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ADMINISTRATIVE DRAFT

SANTA CRUZ BRANCH LINE ECONOMIC ANALYSIS

Prepared for:
Santa Cruz County Regional Transportation Commission

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I. INTRODUCTION

A. Summary of Analysis

Alta Transportation Consultants, Inc., and R. L. Banks Associates (collectively, "Alta/Banks") are pleased to present this economic analysis of potential short line freight operations on the Santa Cruz Branch Line (the "Branch Line") following acquisition by the Santa Cruz County Regional Transportation Commission. Based on the data and analysis presented below, Alta/Banks concludes that the Commission's assumption of freight operations on the Branch Line may be economically viable. The actual financial performance of the freight operations ultimately will depend on the interchange rate – that is, the division of freight shipping revenues between Branch Line operations (which will be received by the Commission and/or its short line contractor) and the main line operations (which will be received by Union Pacific Railroad ("UP") for carrying the freight from Pajaro Junction to its ultimate destination). Alta/Banks projects that, depending on the interchange rate with UP, short line freight operations on the Branch Line, with the short line operator responsible for routine and program maintenance of the trackage, are likely to see an annual profit/loss range of a $391,000 loss to a profit of $41,000.

In order to enable potential short line bidders to project reasonably profitable operations and submit favorable bids to the Commission, Alta/Banks projects that a freight interchange rate of $440 per carload would need to negotiated with UP. That is, the short line operator would need to receive an average of $400 in revenue for each carload it transports to and from UP's main line. If that interchange rate can be negotiated with UP as part of a proposed acquisition, Alta/Banks nevertheless recommends that the Commission solicit bids from short line operators during the escrow period to ensure the validity of these financial projections prior to the close of escrow and the Commission's assumption of the freight operations. It is also expected that the prospective short line operator would conduct its own inspection of the Branch Line facilities before assuming responsibility for maintenance.

B. Background

In 2000, the Commission established itself as the Rail/Trail Authority for the purpose of acquiring and overseeing the future development and operations of the Branch Line. The Commission approved a budget and work program for staffing and for consultant assistance with the acquisition and oversight planning of the Branch Line. The Commission's proposal was to acquire the Branch Line for interim bicycle and pedestrian trail and corridor preservation purposes, and to allow UP to retain the rights to continue to operate freight service on the Branch Line.

In 2001, the Commission contracted with an acquisition consultant team led by Hyde, Miller, Owen & Trost. In early meetings with the Commission and its staff advisory group, the consultant discussed disadvantages to UP's long-term control over freight operations on the Branch Line and outlined alternative acquisition options to achieve the Commission's goals and objectives. As a result of those discussions, Alta/Banks was asked to prepare to prepare a Summary Analysis of the key acquisition options for the Branch Line

to help the Commission make preliminary decisions on the most appropriate acquisition structure, given the Commission's goals and objectives. Alta/Banks analyzed four options for the freight operations on the Branch Line: (1) UP retention of the freight operations; (2) Commission acquisition of the freight operations and contract with a short line operator; (3) UP sale of the freight operations to a short line operator; and (4) removal of the freight operations from federal Surface Transportation Board jurisdiction and provision of freight service by private contract with a short line operator. Alta/Banks' Summary Analysis, based upon preexisting studies and reports concerning the Branch Line, recommended that the Commission explore Option 2 for further study. The Commission adopted Alta/Banks' recommendation, but also requested further analysis of Option 4.

C. Methodology and Summary of Findings

Alta/Banks' Summary Analysis identified seven tasks or areas of further study in order to analyze the options sufficiently to guide the Commission's acquisition strategy with UP. Those seven tasks/areas are set forth below, with a summary of Alta/Banks' findings in each task/area.

1. **Task:** Continue to press UPRR for economic information relating to freight service on the Branch line.

   Findings: UP continues to refuse the Commission access to any operating information, including shipper and revenue data, information concerning traffic volume and frequency of service, maintenance and safety records, bridge books and inspection reports, or other information concerning its freight operations on the Branch Line. UP has taken the position, consistent with its general position in other transactions, that it will not release proprietary economic/operating information until a deal in principle (e.g., agreement on price) has been reached with a potential purchaser. Nevertheless, Alta/Banks believes that sufficiently reliable data exists to negotiate a deal in principle with UP concerning the acquisition of UP's freight operations on the Branch Line. The Commission can then review UP's actual operating information while the property is in escrow in order to confirm the conclusions in this report. Alta/Banks believes that this approach is the most cost-effective way to fully analyze the Branch Line prior to the acquisition.

2. **Task:** Complete detailed engineering analysis of the corridor and especially the physical condition and likely capital and operating/maintenance costs.

   Findings: Alta/Banks has reviewed all prior reports concerning the physical condition of the Branch Line, including Summary Economic Analysis of Alternative Rail Line Acquisition Options Santa Cruz Branch (Alta Transportation Consulting, 2001), Net Liquidation Value of the Track, Signals and Structures of the Santa Cruz Branch

From Watsonville Junction to Davenport (The Woodside Consulting Group, 1995), Intercity Recreational Rail Study for the San Francisco Bay Area to Santa Cruz Corridor (Parsons Brickerhoff Quade & Douglas, Inc. 1996), Santa Cruz Branch Rail Line Acquisition: Project Study Report (Santa Cruz County Regional Transportation Commission, 2000), Going Concern Value of the Santa Cruz Branch (The Woodside Consulting Group, 1997), and a letter from Metrolink dated November 5, 1995, titled "Observations of Track Condition on SP Santa Cruz Line." Alta/Banks also has reviewed the current operating patterns for UP's freight operations on the Branch Line, has interviewed numerous short line operators and public agency freight operators, and has reviewed industry data on freight operations. Based upon this analysis, Alta/Banks believes that it can forecast expected capital and maintenance costs with sufficient confidence to eliminate the immediate need for an additional detailed, and costly, engineering inspection of the entire Line. First, the existing reports and continuing operations on the line, along with information obtained from private and public freight operators, sufficiently support, for negotiation purposes, the capital and maintenance costs presented herein. Second, detailed engineering analysis should be guided, to the extent possible, by proposed uses of the Branch Line. If, for example, the Commission's acquisition plan were to include a limited recreational passenger component, that decision should guide the engineering analysis. Third, the detailed engineering analysis would benefit from UP's maintenance and property records, which would be available in escrow. Fourth, given the potential change in physical conditions between now and the close of escrow, such analyses should be deferred until closer to the date of transfer to ensure that all potential costs have been estimated prior to ownership by the Commission. As a consequence, Alta/Banks recommends that the Commission proceed with negotiations based upon the analysis presented herein, subject to confirmation of this analysis by further engineering analysis prior to the close of escrow.

