, the maximum absolute risk that the Truckee River will be contaminated by a highway accident involving a hazardous substance is:

I-80: [1.14 accidents per day] [0.0056] = 0.006384,

or, a statistical certainty that an accident involving property damage and a hazardous substance will occur every 157 days;

U.S. 395: [0.42 accidents per day][0.001] = 0.00042, or, a statistical certainty that an accident involving property damage and a hazardous substance will occur every 2381 days.

These values are based on total hazardous substance shipments along these two highways and the further assumption that all shipments of hazardous substances represent equal volumes. Values specific to the class of hazardous substance are reported in Tables A.7 and A.8.

ASSESSMENT OF RELATIVE RISK

Relative risk is the notion that potential contamination of the Truckee River is dependent upon the physical condition of the transport artery (rail or highway). For both, degree of curvature and grade influences the potential for derailments, runaway trucks, accidents over embankments, and so on. The physical distance between the artery and the Truckee River influences the probability that an accident severe enough to release a hazardous substance into the environment will consequently contaminate the river.

The following information defining relative risk is obtained from USGS 7.5 minute quadrangle maps:

Upstream of the CA/NV border:

- of 20.2 miles of track, 18.9 of these miles (94%) are adjacent to the Truckee River and have a high degree of curvature and grade;
- of 19.3 miles of highway, 13.1 miles (68%) are adjacent to the Truckee River.

Downstream of the CA/NV border:

- of 45 miles of highway, 15 of these miles (33%) are adjacent to the Truckee River (or cross it);
- of 45 miles of rail line, 32 of these miles (71%) are adjacent the Truckee River (or cross it).

These data suggest that an accident occurring on any portion of the S.P. rail line upstream of the CA/NV border has the potential of physically contaminating the Truckee River (a somewhat conservative generalization given that the relative risk is 94%); the relative risk for I-80 upstream of the CA/NV border is 68%. Downstream of the CA/NV border, the relative risk decreases to 33%, for I-80, and 71% for the S.P. rail line.

ESTIMATION OF ACTUAL RISK

Actual risk is considered to be lower than maximum absolute risk because additional factors, such as where the accident occurs, influences the likelihood (probability) that the Truckee River will be contaminated by the accident. Another, important additional factor is the probability that the accident is severe enough to cause a breach in a hazmat car, thus releasing the hazardous material into the environment. This probability, however, is difficult to assess, at least given the data in Appendices A - D; these data are not comprehensive enough to show the severity of damage for each accident, highway or rail. Some inferences, however, may be possible as is illustrated momentarily.

Actual risk is computed from maximum absolute risk as follows:

Actual Risk = [Max. Abs. Risk] [Relative Risk] [Breach] (Eq. 5) in which Relative Risk is that value discussed in the previous section based on length of S.P. track or interstate highway adjacent to the Truckee River relative to the total length of track or highway over a particular interval; and Breach is the probability that an accident is severe enough to cause a release of hazardous substance into the environment.

Analysis of relative risk suggests that for mileposts 106-228,

there is a 94% probability that the accident will occur at a location where physical contamination of the Truckee River is possible, but this probability is rounded to 100% for computations (a conservative choice). In this case, this value will not reduce the maximum absolute risk.

Some, limited information may be available for determining the probability of breach. Appendix F lists more detailed information on rail accidents occurring (in Nevada, speculative for California) in the time period, 1975-1990. During this time, 15 accidents (out of 467 total Nevada accidents) were severe enough to involve multiple cars. If the probability of breach is assumed to be proportional to the probability that an accident will involve multiple cars, then these data suggest that the probability of breach could be 3.2% of the accidents. Using 0.032 would yield a computed actual risk of 1 accident in 944/.032, or 29,500 days (80.8 years) that will, with a statistical certainty, contaminate the Truckee River, a substantially different and lower risk in comparison to the maximum absolute risk.

In Nevada, the maximum absolute risk is similarly reduced by including both probability of breach and probability of location. For rail: the risk changes from 1 accident in 1300 days to 1 accident in 1300/(0.023), or 56,522 days (154.75 years).

With respect to highway transport, the following is suggested. For U.S. 395, the only location at which a contamination of the Truckee River is possible (that may affect drinking water) is where this highway crosses the Truckee River. This represents no more than 1% of the highway for which accident data are used herein. However, this crossing occurs in close proximity to the intersection of U.S. 395 with I-80 (the "Spaghetti Bowl"). For the sake of conservatism, all accidents on U.S. 395 between Mill St. northward to I-80 are assumed to occur at the bridge crossing over the Truckee River (a relative risk of 100%). For I-80, relative risk based on accident location is 68% (1.0) upstream of the CA/NV border, and is 33% downstream of this border.

Data in Appendix D suggest that probability of breach might be developed by using the data for injury accidents relative to total property damage accidents. This is a conservative assumption, and is thought to yield a probability of breach that is greater than what is actually observed. For both U.S. 395 and I-80, injury accidents represent approximately 45% of the property damage accidents. Suppose probability of breach is directly proportional to the probability of an injury accident, then actual risk for I-80 becomes: (based on total transport of hazardous substances):

Upstream of CA/NV border: 1 accident every 157 days changes to 1 accident every 157/(0.45 x .68), or a statistical certainty that a breach will occur every 513.1 days where the breach will threaten the Truckee River. Again, this value is probably high because the actual probability of breach is thought to be lower than 0.45. Downstream of the CA/NV border, the value would be a statistical certainty of a breach every 157/(.45 x .33), or 1057.2 days.

For U.S. 395, actual risk is found as 2381/(.45 x 1.0), or a

statistical certainty of a breach every 5291 days.

If probability of breach is instead proportional to the probability of a fatal accident (a more rare event in comparison to injury accidents), then probability of breach would be proportional to 1.4%, for I-80, or 1.7% for U.S. 395 (based on the data in Appendix D). Using this value for probability of breach yields actual risk values of 16,491.6 days (45.2 years) for I-80 upstream of the CA/NV border; an actual risk of 33,982.7 days (93 years) for I-80 downstream of this border; and an actual risk of 140,058.8 days (383.5 years) for U.S. 395.

These values of actual risk are introduced to suggest a probable range of values. Because the probability of breach is so difficult to determine due to lack of sufficient data, analogies are drawn herein between the probability of breach (a rare event) and other events (injuries or fatalities (rare)). Probability values used for the location of accidents (relative risk) are determined directly through map interpretation and these values are quite accurate. Therefore, calculations of actual risk, although somewhat speculative because of the assumptions made for probability of breach, illustrate that, whereas maximum absolute risk reported herein appears unrealistically high, including additional factors such as accident location and probability of breach suggests that the actual risk of contaminating the Truckee River is much lower. Table A.1. Maximum absolute risk by hazardous substance, mileposts 106-228. Values show probability, per day, of having an accident involving a train car carrying a hazardous substance.

	Daily		Risk: Numb		bility rains p	x 10000 er Day	
Substance	Frequency	10	15	20	25	30	35
Ammonium Nitrate	.015	1.136	1.704	2.271	2.839	3.407	3.975
Anhydrous Ammonia	.011	.833	1.249	1.666	2.082	2.499	2.915
Butane	.001	.076	.114	.151	.189	.227	.265
Butyl Ether	.007	.530	.795	1.060	1.325	1.590	1.855
Calcium Carbide	.001	.076	.114	.151	.189	.227	.265
Carbon Disulfide	.001	.076	.114	.151	.189	.227	.265
Diesel Fuel	.015	1.136	1.704	2.271	2.839	3.407	3.975
Methyl Alcohol	.001	.076	.114	.151	.189	.227	.265
Methyl Ether	.001	.076	.114	.151	.189	.227	.265
Naptha	.001	.076	.114	.151	.189	.227	.265
Phosphoric Acid	.015	1.136	1.704	2.271	2.839	3.407	3.975
Potassium Hydroxid	e .001	.076	.114	.151	.189	.227	.265
Propane	.001	.076	.114	.151	.189	.227	.265
Sodium Hydroxide	.010	.757	1.136	1.514	1.893	2.271	2.650
Sulfuric Acid	.020	1.514	2.271	3.029	3.786	4.543	5.300
Total	.101	7.647	11.471	15.294	19.118	22.941	26.765

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10^{-4} .

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains per day (accident frequency was 58 accidents in 15 years).
- 4. Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

Table A.2. Maximum absolute risk by hazardous substance, mileposts 229-263. Values show probability, per day, of having an accident involving a train car carrying a hazardous substance.

	Daily		Risk: Numb		bility : rains p		
Substance	Frequel :y	10	15	20	25	30	35
Ammonium Nitrate	.015	.822	1.233	1.644	2.054	2.465	2.876
Anhydrous Ammonia	.011	.603	.904	1.205	1.507	1.808	2.109
Butane	.001	.055	.082	.110	.137	.164	.192
Butyl Ether	.007	.384	. 575	.767	.959	1.151	1.342
Calcium Carbide	.001	.055	.082	.110	.137	.164	.192
Carbon Disulfide	.001	.055	.082	.110	.137	.164	.192
Diesel Fuel	.015	. 822	1.233	1.644	2.054	2.465	2.876
Methyl Alcohol	.001	.055	.082	.110	.137	.164	.192
Methyl Ether	.001	.055	.082	.110	.137	.164	.192
Naptha	.001	.055	.082	.110	.137	.164	.192
Phosphoric Acid	.015	.822	1.233	1.644	2.054	2.465	2.875
Potassium Hydroxid	e .001	.055	.082	.110	.137	.164	.192
Propane	.001	.055	.082	.110	.137	.164	.192
Sodium Hydroxide	.010	.548	.822	1.096	1.370	1.644	1.918
Sulfuric Acid	.020	1.096	1.644	2.191	2.739	3.287	3.835
Total	.101	5.533	8.300	11.067	13.833	16.600	19.367

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10⁻⁴.

