

## An Examination of Camoin Associate's Railroad Corridor Study

The accuracy of the Camoin study depended on good estimates of future train and trail usage. I have only looked at the train estimate so far, and have found some serious problems - objective problems, not quibbles. They've done something akin to saying that two apples plus one orange equals five apples - both the "five" and the "apples" are wrong.

They calculated one estimate, and used it to characterize another estimate as "conservative." It was actually the other way around. Worse, the concept behind the calculation was false. The second estimate - the one they actually used - is presented without any derivation or explanation, other than to say "The more conservative figure was used based on consultation with ASR." In other words, the estimate probably came from ASR, and tried to justify it with a false "conservative" label.

More specifically:

1) The characterization of the lower estimate as "conservative" was based on a seemingly simple mistake: they compared a prediction for *total* ridership with an estimate for the *additional* ridership due to the extension, 18,000 versus 10,500. The proper comparison of total ridership estimates is 18,000 versus 24,500. The wrong estimate was labelled "conservative." It is disturbing to find such a straightforward error.

2) The prediction methodology was wrong - it presumed a relationship between railroad length and ridership, and also that this relationship could be found in the data they used. Neither is true, as can be easily seen in the table of data in Appendix B (reproduced below).

This model is not merely inaccurate, it is based on a false concept, rather like saying you can get more water from a pipe by making it longer - maybe you can, maybe you can't - it depends on where the pipe goes, not how long it is. This speaks poorly of Camoin's analytical skills.

3) The actual estimate used (an increase of 10,500, 24,500 altogether) is given with no derivation, no calculation, no description, no explanation whatsoever. (Note that Appendix C is merely a capacity check, not a derivation.) This lack of transparency is very disturbing.

4) It should be noted that a ridership estimate for the extended railroad depends on the current ridership level (14,000); the report states in a footnote that this figure was provided by ASR, apparently with no independent verification. This a disturbing lack of reasonable diligence.

5) The sentence "The more conservative figure was used based on consultation with ASR" coupled with the lack of any explanation suggests the possibility that the figure came from ASR. If true, this would be highly improper in a study of this kind.

6) Also to be noted is that the list of "individuals interviewed" on page 33 lists 11 people who are involved in railroad operations, zero people involved in trail operations. Notably, Camoin did not interview anyone from Parks and Trails New York, the predominant trail organization in the state, nor Rails to Trails Conservancy. This imbalance is - again - disturbing.

I do not claim to know the correct ridership level for the train, but I do know the Camoin estimate was arrived at improperly and should not be used. Early indications are that the trail usage figures are also poorly estimated, and should not be used.

Put less formally, you have everything in this report you'd expect from the stereotypical bad consultant report. Good thickness, color graphics, slick presentation, but weak content, in this case including outright mistakes, goofy methodology, bad sourcing, evidence of improper influence, and embarrassing details buried in the appendices. And all this can be found in just three pages. You'll be hearing more as the other pages are examined.

Curt Austin, February 1, 2011

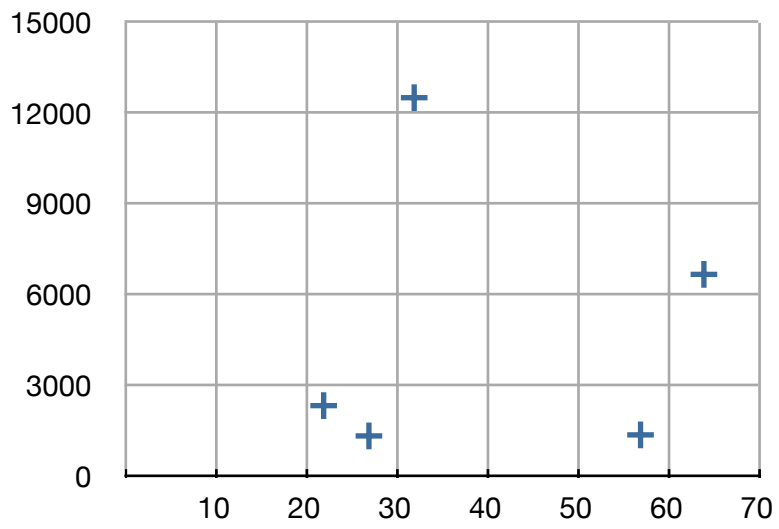
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#### APPENDIX B: DATA FROM RAIL CASE STUDIES

Name of Scenic Rail	Location	Miles	Total Trip Time (Hrs.)	Annual Ridership	Monthly Riders	Monthly Riders per Mile
North Shore Scenic Railroad - Two Harbor Train	Duluth, MN	27	6	8,000	1,333	49
CASS Scenic Railroad	Bald Knob, WV	22	5	14,000	2,333	106
Cumbres & Toltec Scenic Railroad	Colorado/NM Border	64	7	40,000	6,667	104
ASR Utica - Thendara Regular Season Trip	Utica, NY	57	5 / 9	8,200	1,367	24
Great Smokey Mountains Railroad	Byson City, NC	32	6	100,000	12,500	391
<b>AVERAGE</b>				<b>34,040</b>	<b>4,840</b>	<b>135</b>

Note: Monthly Riders is based on the assumption that all trains operate for six months out of the year.

The above table is the source of the predictive model used by Camoin to estimate train ridership. This simple model says that there will be 135 riders per month per mile of track. It is a faulty concept, however, rather like saying you can get more water from a pipe by making it longer - maybe, maybe not, it depends on where the pipe goes, not how long it is. In any case, the data used to create this model does not show a relationship between ridership and distance:



Monthly ridership versus train length (data from the above table); there is no relationship.