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EXECUTIVE SUMMARY

The Colebrookdale Railroad has several distinct strengths that offer an opportunity for success as a heritage rail passenger attraction on the existing freight-only branch. The line is located near highly-travelled roads in a region with compatibly-themed attractions and businesses. It begins and ends in well-defined towns, establishing two origin and destination points and permits round trip operations beginning equally well from either end. The line has unexpected scenery, historic and industrial heritage value, and ride quality, and is of an appropriate mileage for a 2-hour round trip. Over the last year, the proposed operation has been met with positive reaction from the communities, counties, businesses, and attractions most likely to be directly impacted by it and upon which its success depends. The overriding response to the concept has not been “if”, it has been “how”. While this report focuses on the “how”, the potential extends beyond that point.

The market analysis has concluded that a well-planned and executed tourist operation here can expect to draw 20,000-30,000 passengers annually to the region, with the true limits being the quality of the visitor experience rather than the maximum capability of the region to produce riders. The overall key for success is based upon execution, and that execution will require initial investments in equipment, some investments in track in sidings, and investment in boarding and retail facilities.

The railroad will need to be able to accommodate the projected demand of 30,000 riders per year. In the peak fall foliage and Christmas seasons, as well as on the frequent special event days (i.e. Fourth of July in Pottstown Fireworks event or Duryea Day) the railroad will very likely have more passengers than it can haul. By season two or three, the operation should plan to have additional historic restored passenger cars ready for use for peak periods. Because of the popularity of steam in the northeast, the railroad may look to implement steam passenger service, even if on an occasional basis and special events, as organizations exist today to provide visiting steam locomotives early in the project. While the ownership costs of steam are high, the presence of steam can increase ridership, allow for a higher ticket price, contribute to visitor satisfaction, and strengthen the longevity of the enterprise.

The Colebrookdale operation does have some significant challenges that are neither uncommon nor insurmountable. To meet them, passenger operations must proceed in a thoughtful and efficiently-executed manner according to a well-defined plan. The temptation to simply attempt initial operations with poor equipment, no visitor facilities, and no interpretive theme is now an approach that, in the social media age, can quickly result in critical reviews that are preserved forever on web pages and driving away future visitors. Startup and mature operations have proven this to be true. The Colebrookdale Railroad Preservation Trust has developed an appealing and focused vision for a quality-themed heritage rail experience to prevent this. Building toward that initial positive experience will take time and money, but is a vision that is likely to be highly successful.

The quality of existing and successful heritage railroads in the area and the feedback from passengers riding them is instructive about what the Colebrookdale will need. Amenities that are absolutely required include: clean passenger cars with vintage appeal, adequate restrooms, passenger facilities with a retail sales area (this operation will require the income generated from retail sales) and clean, well-lit bathrooms in sufficient number; sufficient on-site parking; and on-site or nearby food services. The railroad will also require the re-installation of a passing siding in Boyertown for the initial startup; the erection of a covered maintenance building with pit and machine equipment for the maintenance of locomotives and cars in the first year; a crew training and compliance program; insurance and working capital for start up. To achieve these threshold requirements, the railroad will need to raise funds from members, pursue available grants, and get the support of the community. It will also need to have an agreement with
Boyertown and Pottstown to establish usage rights in the terminal areas. The development plan for the Boyertown yard now underway as part of this implementation plan is an important step, but will need to be followed-up with commitments to funding and execution.

The biggest challenge to the project will be in securing up-front funding from a wide variety of sources. While grants are available and have proven to be an effective means for major projects, they do not address the initial startup needs that are more equivalent to an economic development project investment than an operational contribution.

Implementing the tourist passenger operation can happen incrementally. However, particularly for the early stages of implementation, each stage should be understood and perceived by the public as a step on the way to something better. For instance, a single coach augmented by a baggage car, caboose, gondola, and diesel engine may suffice as a first season train, but visitors should be able to see the procurement and restoration of additional vintage coaches underway at the same time. While a simple platform and shelter in Pottstown and Boyertown may suffice for season one startup, visitors should be able to see the plans and progress for a proper station and retail and bathroom facilities clearly visible for the future. An example of one such plan would be the relocation of the historic railroad freight depot from Birdsboro to the Boyertown end of the railroad.

One of the key issues of the railroad is developing the ownership and operating alternatives, as they are not clear-cut at the present. Fortunately, examples exist of practical and proven contractual alternatives.

To raise funds to initiate and maintain the tourist operation, the Trust will need to carve out a secure set of rights to operate on and maintain equipment on the line and to be the exclusive operator of passenger services. These rights will need to be established with respect to those held by the County and the Eastern Berks Gateway Railroad (EBGRR) freight operator.

Excursion passenger operations on the Colebrookdale can provide a means to preserve the line for future development even in the current low levels of freight traffic. Passenger service can offset the significant costs of maintaining the railroad and upgrading facilities that will both serve the tourist operation and facilitate future freight operations should they arise. In any case, passenger operations with or without freight can sustain the line for future development opportunities and provide current economic benefits to the communities. They will provide income that sustains the railroad and provides measurable and sustained economic benefit to the region. Pennsylvania has a successful track record of working hard to preserve rail assets, and has seen those investments pay off on a long term basis as the business, transportation, and energy markets evolve. Excursion passenger operations have been part of the success stories on numerous state shortlines, and continue to be today.

The study considered three operational scenarios through this implementation plan. The first assumes the freight operator will be responsible for all rail and locomotive maintenance and crew costs in exchange for a payment from the Trust. The Trust’s payment will offset some of those costs, but only partially, it being further assumed that the freight operator’s other income will be sufficient to cover the remainder. This is the model used by the Oil Creek and Titusville Railroad. The second scenario passes the rail and locomotive maintenance and crew costs entirely onto the Trust. The third scenario assumes there is no separate freight operator and that the Trust assumes all costs associated with rail, locomotives, crew, and freight operations.

At the present time uncertainty exists concerning whether or not EBGRR will remain as the freight operator. Should EBGRR leave the line, the Trust or its affiliates could assume operator status by forming its own operating entity or by acquiring the stock of EBGRR. The latter method will streamline the process and is a preferred alternative if it can
be done at a reasonable price. If this approach does not work or cannot be achieved, our other impression is that sufficient interest remains in the line to attempt recruitment of a replacement operator, possibly as a subcontractor to the Trust to assume common-carrier responsibility. This method is currently done at several railroad museums across the US in similar situations.

Given the County’s expressed desire to eventually sell the line, the eventual goal may be for the Trust and the County to enter into a long-term purchase agreement. There is an essential tradeoff on the available cash flow for purchase vs. necessary cash for reinvestment in the property. If equitably done, such an arrangement would facilitate the Trust’s raising of funds while enabling it to achieve its goal of preserving the line and enabling the County to meet its goal of selling the railroad. An agreement between the Trust and the County whereby the Trust asserts its commitment to develop a line for the County’s long-term economic benefit could address the issues of preserving the line in the absence of freight traffic, allowing the two entities to partner long-term under the terms of the contract. The purchase price of the line should use conventional Net Liquidation Value methodology as a basis for negotiation and should reflect the economic impact the railroad can contribute on an annual basis. The line will require significant maintenance investments, including crosstie replacement and bridge maintenance over the next 5-10 years. This maintenance commitment by the Trust should also be considered in setting a purchase price.

The economic benefits, including jobs, are measurable in the same manner as any other economic development investment that has been made in the past. Excursion railroad capital projects can result in $7.2M in economic benefits. Operation of the railroad itself can result in nearly $1M in economic benefit annually and can generate another $2M in non-rail related tourism expenditures. The railroad will result in the creation of an estimated 205 full-time jobs during implementation and another 80 sustained full-time jobs to the community resulting from operations, for a total of 285 jobs. Note that all of these numbers are baselines; as the railroad operation grows, the number of jobs created and the level of economic benefit will increase. This is a significant activity equal to any comparable economic development currently available to the County. Beyond the simple economics, the railroad also becomes a theme on which a broad range of community development activities and programs can be based, which is an intangible benefit for the local quality of life.

<table>
<thead>
<tr>
<th></th>
<th>$ IMPACT ON TOTAL OUTPUT</th>
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<tr>
<td>TOTALS</td>
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</tbody>
</table>
One of the overhanging issues that must be considered is that neither the County nor the operator can easily avoid additional political problems, losses, and costs associated with abandonment. The operator is contractually faced with the legal costs of the operational abandonment procedure through the Surface Transportation Board. Abandonment can be a lengthy and expensive process, with an exempt transaction requiring two full years without any freight activity before it even can be filed. If the rail line is abandoned while owned by the County, the County will be required to assume responsibility for the corridor maintenance, and removal of the line’s many bridges and other potential hazards. Even if the rail is removed, a corridor will still be in place due in part to the topography and due in part to the presence of the fiber optic line along the track that must remain accessible. Therefore, it will be far more difficult than usual to prevent the abandoned right-of-way from becoming an informal hiking trail that becomes a significant source of complaint by adjacent property owners, along with exposing the County to ongoing nuisance issues.

