

UPDATE OF FEASIBILITY
AND ECONOMIC IMPACT TABLES
OF THE EXPANDED
VIRGINIA & TRUCKEE RAILROAD
SEPTEMBER 2008

Update of Feasibility and Economic Impact Tables of the Expanded Virginia & Truckee Railroad

ECONOMIC IMPACTS

Does the current Virginia and Truckee (V&T) contribute to the economy of Western Nevada? It does. The railroad employs several part-time and full-time employees, and spends nearly everything it brings in on local goods and services. But well beyond that impact is the effect of an attraction to the Carson City/Virginia City area that contributes even more. Earlier ridership surveys showed three key points that are worth recalling here:

1. The majority of riders are from out-of-state (primarily California), bringing "new money" activity into the Virginia City area.
2. With less than \$20,000 of paid advertising annually - little of which was out-of-state, an estimated 20,000 visitors came to the Carson City/Virginia City primarily to ride a 2.8-mile, 35-minute train ride.
3. The median daily spending in Virginia City was \$35 per rider, not including the train trip.

Eight years ago this was impressive enough, and time has only improved those numbers now that the V&T's steam locomotive is back on line. However, our task was *not* to calculate the existing impact of this railroad on the economy. Our task, instead, is to determine how the now-building *expanded* railroad attraction will benefit the area. The key point here is that what will be presented is not the current, but the additional - regional economic benefits produced by investing in the railroad project.

RIMS II Economic Analysis Methods

Estimates of secondary impacts (the multiplier effect) are based upon the United States Department of Commerce, Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS II). RIMS II is based upon national and regional input-output tables developed by BEA over the last twenty years. RIMS II has been used by (among others) the U.S. Department of Defense to estimate regional impacts of changes in defense spending, the New York State Energy Office to estimate regional impacts of energy policy, and the New York State Department of Economic Development to estimate impacts of travel industry expenditures.

Calculated at what level?

Although most studies have various levels of ridership, income and expense scenarios, and capital budget spending options, this can rapidly get out of hand when it comes to calculating economic benefits. The number of combinations begin to expand geometrically - and produce so many columns of figures that it becomes difficult to determine just what is the "answer". It is more important to develop and understand the relationships between a common set of circumstances - and develop an understanding for what we feel the *most likely* results are.

For the purposes of this report, several basic assumptions from other sections of the report carry directly into this section:

1. Annual Budget: Calculated at the pro-forma 135,000 ridership level as projected by the Sierra

Railroad Company (Operator selected to handle all passenger operations in Nov. 2006).

2. Incremental Additional Visitors: Calculated at the 135,000 ridership level.
3. Capital Budget: Calculated from the data released on February 2, 2008 by the Nevada Commission for the Reconstruction of the V&T Railway for construction phases I through V.

Impact of the Virginia and Truckee

Total Regional Business Output (Table A)

This first RIMS II basic input is fairly easy to understand: the railroad will be spending for employment, materials and supplies, and services locally and regionally. Some of this activity creates immediate activity beyond itself, and has a higher multiplier. The basic input for this calculation is the Pro-Forma Income and Expense Statement developed at the 135,000 ridership level.

Some items need to be qualified. For instance, payroll overhead (taxes and benefits) has no multiplier on local economic activity as the funds leave the region, which lowers the output multiplier. Other activities, such as repairs, would not necessarily be thought of as being local, but are. Although skilled tradesmen may be necessary to perform such services, the duration of such projects typically keeps them in the area for an extended period. Such line items as the dinner train operation will undoubtedly have an extensive multiplier, as the caterer is expected to provide labor, food, services to the railroad in exchange for this amount.