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains per day (accident frequency was 42 accidents in 15 years).
- 4. Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

Source of information: (Appendix G).

Table A.3. Maximum absolute risk by hazardous substance, mileposts 229-263. Values show probability, per day, of having an accident involving a train car carrying a hazardous substance. These values are based on accidents excluding those occurring in the Sparks rail yard.

	Daily			er of Th		er Day	
Substance	Frequency	10	15	20	25	30	35
Ammonium Nitrate	.015	.254	.382	.509	.636	.763	.890
Anhydrous Ammonia	.011	.187	.280	.373	.466	.560	.653
Butane	.001	.017	.025	.034	.042	.051	.059
Butyl Ether	.007	.119	.178	.237	.297	.356	.416
Calcium Carbide	.001	.017	.025	.034	.042	.051	.059
Carbon Disulfide	.001	.017	.025	.034	.042	.051	.059
Diesel Fuel	.015	.254	.382	.509	.636	.763	.890
Methyl Alcohol	.001	.017	.025	.034	.042	.051	.059
Methyl Ether	.001	.017	.025	.034	.042	.051	.059
Naptha	.001	.017	.025	.034	.042	.051	.059
Phosphoric Acid	.015	.254	.382	.509	.636	.763	.890
Potassium Hydroxide	.001	.017	.025	.034	.042	.051	.059
Propane	.001	.017	.025	.034	.042	.051	.059
Sodium Hydroxide	.010	.170	.254	.339	.424	.509	. 594
Sulfuric Acid	.020	.339	.509	.678	.848	1.018	1.137
Total	.101	1.713	2.569	3.426	4.282	5.139	5.995

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10⁻⁴.

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains
- per day (accident frequency was 13 accidents in 15 years).4. Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

Table A.4. Maximum absolute risk by hazardous substance, mileposts 106-228. Values show probability, per any given train, of having an accident while carrying a hazardous substance.

Substance	Daily Frequency	10	Risk: Numb 15		bility rains p 25	x 10000 er Day 30	35
Ammonium Nitrate	.015	.081	.122	.162	. 203	.243	.284
Anhydrous Ammonia	.011	.059	.089	.119	.149	.178	.208
Butane	.001	.005	.008	.011	.014	.016	.019
Butyl Ether	.007	.038	.057	.076	.095	. 114	.132
Calcium Carbide	.001	.005	.008	.011	.014	.016	.019
Carbon Disulfide	.001	.005	.008	.011	.014	.016	.019
Diesel Fuel	.015	.081	.122	.162	.203	.243	.284
Methyl Alcohol	.001	.005	.008	.011	.014	.016	.019
Methyl Ether	.001	.005	.008	.011	.014	.016	.019
Naptha	.001	.005	.008	.011	.014	.016	.019
Phosphoric Acid	.015	.081	.122	.162	.203	.243	.284
Potassium Hydroxide	.001	.005	.008	.011	.014	.016	.019
Propane	.001	.005	.008	.011	.014	.016	.019
Sodium Hydroxide	.010	.054	.081	.108	.135	.162	.189
Sulfuric Acid	.020	.108	.162	.216	.270	.324	.378
Total	.101	.546	.819	1.092	1.365	1.638	1.911

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10^{-4} .

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains per day (accident frequency was 58 accidents in 15 years).
- 4. Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

Table A.5. Maximum absolute risk by hazardous substance, mileposts 229-263. Values show probability, per any given train, of having an accident while carrying a hazardous substance.

	Daily		Risk: Numbe	r of Tr	ains p		
Substance	Frequency	10	15	20	25	30	35
Ammonium Nitrate	.015	.059	.088	.117	.147	.176	.205
Anhydrous Ammonia	.011	.043	.065	.086	.108	.129	.151
Butane	.001	.004	.006	.008	.010	.012	.014
Butyl Ether	.007	.027	.041	.055	.068	.082	.096
Calcium Carbide	.001	.004	.006	.008	.010	.012	.014
Carbon Disulfide	.001	.004	.006	.008	.010	.012	.014
Diesel Fuel	.015	.059	.088	.117	.147	.176	.205
Methyl Alcohol	.001	.004	.006	.008	.010	.012	.014
Methyl Ether	.001	.004	.006	.008	.010	.012	.014
Naptha	.001	.004	.006	.008	.010	.012	.014
Phosphoric Acid	.015	.059	.088	.117	.147	.176	.205
Potassium Hydroxide	e .001	.004	.006	.008	.010	.012	.014
Propane	.001	.004	.006	.008	.010	.012	.014
Sodium Hydroxide	.010	.039	.059	.078	.098	.117	.137
Sulfuric Acid	.020	.078	.117	.157	.196	.235	.274
Total	.101	.395	. 593	.791	.988	1.186	1.384

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10⁻⁴.

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains per day (accident frequency was 42 accidents in 15 years).
- 4. Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

increase in accidents with train trainic ve

Table A.6. Maximum absolute risk by hazardous substance, mileposts 229-263. Values show probability, per any given train, of having an accident while carrying a hazardous substance. These values are based on accidents excluding those occurring in the Sparks rail yard.

	Daily		Risk: Probability x 10000 Number of Trains per Day				
Substance	Frequency	10	15	20	25	30	35
Ammonium Nitrate	.015	.018	.027	.036	.045	.055	.064
Anhydrous Ammonia	.011	.013	.020	.027	.033	.040	.047
Butane	.001	.001	.002	.002	.003	.004	.004
Butyl Ether	.007	.008	.013	.017	.021	.025	.030
Calcium Carbide	.001	.001	.002	.002	.003	.004	.004
Carbon Disulfide	.001	.001	.002	.002	.003	.004	.004
Diesel Fuel	.015	.018	.027	.036	.045	.055	.064
Methyl Alcohol	.001	.001	.002	.002	.003	.004	.004
Methyl Ether	.001	.001	.002	.002	.003	.004	.004
Naptha	.001	.001	.002	.002	.003	.004	.004
Phosphoric Acid	.015	.018	.027	.036	.045	.055	.064
Potassium Hydroxid	e .001	.001	.002	.002	.003	.004	.004
Propane	.001	.001	.002	.002	.003	.004	.004
Sodium Hydroxide	.010	.012	.018	.024	.030	.036	.042
Sulfuric Acid	.020	.024	.036	.048	.061	.073	.085
Total	.101	.122	.184	.245	.306	.367	.428

Notes: 1. Table values report probability x 10000. Actual probability is equal to the table value divided by 10000; i.e., a table value of 1.365 is equal to a probability of 1.365 x 10⁻⁴.

- 2. Number of trains per day as of 3/96 is 14.
- 3. This table is based on accident frequency assuming 14 trains per day (accident frequency was 13 accidents in 15 years).
- Above 14 trains per day, calculations assumed a linear increase in accidents with train traffic volume.

Table A.7. Interstate-80: probability of a hazmat truck having an accident in any given day.

Method 1: Accidents by Daily Frequency

Class	Probability of class	Probability of hazmat accident (per day)
1	.3360E-03	.3830E-03
2	.7056E-03	.8044E-03
3	.2800E-02	.3192E-02
4	.6720E-04	.7661E-04
5	.3584E-03	.4086E-03
6	.1344E-03	.1532E-03
8	.1170E-02	.1334E-02
9	.2800E-04	.3192E-04
Total	.5600E-02	.6384E-02

.

Method 2: Accidents by Vehicular Frequency (assumes 30,000 vehicles per day)

Class	Probability of class	Probability of hazmat accident	(per vehicle)
1	.3360E-03	.1277E-07	•
2	.7056E-03	.2681E-07	
3	.2300E-02	.1064E-06	
4	.6720E-04	.2554E-08	
5	.3584E-03	.1362E-07	
6	.1344E-03	.5107E-08	
8	.1170E-02	.4448E-07	
9	.2800E-04	.1054E-08	
Total	.5600E-02	.2123E-06	

Table A.8. U.S. 395: probability of a hazmat truck having an accident in any given day.

Method 1: Accidents by Daily Frequency

Class	Probability of class	Probability of hazmat accident (per day)
1	.6000E-04	.2520E-04
2	.1260E-03	.5292E-04
3	.5000E-03	.2100E-04
4	.1200E-04	.5040E-05
5	.6400E-04	.2688E-04
6	.2400E-04	.1008E-04
8	.2090E-03	.8778E-04
9	.5000E-05	.2100E-05
Total	.1000E-02	.4200E-03

.

Method 2: Accidents by Vehicular Frequency (assumes 100,000 vehicles per day)

Class	Probability of class	Probability of hazmat accident (per vehicle)
1	.6000E-04	.2520E-09
2	.1260E-03	.5292E-09
3	.5000E-03	.2100E-08
4	.1200E-04	.5040E-10
5	.6400E-04	.2688E-09
6	.2400E-04	.1008E-09
8	.2090E-03	.8778E-09
9	.5000E-05	.2100E-10
Total	.1000E-02	.4200E-08

CALCULATION EXAMPLES

Example calculations are presented to demonstrate how to interpret and use the information in Tables A.1 through A.8.