3. **Task:** Complete additional economic studies into the existing and potential revenues and costs, and identify the likely costs, profits, and/or losses to be borne by the Commission, and potential funding sources. Include additional analysis of other publicly-operated freight operations in California and the United States to reveal approaches that are applicable to the Santa Cruz Branch Line.

   Findings: As noted above, even without UP's operating information, and without a detailed engineering analysis of the Branch Line, Alta/Banks believes that it can confidently forecast the likely costs, profits, and/or losses from the freight operations. That forecast, along with our analysis of other publicly-owned or operated freight lines in California, is presented herein. As discussed, the key

variable in determining the economic viability of assuming the freight operations is the revenue division between the Branch Line operations and UP, which would continue to handle freight shipments between Pajaro Junction and the ultimate destination. This report provides the economic parameters for the negotiation of the interchange rate agreement with UP.

4. **Task:** Obtain bids from short line operators to provide freight service and provide on-going maintenance, contingent on acquiring the property.

   Findings: To date, the short line operators contacted for this study, while expressing strong interest in contracting for freight operations on the Branch Line, were, understandably, unwilling to provide specific bids for the freight service until the Commission is under contract to purchase the Branch Line and issues a formal request for proposal. As noted above, however, our interviews with these short line operators provide confidence that the forecasts herein can be relied upon by the Commission to complete its negotiations with UP. In addition, however, we are continuing to actively work with the Roaring Camp & Big Trees Railroad, who has shown an interest in developing a pro forma operating plan. That pro forma should be available later this month or in December. Alta/Banks will supplement this report as necessary to incorporate any new information. In any event, Alta/Banks believes that the Commission should solicit bids for a short line freight operator, if possible, while the property is in escrow. This will ensure that the revenue and cost projections are accurate prior to the close of escrow and the formal assumption of the freight operations by the Commission and its short line operator.

5. **Task:** Review/revisit decision between Options 2 and 4 based upon findings of preceding steps and short line contacts/bids.

   Findings: Alta/Banks has concluded that there may be substantial economic incentives to remove the freight operations on the Branch Line from Surface Transportation Board jurisdiction, as would be the case under Option 4. Such jurisdiction subjects the freight operators to common carrier status and the associated railroad retirement benefits can increase labor costs significantly. Nevertheless, we have concluded that the numerous legal, procedural, and practical barriers to such action make it difficult to pursue at this time. Legally, while there is precedent for private freight operations, we are aware of no precedent for private freight operations where, as here, there remain multiple freight shippers on the Line and the shippers are not hauling their own freight. Procedurally, the uncertainty of whether the Surface Transportation Board would approve the request would

make planning the transition to Commission control of the freight operations complex. Shippers and rail labor interests also would have the right to object to the removal of the Branch Line from Surface Transportation Board jurisdiction. Practically, it is unclear whether the Commission would receive the economic benefit of potentially lower labor costs for the freight operations. The short line operators interviewed for this report are all common carriers. Consequently, in order to achieve the benefit of lower labor costs, the operators would have to establish a separate entity, with separate employee benefits and without common carrier status, serving the Branch Line. Based upon our interviews with the potential short line operators, we doubt that the Commission would receive any economic benefit from this option. Nevertheless, we believe that this option can remain open through escrow, and potentially even be bid as an alternate, when the Commission seeks a short line operator.

6. **Task:** Investigate needed funding sources for any shortfall.

Findings: Other public agencies that own railroad corridors have utilized a wide variety of funding sources for major long-term rehabilitation expenses. Where freight and passenger usage of a corridor is high (such as the NCTD line in North San Diego County), long-term expenses are at least partially covered by usage fees paid for by the operators (BNSF, Amtrak). Others have relied on a combination of sources including bonds, sale tax revenues, and competitive grants. Alta/Banks believes the Commission would have similar success to these agencies in obtaining long-term funds. The following financial sources may be available:

- Railroad Rehabilitation and Improvement Financing Program (RRIP)
- Proposition 181 (The Passenger Rail and Clean Air Bond Act of 1994)
- Regional State Transportation Improvement Program (STIP)
- FTA Section 5309 New Start monies
- TEA-3 (reauthorization of TEA-21 scheduled for 2003)
- Local sales taxes
- Internally generated funds from operating profits

[Additional information on the availability of funding is being developed for inclusion in the final report to the Commission.]

7. **Task:** Submit an acquisition proposal to UPRR based on the acquisition option selected by the Commission.

Findings: We understand that Hyde, Miller, Owen & Trost has performed this task and will report to the Commission separately.

II. EVALUATION OF POTENTIAL SHORT LINE OPERATORS AND INVESTIGATION OF FREIGHT SERVICE ON PUBLIC RIGHTS-OF-WAY

A. Potential Short Line Operators

There are precedents in California for short lines to provide freight service over land and easements owned by public agencies. A common arrangement is a long-term lease between the short line and public agency with rent adjusted annually for changes in traffic volume. Typically, repairs and maintenance are the responsibility of the operator, assuming the right-of-way meets Federal Railroad Administration/California Public Utility Class 1 or better standards at takeover, as appears to be the case with the Branch Line (if not, any upgrade would probably be at the cost of the leasing agency).

There are approximately thirty short line railroads throughout California. While there are no short lines identical to the Santa Cruz Branch Line, there are some which provide a common carrier short line freight service interchanging traffic with a mainline railroad and operate on at least some publicly-owned right-of-way. Below are brief descriptions of the short line railroads that either are conducting operations most comparable to the Branch Line or are qualified candidates to operate freight service on the Branch Line.

1. Anacostia & Pacific

This holding company, headquartered in Chicago, owns various short line railroads nationwide, including the Pacific Harbor Line that serves the ports of Los Angeles and Long Beach. The right-of-way is primarily owned by the Ports of Los Angeles and Long Beach. Over 25,000 carloads of freight move over Pacific Harbor Line's tracks each year and the company provides dispatching services to over 20 inter-modal unit trains each day. The right-of-way is shared with two other railroads and Pacific Harbor Line charges them for dispatching services.