If an economic development opportunity would develop in the future, replacement of the rail is vastly more expensive than preserving and maintaining it at current levels. Full track replacement cost continues to escalate at a minimum reconstruction cost of $1 million per mile, without bridges. These costs will be added to those already invested in the line. Once abandoned, the line will have no way of generating income to offset the County’s expenditures. Salvage of the line will offer only a fraction of the investment the County has in the property already, but the operation of the line can provide many times that investment over time in economic benefit.
RECOMMENDATIONS

There are a number of unknowns at present regarding the future of the line. However, the following actions are recommended:

- The County and the Trust enter into an agreement for the preservation of the line through its redevelopment. The agreement should be a partnership for redevelopment, rather than a transfer of responsibilities. The structure of this partnership might involve a new lease between the County and the Trust, a lease-sublease arrangement between the County, the Trust, and EBGRR, respectively, or the outright purchase of the line from the County by the Trust. The Trust may continue the lease to EBGRR or if necessary, internally develop their own capabilities, or pursue a different common-carrier partner.

- The Trust should assume primary fundraising responsibilities for the operation and re-structure its board for this purpose.

- Excursion railroads are a powerful economic engine, in many cases more so than freight operations. Because operation of the passenger train would become the primary source of revenue flowing for the line, generating the economic benefits for the region, the County should assist the Trust in raising the aforementioned start-up funding via conventional economic development methodology. This initial partnership is the most important, and this timeline becomes the critical path to implementation.

- If the Trust enters into a purchase agreement for the line, the County could combine the mortgage on the railroad with an initial startup capital fund. While this may prove to be a viable option, it will be viable only if the railroad can support that level of debt via generated cash flow. Thus, the loan terms will need to be collateral-based on the transferred physical assets, allowing for a much longer term, significantly lower interest, and based upon revenue production potential in the initial years. In general, borrowed funds can be a legitimate means of enhancing operations once the railroad is underway, but are a recipe for disaster if they are the only source of funding at start-up. Any assistance that the County can provide by sponsoring grant applications is equally critical and beneficial to all parties.

- Berks and Montgomery Counties should support the concept that the Colebrookdale is a unique economic development opportunity and should use the fact that the railroad benefits two entire counties to their mutual advantage while assisting the Trust to find public and private backing.

- All parties involved should avoid the temptation to deviate from the plan of offering a high-quality experience from the start. Once funded, implementation could take nine months to a year, though demonstration runs could be started in approximately 6 months or sooner, based on equipment availability and/or restoration time.
POTENTIAL – THE MARKET

There’s an old adage – You don’t have to live in a good neighborhood, you just have to attract customers from a good neighborhood. It fits Berks County.

Reading and the surrounding area, like many other regions, went through a gray period as the northeast’s economy moved away from its traditional manufacturing/mining base. It gave the County a bad reputation for decades. However, it has shown a slow but steady resurgence in recent years, partly because of improved road systems that place the County within easily commute time to Philadelphia. In addition to the Greater Philadelphia metro region, the County is ideally located within short driving distance/time from a number of major Metro areas – Greater New York City, Harrisburg, Scranton-Wilkes Barre, Allentown-Bethlehem-Easton, PA and Baltimore, MD. All these cities are within a 250-mile radius; easy drive time from the center of Berks County, and Pottstown in Montgomery.

The County’s population is close to 400,000. According to the 2000 census, median household income was $44,714 and 24.2 percent of the population over 25 had an associate degree or higher.

While various economic studies have not drawn a clear picture of the County’s future, the area does offer a number of positives including large tracts of available land at reasonable rates and a close commuter proximity to the greater Philadelphia area making it attractive to developers.

The Pennsylvania Tourism Office places Berks County within the Dutch Country Roads region (third most visited region in the State) linking it with Hershey, Lancaster, York and Harrisburg.

Berks County has 2,587 hotel rooms. The Greater Reading Convention & Visitors Bureau reports that it fulfills in excess of 115,000 visitor guide requests annually. In 2011, the County welcomed more than 42,000 motorcoach visitors – both day trippers and overnight.

Of equal importance is the fact that according to the Pennsylvania Tourism Office the Dutch Country Roads Region welcomes some 10.2 million overnight visitors annually, third only behind Philadelphia & Countryside (14.2 million) and Pittsburgh & Countryside (10.6 million). Also, its studies show that roughly three of four visitors are within easy drive time from Berks County -- 38% of its visitors are intra-state travelers, 14% from New Jersey, 14% from New York, 6% from Maryland and 2% from Delaware.

Potentially, any tourism-based project in the Pottstown-Boyertown area has a possible market audience of 24.4 million – based on demographic analysis. The numbers of nearby railroad operations (see below) testify to the popularity of such attractions to those travelers going to and through the Dutch Country Roads region.

ACCESSIBLE

The joys of interstate highways are such that they let you get where you are going quickly. The negative, however, is that it makes many areas easy to by-pass.

Berks County is readily accessible from key market areas. The major routes leading into and near Berks County –

I-78 – Connects Berks County with Allentown, North Central New Jersey and Metro New York to the east and Harrisburg to the west.

I-76 – Connects Berks County with Philadelphia area.
I-81 – Runs south from Binghamton, NY, and central New York State.

US 422 – Pottstown Expressway runs north from the Philadelphia area into Pottstown.

PA 100 – Major North-South thoroughfare connecting US 202 in West Chester (Brandywine Valley) to Rt. 309 in the Lehigh Valley.

The challenge to the project is to alert, inform, and interest the traveler, since there is no lack of volume or activity.

MAJOR CLOSE-IN ATTRACTIONS

Berks County contains an extensive number of popular visitor attractions that draw a large number of visitors annually. Also, the area is identified by the Pennsylvania Division of Tourism as part of the highly popular Pennsylvania Dutch County Roads Region. In addition, both Pottstown and Boyertown are on the cusp of the adjoining Philadelphia and Countryside Region.

Top attractions in the Reading area include:

Roadside America, Shartlesville – A rail related attraction featuring what is probably the most famous model railroad in the country. It attracts 125,000-150,000 annually despite the fact that it is no longer on the main route from Allentown, central New Jersey, or New York City to Harrisburg.

WK&S Railroad, Kempton – Tourist rail operation running between Wanamaker and Kempton. In 2011, the WK&S carried 9,716 passengers in nine months of operation. Its busiest months were (in order) October, December and July.

Kutztown Festival, Kutztown – Multi-day annual festival held over the July 4th weekend celebrating Pennsylvania’s early Dutch Days. Exhibits include early steam engines and probably the largest collection of quilts anywhere. It draws roughly 150,000 visitors annually.

Boyertown Museum of Historic Vehicles, Boyertown – Large selection of classic automobiles.


Reading Railroad Heritage Museum, Reading (Hamburg) – Offers displays of railroad memorabilia and rolling stock.

Schuylkill County Fair, Summit Station – Fair is held annually for six days in early August.

Mid-Atlantic Air Museum, Reading – Extensive collection of aircraft running from earliest periods through modern day. Collection contains 22 military and 43 various civilian aircraft (including one of the few surviving P-61 Black Widow WWII night fighters).

Regional historic attractions that are significant to the tourism flows include the Valley Forge National Historical Park in Valley Forge (2012 visits 1.4 million¹), the John James Audubon Center at Mill Grove north of Valley Forge, and the Daniel Boone Homestead in Birdsboro. The Schuylkill River Trail connects Philadelphia with Pottstown through Pottstown with the Pottstown-west section completed to Birdsboro.

¹ NPS attendance website: https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Visitation%20(All%20Years)?Park=VAFO
COMMUNITY EVENTS AND FESTIVALS

When an excursion railroad is actually operating within a community, and visible from either the downtown or recreational areas, it creates at least the potential to operate in conjunction with local and downtown festivals. This is a proven ridership building exercise for excursion railroads – if they have the physical community access rather than the more typical remote rural boarding locations. For example, the 1995-2007 NYSW (Susquehanna) Excursion program (using their own steam and diesel locomotive and trainset) basically consisted of an entire year of visiting online communities with excursions operated in conjunction with local events and festivals, rather than basing the excursion train out of a single scheduled location. While the Colebrookdale is a much shorter example, the validity of the concept is proven. The railroad operates directly beside Memorial Park in Pottstown and Ironstone Park in Douglass Township. Opportunities to operate with established community events include:

Boyertown

- Farmer’s Market Saturdays
- “Third Saturday of the Month” Events
- Boyertown Area Sidewalk Expo
- Boyertown Annual Cruise Night
- Coming Out of Hibernation Event
- Boyertown Fun Day
- Duryea Days
- “Dog Days of Summer” Event
- Oktoberfest
- Unity Walk
- Halloween Parade
- Der Bel Shnikel
- Holiday House Tour
- “Chillin’ on Main” Event
- Holiday Festival of Trees
- Boyertown Museum of Historic Vehicles Events
- Boyertown Historical Society Events
- State Theater Film Festivals
- Padre Pio Shrine Events
- Taylor Backes Glass Blowing

Pottstown

- Pottsgrove Manor Events
- Manatawny Park Events, including Pottstown Rumble
- Carousel at Pottstown Events
- Pottstown Performing Arts Center
- Fourth of July Fireworks
- Schuylkill River Trail Events
- Memorial Day Parade
Excursion Railroads and Demographics

While it is always useful and tempting to look at the potential demographic target market (especially when paired with the term ‘millions’), another indication of likely performance is the fact that excursion railroads are not particularly unique in the area. Since Strasburg Railroad began in 1958, various for-profit, museum, shortline, and specialty rail tours have been operated with varying degrees of success.

Due to the fact that the Federal Railroad Administration requires all passenger-carrying railroads subject to regulations to report their monthly ridership, there is an extensive database of information from back into the 1980's for every reporting carrier. This enables some rather detailed analysis of ridership trends over a prolonged period of time, for a wide variety of operations, against tourism and demographic markets that are equally well-known.