Table A.1:

sulfuric acid (example): probability of an accident on any given day @ 20 trains per day equals 3.029/10000, or 3.029e-04; this is a statistical certainty of 1 accident every 1/3.029e-04, or 3301 days.

Table A.4:

phosphoric acid (example): probability of any given shipment of phosphoric acid having an accident @ 25 trains per day equals 0.203/10000, or 2.03e-05, or a statistical certainty of 1 accident every 1/2.03e-05, or 49,261 shipments of phosphoric acid.

Table A.7 (Method 1):

class 6 substance (example): probability of an accident on any given day equals 0.1344e-03, or a statistical certainty of an accident every 7,440 days.

Table A.7 (Method 2):

class 8 substance (example): probability of any given shipment of a class 8 substance having an accident is 0.117e-02, or a statistical certainty of an accident every 855 shipments.

APPENDIX B

1

Rail Accident Data Mileposts 106 - 228 (California, upstream along the Truckee River from the CA/NV border)

> Data Source: California Public Utilities Commission ATTN: Paul King

MACKAY SCHOOL OF MINES

UNIVERSITY OF NEVADA RENO

James R. Carr, Ph.D., P.E. Incressor of Geological Engineering

Department of Geological Sciences 172 Reno. Nevada 89557-717 Ph. (702) 754-6050 FAX (702) 754-1533



Department of Geological Sciett Mackay School of Micros 171 Reno, Nevada 59557-7135 1702 754-124 FAX: 7021754-1335

February 23, 1996

Wesley M. Franklin Executive Director California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 34102

Dear Sir:

I understand that your rail safety group may have risk assessment data for the Truckee River region of northeastern California. I am currently working on a research project funded by Sierra Pacific Power Company entitled, "Development of an Integrated Computer Platform for the Evaluation of Contaminant Mitigation Scenarics along the Truckee River." Therefore, I would be most interested in obtaining any data available through your rail safety group pertaining to that portion of the Truckee River flowing through California.

Thank you for your time and attention to this request. Should you have any questions about this letter, please feel free to call me at 702-784-4244.

Sincerely, Carr Janes R. Professor, Geological Sciences

MACKAY SCHOOL OF MINES



Department of Geological Sciences 172 Reno, Nevada 5-557-135 Ph. (702)754-959 FAN (702)754-1575

March 8, 1996

Paul W. King State of California Public Utilities Commission Safety and Enforcement Division Railroad Safety Branch 505 Van Ness Avenue San Francisco, CA 94102

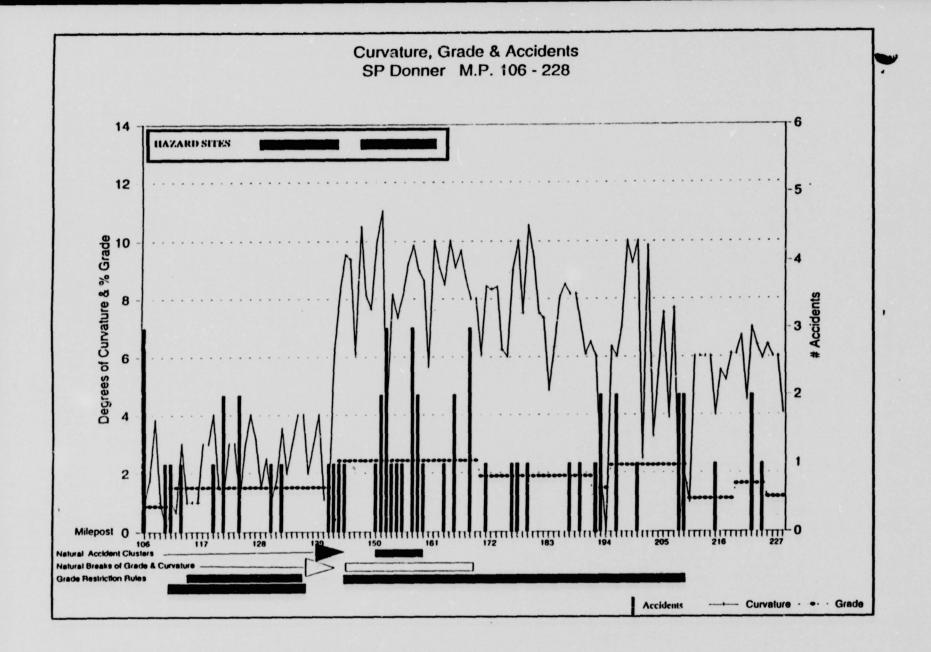
Dear Paul:

This is a brief letter thanking you very much for the data showing accidents, curvature, and grade by mileposts. This supplements my data perfectly (my accident data begin at mile post 230-Verdi, eastward).

I am intrigued by the cluster of accidents shown between mileposts 150-161. Did you identify a reason for this cluster? I would be interested in knowing.

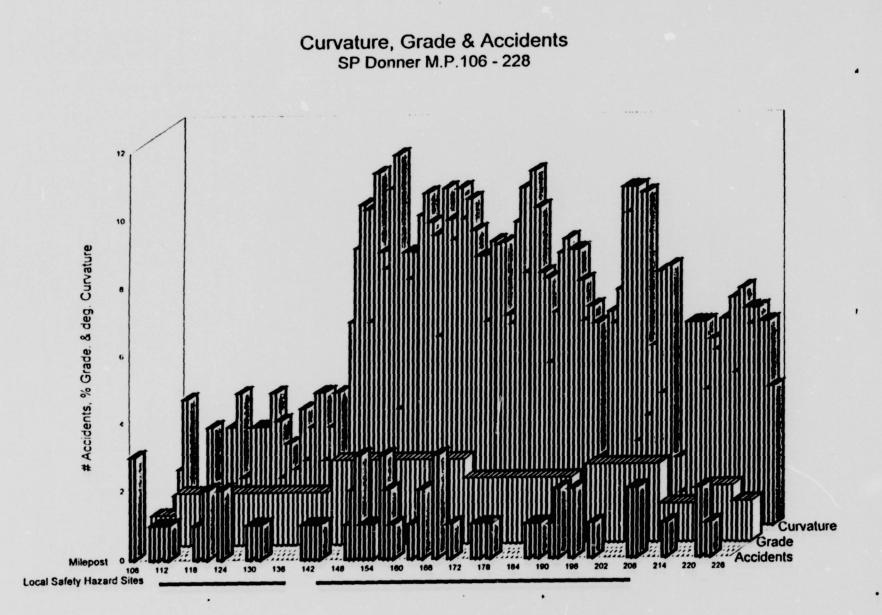
Again, thank you very much for this information.

Your friend, Jim Carr



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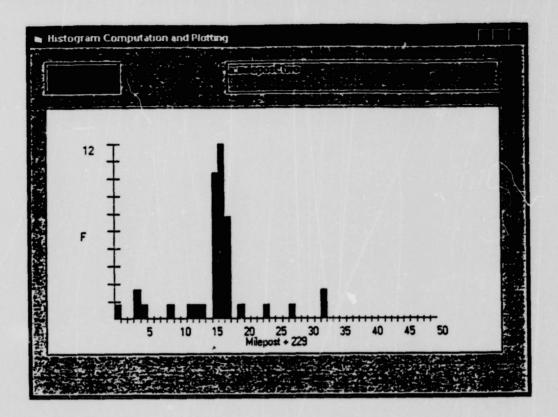


APPENDIX C

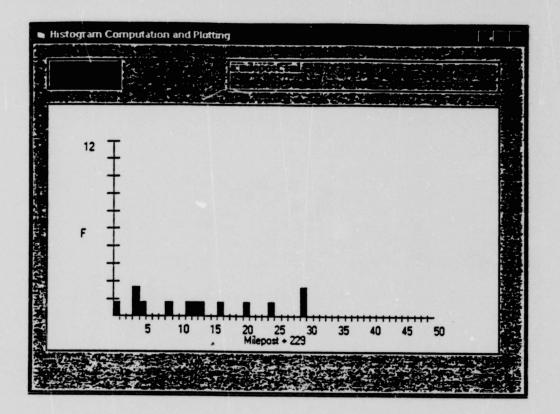
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Rail Accident Data Mileposts 229-257 (downstream along the Truckee River from the CA/NV horder)

Data Source: Nevada Bureau of Mines and Geology ATTN: Ron Hess



Histogram of all Nevada rail accidents from milepost 229 to 263. Plot shows accident frequency by milepost. Note large frequency within Sparks rail yard (mileposts 244-247).



Histogram of all Nevada rail accidents, excluding Sparks rail yard.