2. McCloud Railway Company

The McCloud Railway Company operates freight service along 77.7 miles of track between Mt. Shasta and Burney, and another 19 miles on a branch line from Bartle to Hambone. The U.S. Forest Service owns 32 miles of the right-of-way. Nearly 3,000 carloads of outbound lumber and diatomaceous earth are handled each year. The Shasta Sunset Dinner Train and an open-air excursion train, both operated by McCloud, offer passenger service along a portion of the track. Freight is only moved during the week so as not to hinder popular weekend passenger trains. Passenger trains scheduled on Thursdays and Fridays depart at 4:00 p.m. to minimize interference with freight trains.

3. Santa Cruz, Big Trees & Pacific Railway

Roaring Camp Inc. operates two lines: the Roaring Camp & Big Trees Railroad and the Santa Cruz, Big Trees & Pacific Railway. The right-of-way is privately owned and held under a long-term leasehold by the Roaring Camp's parent company. Roaring Camp & Big Trees operates passenger excursion narrow gauge trains through six miles of redwood groves

in the Santa Cruz Mountains near Felton. Most of its income is from individual and group visitors, with additional income derived from restaurant, merchandise, and entertainment sales.

The Santa Cruz, Big Trees & Pacific Railway is a common carrier that operates between Olympia and the Santa Cruz Beach Boardwalk. The railroad owns most of the track and obtained has trackage rights from UP to the remainder. The only freight customer is the San Lorenzo Lumber Company in Felton. This line also operates sightseeing excursion trains between Roaring Camp and Santa Cruz.

4. San Diego & Imperial Valley Railroad

Operated by RailAmerica, Inc., the San Diego & Imperial Valley Railroad (SDIV) operates freight service along 38.8 miles of three of the four routes of the San Diego & Arizona Eastern Railway: the Main Line operates from Centre City, San Diego, to the International Border at Tijuana; the La Mesa Branch operates from downtown San Diego to El Cajon; and the Coronado Branch operates from National City to Otay. The portion of the right-of-way between San Diego and San Ysidro, on which the San Diego Trolley operates, is owned by the Metropolitan Transit Development Board. Approximately 4,000 carloads of freight travel along these routes annually. Freight operations that require use of Trolley track are conducted in the early morning hours when there is no Trolley service.

5. Santa Maria Valley Railroad Company

The Santa Maria Valley Railroad Company (SMV), owned by the G. Allan Hancock – Rosemary Trust, operates 14.8 miles of freight service between Santa Maria and the Union Pacific connection in Guadalupe. The right-of-way is privately owned, with the City of Santa Maria owning easements over city streets along the right-of-way. Approximately 2,000 cars of freight are transported annually.

6. Sierra Railroad Company

The Sierra Railroad Company operates freight service along 49 miles of track between Oakdale and Standard, CA. The right-of-way is privately owned. Approximately 2,000 cars are shipped along the line annually, primarily for the lumber industry in the area. The California State Railroad Museum operates a passenger excursion train on the line that appeals to the movie industry.

7. Trona Railway Company

The Trona Railway Company (TRC) is a private railroad with a 30-mile line between Trona and Searles. The U.S. Bureau of Land Management and the U.S. Navy own the right-of-way. The company is owned by IMC Chemicals. Approximately 20,000 carloads of military equipment and natural resources are transported each year.

8. Yolo Shortline Railroad

The Yolo Shortline Railroad Company is an investor-owned common carrier railroad that operates on 11 miles of track between West Sacramento and Clarksburg, and 17 miles of track between West Sacramento and Woodland. The right-of-way within the Port of Sacramento is owned by the Port and the right-of-way within McClellan Park is owned by Sacramento County; the remainder of the right-of-way is owned by Yolo Shortline. The Yolo Shortline connects to both the Burlington Northern Santa Fe and Union Pacific railroads in West Sacramento and McClellan Park (an industrial park). Fewer than 2,000 cars of freight are shipped along the Yolo Shortline each year. Excursion trains operate along the railroad during weekends.

After interviewing the foregoing short line railroads, Alta/Banks believes that only some of the interviewed short lines would respond to a request for proposal issued by the Commission to assume freight operations on the Branch Line. Many lines are small operations without the required resources, some are engaged in freight switching service only, and still others operate in remote areas with no inclination to expand. Those lines which might submit bids include RailAmerica, Inc., which already has four short lines in California; Yolo Shortline Railroad; Sierra Railroad; Roaring Camp Railroads; and Anacostia & Pacific, which operates nationwide and already owns one line in California.

B. Public Agencies Owning Rights-of-Way Used for Freight Service

Interviews were conducted with three public agencies that own railroad rights-of-way that are utilized by both freight and passenger rail service.

1. Southern California Regional Rail Authority

The Southern California Regional Rail Authority (SCRRA) is a Joint Powers Agency formed to oversee all facets of regional passenger rail service (Metrolink) in Orange, Los Angeles, San Bernardino, Riverside, and Ventura counties. Portions of the rights-of-way are owned by the counties, while the remaining right-of-way is owned by freight companies.

a. Freight Operators

Metrolink operates seven lines and all are shared with freight operators. Freight operations over two Metrolink-controlled lines include: (1) Burlington Northern Santa Fe (BNSF), which runs approximately 11 trains daily on the Orange County Line, which is also utilized by Amtrak (25 trains/day): and (2) UP, which runs 50 trains each weekday along the Riverside Line, which Metrolink leases for passenger rail use. Both carriers had their original agreements developed in the early 1990s in perpetuity, but with language that allowed mutual renegotiation of the terms after eight years for UP and ten years for BNSF.

SCRRA has two different payment agreements with the freight railroads. BNSF pays a fixed fee that was agreed to in the original purchase and sale agreement. It is indexed each year by the American Association of Railroads (AAR), a trade association that provides industry-wide accepted standards for operating costs. AAR's costs include labor and materials associated with running trains over rails, but do not include fuel costs. UP is billed monthly based on car miles and route miles.

b. Right-of-Way Maintenance And Operations

SCRRA maintains the right-of-way owned by the counties. SCRRA spends $20 million each year to maintain their lines, which includes tracks, signals and structures (primarily bridges). Of this total, BNSF contributes $3.5 million and UP contributes another $3 million for annual maintenance. Where SCRRA runs trains but does not own the right-of-way, SCRRA pays a maintenance fee to the right-of-way owner.