Overall, it quickly becomes evident that there is no direct correlation between pure demographic potential and resulting ridership. Some of the very smallest tourist operations are well within the mid-Atlantic Standard Metropolitan Statistical Area within the theoretical reach of millions of potential riders. Some of the highest ridership operations in the United States operate in virtual wilderness, such as the Durango & Silverton, Grand Canyon Railroad, and the White Pass & Yukon. It is obvious that base demographics are a contributing factor to success, the overall value of the experience is a better indication of performance, particularly for destination attraction operations. Railroads that operate within high-population areas can also succeed well beyond the 100,000 annual ridership mark, such as the Cuyahoga Valley Scenic Railroad, by focusing on special events, partnerships with neighboring attractions, and entertainment themes. They may not have outstanding scenery, but they have developed an outstanding experience.

The FRA ridership database also discloses that while there are certainly a number of well-known and high-ridership excursion railroads, there are far more that are operated by volunteer groups, shortline freight railroads, and seasonal operators that handle well under 25,000 riders per year. The fact that there are as many of these railroads, often within the same statistical/demographic reach of successful railroads with over 100,000 riders, is a cautionary tale. There are many excursion railroads that appear to do far better than what they actually do; and there are also a large number that do actually relatively well on far lower numbers, as a sustainable operation. Many operate in conjunction with shortline freight railroads, and many operate as volunteer organizations, to lessen the burden of track maintenance and direct labor cost on the venture.

To truly understand the data reported, it's necessary to understand FRA ridership methodology, and sometimes the railroad itself. To the FRA, a rider is defined as a 'point to point' trip, meaning that a single ticketed passenger can be counted as two riders if they physically get off and re-board at an intermediate point. That's not true of the vast majority of excursion railroads, but it is true of some of the longer ones that have seemingly unbelievable ridership numbers compared to the rest. Some railroads, with combinations of both, can only be discerned with careful study and questioning on what their true visitation is.

Our study and analysis leans heavily on a combination of all three factors – the potential demographics, the quality of the attraction itself, and the comparative results on existing excursion railroads that have already tested the region.
RAILROADING IN THE READING-BOYERSTOWN-POTTSTOWN AREA

There are already six tourist railroads within a two-hour drive from the Boyertown-Pottstown area. Of the six, the Strasburg Railroad is the most successful attracting more than 300,000 riders annually. The railroads in descending ridership (2011 figures) are:

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strasburg Railroad (Strasburg)</td>
<td>311,371</td>
</tr>
<tr>
<td>Lehigh Gorge Scenic Railroad (R&amp;N) (Jim Thorpe)</td>
<td>59,137</td>
</tr>
<tr>
<td>New Hope &amp; Ivyland (New Hope)</td>
<td>44,835</td>
</tr>
<tr>
<td>Steamtown (Scranton)</td>
<td>36,809</td>
</tr>
<tr>
<td>WK&amp;S Railroad (Kempton, Berks and Lehigh County)</td>
<td>9,716</td>
</tr>
<tr>
<td>Middletown &amp; Hummelstown (Middletown, PA)</td>
<td>8,856</td>
</tr>
</tbody>
</table>

Only the New Hope and the Strasburg operate year 'round. All others generally operate April through December (an indication of the enduring popularity of Christmas themed rides such as Polar Express).

Each one of these operations has factors and features that make it unique. Since all are generally within the same region, it should be plainly evident that simply running an excursion train up and down the track has little if any relationship to results. In a nutshell, the major features are:

**Strasburg** (Lancaster Co.): Started in 1958, this for-profit and privately-owned 4 ½ mile operation has the highest ridership railroad in the eastern United States, and is always in the top five nationally for ridership. Its stable of operating steam locomotives, lovingly restored wood coaches, immaculate site, and proximity to the Railroad Museum of Pennsylvania contribute to high attendance, but the on-site dining, shopping, and ancilliary experiences make it a successful business. Strasburg claims to successfully attract a relatively consistent 3.5% of the Lancaster/Pennsylvania Dutch market, and has had high ridership from Thomas the Tank Engine events over the last decade. They do not do Polar Express.

**Reading & Northern (Lehigh Gorge Scenic Railway)** (Carbon Co.) moved their passenger operation over to the Lehigh Gorge (Jim Thorpe) after many years of operation in the Hamburg-Temple corridor of Berks County. During that time period they were steam operated; the combined expense of maintaining a large steam locomotive and track quality resulted in retirement of the steam power and relocation to newly-leased track through the Gorge. Now with a high-volume fall foliage focus plus the occasional steam trip, the ridership has again increased back to a significant number.

**New Hope and Ivyland in New Hope**, (Bucks Co.) is only 25 miles from downtown Philadelphia, and combines a vintage steam train experience with demographic-targeted special events and entertainment. Their ridership is achieved largely without either remarkable scenery or licensed events.

**Steamtown NHS, in Scranton** (Lackawanna Co.) is an unusual quasi-Federal operation resulting from the combination of a National Parks Service site devoted to the classic steam era and a heavy museum component. Ridership is produced from two sources, the on-site shuttle runs and longer-distance major excursions. Steamtown has seen a dramatic cutback in steam operations and longer-distance excursions, resulting in a decrease in ridership from over 100,000 to the current rate, primarily due to the lack of operational steam on many days and the deliberate decrease of offered trips. Steamtown, like most NPS sites, does not really promote itself or advertise, and is funded...
as an operating park rather than attraction, with separate revenue and expense budgets. Steamtown listed only 15 steam-powered excursion trips for 2012 (which was originally a daily summer schedule), along with 10 diesel-powered special excursions.

The Wanamaker, Kempton & Southern, Kempton (Lehigh and Berks Co.) is an all-volunteer short excursion railroad in Kempton, on the north end of Berks County. Strictly diesel-powered, it is an operating, weekend-only site with no licensed events and a short 6-mile round-trip ride into the farm fields and forests. The site is neat, clean and well organized, and several cars have been nicely restored. The weekend-only operations, combined with a relatively limited amount of marketing effort, can be the only real explanation for the ridership results from a location that is only four miles from I-78, and only 13 miles away from the Roadside America exit (which draws 10-times the visitation from the same demographic target area).

Middletown & Hummelstown, Middletown (Dauphin Co.) is a for-profit supplemental excursion program to the M&H shortline freight railroad. M&H runs from downtown Middletown along the Swatara Creek north to the Rt. 322 crossing just short of Hummelstown. The ‘end of the railroad’ attraction is the Indian Echo Cavern, just short of the Rt. 322 crossing. In the past, M&H has had an operating steam locomotive, but was not able to support the program’s cost and the 2-6-0 is currently stored with an expired boiler. The excursion program continues into 2013.

Historically, M&H has done relatively well with special event and non-licensed events such as Santa Claus, Easter, etc. The 2011 Swatara Creek flooding resulting from Tropical Storm Lee extensively damaged the M&H track to the Caverns, and impacted the 2011 and 2012 ridership totals\(^2\). In years past, M&H had regularly produced 20,000 riders when steam was operated, but had slid down to approximately 13,000 in 2010, and 2011’s flood-impacted results were only 8,900.

Considering that M&H operates in the virtual shadow of Strasburg, it has managed to survive due to a relatively robust shortline freight operation in Hummelstown itself. It is not known when, or if, the railroad will be able to repair all the flood damage as FEMA funds have reportedly been denied. There has been no indication that M&H has changed its intent over the excursion program overall.

**PROJECTED RIDERSHIP**

The basics of the ridership study amount to proving the wide disparity of operating results within a two-hour driving range of Berks County. There are visitor attractions, excursion railroads among them, that do very well, and there are also those that do relatively poorly. Simply being within the market and running a train is no particular guarantee of results. There are already established operations within the market that have the widest possible results.

Factors that directly impact the actual numbers relate to the quality of the experience and the effectiveness of the operation in terms of meeting visitor expectations. How does that relate to this project?

The operations that have succeeded meet visitor expectations down to a ‘Disney level’ of detail, inclusive of the moment that they arrive on the property to the moment they leave. They may not have the budget of Disney, but they see things through the eyes of the visitor and relate and respond to consumer behavior. When this conflicts with the essential facts of railroads and history, they do their best to remove the negative issues. Negative issues relating

to old trains specifically include: bad restrooms, unsafe boarding situations (including heavily rusted vestibules and steps), dirty and dangerous windows, torn seats, dirty cars, and other situations that are perceived to be unsafe.

The positive side also relates to consumer behavior and the visitor experience. What is there to see? Do you see something that you can’t see from the highway? Are you surprised by the views? What is there to see at the endpoints? In this particular case, our opinion of the 8.6 miles of track is that it is a remarkable property. The forested and curving valley is nearly impossible to see from any other viewpoint other than from the railroad. The geometry of the railroad contributes to a much longer ride ‘feel’ because of the hills and curvature – you cannot see where you are going by looking ahead. The Gettysburg Railroad, which is essentially a straight and flat run across the Adams County cornfields in a predictable path, is a totally different experience. The other defining factor is that the remnants of industrial archeology – the foundries, mines, and coke ovens, are surprisingly close to the track and still evident when pointed out. The rock cuts are obviously very old, and very close, lending a sense of history to the line that simply is not evident on a flat and straight branch. The bridges, while short, are relatively high and dramatic, particularly if seen from an open car. The reaction from rail enthusiasts will be a surprise that such an interesting short branch exists in Pennsylvania, with a long industrial history, and so little physical change. On a per-mile basis, this is a very interesting railroad property when compared to other regional excursion railroads and it lives up to its claims.