**IMPACT OF VIRGINIA & TRUCKEE ON TOTAL REGIONAL BUSINESS OUTPUT
THIRD YEAR OF OPERATION – BASED ON 135,000 ANNUAL RIDERSHIP**

Category of Expenditure	Direct Expenditures	Output Multiplier a/	Impact on Total Output b/
EXPENDITURES			
Maintenance of Way	\$145,000	1.6805	\$243,673
Wages	\$964,000	0.8293	\$799,445
Fuel & Oil	\$207,000	1.5829	\$327,660
Materials/Supplies	\$336,000	1.6179	\$543,614
Depreciation	\$180,000	0	0
Guest Services	\$69,000	1.7780	\$122,682
Maintenance of Equip	\$145,000	1.6805	\$243,673
Insurance	\$90,000	1.9545	\$175,905
Food/Dinner Operations	\$1,080,000	1.6102	\$1,739,016
OVERHEAD			
G&A	\$300,000	1.6693	\$500,790
Marketing	\$480,000	1.7780	\$853,440
Amortize Start Up	\$100,000	1.7780	\$177,800
Capital Fund	\$158,400	0	0
TOTAL	\$4,254,400		\$5,727,698

a/ Each entry represents the total dollar change in output from all industries for each dollar of output delivered to final demand.

Economic Impact – Construction Phase (Table B)

The next table takes the new construction projects as identified by the Commission and develops the secondary and multiplier effects of new construction jobs as an output of the project:

ECONOMIC IMPACT – CONSTRUCTION PHASES I – V

Expense Category	Direct Expenditures	Output Multiplier	Impact on Total Output
Construction Costs	\$32,948,531	1.7353	\$57,175,586
Right-of-Way Acquisition Costs	\$8,545,000	1.2733	\$10,880,349
Pre-Purchased Rail Costs	\$2,445,016	1.5377	\$3,759,701
Pre-Purchase Add. Rail, OTM & Ties for Terminal	\$75,000	1.5377	\$115,328
Utility Relocation Costs	\$659,228	1.7353	\$1,143,958
Preliminary, Final Design & RW Doc, Maint Engr	\$3,406,800	1.6953	\$5,775,548
Tunnel #2 Exploration & Safety Work	\$3,300,892	1.7353	\$5,728,038
Building Demolition @ Terminal Site	\$250,000	1.68050	\$420,125
Construction Engineering Costs	\$3,523,890	1.6953	\$5,974,051
TOTAL	\$55,154,357		\$90,972,683

Economic Impact – Spending by Additional V&T Riders (Table C)

The ridership impact on the local community is next measured by the additional spending as a function of growth:

Ridership for:	2007	Yr. One	Yr. Two	Max. Rider
TOTAL	41,450	73,000	100,250	135,000 (b)
Incremental Increase over 2007		31,550	58,800	93,550
Projected incremental room nights (a)		3,944	7,350	11,694

(a) *Formula for developing incremental room nights = 25% of half of projected increases in Virginia & Truckee traffic. Based on original ridership survey results and Carson City CVB Visitor Profile Study 2007-2008.*

(b) *Maximum ridership level lowered from earlier study from 140,000 to 135,000.*

CARSON CITY AREA ECONOMIC IMPACTS:

Projected non-rail related tourism expenditures by overnight visitors (in 2008 \$):

Year One	\$1,127,984 (\$286/day per couple)
Year Two	\$2,102,100
Maximum	\$3,344,484

a AAA annual estimate – 2008/Carson City CVB data- 2007-2008

Projected non-rail related tourism expenditures by day trippers (in 2008 \$):

Year One	\$1,005,635 (\$85per couple/day ^b)
Year Two	\$1,874,250
Maximum	\$2,981,885

b GC&L Consulting annual estimate – 2008/Carson City CVB data-2007-2008

Projected incremental gaming expenditures, all visitor categories, first year of maximum ridership (in 2008 \$):

Overnight visitors	\$2,104,920 (\$90/day per person)
Day Trippers	\$3,157,290 (\$45/day per person)

(Projections based on data developed by the Reno/Sparks Convention & Visitors Bureau – 1993. Updated 2000 and 2007.