SCRRA does all dispatching along the county-owned rights-of-way and charges fees to BNSF and UP. BNSF pays approximately $300,000 each year at $6.86 per train mile, which is based on a 1989 fee that has been indexed to current rates. According to SCRRA, this is the same rate a freight railroad would charge a public agency for dispatching services. UP contributes a fixed annual fee of $200,000 for dispatching services. BNSF does all dispatching along the Orange County Line and UP performs all dispatching services along the Riverside Line.

Metrolink is given priority on all passenger rail corridors during the peak travel times of 5:00 and 9:00 a.m. (inbound) and 3:45 to 7:45 p.m. (outbound), Monday through Friday. Freight may use the tracks during these times if the dispatcher feels the freight train will run on time. Unfortunately, SCRAA has had continual problems with UP's dispatching, causing frequent Metrolink delays along the Riverside Line. During the off-peak hours, both freight and passenger trains have equal priority.

2. North County Transit District

The North County Transit District (NCTD) operates "The Coaster," a commuter train between Oceanside and Downtown San Diego that runs 118 trains each week along the 42-mile main line route. Light rail service is scheduled to begin in 2005 within the branch line right-of-way between Oceanside and Escondido.

a. Freight Operators

BNSF is the only freight operator sharing trackage with The Coaster. BNSF runs four to six trains daily, carrying approximately 25 cars each, on the main line. One round-trip train utilizes the Oceanside – Escondido branch line three nights of the week. BNSF has a one-year agreement with NCTD and pays a flat fee of $4,193,000 (FY 2003) annually.

b. Right-of-Way Maintenance And Operations

SCRRA/Metrolink in Pomona dispatches The Coaster and BNSF trains. NCTD pays them $386,000 annually to schedule and dispatch all trains.

NCTD pays Amtrak or others to maintain the right-of-way. The sources for these funds are derived from a combination of fees from users (Amtrak, BNSF) and other local sources. Part of the $4.1 million annual flat fee paid to NCTD by BNSF is contributed towards maintenance. Amtrak has budgeted $3.3 million to maintain both the main line and

branch line in 2004. Maintenance is generally done during the night, which can conflict with freight operations.

Although no exact figures were given, the Manager of Rail Services did mention that accounting and administrative costs were "minimal".

c. Other Issues

Interaction between NCTD and BNSF is fairly limited. For the most part, freight trains do not interfere with passenger trains since freight trains run at night. NCTD interacts with BNSF when there are derailments, when freight trains cause a delay in passenger service, when there has been a rule violation (i.e. running a signal), or when BNSF requests permission for a special train move.

The Oceanside – Escondido branch line will soon be re-constructed as a light rail line. The corridor will have new double tracks, roadbed, structures, stations, and other facilities. The light-density BNSF freight service will continue during off-peak hours.

3. Metropolitan Transit Development Board

The Metropolitan Transit Development Board (MTDB) is the policy-setting and coordinating agency for public transportation within the San Diego metropolitan region. MTDB is involved in both passenger and freight rail operations. In 1979, MTDB purchased the San Diego & Arizona Eastern Railway (SD&AE), a Nevada nonprofit corporation operating along 108 miles of a main line and three branch lines formerly owned by the Southern Pacific Railroad. San Diego Trolley, Inc. (SDTI) is a division of the MTDB that operates two light rail transit lines over a 48-mile system, 30.5 miles of which is joint-service (passenger and freight) territory.

a. Freight Operators

Freight is handled by two operators, the San Diego & Imperial Valley Railroad (SDIV) and BNSF. SDIV is owned by MTDB but operated by RailAmerica. It uses three of the four SD&AE lines: the Main Line from Centre City, San Diego to the International Border at Tijuana (15.5 miles); the La Mesa Branch from downtown San Diego to El Cajon (16.1 miles); and the Coronado Branch between National City and Otay (7.2 miles). SDIV runs approximately 4,000 carloads of freight each year during the early morning hours of Sunday through Friday, when the San Diego Trolley is not in operation.

BNSF uses separate rail within most of the MTDB right-of-way and can, therefore, operate 24 hours a day. However, coordination is necessary between Amtrak and The Coaster passenger trains within the MTDB right-of-way.

b. Right-of-Way Maintenance And Operations

BNSF has an operation sharing agreement with the MTDB over MTDB-owned right-of-way. ***[A discussion of the nature and scope of the agreement will be included in the final report.]***

The San Diego Trolley is responsible for maintaining the right-of-way it uses, while SD&AE maintains the remaining right-of-way.

All freight and light rail dispatching is carried out by SDTI train controllers.

In summary, each of these three public agencies serve as important comparable operations to the proposed Santa Cruz Branch Line purchase and operations—with a few important differences. These three systems generally have much higher rail traffic volumes than the Santa Cruz Branch Line plus commuter rail service, which means they have a higher base of revenue to pay for corridor maintenance and rehabilitation. At the same time, these examples also prove that a public agency can successfully operate a mix of freight and passenger rail on the same corridor and remain economically viable. These examples also show the variety of funding and financing mechanisms that can be used to help underwrite both short and long-term costs—some of which may be appropriate to the Santa Cruz Branch Line. ***[Discussion to be expanded.]***

III. ECONOMIC ANALYSIS OF FREIGHT OPERATIONS

A. Revenues

1. Traffic Forecast

An earlier study for the Commission (Woodside Consulting Group ("WCG"), March 28, 1997, "*Going Concern Value of the Santa Cruz Branch*") estimated annual traffic in the mid-1990s to be 3,500 to 4,000 carloads. Since that time, some shippers have gone out of business or discontinued the use of freight rail service, but their portion of the overall shipping activity was relatively low. The RMC Pacific Materials Cement Plant in Davenport continues to be the dominant shipper with inbound coal, iron ore, and gypsum, and outbound cars containing Portland cement. Freight generally travels along the Branch Line on Mondays, Wednesdays, and Fridays. The Branch Line's shipping activity has remained steady, with minor increases in recent years. Over 3,000 carloads of freight continue to travel along the Branch Line annually (see Table 1).