The third critical issue relates to capability. For a volunteer organization, this impacts ridership when volunteers are simply not able to work and operate the organization when the market demand is actually there. This can happen during weekdays, and also at peak times, when the sheer workload of trains and visitors can overwhelm a small group. The small size of some programs also effectively limits the ability to advertise since only so much funding is available. One of the problems within this market is visibility – there are many alternatives for the visitor and paid promotions in the market are not free, or inexpensive.

The proposed Colebrookdale operation has some built-in strength. Unlike many excursion railroads, it actually “goes someplace”, from an identifiable point of origin to another identifiable point and destination town. Ridership and operations may, at the railroads decision, originate from either end. There is no fixed rule that says all trains must depart or arrive from either point. Pottstown is closer to visitor flows, but Boyertown is more likely to be the operational center simply due to the track facilities available. A two-train-per-day schedule allows a round-trip-ticket to be sold from either point with equal effectiveness.

How this potential can be translated into effective ridership remains the challenge. It is obvious that the large numbers of riders that are possible in the immediate market are driven by special events – both of a large and small scale. This means that simply running the train up and down the track on a schedule will not be sufficient much beyond the first year of operation. Every operating railroad in Pennsylvania is dependent, to greater and lesser degrees, on featuring special events and operations such as Easter Bunny trains, Santa Specials, nature trains, Civil War reenactments, ad infinitum to the point of imagination and capacity. The limits on the railroad at present to meet that market are entirely based on the lack of facilities to host events – buildings, facilities, and creature comforts.

Based on the results of regional excursion railroads, a likely ridership range of the Colebrookdale Railroad operation would be between 15,000 and 30,000 annual riders, based on the quality of the experience within a good market. This is not a linear exercise over time that shows a straight growth line. If anything, the initial two years of operation are likely to have higher ridership than the third or fourth, due to the initial interest and enthusiasm over a ‘new'
railroad in the area. After the regional residents have ridden the new railroad once, it is essential for the railroad to either re-attract them with interesting new events on a regular basis, or expand the market reach of the railroad to a wider audience with a national component. This is the essential challenge. That interest can be rekindled with new historic equipment such as steam locomotives (visiting or permanent), vintage passenger cars, performances and special events like reenactments, and all manner of new and exciting changes in the operation over time.

As a case in point, when it operated steam and provided a good visitor experience, the Gettysburg Railroad consistently delivered over 50,000 riders a year during the 1980’s and early 1990’s. After steam was dropped and the ride experience quality declined (with brutal reviews in online social media), the precipitous drop in ridership finally led Pioneer to completely drop the entire excursion program in what had been the second-best excursions rail market in the state.

With that projected high and low range of ridership, various financial analysis can be done to determine if and how the operation can be stable and self-sustaining. 15-30,000 riders is an achievable basis within this market with the assumptions of a relatively conventional, diesel-powered excursion railroad on a 17-mile round trip. Our financial models have been tested on both ends to examine the possibility for both survivability and potential.

**SEASONALITY**

Once a likely annual ridership range has been estimated, the other ‘fact of life’ of excursion railroads has to be taken into account. These are exceedingly seasonal businesses by any standards. Most, but not all, excursion railroads in the state of Pennsylvania totally shut down between January and April, and some don’t open until Memorial Day. Nearly all of them operate at capacity conditions in October fall foliage season.

How do you accurately predict the seasonality of such an operation and plan for it? Do you actually have enough seats to meet peak demand or do you have too much equipment and too many trips scheduled at the wrong times?

Because the same FRA databases that record annual ridership also record it by month, it is possible to extract and analyze monthly ridership patterns over many different railroads and many years. The result, possibly surprising, is that the annual ridership patterns between different railroads are surprisingly comparable and consistent. While the number of riders may be greatly different, WHEN they ride (given the services and opportunity) can be predicted with a fair level of accuracy.

This would seem to be an irrelevant question but it is very much not, and it has changed significantly over the last 20 years. Twenty years ago the typical excursion railroad had an expected bell-shaped ridership curve peaking in mid-July, with a second short and sharp peak (in the northeast) for the local fall foliage season. This peak varies from mid-September through late October depending on how far north the railroad is, and how high the elevation, so it can be spread across two months or one. October rush was followed by possibly a single special train run in December with Santa on board, and then a deep winter sleep.

Two things have evolved since then that make this ‘typical ridership curve’ obsolete: Thomas and Polar Express. Railroads that host Thomas often prefer to make it an early-and-late season event (May and/or September) when ridership is otherwise relatively low; Polar Express runs from just after Thanksgiving now through as late as the last week of December (even post Christmas). Even railroads that don't run Polar Express theme events have seen the
Christmas season begin to overtake and pass summer ridership numbers, and on some, the highest ridership of the year is now in December. As excursion railroads are typically thought of as summertime, family-based, vacation activity marketed to out-of-area-visitor, these results require careful analysis. The railroad excursion market has definitely changed, and with it, the entire operating and business plan behind it.

This analysis is particularly critical for this railroad because of the capacity constraints at both ends, at least for startup operations. Passing sidings are short, limiting train length. That in turn limits the number of cars, and seats. Any operating scenario requires this to be taken into account. The proposed operating schedule must be designed to fit the predicted demand curve, and not to run when it is not. Operating excess and empty trains are the single most avoidable startup expense that an excursion operator should avoid. Conversely, not having scheduled trains available when they sell out is worse.

Analysis of all the mentioned Pennsylvania excursion railroads was done to compare the percentage distribution (not the numbers) of total riders per month. These allow direct comparison of operations with 10,000 riders to operations with 300,000 riders, and see the results below.

It is immediately apparent that there are two distinct ‘tracks’ of performance; those railroads that have a strong fall foliage season (WK&S, most others in PA) and those that don’t. Strasburg, Steamtown, M&H, and New Hope & Ivyland are not in regions particularly renowned for rural forested vistas. Our opinion is that this line can and will have a strong foliage season.
October on excursion railroads is typically a different operation for several reasons; it is often sold-out on weekends only to the capacity of the railroad, and the shorter daylight hours restricts operating times to have trains back well before 6PM. Relationships with bus tours can create demand for weekday operations, but volunteers have to be available to operate. Ironically, shorter and more frequent trips than are typically run seem to be the most effective strategy to maximize both revenue and rider satisfaction.

The high percentage of riders in October also drives the initial startup calendar – being ready for October is effectively more critical than being ready for May. A fall startup after a summer rehab and construction season is actually preferable in many instances to an attempted May startup after rushed spring work.

What is even more critical to realize about seasonality is that across the entire state, the predominant market time for excursion railroads has now become the 4th quarter of the year rather than the traditional summer season. On average, the October-December market is now dominant over the summer vacation season by a relatively wide margin. The wide swings between October (averaging 25-35% of the year across the state), September (below 5% of the year) and Christmas season (typically 20% or above) puts an entirely different focus on marketing, operating, and crewing the railroad from what conventional wisdom would think would be a summertime activity.

This data creates what is essentially a demand plan for service by month – reviewing similar railroads across the state and determining a state average, and adjusting the plan somewhat to predict a stronger October against average. Plotting this state average and adjusting it specific to this market results in a distributed ridership by month.
Working with these projected demand percentages against an annual market rapidly results in a projected table of monthly riders that can be used to develop a business and operating plan. While the total number of riders may vary, this demand plan can likely predict well in advance what the annual ridership will be based upon state averages and initial performance.

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When these numbers are developed on a monthly basis, it rapidly develops into an exercise of establishing the likely demand patterns within the months. October, in particular, is concentrated demand on the weekends for families. Weekdays only develop for bus groups, if they are successfully targeted. While weather may not be a deterrent, darkness is. The opportunity for additional weekend trips to meet peak demand is limited.

During the summer, the typical weekend operation is assumed, but also with the understanding that those weekends are in direct competition with every imaginable family activity, event, show and vacation destination. Riders will come, but the railroad is in direct competition for them at this time more than at any other time of the year. ‘Shoulder’ weekdays (Friday, Monday, and sometimes Wednesday) are popular days for excursion railroads to attempt trips to capture visitors going to and from other destinations when rider competition is not quite as strong. Those shoulder weekdays can expand to full-week operations during July when vacation season is at its peak.

December/Christmas operations are the new phenomenon, and they are not like any other time of the year. Excursion railroads are discovering that the on-board events (typically either a licensed Polar Express train, an imitator, or a conventional Santa train) have little if anything to do with visible scenery, can be run at night on weekdays, and can be run to capacity on weekends. This capacity crush in December has led to experimental operations between Christmas and New Year’s, when there is virtually no competition for other activities or events and the entire family is typically together looking for something to do. This too, changes the business plan for a period of time in the year that has typically been considered as ‘closed’.

Given this information, projections can be made on the calendar of how many weekend and weekday days are available, how many trips per day can be reasonably done, and how that demand works out on a projected basis. For this railroad, the percentage of riders predicted into the 4th Quarter is perhaps even a little more pronounced than the average.
Note that the summer season ridership (June-August) is just 35% of the total, and while the operating schedule can be set to be any period, the experience of every other excursion railroad in the state would indicate that the greatest opportunity for results is actually in the Fall and Christmas seasons.

The next step in ridership analysis projects it into the business plan, to calculate necessary seasonal operations. Once you have a fact-based estimate of likely demand by month and even by weekend vs. weekday, the number of seats necessary to implement that plan — and the number of cars you need to do it, begins to take shape.