	Year One	Year Two	Max. Year
Overnight Visitors	\$1,127,984	\$2,102,100	\$3,344,484
Day Trippers	\$1,005,635	\$1,874,250	\$2,981,885
Total	\$2,133,619	\$3,976,350	\$6,226,369
Multiplier	2.26	2.26	2.26
Total Impact – 2008 Dollars	\$4,821,979	\$8,986,551	\$14,071,595

Economic Impact – Additional Visitors Gaming Activity (Table D)

Carson City Area

The ridership survey conducted in 1993/94 indicated that nearly half of all visitors to the Virginia & Truckee Railroad also did some gaming activity. There is no reason to believe that the percentage has changed substantially. In fact, if anything, that percentage has increased. Projected incremental gaming expenditures, all categories, the first year of maximum ridership were based on data developed by the Reno/Sparks Convention & Visitors Bureau – 1993 – and updated by GC&L Consulting in 2000 and 2008.

**INCREMENTAL GAMING ACTIVITY BY
ADDITIONAL VIRGINIA & TRUCKEE RIDERS (IN 2008 \$s)**

	Max. Year
Overnight Visitors	\$2,104,920
Day Trippers	\$3,157,290
Total	\$5,262,210
Multiplier	1.7339
Total Impact – 2008 Dollars	\$9,124,146

Total Economic Impact – Summary (Table E)

VIRGINIA & TRUCKEE RAILROAD

TOTAL ECONOMIC IMPACT

FIRST YEAR OF MAXIMUM RIDERSHIP	\$ IMPACT ON TOTAL OUTPUT	INCREMENTAL JOB CREATION ^{a, b}
OPERATING BUDGET (<i>Table A</i>)	\$5,727,698	
WAGES AND PAYROLL (<i>Table A</i>)	\$964,000	
TOTAL ECONOMIC IMPACT – RAILROAD OPERATION	\$6,691,698	178.98
TOTAL ECONOMIC IMPACT NON-RAILROAD ACTIVITIES (<i>Table C</i>)	\$14,071,595	367
TOTAL ECONOMIC IMPACT – INCREMENTAL GAMING ACTIVITIES (<i>Table D</i>)	\$9,124,146	238
TOTAL ANNUAL AREA INCREMENTAL ECONOMIC IMPACT – 135,000 RIDERSHIP	\$16,576,620	432.25
TOTAL AREA ECONOMIC IMPACT – CONSTRUCTION PHASES I-V (<i>Table B</i>)	\$90,972,683	1,965.0
TOTAL JOB CREATION		3,181.23

a/ Equivalent full-year jobs.

b/ Projection of jobs created are based on the RIMS II models for the State of Nevada. The actual number of jobs created may be higher, but the numbers shown here are equivalent of full-time employment. Job creation for the railroad operation does not necessarily mean employment with the railroad, but rather employment with those firms servicing and selling goods and services to the railroad operation. The same holds true for job creation projections in other categories as listed.

Regional Input-Output Modeling System (RIMS II)

Employment Impacts

Employment numbers as calculated from this forecast are entirely private sector jobs. Stated as full-time employment equivalents, they are also conservative, as the railroad is a highly seasonal operation. This means that it is more likely that a higher total number of jobs will be generated, but linked to the May-October prime tourist season. A good example of this is the detailed employee budget for the railroad: nine full-time and up to 24 seasonal jobs. This is a market response, not a pre-designed scheme to minimize full-time employment.

The employment numbers are economic models, useful for comparison. They cannot be considered to be a concrete employment plan. Impact of the railroad will develop in many ways. For example, as the steam locomotives burn fuel oil, the local oil supplier may find it necessary to add one additional person to the payroll just to handle the additional deliveries. Restaurants in both Virginia City and Carson City would see additional business that would warrant additional waitresses during the season. These are the kinds of "multipliers" that happen as a result of a tourist railroad attraction developing.