In October, the County approved a request by RMC Pacific to increase the maximum amount of material shipped from its plant by 12 percent (from 875,000 tons to 980,000 tons, annually). This is a positive development for potential revenues that makes the 3,000 annual carload figure used in this analysis a conservative estimate.

Table 1
Shipping Activity Along the Santa Cruz Branch Line

Company	Commodities	Carloads/Year
Americold Logistics, Inc.	*Inbound*: Agricultural products	24 - 36
	Outbound: Refrigerated & frozen agricultural products	60
Cascade Refrigerated	*Inbound*: Agricultural products	120 – 180*
	Outbound: Refrigerated & frozen agricultural products	120 – 180*
RMC Pacific Materials Cement Plan	*Inbound*: Coal, iron ore, gypsum	1144-1281
	Outbound: Portland cement	1560-1747
San Lorenzo Lumber Company	*Inbound*: Lumber	200**
TOTAL		**3228 - 3684**

* Varies seasonally

** Approximately 100 cars/yr. to both Felton and Capitola

2. Projected Revenue Per Car and Total Revenues

Total revenue from freight traffic on the Branch Line is approximately $8,264,000 per year. This estimate is based on economic projections prepared by the Woodside Consulting Group in 1997, confirmed by Alta/Banks through interviews with shippers in 2002, and inflated to reflect 2002 dollars. Taking the estimated revenues (from the Woodside Consulting Group report and verified and updated by the Alta/Banks team) and the estimated number of carloads, an average carload revenue figure can be identified as shown in Table 2.

Table 2
Revenue Per Car on the Santa Cruz Branch Line

	UP Per Carload Revenue (average)	Short Line Per Carload Revenue (average)	Total Annual Revenue to Short Line (@ 3,000 carloads/yr.)
Low-End Split	$2,449	$306	$917,560
High-End Split	$2,315	$440	$1,320,000

As we discuss in the Economic Analysis section below, we believe that a short line operator can expect a reasonably profitable operation if it receives over $440 average revenue per carload, with total annual revenues over $1.3 million—depending, of course, on the short line operator's own expenses.

B. Expenses

One of the purposes of this report is to establish, as stated above, the revenues necessary in order to conduct the Branch Line freight operations profitably. The necessary revenues largely have been derived by an analysis and projection of the expenses of operating the Branch Line freight service, whether those expenses are incurred by the Commission or the short line operator. In the following sections, we address operating expenses, routine maintenance expenses, program maintenance expenses, and long-term maintenance expenses.

1. Operating Expenses

Operating expenses include transportation, general and administrative, return on value of freight equipment, and property taxes. Transportation costs are all costs directly related to the transportation aspects of the operation, including labor, benefits, and fuel. General and administrative include all expenses related to the administration of the operation, from payroll through insurance, marketing, invoicing, billing, and accounting. It is expected that all operating expenses will be covered by the short line operator. A full breakdown of these expenses is set forth in Table 7.

2. Routine Maintenance

Based on available inspection reports, and information from shippers and others on the current operations on the Branch Line, Alta/Banks believes that the immediate cost to bring existing track to a standard that a short line operator would accept would be minimal. Freight service has continued on the Branch since the inspection reports were prepared and there is no information or indication that general maintenance conditions have changed. A more in-depth analysis of the trackage, and especially the structures, would be appropriate prior to the close of escrow on any proposed acquisition of the Branch Line.

According to the latest information available to Alta/Banks, the Branch Line is currently operated at 10 MPH from Watsonville Junction to Santa Cruz. This implies that the track currently meets FRA Class 1 standards. The trackage from Santa Cruz to Davenport is currently operated at 20 MPH, which equates to FRA Class 2 standards. In addition, the Woodside Consulting Group report titled "*Net Liquidation Value of the Track, Signals and Structures of the Santa Cruz Branch from Watsonville Junction to Davenport*" (December 1995) reported that "Generally, the bridges and trestles are satisfactory for at least FRA Class 2 train speeds of 25 MPH." Given that current operating speeds are as above, the proposed short line operator could assume possession of the Branch Line and continue to operate on the existing trackage, provided continuous preventative maintenance occurs on a timely basis.

Under FRA Track Safety Standards, Part 213 Subpart F Section 213.233(c), the Branch Line would need to be inspected weekly under existing conditions. Should passenger service begin, or traffic levels increase to greater than 10 million gross tons per year, the track would then need to be inspected bi-weekly, thus affecting the inspection and routine maintenance cost estimates. Table 3 demonstrates the level of routine inspection and maintenance that could be accomplished by a single individual with assistance every other week by an additional person. Together these individuals could handle most minor problems that arise in daily operation and, when used in conjunction with the annual program maintenance expenditures, the Santa Cruz Branch would be expected to remain a functional railroad.

Table 3
Branch Line Annual Routine Maintenance Expense (2002 Price Levels)

Inspection and Minor Repair
One Person (8 hrs./day x 52 days/yr.) = 416 hrs./yr.
Contractor Wages ($30 - $40/hr.) average = $35/hr.
416 hrs./yr. x $35 hr. = $14,560/yr.
Additional Maintenance Assistance
One Person (8 hrs./day x 26 days/yr.) = 208 hrs./yr.
Contractor Wages = $35/hr.
208 hrs./yr/ x $35/hrs. = $7,280/yr.
Total Labor Cost
$14,560 + $7,280 = $21,840
Material Cost
Annual material cost will approximate annual labor cost = $21,840
Total Annual Maintenance Expense
$21,840 x 2 = **$43,680**

Source: Alta/Banks estimates.

3. Program Maintenance

Program maintenance refers to the periodic replacement or renewal of track components such as rail, ties, ballast, and grade crossings. It is more cost-effective to conduct such work on a periodic basis than to replace or upgrade lesser quantities on an annual basis.

Table 4 lists, on an annualized basis, the program maintenance that would need to be performed on the Branch Line in order to keep it in its existing condition, along with estimated costs for such program maintenance. As with any maintenance program, the amount of program maintenance expenses will vary from year to year and from location to location. Over time, constant program maintenance will result in upgraded rail facilities capable of handling heavier loads at greater speeds.