**Bridging into the Operating Plan**

The wide swings in demand and the high concentrations of demand over just a few short weeks create instant problems with meeting the demand with capital expenditures. Do you secure enough cars to handle every individual that possibly wants to ride in October or Christmas? Or do you accept that at certain times there simply aren’t enough seats and turn riders away? Can you simply add more trips and attempt to divert customers to alternate times?

Our approach has been to recommend addressing the high costs of capacity conditions with a combination of reservation systems (even if primitive) and expansion of numbers of trips per day during peak season situations. While some railroads have a large enough car fleet to handle nearly the biggest imaginable days (OC&T, Potomac Eagle), many do not, and shouldn’t. During this period of the year the trains are typically run to capacity, and controlling ticket sales by reservation – and interfacing with an individual or system to suggest alternate times, trains, or solutions, is more cost effective than open seating with too many cars.

While the definition of a 65 or 80-seat coach is the actual number of seats, riders are highly resistant to filling every seat to capacity conditions. Odd number of family members will ‘hold’ a seat unless it is sold by a specific seat #; families want to sit together, and the end result is that ‘comfortable’ capacity of trains is more like 65-70% of stated capacity. While that can be stretched, it results in far lower rider satisfaction and very little room for error. So for the purposes of designing an operating plan, predicted ridership by month was expanded first into the weekends, then into weekdays as can be rationally anticipated.

Although 80-seat commuter coaches are and were available, a mix of 44-seats (long-distance), commuter, and medium distance (60-65-seat) is more typical. An average car capacity of 60 seats per car is used for planning. Cars with more seats will result in even more capacity; this is a conservative number to start for budgetary purposes. 180 seats per train can also accommodate two higher-density cars and a multi-function car, or other alternatives such as open cars in the mix.

One of the true restrictions of the Colebrookdale line as it currently stands is the short passing siding length at both ends; 450’ at Pottstown and 500’ on the replaced siding in Boyertown. We have done the initial operating plan of the railroad based on three cars; 180 seats per train; 85’ per car. While that may be expanded in the future, the initial
calculations based on an operating plan result in a higher-than-expected system capacity. By adding and adjusting trips, the typical practical ‘capacity’ seat situations of 65-70% can be achieved for all months except December, and with only three cars. System capacity as calculated runs as high as 38,900 seats per season at 100%. At that point, more cars have to be added to provide more seats.

Under operating Scenario 1, the freight operator provides locomotive and crew for a per-train charge. In this case, it is critical to closely match the operating schedule with demand and minimize unnecessary trips which will be paid for even if nearly empty. Unlike the OC&T which has a much longer-mileage (and time) run, a locomotive and crew can perform 2-3 trips per operating day if necessary, even on a per-trip-charge basis. This results in much better equipment utilization.

Operating Schedule

The basic approach to the operating schedule was to base operations on no more than two weekend round trips per day (Saturday-Sunday) and no more than one weekday trip per day on an as-needed basis to meet demand. To achieve 30,000 riders, specific weekend operations are expanded to three trips per day for limited time periods in October and December. Shoulder and low-demand months do not operate every weekend and/or have only one trip per weekend day. At the 30,000 ridership plan, 164 of the 216 trips are on weekends.

Weekday operations are only done during summer, fall, and winter peak demand times with the ‘full out’ operations during December with 16 weekday trips scheduled then, and more trips should be added. Simply stated, the Christmas demand then runs at full capacity (91%) at the 30,000 ridership mark and no more trips, days, or seats are practically available without adding more cars.

While ‘your mileage may vary’, this approach creates a starting operating plan and the number of trips, miles, days, etc. necessary to begin to develop a financial plan to match it. With a developed operating schedule based on likely demand, the variable operating costs – fuel, crew hours, number of trips, and number of days, train miles, and annual mileage can be estimated for financial purposes.

The full operating schedule trips/days calculations are attached in the spreadsheets, but the basic summary metrics at the 30,000 level include:

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<td><strong>216</strong> trips</td>
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<td><strong>120</strong> operated days</td>
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For the purposes of this determination, it is not necessary to work to the level of detail to develop the in-depth operating plan, timetable, etc. It is necessary to determine activity levels to determine an operating budget with such significant items as fuel, labor, and consumable properly estimated. The actual operating schedule, ultimately, is up to the operator and organization to determine on how to best fit the volunteer and professional resources to the predictable ridership demands of this property.
STATION AND FACILITIES

By far, the most significant ‘missing link’ to the Colebrookdale Railroad is the near-complete absence of heritage railroad facilities. This is almost unusual for a startup tourist railroad as the legacy of the railroad business in the northeast is often abandoned passenger stations, weed-grown yards, and excess trackage. In this case, the remaining railroad assets at either end of the railroad are very sparse. While it can be debated and lamented that some regrettable choices may have been made in the past, those cannot be reversed. For the railroad to be successful in even the most minimal form, acceptable passenger facilities have to be present at both ends of the railroad, along with additional storage tracks for passenger operations and equipment.

Pottstown

The original station at Pottstown is on the Norfolk Southern main line, and would require entering the NS main line to access. This is essentially like attempting to make a school bus stop on an expressway today, and due to safety and passenger liability issues in the modern era, effectively impossible. No matter how attractive the potential of the building might be, it is 1600 feet east of the switch where the Colebrookdale line branches off of the NS main line.

Because of NS’ position as a large, publicly-held corporation, it has taken every possible practical measure to reduce the potential of trespassing or passenger liability on its property due to experience – not just fear – with lawsuits from accidents. Other than a grandfathered lease of the Tennessee Valley Railroad Museum property, there are no excursion railroad operations done on NS property anywhere in the United States, or even on properties under long-term lease. The only effective exceptions to that rule are special runs done as ‘Amtrak Specials’, which means that they are effectively a chartered Amtrak train, run under Amtrak contract, using Amtrak liability insurance procedures – which effectively limit NS’ exposure and ability to interfere operationally. While these have been rather effective for some special train moves, they have no bearing on a project that needs to access a station now located on a high-density, freight-only main line for a predicted 180-200 trips per year.

This situation results in the boarding location at Pottstown being relocated somewhere north of the Norfolk Southern main line, on the actual branch line. Luckily, Pottstown is blessed with a rather large and attractive central city park that is directly adjacent to the branch line. This park is also the location of the Pottsgrove Manor (south side of King St.) and the new Pottstown Carousel project (also south side of King St.). Both these attractions feature restrooms on the site and some parking spaces. The park area offers some parking space within the park, restrooms, and public use facilities.

The branch itself curves sharply off of the NS line just south of King St, crosses an overpass highway bridge, immediately crosses King St. at grade, and proceeds on the west edge of the park area for 1400’. The original railroad alignment in this area (according to 1906 USGS maps) went immediately to double track just north of King St. This is still evident in the relatively wide right-of-way and the parallel access road beside the tracks.
There is an existing Quality Inn motel property on the east side of the tracks, with a large and apparently under-utilized parking lot directly off of King St. This motel parallels the tracks with a mowed and manicured right-of-way and the rooms on the east side (back) of the motel are only 75 feet away from trackside. TripAdvisor reviews of the motel are decidedly mixed from poor to excellent in an almost inexplicably even distribution.

There is a driveway from the central area of the park that comes up to trackside on the east side. Generally, the ex-two track right-of-way appears to be easily developable for a new loading ramp or platform — until deeper investigation revealed that there are two right-of-way occupations that will provide serious impediment to any permanent structure directly beside the tracks — the west side of the tracks is host to a fiber-optic right of way, and the east side of the tracks is host to a major municipal sewer line under the access road. Agreements must be carefully examined to determine access, air rights, and potential disturbance beside the tracks. Pottstown controls the utility issues on the east side.

While it is unlikely that either of these occupations would ever require total excavation, it is possible, and it also makes construction of any permanent building or elevated platform a challenge unless the utility conflicts are bridged, avoided, or the utilities relocated. The existing trackside area is relatively free and unobstructed and can be elevated with additional crushed fines. The question becomes if the addition of any platform surface (paved or treated wood) can be added in this immediate location without creating an access problem. Starter operations using low, deck-style platforms on low concrete piers (deliberately spanning the actual utility) could allow the deck portions to be removable with a forklift — not requiring complete destruction if the unlikely access was needed to the lines below. Erection of a more permanent structure, like a conventional excursion train station on a foundation, would not appear to be feasible in the immediate trackside area without utilities relocation.

There is an existing, if relatively short, 450’ passing siding in Pottstown. 450’ allows running around a maximum five-car train of passenger cars. Extension of this passing siding is possible to the south, but rapidly runs into the parallel sewer line occupation of the main line.
Potential platform location alternatives identified
Directly to the west of this existing passing siding is a short street called “Maaco St”, for the Maaco automobile painting business on it. It is basically a cul-de-sac / driveway for Maaco, but ends only 60’ away from trackside, directly to the preferred target area of the passing siding. Initial investigation of this street concluded it was actually a named city street and also had utilities (electrical and water) available nearly to the edge of the right-of-way. Meetings at Pottstown indicated that this was not actually a public street, but a private driveway to Maaco. The proximity to trackside, the wide-cul-de-sac (broad enough for tour busses to enter and turn) and the potential for near-level access to the car floors with a constructed deck-style walkway definitely create a potential here, if it were publicly accessible, with utilities.