		SE ACCIDEN	TS AT CROSSINES.	saland liete.
e 2, 1551 at 9	:24 4.0.			RI
ATION	COUNTY	CITY	NIGNWAY SEN CROSSING	CR INCOTHOL / 1- 1/2
	CHRUCHILL	OCALA	HWY 95 666 8187	ee 56598
	CHURCHILL	HAZEN	CENTRAL ST	68 56688
EN	CLARK	# LAS VEEAS	PABCO ACCESS RGAD 468 87	00 0750CA003
1	CLARE	LAS VEGAS	NINE RGAD CROSSING 184 07	ee #889UT212
1	CLARE	LAS VEGAS	BLUE DIANGNO RD #18 #1	00 0289CA013
IEN	CLARK	ARDEN	BLUE DIANOND ROAD \$25 \$187	66 1076CA015
	CLARE	BLUE CIANCED	WARK SPRINGS RD	48 \$379CA284
UE DIANCHO	CLARE		GIBSON RD 010 07	00 1184CA285
ULDER CITY	CLARK	LAS VEEAS	INDUSTRIAL RD COC 010307	eb 0688UT019
ULDER JET	CLASE	BOULDER JCT	BERNUDA ROAD \$15 \$7	00 1278CARS0
ULDER ICT	CLARK		LAS VEGAS BLVD 050 64	00 1278CA051
ULDER JET	CLARE	BOULDER JCTH	LAS VEGAS BLVD 020 02	es serecases
ULDER JETH	CLARK	LAS VEEAS	TROFICANA AVE 025 0103	N 0279CA022
ACLEN	CLARK	LAS VEEAS	TROFICANA AVE	00 6780CA033
ACKEN	CLARK	LAS VEEAS	RANGE ROAD 005 87	tt t250UTEt6
IL	CLARE		PEREINS STREET #15 07	AN 012207211
ASSAND Incoccu	CLARK	HENDERSCH	PRIVATE XING PR5 11	46 6179CA245
NDERSON	CLARE	HENDERSCH	PRIVATE XING MAL 12	00 0279CA205
NCEFSCH	CLARK	HENDERSON	GREEN VALLEY PELLY PAG 87	00 0358UT003
	CLARK	LAS VEEAS	WASHINGTON STREET 0310	66 0175CA216
S VEEAS	CLARK	LAS VEEAS	SPRING RADUNTAIN PPO 0103	00 0179CA285
S VEERS	CLARK	LAS VEEAS	DIVIDEND ST 005 0710	00 0179CA226
S VESAS	CLARK	LAS VEEAS	PRIVATE-UP PARKS LOT	10 11E7CAU20
S VEEKS	CLARE	LAS VEEAS	SFRING NOUNTAIN ROAD 005 010307	66 6276C6616 68 6279CA284
NS VEEAS NS VEEAS	CLARK	LAS VEEAS	PRIVATE XING 005 11	00 0478CA281
AS VEERS	CLARK	LAS VEEAS	PRIVATE 015 0709	00 0754CA030
	CLARK	LAS VEGAS	PRIVATE CROSSING 015 07	
AS VEEKS AS VEEKS	CLARK	LAS VEEAS	PEIVATE (ROUNDHOUSE \$25 12	48 467554282
AS VEEKS	CLARK	LAS VEEAS	SPRING ROUNTAIN ROAD BEB 81	10 0EBOCA213
	CLARE	LAS VEEAS	PRIVATE XING 402 08	0 0682CA004
AS VEEKS	CLARK	LAS VEEAS	SFRING MOUNTAIN RD 01	10 1278CA103
AS VEEAS AS VEEAS	CLARK	LAS VEEAS	WYCHING STREET 485 81	00 1280CA012
	CLARE	OVERTCE	PRIVATE-RYAN ST 025 07	00 0254CA001
ICAPA	CLARK	OVERTOR	PEIVATE CROSSING 025 07	00 1087CA007 08 8489UT003
DVERTCH	CLARK	ROAFA	UTE CROSSING NOS D7	46 4116828
UANN .	CLARK		CRAIG 80 855 8183	0 0116228 00 0102UT008
UARR	CLARK		CRAIG ROAD 055 0102	10 1376UT204
WARN	CLARK	WARR	CRAIG ROAD CROSSING 410 818306	48 C478UT283
	CLARK	LAS VEEAS	CRAIG ROAD 0103	te 17501212
WARK	CLARK	WARN	CEAIG EGAD PIEG	40 4685FR004
CARLIN	ELKO	CARLIN	ATH STREET CROSSING ODS 03	18 1885FR188
CARLIN	ELKO	CARLIN	WEST MAIN LINE	11 45538
CARLIN	ELKO	CARLIN	FCURTH ST 664 6367	10 52349
CARLIN	ELKO	CARLIN	15T ST 860 87	10 60753
CARLIN	ELKO	CARLIN	10TH ST 025 0507	• 212279
DEETH	ELEO		DEETH RD 010 03	10 01905R215
ELLO	ELLO	ELLO	SZOO UNION PACIFIC DOD 07	10 1183UT020
ELIO	ELEO	ELLO	SED STREET MIS MA	10 1187FF812
ELEO	ELKO	ELLO	RCY YOUNG FANCH XING 035 12	10 161377
ELTO	ELEO	ELEO	3RD STREET \$3	10 2101391
ELLO	ELLO	ELLO	PRIVATE XINE ELLO FA 12	10 2101576
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ine 3. 1992 at 9:24 a.m.

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TATICE	COUNTY	CITY	HIGHWAY	VEH CROSSING	CR INCOTNOL
	CITA	ELIO	380 STREET	13	ee 2112178
ro	ELKO	ELEO	STH ST	13	68 211479
LO	ELEO	ELEO	FRIVATE RICHFIELD OI	12	00 211776
LEO	ELKO	ELEO	11TH STREET	13	46 2121578
10	ELEO	ELIO	380 STREET	115 13	00 2122180
	ELEO	ELEO	ATH ST	111 13	00 212481
LEO	ELEO	ELEO	PEIVATE XING	••• 12	00 21279
110	ELKO	ELKO	WEST 11TH STREET	115 13	44 212977
LKO	ELIO	ELEO	HOT SPEINGS ROAD	125 17	00 21683 00 21883
LKG	ELEO	5150	PRIVATE CROSSING	015 07	10 222281
LEO	ELEO	ELKO	380 ST	111 13	00 223875
LEO	ELEO	ELKO	HOT SPRINGS ROAD	115 17	00 22577
LKO	ELEO	ELKO	380 STREET	035 03	00 22681
LEO	ELEO	ELKO	PRIVATE-UP YAED XIN		N 23288
LEO	ELEO	ELKO	STH ST	115 13	10 232784
LEO	ELEO	ELLO	STH ST	445 43	10 24379
LIO	ELKO	ELKO	9TH ST	145 13	00 262280
LTO	ELKO	ELKO .	6TH ST	13	18 262478
LEO	ELKO	ELKO	SIXTH STREET	13	10 27279
LEO	ELLO	ELKO	310 ST	ess s7	10 27280
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ELKO	ELKO	ELKO	ELEO	414 43	00 291381
ELEO	ELKO	ELKO	ARD STREET FRIVATE TING/ELKO I		10 291682
ELLO	ELEO	ELKO		17	es 293879
ELKO	ELKO		PEIVATE AD STR STREET	112 13	44- 29676
ELKO	ELKC	ELKO	ATH STREET	e15 e3#8	88 44115
ELKO	ELKO	ELKO	6TH ST	483 8388	45135
ELKO	ELKO	ELKO	6TH ST	HIE 83	11 4E167
ELFO	ELLO	ELKO	STH ST	414 43471¢	tt 47925
ELIO	ELKO	ELKO	97H ST	815 8407	11 49:37
ELKO	ELKO	ELKO	ETH ST	001 0308	es 45395
ELKO	ELLO	ELKO	THIRD ST	111 13	II 49568
ELEO	ELKO	ELEO	14 57	415 4748	ee 50759
ELEO	ELKO	ELEO	ATH ST	122 121508	IE 51581
ELTO	ELKO	ELKO	HCT SPRINES ED	025 0208	10 52966
ELKO	ELKO	ELKO	9TH ST	110 1318	68 54197
ELED	ELLO	ELKO	LATH STREET	818 87	II 55472
ELEO	ELKO	ELKO	FRIVATE CROSSING	III 12	00 55779
ELKO	ELKO	ELKO	PEIVATE-FIRECRACE	ER 888 8711	00 56249
ELKO	ELKO	ELKO	THIRD ST	125 13	48 56898
ELKO	ELEO	ELEO	HUNTER RANCH	160 07	48 56939
ELEC	ELEO	ELEO	9TH STREET	010 0206	00 57541
ELKO	ELKO	ELKO	STH ST	R83 8388	66 66278 68 63368
ELFO	ELKO	ELKO	11TH ST	003 030810	16 63688
ELKO	ELEO	ELKO	320 ST	023 0408	18 17729
ELKO	ELKO	ELKO	WP XING 11TH ST	eee e407	44 45789
MOLEEN	ELKO	ROLEEN	FIRECRACKER ACH	444 48 444 47	10 C0588
OSTNO	ELLO	ELKO	PEIVATE CROSSING	000 07 000 07	10 1185UT201
SHAFTER	ELLO	SHAFTER	******	tez e7	• 271777
WELLS	ELEO		CCUNTY ROAD	648 6388	10 45528
WELLS	ELKO	WELLS	LALE AVE	e15 12	10 52341
PALISAGE	EUREKA	PALISACE	FFIVATE XING-SP EDEN VALLEY CROSS		DE 218976
SCLCCNCA	HURBOLDT	-	STATE ROUTE 617	111 11	10 21383
SOLCCADA	HURBOLDT		PEIVIINE	### 12	10 54468
TRCH FOINT	HUNBOLDT	IRO PCINT			

AR ACCIDENTS AT CROSSINGS.

ne 3, 1992 at 9:24 a.m.