Table 4
Branch Line Annual Program Maintenance Expense (2002 Price Levels)

Cross Ties							
Main Line	2880 ties/mi.	÷	35 years	=	83 ties/mi.		
	83 ties/mi./yr.	x	$39/tie	x	31.7 mi.	=	$101,730
Siding	2880 ties/mi.	÷	45 years	=	64 ties/mi.		
	64 ties/mi./yr.	x	$39/tie	x	2.9 mi.	=	$7,238
Surface and Line							
	$5,300 / mi.	÷	7 year cycle	=	$757 /mi./yr		
	$757 /mi./yr	x			34.6 mi.	=	$26,197
Rail							
Main Line	31.7 mi.	÷	500 years	x	$110,000 / mi.	=	$6,974
Road Crossings							
	124 crossings	x	50 ft/crossing	=	6,200 L.F.		
	6,200 L.F.	x	$360 L.F.	÷	40 year life		$55,800
Turnouts, Timber and Surface							
	100 MT Switch	x	65 switch tie	÷	25 yrs	=	$260
	90 ST Switch	x	60 switch tie	÷	35 yrs	=	$154
					Average	=	$207
	46 Turnouts		$207 average per turnout				$9,522
Total Program Items							**$207,462**

Source: Alta/Banks estimates.

In addition to these maintenance expenses, grade crossing signal maintenance is estimated to cost approximately $100,000 per year and bridge inspection/maintenance would cost $30,000 per year. The grade crossing signal maintenance cost includes the expense of a full time maintainer, overtime, and vehicle and parts. The bridge maintenance costs would cover an annual inspection and occasional replacement of piles and stringers, and tie replacement as needed. Total annual costs of routine and program track maintenance and annual signal and bridge maintenance would be approximately $381,000.

Given the latest available information that the Branch Line is currently operating under FRA Class 1 and 2 standard conditions, Alta/Banks expects that a potential short line operator could assume possession of the Branch in its current state and continue with daily operations while routine maintenance and program maintenance are performed to keep the

railroad in a steady state of repair. Total estimated routine and program maintenance costs would approximate $381,000 annually. Therefore, total estimated annual routine and program maintenance costs are approximately $11,011 per mile of track, which is consistent with industry estimates for short line operations (see Table 5). This level of preventative maintenance expenditures would keep the existing Branch Line in a steady state of repair providing no abnormal events occurred. Naturally, the area between Watsonville Junction and Santa Cruz would require more maintenance work initially, since it only meets FRA Class 1 standards. However, the entire Branch Line will require constant maintenance.

Table 5

Branch Line Physical Property Summary
Watsonville Junction – Santa Cruz – Davenport
Maintenance Estimates (2002 Price Levels)

Track:	
Main Track Miles (Watsonville Junction – Santa Cruz)	20.0
Main Track Miles (Santa Cruz – Davenport)	11.7
Side Track Miles Side Track Miles (WJ – SC)	2.0
Side Track Miles (SC – D)	0.9
Total Track Miles	34.6
Turnouts (Number):	
Main and Side Track Turnouts (WJ – SC)	32
Main and Side Track Turnouts (SC - D)	14
Total Track Turnouts	46
Crossings (Number):	
Public Crossings – Flashing Lights	25
Public Crossings – Reflectorized Sign Only	21
Private Crossings	78
Total Crossings	124
Bridges (Linear Feet):	
Steel	1,840
Wood	2,380
Concrete	941
Total Bridge Footage	5,161
Total Program Items	**$207,462***
Total Routine Maintenance Items	**$43,680****
Grade Crossing Signal and Structure Maintenance	**$130,000**
Total Annual Line Maintenance Costs	**$381,142**
Annual Cost Per Route Mile ($381,000/ 34.6 miles)	**$11,011**

* See Table 4

** See Table 3

4. Catastrophic Damage to Right-of-Way Improvements

Another issue of concern is the consequences of a catastrophic event, such as a fire or flood, that causes substantial damage to the Branch Line. Of particular concern are the bridge structures on the Line. If UP continued to own the Branch Line, it is likely that a major structure failure would cause UP to file for abandonment of, or embargo, service on the Branch Line given the economics of freight operations on the Line. While the Commission would have the same options available to it, the Commission may have a different set of considerations. First, the Commission might arrive at a similar conclusion as the UP that the cost of reconstructing the line could not be supported by the revenues generated by the line itself. The Commission would have additional considerations, however, including the possible economic impact to the RMC Pacific plant and the resulting need to ship all materials by truck.

The Commission would have several funding options in the event of a catastrophic event causing major damage to the Branch Line or the structures thereon. First, the Commission would be in a similar situation as the Sonoma-Marin Area Rail Transit Authority (SMART), which sought FEMA and state funds for such an event. SMART's line was seriously impacted by storms that closed the line to freight service. SMART did not have the financial resources to rehabilitate the line, so it applied for and received FEMA and state funds for the repairs.

A second option that the Commission could consider for the Branch Line is obtaining an insurance policy on the structures, with the policy being partially paid for by the short line operator. Insurance premiums are calculated at $0.65 per $100 of value. For example, if the Commission were to decide that the most vulnerable or oldest of structures on the line had a replacement cost of $4 million, the premium would equal $26,000 per year. The value of obtaining insurance and the amount of insurance needed need to be based on an assessment of risk, the replacement cost of the structures, and the likelihood of the extent of a major catastrophe in impacting the line's structures. ***[Further discussion to be added.]***

C. Analysis of Economic Viability

The economics of several scenarios were developed for the Branch Line based on past studies of the Branch Line and the additional research undertaken for this report. It is important to note that not only are actual financial figures not available from the Union Pacific Railroad, but various UP internal accounting schemes make economic projections difficult. All assumptions and sources are identified below.

The findings of the economic analysis are provided below.

1. Existing Operations

Previous reports produced by Alta/Banks and by WCG estimated that freight operations on the Santa Cruz Branch Line are losing approximately $1.3 million (1997 dollars) annually. Table 6 shows the breakdown of revenue and expense items based on 2002 dollars. Table 6 also shows an allocation of projected revenues and expenses between the Branch Line operations and the freight operations on the Union Pacific main line. It is important to note that the assignment of revenues and expenses for a branch line, especially overhead and administrative charges, is based on industry experience and will vary depending on accounting practices of the UP.