Maaco St. is already being used as a pedestrian ‘shortcut’ to the park with rather well-defined footpaths over the bank and the tracks to the dog park area. Some legitimate claim for pedestrian improvement could be made if this area was improved with steps or walkways.

The Maaco St. alternative has some serious flaws in that it is extremely difficult to find and enter from Rt. 100, via Shoemaker Rd., and into Maaco. The south end of Shoemaker Rd. is now blocked, making it a dead-end road, although that is not particularly obvious by looking at either a map or Google Earth. While Maaco St. still may have a potential as a low-cost tour-bus/ADA boarding point to a trackside boarding ramp, it is not particularly acceptable or intuitive as a main boarding point even it is proven to be a public right-of-way as originally identified.

Raised Platform Designs

Eventual concepts for a boarding platform for Pottstown are imagined to be similar to the existing high-level boarding platforms currently in service along the Oil Creek and Titusville. These deck-style structures are located at Drake Well, Petroleum Center, and Rynd Farm. They are sturdily built, high-platform (car floor height) unenclosed buildings that serve as boarding platforms, and have been in service since 1982. They are of three distinctly different approaches in style, but all feature a wheelchair ramp, lighting, level boarding to the train from the deck by use of removable bridgeplates into the car vestibule, and a full or partially roofed portion with waiting benches.
These low-cost post-and beam structures were done with commercial trusses and deck components using treated lumber. There are post foundations only and other than security lighting, have no utilities. Restrooms are located in adjacent buildings at Drake Well and Rynd. Based upon the agreement limitations and the exact location of the underground utilities, such a design could potentially span underground utility conflicts such as the sewer line and fiber-optic cable as they do not require a conventional full-foundation approach.

Similar ‘boarding platforms’ that resemble train stations are the standard structures on the Cuyahoga Valley Scenic Railroad in Ohio. Simple NPS designs were merged with vintage historic photos of the original vintage designs to create a covered platform with a closed end – which resembles a full station from the end view from the highway but is actually nothing more than a covered low platform with benches. Other than the center of the railroad in Peninsula, OH, this structure style is the ‘standard’ for a railroad hosting nearly 200,000 riders per year. They are all-wood.
Pottstown Alternatives

There are basically two paths of action within Pottstown; the short-term immediate plan, and a long-term plan of developing a true excursion train station.

The short-term plan will be a relatively minimalistic approach to grade and level the area just north of King St. beside the tracks, allowing easier pedestrian walkway. This can be done by simply adding additional trail-grade crushed limestone fines over top of the existing parallel driveway. In the immediate area of the tracks, a low, but elevated deck would allow a fixed and firm step area onto passenger cars without the concern that step boxes would shift or sink into crushed stone; this low platform area would also allow the use of Amtrak-style cranked wheelchair lifts to allow some ADA access. Restrooms and parking are dependent on cooperation of the park, carousel, Pottsgrove Manor, and possibly the Quality Inn. Retail sales space, ticketing, and office space remain problematic, but the close proximity of motel rooms to trackside raise a unique and unusual potential of actually renting motel rooms for short-term occupancy as office and ticketing space instead of attempting to place temporary office trailer-style structures trackside. A parked passenger car beside active track is another alternative to a trailer structure.

As the project would grow and become more successful, the need grows to develop some kind of dedicated permanent structure at Pottstown. There are several potential locations.

- Park: General location of the existing trackside driveway, far enough back to avoid conflict with the underground sewer line
- Park: Upper end of the park between the BMX track and the dog park, east side
- King St: Extreme southeast corner of the existing Quality Inn parking lot (space for structure only), far enough back to prevent overhead conflict with the fiber-optic right-of-way. This is particularly viable if the costs and use of parking can be developed via agreement with Quality Inn, as there is mutual benefit from sharing space that sees peak use at completely different times of the day.

There is effectively no space in the immediate Pottstown area to expand typical railroad servicing and support facilities such as car storage or maintenance facilities. The Reading used the Pottstown railroad yard which was in the general area of the NS-sited passenger station and points east.

Rt. 100 Crossing

Typical excursion railroad analysis searches for the highest-volume railroad crossing in the immediate area as a prime target location for a station boarding area. Just north of Maaco St., the line crosses Rt 100 on a diagonal, 4-lane semi-expressway configuration. The crossing is equipped with flashers and overhead cantilever signals, as well as advance warning signals. While this is a high-traffic crossing, the north side is directly off of a bridge and on a steep bank, and the south/west side is against existing commercial development on both sides extending back from Shoemaker Rd. There is no flat or accessible land on either side of the crossing that is easily developable to a boarding area, and effectively no space for parking.

Searches of the FRA accident/incident database disclosed that there are no reported accidents on this crossing; while there have been some reported incidents on two other crossings on the branch, they did not occur on what would appear to be the one most at risk.
Intermediate Points

Most excursion railroad projects have at least one identifiable intermediate point of interest as a potential boarding area. The railroad is sprinkled with remaining industrial archeology sites, historic station sites, and other areas of interest that may, over time, be incorporated as special stops or flagstops. But as there are no current activities at these sites, the implementation of the project does not include any immediate investment on facilities at this time for startup. There is an interest in developing the existing picnic grove with a minimal platform; it would not need to be much longer than 50’ to accommodate a single pair of car steps.

There are the remains of several industrial sidings along the route. One area that has at least minimal potential for car storage and/or repair shop location is the Stainless, LLC site at Pine Forge, which also has potential as a simple seasonal rafting passenger platform. This site has a remaining 400’ passing siding, and the remnants of some other industrial spurs on the site. It is privately-owned and active, but the original sidings are on areas of the parcel that are at the far rear and not obviously being utilized. The company is involved in the design and construction of high-quality radio towers, which is unlikely to require extensive rail freight inbound shipments in the future.

At the time of the study, this was an active, if very low-volume customer for contaminated soil reload by a third party. The passing siding was in use for freight car storage. If this activity ceases, the lease of this siding and access to the site would be recommended for car storage and potentially industrial-grade activity such as painting, sandblasting, etc. for repair activities under an agreement with Stainless.

Boyertown

The immediate ‘railroad area’ of Boyertown is defined as a relatively small parcel between E. 3rd St. and Philadelphia Ave. that measures approximately 600’ x 270 feet at its widest point. Historically, the 1870’s Reading shoehorned in a passenger station, passing siding, freight platform, and three storage tracks on this site by using exceedingly sharp curves and curved switches. Much of this trackage is documented by aerial photography and vintage photos to show how it was done; current railroad industrial siding design criteria would indicate it would not fit today with longer cars and standards in place. Until 2005, this site was being actively used for plastics reload out of freight cars.

Except for the ‘main line’ and the 720’ passing siding (that extends across Philadelphia Ave.) all other vintage sidings and spurs have been removed from the site. A switch remains in to the southern side to 3rd St. with 125 feet of storage. The crossing across 3rd St. remains, and is a concrete crossing surface in good condition. The opposite end of this historic siding remains as well, as the switch is still in place on the north end although the track is disconnected between them.

The Philadelphia Ave. grade crossing surface was rebuilt in 2008-9, removing what had been a third track to an industrial siding to the north. While the track spacing between the existing passing siding and the ‘main line’ appears wide enough for a third track between them, photos indicate that this track hasn’t been in place since the early years of the 20th century.

It is not possible to easily add on trackage to either the north or south end of the yard area, as the south end immediately curves and drops beyond 3rd St., and the north end switch is only 54 feet short of the 4th St. overpass bridge – which was constructed as one-track wide. The 720’ passing siding length effectively limits normal passenger train lengths on the line as well as freight. It should be noted that during the Reading & Blue Mountain excursion era (1992) the long excursion trains were operated with two locomotives present at Boyertown simply to push the train around the steam engine rather than the other way around.
At the time of the report, the 720’ passing siding was being actively used as a scrap metal reload site. At the current time, this is the only active freight loading area on the entire railroad. If this siding is being used for freight car loading activities, it means that there is effectively no way to run around a passenger train, or to get the passenger cars out of the way so that freight cars may be run around by the locomotive for the return trip to Pottstown.

The immediate recommendation for the project is the replacement of the removed 400' track between 3rd. St. and the remaining turnout just south of Philadelphia Ave. This produces a reverse-curved siding, but 14-degree curves will still allow a smooth transition for reconnection to existing tracks and is the minimum practical radius for coupled passenger cars.

The current freight operator has said they must have unrestricted access to the existing ‘main line’ to continue to transload trucks to rail at that location. That means that the depot area cannot be in the original historic location – which was closer to Philadelphia Ave., and must be located where it does not necessarily conflict with truck movements on and off the site.

This need for an additional passing siding at Boyertown to allow freight and passenger to coexist will be one of the very first requirements for excursion operations. The price for reinstallation of the missing 440’ of track is for materials and installation only, as the most expensive parts – turnouts and crossings – are still intact. The only other alternative is if freight activities are moved entirely off of the proposed depot site. There has been some discussion of that potential by re-activating industrial trackage on the track beyond 4th St. bridge toward the Boyertown Foundry property (Mestek, Inc.). Rail is overgrown and partially removed beyond 4th St. and appears to be entirely removed within that facility. The best community alternative for freight reload activities may be to invest the same amount required at the downtown site into rehabilitation of the Boyertown Foundry site, if an agreement can be reached to allow other materials to be transloaded on a shared site and track.