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TATION	COUNTY	CITY			(6055186		INCOTNOL
***************	*****************	****************					53969
SE CREEK	HURBOLDT	ROSE CREEK	STONEHOUSE CROSSING		11		263284
LREY	NUNBOLOT	VALRY					58685
11.87	HURBOLDT	WINNERUCCA					4986FR242
150	HUNBOLDT HUNBOLDT	WESO	III	112			0990FR289
150	NURBOLDT		COUNTY ROAD		67		24178
INNENUCCA	HURBOLOT	WINNERUCCA	BRIDEE ST	121	0107		68233
INNERUCCA RGENTA	LANDER		PRIVATE CROSSING	115	11		241177
ATTLE ROUNTAIN	LANDER		DRESSER MILL TING	115			218583
ATTLE ROUNTAIN	LANDER		DRESSER TING	.1.	12		25180
ATTLE ROUNTAIN	LANDER		DEESSER		18		28678
ATTLE ROUNTAIN	LANDER	BATTLE ROUNTAIN	RAGRET COVE		11		\$2936
ATTLE NOUNTAIN	LANDER	BATTLE MAIN	PEIVATE IINE/DRESSER	115	18		68772
ATTLE ATS	LANDER	BATTLE BOURTAIN	DRESSER	115	1711		0384UT202
ATTLE ATA	LANDER	BATTLE NTH	DRESSER NINERAL	115	11		44188
ATTLE STR	LANDER	BATTLE NTH	PRIVATE ROAD	111	0108		50427
ATTLE MTH	LANDER	BATTLE MTH	STATE ATE 621		0107		53762
PET	LINCOLN	APEX .			•7		8985CA018
ALIENTE	LINCOLN	PARACA	STATE HIGHWAY 25		1607		8475UT282
ALTENTE	LINCOLN	CALIENTE	CENTER CALIENTE XING				8786CA011
ARP	LINCOLN	CARP	PRIVATE CROSSING		18		1283CA284
AST ACCRA	LINCOLN	ACCHA	COUNTY ROAD		0708		0876UT836
ISLEN	LINCOLN		LINCOLN COUNTY ROAD				8978UT848
ROX	LINCOLN	ROI	PRIVATE CROSSING		• • 7		852486A
SPPIAN BAY	LYON	APPIAN	BEACH RO		47		45288
INLAY	PERSHING	INLAY	JUNGO-NAJUBA RD		1 1507		56836
INLAY .	PERSHING	INLAY	PRIVIING		12		45248
OVELOCE	PERSHING	LOVELOCK	HAIN ST		0 01 0 0708		1105674
RENO	STOREY	RENO	SAGE ST VISTA WAY		5 \$4\$8		4314E3A
VISTA	WAHSOE	VISTA	WACSWORTH CECARVILLE				0185FR482
SERLACH	WASHOE	GERLACH	446 HAIN ST		• •7		4254FR442
SERLACH	WASHOE	GERLACH GERLACH	WADSWORTH-CEDERVILL		4347		2102175
SERLACE	WASHOE WASHOE	PATRICE	NUSTANS BRAN CH ROAL				49527
HAFED Hafeg	WASHOE	SPARES	NUSTANG RO		12	1	51375
HAFED	WASHOE	HAFED	RUSTARS BRIDGE		1 11	1	51627
RAFED	WASHOE	HAFED	PRIVIING		• 11		\$ 53647
LANTON	WASHOE	LAUTOR	RIVER INN AD		• •1		48987
LANTCH	WASHOE	LAUTER	ALT US 80		1 1117		\$ 49248
LAUTCH	WASHOE	RENO	WOODLAND AVE		0 0107		6 51748
LANTON	WASHOE	LANTON	RIVER INN ROD		4 11		4 52436
LAUTCH	WASHOE	LAWTON	PRIVATE XING	11	4 48		\$ 52188
LAUTON	WASHOE	LAUTON	PRIVATE 1-ING		18		53892
LAUTON	WASHCE	RENO	55 40		0 01		1 73150
LAUTON	WASHOE	LANTON	HCGGLAND		10 07		+ R1519
ROEUL	WASHOE	RENO	PRIVATE CRESSING		1 12		6 58349 6 53768
PATRICI	WASHOE	PATRICE	PRIVERAN RANCH (PVT		10 04		
RENO	WASHOE	RENO			15 82		0 0285FR013
RENO	WASHCE	REXO	GTH ST		15 01		A SEESFRATS
REPO	WASHOE	RENO	HUY 395		18 81 16 A1A6		0 2101475
RENC	WASHOE	RENO	FOURTH STREET AND I		28 87		1 223479
RENO	WASHOE	REND	BEOCES ST		12		22583
RENO	WASHOE	RENO -	US 395 9TR STREET		18 67 -		23575
REND	WASHOE	RENO	EAST OTH ST		25 07		271381
RENO	WASHOE	RENO	RCETH HWY 355		SE 13		1 29483
RENO	WASHOE	****					Ne Change and

ER ACCIDENTS AT CROSSINGS.

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TATIC	COUNTY	CITY	HIGHWAY	VEN CROSSING	CR INCOTHON
	WASHOE	RENO	LAKE ST	111 1107	18 44167
ENO	WASHOE	RENO	VINE ST	424 4347	18 45536
ENG	WASHOE	RENO	SAGE ST	101 08	18 45548
ENO		RENO	ARLINGTON CR	125 1217	18 45665
END	WASHOE	RENO	VIRGINIA ST	111 11	45 45817
ENO	WASHOE	RENO	SIERRA ST	000 0107	46256
ENO	WASHOE	RENO	REYSTORE AVE	120 11	47885
	WASHCE	RENO	ACHTELLO	111 1415	44 47538
ENO		RENO	N VIRGINIA ST	000 0107	48827
ENO	WASHOE	RENO	# ARLINGTON	113 13	48558
ENO	WASHOE	RENO	VIRGINIA ST	000 0197	49835
ENO	WASHOE	REND	SIERRA ST	444 41	
ENO	WASHOE	RENO	N ARLINGTON AVE	121 1417	
ENO	WASHOE	RENO	VIRGINIA ST	121 11	53486
ENO	WASHOE	RENO	KEYSTONE	110 D1	N 53510
ENO	WASHOE	RENO	R ARLINGTON	120 12	N 53526
CHO	WASHOE	RENO	VIRGINA ST	111 12	II 53637
ENO	WASHOE		SAGE ST	111 18	. 54465
ENO	WASHOE		SAGE STREET	125 17	11 56545
ENO	WASHOE	RENO	CENTER ST	105 01	10 56928
ENO	WASHOE	RENO	VIREINIA ST	6167	48 58513
ENO	WASHOE	RENO	VIRGINIA ST	608 618587	10 59194
ENO	WASHOE	RENO		111 11	44 63764
ENO	WASHDE	RENO	LALE ST	111 18	48 65958
ENO	MS. HOE	RENO	SAGE ST	005 0107	AB 84938
ENO	WASHOE	RENO	KEYSTONE AVE	110 11	N 12319
ENO	WASHOE	RENO	VIRCINIA	125 17	IN DESSFREE
AND FASS	WASHOE	SAND PASS	COUNTY RO	000 07	10 \$41189A
FARES	WASHCE	RENO	SAEE ST M.P. 243.9	000 0208	10 44836
PARES	WASHOE	LANTON	OLD HIWAY SEO	125 17	18 58143
PARLS	WASHOE	SPARES	FREEPORT ELVD		H 50321
SPARLS	WASHCE	SPARES	PRIVATE YARD TING	015 07	18 58493
PARKS	WASHCE	RENO	SAEE ST	000 07 000 0710	18 50769
PARKS	WASHOE	SPARES	GREG ST		44 54843
SPARES	WASHOE	SPARES	PRIVATE CRESSING	115 1B	48 51538
SPARKS	WASHOE	SPARES	GALLETTI WAY	010 01	et 51617
PARES	WASHOE	SPARKS	SP MAINTHEE XING	005 08 005 07	10 53186
SPARKS	WASHCE	SPARES	GLENDALE RD		18 55896
SPARIS	WASHOE	RENG	SALE ST	020 07 030 07	10 56736
SPAFES	WASHOE	SPARES	GLENDALE AVE		## 58152
SPAFES	WASHOE	SPARES	PRIVATE TIPE	885 88 ACA ACAT	48 67458
SPARKS	WASHOE	SPARES	GLENDALE AVE	450 0607	00 70150
SPARES	WASHOE	SPARES	GREEG ST	005 07 AAA A71A	M R3839
SPARES	WASHOE	SPARES	GLENDALE AVE	000 0710	10 R5889
SPARKS	WASHOE	SPARES	GALLETTI WAY	685 61 	10 C8528
THISBE	WASHEE	FERMLEY	PEIVATE CROSSING	666 61 474 17	18 46885
VERGI	WASHCE	VERDI	SP CO ED	030 12	10 47859
VISTA	WASHOE	VISTA	ELEFPE LANE	### ##	
VISTA	WASHOE	VISTA	KLEPPE LANE	th8 \$488	11 45899
VIS"4	WASHOE	VISTA	VISTA WAY	125 1408	tt 51823
VIS.A	WASHOE	VISTA	ELEFPE LANE	838 8488	II 52658

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ER ACCIDENTS AT CROSSINGS.