Table 6 indicates that, while the UP has an overall $1.5 million annual net loss on the line, it generates a profit ($338,000) from the Branch Line freight off-line. More importantly, if accounting (or avoidable cost) figures are removed from the equation (such as return on value of the right of way property), the Branch Line generates a net profit of about $1.1 million. This may be higher considering that actual maintenance costs are probably lower than shown.

Table 6
Economic Analysis
Santa Cruz Branch Line: UPRR Freight Operations
(2002 Price Levels)

	----------UP----------	
Method	2002 est. accounting	2002 est. cash
Revenues		
Total Freight Revenue	$ 8,264,820	$ 8,264,820
On-Line	$ 917,560	$ 917,560
Off-Line	$ 7,347,260	$ 7,347,260
Expenses		
On-Branch		
Maintenance of Way	$ 339,000	$ 339,000
Maintenance of Equipment	$ 187,128	$ 113,000
Transportation	$ 670,316	$ 670,316
G&A	$ 135,600	$ -
Return on value-freight cars	$ 108,819	$ -
Property Taxes	$ 118,650	$ 118,650
Return on value--land	$ 1,202,998	$ -
Sub-total	$ 2,762,511	$ 1,240,966
Off-Branch		
Operating Costs	$ 5,877,356	$ 5,877,130
Increment to 110%	$ 587,713	$ -
Return on value-freight cars	$ 543,756	$ -
Sub-total	$ 7,008,825	$ 5,877,130
Total UP	$ 9,771,336	$ 7,118,096
Net Income/Loss		
Branch Line	$ (1,844,951)	$ (323,406)
Off-line	$ 338,435	$ 1,470,130
Total	$ (1,506,516)	$ 1,146,724

Notes:
Maintenance of equipment costs have been reduced in the cash scenario assuming that the equipment is used off-branch for a portion of the time.
Sources:
Going Concern Value of the Santa Cruz Branch, Woodside Consulting Group, 1997, with updates by:
RL Banks Associates, Walter Schuchman, Tim Gannon, CPA, 2002
Alta Transportation Consulting, Inc. 2002

2. Short Line Operator Scenarios

Table 7 illustrates the economics of a short line operator conducting freight service on a Commission-owned corridor *using the same economic assumptions as shown in Table 6*. The "low-end" projection analyzes the economics of a short line operation assuming the Commission negotiates an interchange rate with UP at the low end of the probable range (i.e., short line gross revenues are only $917,560 per year). The "high-end" projection assumes that the negotiated interchange rate results in revenue to the short line at the high-end of the probable range (i.e., $1,320,000).

In the low-end scenario, the short line operator is projected to generate $917,000 in gross revenue (2002 dollars), which is the on-line revenue from Table 6, above. Off-line revenue for the UP is projected at $7.3 million. Expenses for the short line operator are projected at $1.3 million, for a net loss of $390,000. In the high-end scenario, the short line operator is projected to generate $1,350,000 million in gross revenue (2002 dollars), with net profits of approximately $41,000.[1] In comparison, the 1997 WCG report showed a range of expenses that resulted in a range of net profit/loss from a profit of $25,000 to a loss of $153,000 ($28,250 and $172,890 respectively in 2002 dollars).

The economic projection in Table 7 contains several important pieces of information:

1. The UP would stand to benefit by transferring the Branch Line operations to a short line operator, since it is projected that the UP is losing between $323,000 to $1.8 million annually from the Branch Line operations alone. Under the "low-end" short-line revenue assumptions shown here, UP would stand to retain its current off-line revenue ($1.4 million). Under the "high-end" revenue assumptions, UP would reduce its net off-line income to $1 million. However, if the current on-line losses are accurate, the UP's net income would change from a $1.5 annual loss to a positive $1.4 million by transferring operations to a short line operator. .

2. All routine track, structure, and equipment maintenance expenses plus transportation and general administrative expenses (including insurance costs) are included in the short line operator's figures. The Commission would have some property-owner liabilities but may be able to negotiate an indemnity agreement with the short line operator. The Commission would be responsible to repair any catastrophic damage and to perform long term rehabilitation and replacement of the structures, as necessary.

[1] Note that the WCG figures for the short line operator did not include property taxes because the Branch Line will be owned by the Commission, which is exempt from property taxes. However, if the Commission leases the Branch Line to a private short line, as planned, the short line will be subject to possessory interest taxes under Revenue and Tax Code Section [_____]. Possessory interest taxes are assessed against private entities leasing public property, and are based on the value of the leasehold estate. For purposes of this analysis, we assume that the possessory interest tax will be the same as the property tax, although it will be somewhat less in practice.

3. The short line operator would pay the Commission $56,000 per year to help cover any additional administrative costs the Commission incurs.

Table 7
Economic Analysis
Santa Cruz Branch Line: Short Line Freight Operations
(2002 Price Levels)

	---------Low End--------		--------High End---------	
Method	UP cash	Short Line	UP cash	Short Line
Revenues				
Total Freight Revenue	$ 7,347,260	$ 917,560	$ 6,914,820	$ 1,320,000
On-Line	$ -	$ 917,560	$ -	$ 1,320,000
Off-Line	$ 7,347,260		$ 6,914,820	
Expenses				
On-Branch				
Maintenance of Way	$ -	$ 381,000	$ -	$ 381,000
Maintenance of Equipment	$ -	$ 141,250	$ -	$ 141,250
Transportation	$ -	$ 303,518	$ -	$ 303,518
G&A	$ -	$ 307,925	$ -	$ 307,925
Return on value-freight cars	$ -	$ -	$ -	$ -
Property Taxes	$ -	$ 118,650	$ -	$ 118,650
Return on value--land	$ -	$ -	$ -	$ -
Lease to RTC	$ -	$ 56,500	$ -	$ 56,500
Sub-total	$ -	$ 1,308,843	$ -	$ 1,308,843
Off-Branch				
Operating Costs	$ 5,877,356		$ 5,877,130	
Increment to 110%	$ -			
Return on value-freight cars	$ -			
Sub-total	$ 5,877,356		$ 5,877,130	
Total Expenses	$ 5,877,356	$ 1,308,843	$ 5,877,130	$ 1,308,843
Net Income/Loss				
Branch Line (Short Line)	$ -	$ (391,283)	$ -	$ 41,157
Off-line (UP)	$ 1,469,904	$ -	$ 1,037,690	$ -
Total	$ 1,469,904	$ (391,283)	$ 1,037,690	$ 41,157

Note: G&A expenses may be lower than shown, especially if the short line operator is already operating locally (RC&BT).