Mestek’s primary facility in Westfield, MA is adjacent to live rail property but shows no signs of being used, and announcements in 2009 indicate that most production activity was transferred to Boyertown. Although the Boyertown facility has been modernized for cast iron boiler production and CNC machining operations, the inbound material volumes necessary are not typically sufficient for rail traffic. It is highly unlikely that Mestek would be willing to pay for track rehabilitation on their site based upon their potential use of rail traffic.

**Site Requirements for Passenger Service**

The basic needs for passenger service at Boyertown revolve around a safe, accessible and usable site to board passenger cars, and a physical location to serve for ticketing, restrooms, and retail space.

The footprint and use of a building for this actually coincides with many of the stated goals within Boyertown. Parking and community space have been in the plan for the Boyertown site since the community acquired the site. The changes in that plan will be the placement of a new building that can have some community mixed-use applications, reconstruction of the short passing siding, and the intent to proceed with the remainder of the site dedicated to parking.
The original Boyertown station was a relatively large and unusual depot building more or less on the same site location as is most practical to replace it today. Reconstructing the actual passenger depot does not necessarily achieve the site goals, as a modern excursion railroad typically needs more open floor space that was done in passenger stations that typically put the office in the center, a waiting room on one end, and baggage/express on the other – with small restrooms added as an afterthought. The ideal floor plan more closely resembles a typical freight station with an emphasis on wide and open floor space, a small business office, elevated floor and platforms suitable for high-floor boarding without wheelchair lifts, and some flexibility on placement of modern restrooms with the open floor plan.

The two most critical issues that typically hamstring startup operations is the lack of acceptable restrooms and the lack or poor placement of retail sales space. Both are critical to survival; the restroom issue is nearly self-explanatory. It’s difficult to have too many restrooms, but the design and functionality of what you have is critical to success and if not positive visitor reviews, at least not scathing criticism. As original restrooms rarely if ever can be used and meet ADA requirements, building new ones out of open space is assumed. The retail space is often overlooked at a high price. The ability of excursion railroads to succeed and fail is often hinged on their ability to develop on-site retail sales of books, souvenir items, memorabilia, toys, and in particular – themed railroad logo clothing. When licensed special events such as Thomas are included, it is possible to earn as much as $9 per passenger on retail sales; without retail space it can be as low as under a dollar per head. An achievable level of $4 per head is forecast for a somewhat limited, but better-than-average rate with adequate space from the beginning. This means that retail space is designed as ‘flow through’ rather than a dead-end room, that historic waiting room space is effectively eliminated, and that full floor-to-ceiling space is utilized for clothing and adequate displays with lighting.

For community-use purposes, the retail display and inventory can be semi-portable. Most racks, displays, and counters are fully capable of being equipped with wheels. These may be rolled to the side, a separate room, or for certain events, completely out the door and into a storage room on-site. If the building can be rented or leased for special events and meetings, it is one more source of income to support the excursion program. Using such ‘museum facilities’ for special events, meeting space, and community events is possibly the single fastest-growing source of revenue available to excursion railroads, and can be designed into the structure from the start.
The Birdsboro Freight Station Concept

Early on in the report process the lack of a structure or space in Boyertown was agreed as a critical path item for the entire project. A site visit was made by interested parties to visit the Oil Creek and Titusville Railroad in Titusville, PA, which hosts its excursion operations from an ex-PRR freight station in the industrial section of the community. Like Boyertown, the original passenger depot was long ago demolished. The Titusville freight house is a relatively large structure measuring 200 x 40, it features an open, elevated floor plan with minimal interior enclosed space for offices and restrooms. The remainder of the entire structure is split between retail sales and a snack bar with table seating. The table seating area is typically torn down for special events. 2012 special events included community award banquets (catered) and a wedding reception.

Based on the Titusville freight station concept, interest was pursued on a smaller, but similar concept building still standing in Birdsboro, PA. This now-unused freight station is at the corner of First St. and Furnace St. in downtown Birdsboro, it measures approximately 20x70, and is of all-wood construction. The architecture of the building is decidedly 1800’s with ornate wood arches and gingerbread wood details, and exudes distinct railroad style architecture. It is identified as the original Pennsylvania Railroad Schuylkill Branch freight house. While construction date is indeterminate, it shows on one of the typical Pennsylvania “panoramic view” posters dated 1890.

The building is currently somewhat in use as a storage structure, but is no longer beside live rail. The owner of the building has been approached and would consider sale of the structure to be relocated to Boyertown. Initial investigation of the feasibility of moving and piecing the structure to Boyertown are being considered. It is 12 miles from Boyertown. It should also be noted that Birdsboro’s original passenger station remains as the “Players Bar and Grille” directly across the street, so this structure is secondary in value to the community.

While the building is smaller than some concepts, it is also small enough to fit within the footprint of the original Boyertown depot between the passing siding and the main line if necessary, maximizing the amount of parking space on the site. It is also small enough to be moved. Extensive rehabilitation of the building will be necessary, but the architecture, style, and materials of the building are classic enough that it literally could not be replicated today. This structure has the potential to meet visitor expectations and also be a functional and practical excursion railroad depot, essentially better than a passenger station in terms of flexible interior layout. While Boyertown no longer has
its own historic train depot, this is a worthy successor that fits the historic nature of the downtown and can meet the multiple-use criteria that has been envisioned for the parking lot site.

**New Construction**

While building a new structure for quasi-railroad purposes is unusual, it is not unknown. The newest ‘railroad station/community building’ of similar size within Pennsylvania is likely the Bud Shuster Intermodal Transportation Center; (aka Tyrone History Museum) at Tyrone PA. This railroad-station style structure was built as a replacement train station for the bus-stop-style Amtrak stop in Tyrone, with the intent to also be a local bus station. Due to the placement of the building on a sharp curve, Amtrak and Conrail both refused to allow train access at the structure and continue to use the open rail platform just west of this location today. The $406,000 building, constructed in 2000-1, was intended as a combination travel center and community building and measures 70x35. This ‘imitation’ style of train station is likely typical of the costs and style from new construction and materials of a building size similar to Boyertown.

The Indiana Transportation Museum at Fishers, IN has a newly-constructed ‘depot’ and platform on its line. This building is an interesting mix of high-volume excursion railroad and town community center, with an open central display room. ITM’s administrative offices are in the building.

*And beyond the railroad…*

The basic premise for the Boyertown site accomplishes the critical goals that work for the railroad and work for the community; expansion of parking space and development of a structure that can be used for community events. The needs for the railroad – restrooms, open space, and parking, are identical to the needs expressed in the community plan.

The parking lot placement and use concept will be available to the town, particularly on key weekdays. Peak demand for the excursion railroad parking will be on weekends. The depot structure itself has the capability to be an interesting and attractive addition to the downtown setting, as well as have the capability to be used for non-railroad events and uses. While the intent for primary railroad use is clear, the reality of the design is that it could be of full future value to the community even if the railroad project were not there. The structure placement, parking lot design and site footprint works even in the absence of the railroad use.
Hurlock, MD, relocated the Williamsburg, MD depot to their townsite in 1992, and it now serves as both a community center and excursion passenger station for the annual Hurlock Fall Festival. This small-depot project would be highly similar to the intent for Boyertown:
Shops and Support Structures

Aside from the depot, the other critical need for development on the excursion railroad project is a work area and storage track for equipment. No vintage railroad equipment will arrive on-site without requiring extensive work, and ongoing maintenance of vintage equipment is assumed. Today, there is no place to work on railroad equipment anywhere on the line - for either freight or passenger services. If the locomotive requires extensive work, it must be sent offline. In winter, an electric heater is plugged in to keep the locomotive oil warm enough to allow starting. This is not satisfactory for ongoing use of the branch either as an independent shortline freight railroad or an excursion passenger operation.

This issue is nearly as much of a challenge as the Boyertown boarding sites. This branch never supported its own terminal operations at either community, so there were no historic locomotive storage sheds, repair buildings, or car repair buildings. While rail enthusiasts may be very enthusiastic about stored equipment and a repair site, experience indicates that neighbors are far less tolerant of what is essentially an industrial activity. Locating this activity too close to commercial or residential activity is an invitation to develop difficult community relationships.

The good news about the Colebrookdale line is that the entire valley is full of industrial history, and much of the line served small industrial customers. Unlike most ex-Conrail branches, this one has many surviving industrial spurs into sites that deserve investigation for potential shop locations.

What do you need?

The basic features of a small railroad repair shop include:

- A covered building that can be secured from the weather and vandalism; dimensions are typically determined by equipment, but an 85’ passenger car needs a 100’ building to adequately work on it, and car width of ten feet needs a relative minimum of 25 feet for adjacent room for workspace.
- FRA locomotive inspection rules dictate that periodic inspections are made of locomotive traction motors, traction motor leads, fuel tanks, and frame components – all of which are underneath the locomotive and are really only clearly visible from underneath. Repairs of these items typically require a pit so that workers can be safely underneath the equipment.
- Either a reinforced structural steel frame that can support an overhead crane, a reinforced concrete floor capable of supporting hydraulic jacks, or both. A burned-out traction motor or defective wheels can only be changed out if the locomotive can be lifted clear of the wheels.
- Sufficient storage track beyond the building so that project equipment can be pushed clear out of the way if operating equipment needs more immediate repair
- Restrooms, welding-grade electrical service, water and sewer. Floor drains typically require an oil-water separator so that lubricating oils are not discharged to storm sewers.
- Vehicle access so that commercial trucks and semi-trailers can deliver or pickup heavy components

The shop building may or may not also double as an administrative headquarters purely as a matter of convenience. Interior space is typically valuable enough that an addition can be added for on-site office space if necessary, but the building itself does not need to be larger. If anything, fire, safety, and ventilation considerations indicate that administrative functions are not inside.
Most modern shop buildings have evolved into the use of pre-engineered steel industrial structures (often referred to as “Butler Buildings”) with an emphasis on a reinforced floor, foundation, and inspection pit area. Pole-type structures have also been used with wood-truss roofs.