RSTATION	COUNTY	CITY			reye 5
	*** *****************	*********	RIGHWAY	VEN CROSSING	CR INCOTNO1

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TOTALS: VEHSPO 2.467

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RR ACCIEENTS TOTAL LIST.

ne 3, 1992 at 9:43 a.s.

	STATION				TREMANE	DIVISION			6110	INCOTNO

	CANNON				ORE LINE TRACE			32		115
	DECOY-NCH-AGENCY STA			-	SINGLE MAINLINE			32		380
	DOLLY VARDEN STATION				SINGLE PAINLINE			32		280
	DCLLY-VARDEN-HONAGEN			_	SINGLE-RAINLINE			32		181
	EAST ELY			_	ORE LINE TRACK			32		1275
:0117		-			WESTWARD RAIN		5.	32		14539
	LAS VEGAS				RUCHSE SET-OFF TRE	CALIFORNAL	UP	32		#379CA213
2017		352.4		E	MAIN LINE	CALIFORNIA	UP			#985CA018
2017	APEX				MAIN LINE	CALIFORNIA	UP	32		0284CA203
2017		349.7	135	E	SINELE MAIN	CALIFORNIA	UP	32		\$284CA283
2003	ARDEN	322.5	135	E	SINELE MAIN	CALIFORNIA	UP	32		127864248
	ARDEN	3.2		E	MAINLINE	CALIFORNIA	UP	32	884121V	4686CA242
20113	BOULDER JCT	327.9		E	SET OUT TEACK	CALIFORNIA	UP	32		1889CA286
2003	BOULDER JCT	327.4		E	OLD SIDING	CALIFCENIA	UP	32		0780CA203
2003	BOULDER JCT	327.4		E	OLD SET OUT THE	CALIFORNIA	UP	32		0285CA289
20017	FARAIER	393.9	135	E	SINGLE MAIN	CALIFORNIA	UP	32		\$884CA2\$2
20017	GARMET	355.5	125	£	MAIN ,	CALIFORNIA	UP	32		\$385CA283
20113	HERCERSON		113	E	NO 9 LEAD	CALIFORNIA	UP	32		\$378CA248
20843	HENGERSON			E	TRACE 414	CALIFORNIA	UP	32		1183CA207
2003	KENCERSCN		114	E	SCALE TRACE TEB	CALIFORNIA	UP	32		\$786CA284
2003	HENDERSCH		111	Ē	TRK 15 7	CALIFORNIA	UP	32		1180CA201
2003	HENDERSON		113	£	NO 12	CALIFORNIA	UP	32		1183CA207
20113	HENDERSON		113	E	LEAD	CALIFORNIA	119	32		1188CA281
20017	ISLEN	472.4				CALIFCENIA	UP	32		#186CA241
20013	LAS VEEAS	33.4	121	E	CROSSOVER CP330	CALIFORNIA	UP	32		0490CA217
	LAS VEGAS .	33.4			YARO	CALIFORNIA	UP	32		0589CA203
	LAS VEEAS			. 7	RUNNING TPACK	CALIFORNIA	UP	32		8898CA201X
	LAS VEEAS				SINGLE NAIN TRACK	CALIFORNIA	UP	32		\$875CA286
	LAS VESAS	335.44		-	WEST NO 1	CALIFORNIA	UP	32		4775CA212
	LAS VESAS				WEST LEAC	CALIFORNIA	UP	32		127864241
	LAS VEEAS				WEST NC. 2	CALIFORNIA	UP	32		1176CA229
	LAS VEEAS				TRE 9	CALIFCENIA	UP	32		1278CA201
	LAS VEERS	334.2			WEST 2	CALIFORNIA	UP	32		\$176CA22\$
	LAS VEGAS				DRILL TRACK	CALIFORNIA	UP	32		1279CA027 0177CA014
	LAS VEGAS				BOULDER ERANCH	CALIFORNIA	UP	32		1279CA027
	LAS VEGAS				DRILL TEACE	CALIFORNIA	90	32		1176CA229
	LAS VEGAS			-	WEST NO. 2	CALIFORNIA	UP UP	32		\$178CA225
	LAS VEGAS				OLD MAIN RNCHOUSE SET/OFF TK	CALIFORNIA	UP	32		\$379CA213
	LAS VEEAS	326.2				CALIFORNIA	UP	3		1489CA249
	LAS VEGAS				ROUND HOUSE LEAD	CALIFORNIA	UP	31		1280CA206
	LAS VEEKS				WEST 42	CALIFORDIA	UP	3		#688CA281
	LAS VEGAS				H-7 LEAD	CALIFORNIA	UP	3		\$377CA214
	LAS VEEAS	33.5		- 7	LEAD/WEST 4	CALIFORNIA	UP	. 3		\$398CA212
	LAS VEGAS				ENGINE LENG	CALIFCENIA	UP	3		8988CA214
	LAS VEEKS				OLD SET OUT TRACK	CALIFORNIA	UP	3		#283CA2#1
	LAS VEEAS				CLO MAIN	CALIFORNIA	UP	3		#178CA225
	LAS VEEAS				WEST LEAD TO THE	CALIFORNIA	UP	3		\$377CA214
	LAS VEGAS				HOUSE TRACE 12	CALIFORNIA	UP	3		1280CA286
	LAS VEEAS				WEST LEE CF WYE	CALIFORNIA	UP	3		1188CA232
	LAS VEGAS				FENCE & CLO MAIN	CALIFORNIA	UP	3	2	4779CA245
	LAS VEGAS				OLO MAIN LINE	CALIFORNIA	UP	3	2	4388CA283
	LAS VEGAS		112	1	DELUCA INCUSTRY	CALIFORNIA	UP	3	2	8877CA382
	LITTLE SFFINES	471.7	11	1	SINGLE PAIN	CALIFORNIA	UF	3		1183CA283
	SLCAN	316.85	131	1	SINGLE PAIN TRACE	CALIFORDIA	UP	3	2	1988CA005

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ine 3, 1992 at 5:43 a.m.

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CHTY STATION				•	DIVISION			SXID	INCOTNO
				******					*********
COOS SLOAN	318.7				CALIFORNIA	UP	32		1276CA215
2COO3 SLOAN					CALIFORNIA	UP	32		0779CA204 0586CA014
2C017 UTE	3.7				CALIFORNIA	UP	32		211580
2COOT WEST CLIFFSIDE					EAST EAST	UP UP	32		211580
2COOT WEST CLIFFSIDE				SINGLE RANIN TRACK WESTWARD NAIN TRACK		WP	32		232877
2COOT ALAZON				JOINT PAIRED HAN TRA		WP	32		2111775
2C013 ANTELOPE					EASTERN	UP	32		232679
2CO15 ARGENTA 2CO15 ARGENTA					EASTERN	WP	32		251080
2COIS ARGENTA	487.7			INDUSTRY TRACE	EASTERN	LP	32		251681
2COLL BARTH	XP630		•	SINGLE MAIN TRACK	EASTERN	UP	32		262988
2COLL BARTH			F	SINGLE MAIN TRACK	EASTERN	UP	32		282476
2COIS BATTLE ACUNTAIN	478			SINGLE NAIN	EASTERN	WP	32		28981
2COIS BATTLE NOUNTAIN				DRESSER INCUSTRY TRE		UP	32		222881
2 BEOWANE				SINGLE MAIN TRACK	EASTERN	WP	32		222588
2COLL EEOLAWE	510				EASTERN	UP	32	2	283176
COLL EEQUANE	614		-	SINGLE MAIN TRACK	EASTERN	UP	3		252777
2CONT CARLIN	649		-	SINGLE MAIN TRACE	EASTERN	WP	32		291676
SZCOOT CARLIN	641			SINGLE MAIN TRACK	EASTERN	WP	3		26583
12CONT CAFLIN	646			SINGLE MAIN TRACK	EASTERN	WP	3	2	283376
SZCROT CAPLIN	534.5	.18	E	SINGLE MAIN	EASTERN	WP	3	2	281281
32 CAPLIN	NP638	845	E	SINGLE MAIN TRACK	EASTERN	WP	3	2	293888
J2CONT CLIFSIDE	MP779	017		SINGLE MAIN TRACK	EASTERN	WP	3	2	2101182
12CONT DEETH	694			SINGLE MAIN	EASTERN	WP	3	2	221382
32COOT DEETH				SINGLE MAIN TRACK	EASTERN	UP	3	2	253280
32COOT DEETH	NP598	848	6	SINGLE MAIN TRACK	EASTERN	WP	3	2	293680
BICONT CEETH	#P591			SINGLE MAIN TRACK	EASTERN	WP	3	2	222679
32CO11 DUNFHY	610.12		1	SINGLE MAIN TRACK	EASTERN	WP	3	2	274577
32 EASTERN	RUBY	137	1	SINGLE MAIN TRACE	EASTERN	WP	3	2	211486
32C007 ELEVAZ	#P686		1	SINGLE MAIN TRACK	EASTERN	WP	3	2	212681
SZCONT ELEURZ	683		1	SPUR TRACE	EASTERN	WP	3	2	261483
32 ELEURZ	#P688			SINGLE MAIN TRACE	EASTERN	WP	3	2	2111/80
32CONT ELBURZ	683.3	150	1	EASTBOUNC MAIN TRACK	EASTERN	WP	3	2	27276
32C007 ELLO	665		1	NO 1 TRACE NEW YARD	EASTERN	WP	3	2	2102477
32 ELEO	MP665		1	NO. 1 TRACE NEW YARD	EASTERN	WP	3	2	293880
32C007 ELKO	MP556	.11	1	SINGLE MAIN TRACK	EASTERN	WP		2	29981
32C007 ELLO	MP665			YARD TRACE NO 1	EASTERN	UP		2	23279
32C007 ELLO	SP556			SINGLE MAIN TRACE	EASTERN	WP		2	2113776
32CEN7 ELFO	665			TARD TRACE	EASTERN	WP		2	212777
320007 8110	664			E SINGLE MAIN	EASTERN	WP		2	29282
32C117 ELLO	665			SINGLE MAIN TRACK	EASTERN	WP		2	283276
320007 5180	RP665			E NO 3 TRACE	EASTERN	WP		2	24881
32C007 ELKO	559.8			E SP MAIN	EASTERN	69		2	261581
32C007 ELKO	NP665			E YARD TRACE 4	EASTERN	WP		2	211681
32CO13 ELLISON	572	161		SINGLE MAIN TRACK	EASTERN	WP		2	212376
32C031 FLANIGAN	MP384			E SINGLE MAIN TRACK	EASTERN	WP		2	21879
32CO13 FLORA	479.4			SINGLE PAIN TRACE	EASTEEN	UP		12	2102177 291176
32C013 GASKELL	584			E SINGLE PAIN TRACK E SINGLE PAIN TRACK	EASTERN	UP		2	25876
32CO13 EASKELL	506				EASTERN	UP		12	242576
32CO13 EASKELL	509	•••		SINELE MAIN TRACE	EASTERN				
32CO13 EASKELL	509			E SINGLE MAIN TRACE	EASTERN			2	2103277
32C031 EERLACH	AP444 433	03		E SINGLE MAIN TRACE SINGLE MAIN TRACE	EASTERN EASTERN	UP		12	234976 243576
32C031 6EFLACH			-	E YARD TRACE	EASTERN			12	2111480
32 GERLACH 32C013 ECLCONDA				E EASTBOUNC NAIN TRACI		-		32	27776
32CO13 IFON POINT	447			E JOINT FAIFED MAIN TH		LP		32	2121275
520015 1900 P0101			•						