Under the low-end scenario, the short line operator would incur a $391,000 loss. It is useful to note that the projected short line expenses are based on industry standards and may be considerably higher than what an operator actually spends. In other words, a short line operator may be able to break even or turn a small profit, even under the low-end scenario, but potentially at the expense of deferred maintenance. A local short line operator such as the Roaring Camp & Big Trees may be to reduce cost items such as general administrative expenses since it already has its operational base on an adjacent line.

In the high-end scenario, the interchange rate structure with the UP increases gross income to $1,350,000. UP's gross revenue would drop approximately seven percent (7%) from $7.3 million to $6.9 million, and its net profit/loss becomes $1.1 million on a cash basis. Our experts indicate that this is at the top end of what UP is likely to accept, which in turn is dependent on how the UP accounts for its internal revenues and expenses from the Branch Line.

3. Summary

The viability of a short line operation is directly related to a negotiated interchange rate with UP, and possibly the shippers on the line, that yields at least $1.35 million in annual revenues for the short line operator. As part of any negotiation to purchase the Branch Line, the Commission should include the following items as part of that process:

1. From UP, an interchange rate that yields sufficient revenue for a short line operator to operate and maintain the corridor to acceptable standards. The Commission should request bids from short line operators that include specific maintenance and operation standards, plus adequate insurance.

2. The Commission may wish to explore methods of reducing the possessory interest tax owed by the short line operator.

3. The Commission will continue to have some liability exposure and ultimate responsibility for the track and structures, recognizing that the economic viability of the Branch Line could be affected in the event of a major expense, such as a bridge failure, regardless of who owns the line.

D. Operating Options: Common Carrier v. Private Contracts

Acquisition Option 2, discussed in Alta/Banks' *Summary Analysis of Alternative Rail Line Acquisition Options*, dated December 2001, involved the Commission's acquisition of the Branch Line, including the active freight service, and a subsequent contract with a short line operator to provide that service. Under Option 2, both the Commission and the short line operator would be considered common carriers subject to the jurisdiction of the Surface Transportation Board ("STB"). Thus, if the short line operator were to discontinue its service, the Commission would have an obligation to provide service itself, or make immediate arrangements for a replacement operator. Alternatively, the Commission could seek STB approval to abandon the line. The Commission probably would not be subject to

obligations under the Railroad Retirement Tax Act and the Railroad Retirement Act (collectively, the "Railroad Retirement Act"), assuming no change in the Railroad Retirement Board's current interpretation of the railroad retirement tax status of non-operating common carriers. The short line operator, however, would be subject to the Railroad Retirement Act.

Acquisition Option 4 envisioned abandonment of freight rail service by UP prior to the close of escrow and a subsequent lease of the Branch Line to a short line operator that would provide freight service to existing customers on a contract basis. If the short line operator were to secure a ruling from the STB that its contract service did not make it a common carrier subject to STB jurisdiction, neither the Commission nor the short line rail operator would be a common carrier.

The principal, and most easily quantifiable, benefit to Option 4 would be the reduction in labor costs associated with the removal of any requirement to comply with the Railroad Retirement Act. Most private employers are required to deduct 7.65% from an employee's wages, and to contribute an additional 7.65%, toward the employee's Social Security account. In addition to the normal Social Security withholdings and contributions, common carriers are required to withhold an additional 4.9% of an employee's wages and to contribute an additional 16.1%. That is, the retirement contribution by both employee and employer under the Railroad Retirement Act is 21% of the employee's wages, in addition to the normal Social Security contribution. If a short line operator did not have to pay these benefits, it would result in a significant drop in expenses (approximately $40,000 annually).

While there may be substantial economic incentives to abandon the common carrier freight service on the Branch Line, and to provide freight service on a contract basis only, there appear to be numerous legal, procedural, and practical barriers that would make it difficult to pursue Option 4 at this time.

Legally, while there is precedent for contract freight operations, we are aware of no precedent for contract freight operations where, as here, there remain multiple customers on the line. There are a number of STB decisions allowing companies to provide freight rail service to themselves, or allowing a railroad to provide contract service to a customer that owns its own line. ***[Citations to come.]*** However, we are aware of no instances where the STB has approved contract service to multiple customers on the same line.

Procedurally, the uncertainty of whether the Surface Transportation Board would approve the request to provide contract service complicates planning the transition of freight operations to Commission control. In addition, customers and rail labor interests, among others, would have the right to object to the abandonment of freight service and removal of the Branch Line from STB jurisdiction.

Practically, it is unclear whether the Commission would receive the economic benefit of potentially lower labor costs for the freight operations. The short line operators interviewed for this report all have common carrier status. Consequently, in order to achieve the benefit of lower labor costs, the operator would have to establish a separate entity, without common carrier status, serving only the Branch Line, and would have to establish separate benefits for Branch Line employees. Since freight service runs only three days per week on the Branch Line, it is questionable whether a short line operator would have sufficient work to hire employees on a full-time basis solely for the Branch Line. In

addition, based upon our interviews with the potential short line operators, who uniformly expressed real doubts about this option, we believe that requiring them to submit bids as contract freight providers, instead of common carriers, would significantly reduce the number of bids received.

For the foregoing reasons, we doubt that the Commission would receive any economic benefit from Option 4. Nevertheless, we believe that this option can remain open through escrow, and potentially even be bid as an alternate, when the Commission seeks a short line operator.

IV. CONCLUSIONS

Based on the data and analysis presented above, Alta/Banks concludes that the Commission's assumption of freight operations on the Branch Line may be economically viable. However, in order to enable potential short line bidders to project reasonably profitable operations and submit favorable bids to the Commission, Alta/Banks projects that a freight interchange rate of $440 per carload would need to negotiated with UP. If that interchange rate can be negotiated with UP as part of a proposed acquisition, Alta/Banks nevertheless recommends that the Commission solicit bids from short line operators during the escrow period to ensure the validity of these financial projections prior to the close of escrow and the Commission's assumption of the freight operations.

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