RR ACCILENTS TOTAL LIST.

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									6110	INCOTNO
	STATION				TREMAME	GIVISION				
		497	150	•	SINGLE PAIN TEACK	EASTERN	WP	32		262877
2	JUNGO NARBLEHEAG	871		E	BRANCH	EASTERN	WP	32		273278
	AOLEEN	-		-	SINGLE MAIN TRACE	EASTERN	WP	32		292478
	PALISADE				SPUR TRACE	EASTERN	-	32		2101388
	PARDO	\$73.5			SINGLE MAIN	EASTERN	WP	32		24583
20031		431	-		SINGLE MAIN TRACK	EASTERN	WP	32		274477
	PILOT	RP 786	135	٤	STRELE MAIN TRACE	EASTERN	LP	32		222280
	FREBLE	448	155	٤	PAIRED MAIN TRACK	EASTERN	WP	32		221575
	PREBLE	556	151	E	SINGLE MAIN TRACK	EASTERN	WP	32		28977
2013	PREBLE	#P556	116	E	SINGLE MAIN TRACK	EASTERN	WP	32		22889
20013	RAGLAN	518.50			SINGLE MAIN TRACK	EASTERN	WP	32		243479
20013	RECHOUSE	562.97		٤	SIDING	EASTERN	WP	32		212183
2015	RENNOX	589P31	115	E	SINGLE MAIN TRACK	EASTERN	WP	32		221381
20031	REYMARD	416	.11	E	SINGLE MAIN TRACK	EASTERN	WP	32		273677
20031	REYNARD	416.3			SINGLE MAIN TRACK	EASTERN	UP	32		ROW5479
:20027	RONDA	474	111		SINGLE MAIN TRACK	EASTERN	WP .	32		26383
320027	RUNDA	MP471	121	E	SIDING	EASTERN	119	32		27476
120127	SCRLA	89469	145	E	SINGLE MAIN TRACK	EASTERN	49	32		232111
320007	SAGE	753	\$45	E	SINGLE NAIN	EASTERN	WP	32		281081
:2	SAND FASS	397	111		SINGLE RAIN TRAC	EASTERN	WP	32		273080
120031	SAND FASS	394			SINELE MAIN TRACK	EASTERN	WP	32		273979
32	SAND PASS	398			SINGLE MAIN LINE	EASTERN	WP	32		212260 2121076
	SAND PASS	386			SINGLE NAIN TRACK	EASTERN	UP	32		23775
	SAND PASS	393			SINGLE MAIN TRACK	EASTERN	UP	32		273978
	SAND PASS	397			SINGLE MAIN TRACK	EASTERN	UP	32		274377
320031		484			SINGLE NAIN TRACK	EASTERN	UP	32		212777
	SHAFTER	756			SHAFTER SIDING	EASTERN	UP	32		2111276
	SHAFTER SILVER IDNE	89772			SINELE MAIN TRACK	EASTERN	UP	32		2101779
	SFFUCE	746			SINELE MAIN TRACK	EASTERN	UP	32		212976
32	SFRUCE	RP748			SINGLE MAIN TRACK	EASTERN	LP	32		261280
	TCEAR	MP732			SINGLE MAIN TRACK	EASTERN	-	32		23276
	TREED	453			SINGLE NAIN TRACK	EASTERN	WP	32		211977
	7 77560	451	111		SINGLE PAIN TRACK	EASTERN	LP	32	2	2102077
	TREGO				SINGLE MAIN TRACK	EASTERN	UP	32	2	2121379
	TULASCO	789	111		SINGLE MAIN TRACK	EASTERN	WP	32	2	2121580
	TULASCO	NP587	025		SINGLE MAIN TRACK	EASTERN	WP	32		29881
32000	7 TULASCO	MP789	165	1	SINGLE MAIN TRACK	EASTERN	WP	32		261476
32011	3 VALNY		-		E SINGLE NAIN TRACK	EASTERN	WP	37		210480
32000	7 VIVIAN				E SINGLE PAIN TRACK	EASTERN	UP	32		2101582
32044	7 WELLS				E SINGLE MAIN TRACK	EASTERN	WP		2 833519R	
32018	7 WELLS				E SINGLE MAIN TRACK	EASTERN	WP	3		251079
	1 WEST BEOWAWE	AP618			SINGLE RAIN TRACK	EASTERN	WP	3		241479
	3 WINNERUCCA	MP532			NAIN TRACE	EASTERN	WP	3		2112582
32	WINNERUCCA	MP532			E YARD TRACE 3	EASTERN	WP	3		28380
	3 WINKERUCCA	532			E SINGLE PAIN TRACK	EASTERN	WP	3		241976
32	WINNERUCCA				E YARD TRACE 3	EASTERN	UP	3		22388
1	3 WINNERUCCA				E SWITCH AT SOUTH E WELDINE LEAD	EASTERN EASTERN	119	3		222181
	3 WINNERUCCA				E SINGLE AFIN TRACK	EASTERN	59	3		23675
	3 SIANEAUCCA	527			E WEST EAC 417	FEATHER RIVER	UP	3		1454FR245
	7 ELKO 7 ELKO				E MAIN LINE	FEATHER SIVER	UP			0150FR219
1	7 6110				E TRACE AT (M. END)	FEATRER RIVER	UP	3		#15#FR213
	1 GERLACH				E WEST SHITCH	FEATHER RIVER	UP	3		1089F8286
	1 MORTH RENC	28.3			E TRACE SEL	FEATHER RIVER	UP	3		1558FR284
	1 ACETH RENO	28.3			E TRACE HELH	FEATHER RIVER	UP	3		1552 1204
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			TARANE	OIVISION	RATE	ST	STID	INCOTHO
CHTY STATION								
C031 RENO			E MAIN 210	FEATHER RIVER	UP	32		#385FR2#4
CO31 EEYMARD	4.1		ENAIN	FEATHER RIVER	UP	32		0186FR202
2013 4650	542.3	155	E MAIN LINE	FEATHER SIVER	UP	32	8334381	1990FR289
2CO11 DUNPHY	610.0		UP SPUR	REVADA	UP	32		0189#V201
2CONT ELEO	6.6	115	E 129 BALLOCH	NEVADA	UP	32		1188MV201
20007 8:10	6.5		E 11 & 12 EAST END	REVADA	UP	32		4588#V242
2CONT ELLO	6.6		E TRACK 17	NEVADA	UP	32		0188#V201
20007 ELEO			E 17 RAIL EAST END	REVADA	UP	32		0589NV202
2CO13 FLORA			E MAIN LINE	NEVADA	UP	32		04898V201
2CO13 FLORA			E MAIN LINE	NEVADA	UP	32		0489#V201
2CO27 RONDA			R MAIN LINE	NEVADA	UP	32		02898V201 02888V201
2COOT WEST CARLIN	6.4		E MAIN LINE	NEVADA	SP	32		53141
2COOT CGERE	648.8		WESTWARD NAIN	SACARARENTO SACEANENTO	SP	32		46297
20007 ALAZON	603.6 298.5	111	E BRANCHLINE	SACRARENTO	SP	32		54428
IZCO19 AFFIAN -	489.0		WESTWARD MAIN	SACRAMENTO	SP	32		59786
SZCOIS ARGENTA			E SPUR AREENTA	SACRAMENTO	SP	32		55661
32CO15 ARGENTA			E WESTWARD MAIN	SACEANENTO	SP	32		46179
SZCOLL BAFTH	521.		AAIN	SACEARENTO	SP	32		53784
320011 84678	629.2			SACEANENTO	SP	32		68388
320011 84678			E BARTH SFUR	SACEARENTO	SP	32	1	50417
320011 24678	520.40			SACEANENTO	SP .	32	!	53236
32CO15 EATTLE ROUNTAIN	479.0		ENAIN	SACEANENTO	SP	32	2	58202
32CO15 BATTLE MOUNTAIN	478.2		EMAIN	SACRAMENTO	SP	32		54525
32COIS EATTLE ACUNTAIN			E INCO/44-67	SACEARENTO	SP	32		58202
32C015 BATTLE ACUNTAIN			E HAIN	SACRAMENTO	SP	32		58741
32CE15 BATTLE MTR.			E TEAN	SACEAMENTO	SP	3		45067
32CO15 EATTLE MTH			E MAIN LINE	SACEARENTO	SP		7408151	
32CO11 EECWAWE			E EASTWARD MAIN	SACRAMENTO	SP	31		52157 55216
32C011 28C-44-8			E HOUSE	SACIARENTO	SP	3		57911
32CO11 EECWAWE			E WP INTERCHANGE	SACEANERTO SACEANERTO	59	3		44028
32CE11 EECWAWE	511.0		E MAIN TRACK E STOCK TRACK	SACEARENTO	SP	3		R5689
32CO11 BECWAWE 32 BECWAWE	508.2		WESTWARD RAIN	SACEANENTO	SP	3		52930
32COLL EEGWAWE			E MAIN TRACE	SACRARENTO	SP	3		44169
32COLL BERMANE	515.70		WESTWARD MAIN	SACEARENTO	58	3		53216
32COLL BEOWANE	617.7			SACRAMENTO	SP	3	2	48539
32CO11 RECHANE			E CROSSOVER	SACEARENTO	SP	3	2	51597
32CEN7 CARLIN			E NO 1 TRACE	SACEANENTO	SP	3	2	44848
32C887 CAFLIN	537.2		MAIN	SACRAMENTO	59	3		58392
32 CAFLIN			E YARD TEACE 3	SACRARENTO	5.	3		62448
32C007 :#FLIM			E YARD TRACK 1	SACRAMENTO	SP	3		51595
32CONT CAPLIN			E TRACK 4 YARD	SACEARENTO	SP	3		48285
32CRET CARLIN			E YARD 4 1	SACEARENTO	SP	3		45299
32CERT CARLIN			E SE3 E TRACE 2	SACRAHENTO SACRANENTO	SP		2 2	50174 60260
32 CARLIN	646.7		E WP MAIN	SACRAMENTO	SP		2	52976
32COUT CAFLIN 32COUT CAFLIN			E E/END #1	SACRARENTO	SP		2	53354
SECONT CAFLIN			E SPIN 502/503	SACRAMENTO	SP		2	56189
320007 CAFLIN			E WEST DETCUR TRACK	SACEARENTO	SP		2	55003
32 CAFLIN			E WESTWARD MAIN	SACEARENTO	SP.		2	52310
32 CAFLIN			E WESTWARD MAIN	SACEARENTO	SP		2	52910
320007 CARLIN	538.0		EMAIN	SACEARENTO	SP		12	54275
32 CARLIN			E TRACE 3	SACEARENTO -	SP		12	60260
32C007 CAFLIN	535.7		MAIN	SACEAREBTO	SP		12	58961
320007 CARLIN	531.3	14	E MAIN TRACE	SACEARENTO	SP	:	12	55648
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TCNTY STATION	AILEPO S			DIVISION		ST GIID	INCOTNO
20447 CARLIN	537.3 0		VAR WATEES	SACRAMENTO	SP	32	54478
2 CASLIN	535.7 4			SACRARENTO	SP	32	52310
2CH27 CHOLONA	457.6 1	45 E		SACRARENTO	SP	32	55643
20031 CLARK	262.4 1	21 1		SACRARENTO	\$₽	32	59454
20031 CLARK	262.4 1	11 E	MAIN	SACEARENTO	SP	32	59494
2CO11 CLURO	627.1 1	55 E	CLURO	SACEARENTO	SP	32	54859
2COOT COSRE	644.8 1	185 E	WESTWARD MAIN	SACEARENTO	SP	32	\$3152
20027 COLADO	350.05 0	125 E	RAIN	SACRAMENTO	SP	32	61501
2 CARWIN	278.5 1	130 E	WESTBOUND NAIN	SACRAMENTO	SP	32	68190
ZCONT DEETH	595.0 0			SACRAMENTO	SP	32	59790
ZCONT DEETH	596.1 (155 E	NAIN TRACE	SACRAMENTO	SP	32	45786
CTAT DESTH	594 (124 E	SP MAIN	SACRAMENTO	SP	32	59015
IZCONT CEETH	588.6	168 E	WESTWARD RAIN	SACRARENTO	92	3.	48648
IZCONT CEETH	586.0 1			SACEARERTO	SP	32	48626
CONT CEETH			RAIN TRACE	SACRAMENTO	SP	22	52946
CONT CEETH			HAIN TRACE	SACEARENTO	SP	32	45459
B2COOT DEETH			NAIN TRACE	SACRAMENTO	SP	32	49825
COLL DUNFRY	508.0			SACRAMENTO	SP	32	58487
COLL CUNPHY	610.1			SACRAHENTO	SP	32	50409
IZCOLL CUNFRY		141 E		SACEARENTO	SP	32	54574
BZCEET ELBURZ		151 8		SACEANENTO	SP	32	71910
32CTAT ELEURZ			RAIN TRACE	SACRAMENTO	SP	32	51666 47535
SZCHAT ELLO	559.0			SACRANENTO	SP	32	
32C007 ELLO		•••	WESTWARD MAIN	SACRAHENTO	SP	32	55266
32C007 ELLO		•••	RAIN TRACE	SACRAMENTO	SP	32 32	61641 52956
32C007 ELLO			UP NAIR	SACRAMENTO SACRAMENTO	SP	32	57121
32C007 ELLO			AAINLINE	SACRAMENTO	Sř	32	45838
32CO13 ELLISON			MAIN TRACE	SACRAAENTO	SP	32	\$3777
320813 FLCKA	479.		E KAIN	SACEANENTO	SP	32	46836
SZCR13 EASKELL	444.28			SACEANENTO	SP	32	46336
32C031 EERLACH 32C013 EGLCONDA			E NAIN LINE	SACFARENTO	SP	32	46527
32CO13 ECICONDA	434.1			SACEARENTO	SP	32	53214
32C#31 ##FED		141	WESTWARD RAIN	SACEARENTO	SP	32 740740	A 51627
32COOT HALLECK	584.2			SACEARENTO	SP	32	45268
32CORT HALLECK	\$77.0		WESTWARD RAIN	SACRAMENTO	SP	32	67410
32COLL RAFNEY			E MAIN TRACT	SACEARENTO	59	32	68228
32COR1 HAZEN			E RINA RAIN	SACRAMENTO	SP	32	52481
32CEN1 HAZEN			E HOUSE TRACE	SACRAMENTO	SP	32	54552
32COOT HELSURN	622.5	845	E MAIN TRACE	SACRAMENTO	SP	32	44539
32CH27 HUNBOLGT	377.0		E MAIN	SACEARENTO	SP	32	57875
32C827 :PLAY	192.2		E WESTWARD MAIN	SACEARENTO	SP	32	53686
32CO13 TRCM POINT	455.9	148	E WESTWARD MAIN	SACEANENTO	SP	32	52415
32CH13 IFCH POINT	457.2	161	E MAIN	SACEANENTO	SP	32	55286
32CH13 ISCH POINT	454.6		WESTWARD PAIN	SACEANENTO	SP	32	58977
320113 38860	511.3	151	E MAIN LIPE	SACEARENTO	SP	32	53876
32CHEL LAWTON	238.8	\$45	R RAIN TRACE 2	SACEAKENTO	SP	32	46285
32CO31 LAWTON	135.2		E MAIN TRACE #1	SACEARENTO	SP	32	44879
32C#21 LUNING	407.5		BRANCH LINE	SACRAMENTO	SP	32	48756
32CORI MASSIE	291.6		E MAIN EAST	SACRAMENTO	SP	32	R6869
SICCOL PASSIE	253.0		E MAIN	SACRAHENTO	SP	32	53437
SZCARI MASSIE	296		R MAIN	SACRARENTO	SP	32	46895
32CH13 PILL CITY	_ 391		E MAIN	SACRARENTO	SP	32	55756
32C#27 MILL CITY	390.0		ERAIN	SACRAMENTO	SP	32	44838
32C#21 #1#A	417.0		E YARD TRACE 4570	SACRAMENTO	SP	32	53571
32CHAT MILEEN	545.6	115	E MAIN TRAIL	SACRAMENTO	SP	32	53317