Pre-engineered steel structures and pole buildings are typically available as ‘one stop shop’ centers for design and financing throughout the mid-Atlantic. Used buildings are sold as well, in outlets as diverse as Ebay and classified ads, for relatively small numbers compared to new construction. The biggest limitation for these structures is overhead clearance issues for railroad equipment; many buildings are simply not high enough. A minimum height of 16 feet leaves no room for jacking equipment but can at least store most conventional railroad locomotives and cars. The 16-foot clearance is more typical for pole-type structures used for farming and industrial storage.

We investigated several potential shop locations on the Colebrookdale line that show some promise. Since these locations all need essentially the same facilities of the same size, a ‘one size fits all’ capital budget was estimated for the repair shop project that could conceivably fit several different sites.

Investigated locations included:

**Boyertown Body Works Building**

This industrial site within Boyertown is within site of the original railyard and has been the topic of redevelopment efforts over the last 15 years. Considered a hazardous waste site, it has been unsuccessfully attempted to be redeveloped, primarily due to materials stored on-site.
The site includes an existing and still-connected rail siding into a covered, modern shipping wing of the building that is approximately 80 x 164 with the rail siding entering it on the 80’ side. News stories of the time indicate that this wing likely has an overhead crane in place. This wing of the building appears to be the last wing built, and was the truck body shipping area. The on-site portion of the siding is another 178 feet. There is room on-site for the addition of another storage siding of approximately 300-350 feet in length.

Newspaper reports indicate that the primary area of stored contaminated material is on the other side of the site from the rail siding, raising a question if the property could be subdivided simply to ‘cut loose’ this rail-served wing as a separate property. If this area of the site cannot ever be excavated for a pit or additional track construction, it is probably not feasible. Efforts to contact the legal firm currently handling the sale of the building were not successful to determine if the property could be effectively subdivided or the current state of the environmental cleanup.

Royer Building

A rather nondescript shed parallel to the railroad, and 1000’ west of the 3rd. St. crossing in Boyertown was revealed to be an original, railroad-era covered coal unloading trestle. Facilities like this were used to transfer coal by gravity from railroad hopper cars to delivery trucks during the coal heating era. Most coal trestles are elevated, with steep grades to push the hopper cars to the top; this facility is unusual that it is built into the embankment so that the actual service rail spur is flat.

This building has been confirmed to be available for lease. Interior photos supplied by the owner disclosed that the building is really only a semi-enclosed structure with no floor at the track level, open holes in the walls, and no remaining track on the inside of the building. The positive points are that the roof has been recently replaced, there appear to be adequate overhead clearances, and the original ‘trestle’ portions are steel and concrete and apparently fully intact and in relatively good condition. The ‘trestle’ design effectively functions as an inspection pit without excavation.

The difficulties are that there are no floors, utilities, or usable secured space. Using this as a locomotive and car shop would require so much additional investment that the site location may actually be more valuable than the building itself, even with the roof repairs applied. Tight clearances on the inside of the building (17’ x 107) at the rail bay leave little room for exterior car or locomotive work.

One alternative is that the site itself is well-located even if the current building is suspect. The hardest part of developing a workable rail access into the site has already been done and track can be relaid on the original spur access with minimal grading and changes.

Right-of-Way at Boyertown

The existing railroad ends at the south end of the Reading Ave. bridge in Boyertown. This leaves the potential (even if temporary) to locate a storage building at the far north end of the railroad on the existing right-of-way. The advantage to this is that the rail corridor at that point is primarily in an industrial area near the Unicast Foundry in
Boyetown. This places this activity in an area with less community impacts, but greatly restricts footprint and access. The only location that is vehicle-accessible is at Shaner & 6th St.

This location is actually a trade-off as erection of a permanent structure on the right-of-way effectively blocks the track further north and restricts freight development. The right-of-way itself is not wide enough to put a building on it beside the existing right-of-way. If an immediate secured location cannot be found for a temporary shop, this location may have to do until construction can be made of a better building elsewhere. This location offers immediate rail access without additional track construction (only repair) and no real estate conflicts at the current time. But if the freight activities are to be relocated to the Mastek site, this will not work as an alternative shop location, either.

**Stainless**

Mention had previously been made of the Stainless site, which already features a rail passing siding for storage and previously had on-site sidings into covered storage areas. The remnant of the industrial spur into the Stainless building is well-accessible by truck and rail, with room for a 100’x25’ building with only the replacement of the industrial track turnout and track repair on-site. If this corner site can be leased or this corner purchased, this would make an acceptable location for shop and equipment storage. The primary negative for this site is the distance from either Boyertown or Pottstown for deadheading equipment moves under regular operations. The positives are that repair-shop activities, material storage, and equipment storage would not have negative community impacts in this existing industrial area, and the space appears to be available on-site for potential expansion toward the creek.

**Other Locations**

The availability of small, near-abandoned, and rail-accessed parcels along the trackage is still emerging. Because of the relatively high number of such parcels on such a short railroad (most marked with abandoned switches off of the main track), the final ‘answer’ to a repair shop location cannot be known at this time, but alternatives certainly have shown to exist to not allow this to be considered as a fatal flaw in the plan. As long as budgetary numbers are estimated and reserved, location can be solved at a later time.
MARKETING THE RAILROAD

Stone Consulting has made a regular practice of surveying riders on existing excursion railroads on ‘how did you first hear about the railroad?’ as a standard question. Over 20 years, what is remarkable is how consistent the replies are across various railroads across the US, despite perceptions about the effectiveness of various media, approaches, and available distribution tools.

On every ridership survey taken, the number one response has always been ‘word of mouth’. That is basically the recommendations from friends, contacts, family, and co-workers relating and recommending the experience. That survey response has maintained the lead, but the mechanics of how it is done has certainly changed with the advent of social media outlets. If you consider social media (particularly Facebook, Twitter, Pinterest) as ‘word of mouth’, that primary marketing tendency remains unchanged. The key issue of ‘word of mouth’ is the value of the personal recommendation and it is also a reflection of how damaging negative reviews are, no matter the methodology of delivery. ‘Word of mouth’ is differentiated between comments on individual social media pages, rather than deliberate placement on a media web page controlled by the attraction.

Despite the assumptions to the contrary, the conventional printed rack card / brochure still holds an important part of the marketing plan and usually places second in surveys. Significant number of riders, when asked, indicate that their first contact with an excursion railroad is the rack or brochure card. When visitors are in an area and looking for things to do, the instinctive tendency to stop and grab the conventional rack brochures that look interesting is still significant. What’s changed, however, is the information inside and what they then do with them. Where they may have been collected in the past and assumed to be all-inclusive sources of information (and only good for one year), today they are typically the gateway to the next level. The brochure is often the lead item to the other significant source of information in the modern world – the Internet – inclusive of the standard web page as well as organizational-placed social media pages / broadcasts / and emerging tools. The scanned link icon to a mobile device page (including a map and schedules) is now a must-have on the brochure.

The Colebrookdale railroad has already done an extraordinary job of promoting the attraction on the Internet without the attraction ever starting. If anything, the ‘buzz’ built around the railroad has already begun with http://www.colebrookdalerailroad.com/ without any passenger ever boarding. This is most certainly the earliest ‘start’ to a planned excursion railroad project with a web page that essentially is way in front of the actual operation. This existing web page can easily evolve into one of the primary promotion arms of the railroad and has already significantly changed the perception and promise of the project within the region and beyond. The project already has an established Facebook presence, and is regularly updated:


In terms of the web and Facebook presence, the railroad is already nearly as well established as an existing operation. If anything, it’s become a surprise to discover that it’s not already operating.

Placement of the brochure material is as important as content. The railroad may use existing distribution rack jobbers that control their own racks, or work on an individual basis with motels and other attractions, sometimes on a reciprocal basis. All-volunteer organizations frequently prefer the latter, but the lack of effective brochure placement is usually the most common discovery on a poor ridership investigation effort.
The Signage Problem

Those basics being well-covered, our observations are that two of the key elements for this project will be more difficult to implement over the medium and long-term and will require immediate action based on the proposed timeline. The stark visitation difference between two near-adjacent and regional attractions – Roadside America and the WK&S Railroad, demonstrates the problem well.

Roadside America has developed into somewhat of an institution, but it also has done the basics right. It is situated directly within clear view of an interstate highway (I-78), has ample signage and billboards, web presence, reviews, etc. Directional signage is above average, including on-interstate marking of the appropriate exit signs. The combination between visibility and signage is about as good as it gets. Meanwhile, just two exits away to the east, the WK&S Railroad is relatively unknown despite near-identical traffic and demographic exposure on I-78. The exit is unmarked, and after leaving I-78, little if any signage is observed until you are within Kempton. What promotion is done is almost exclusively web based, and brochures are not widespread even in the Harrisburg area. While the railroad site itself meets expectations, visibility and signage are near the bottom of a rating scale.

The Colebrookdale Railroad will also have difficulty with visibility for boarding and business location in relationship to the high regional traffic flows in the immediate area. This means that from the very start, signage – either on public signs or private advertising, is relatively critical. Pennsylvania DOT has now discontinued the TODS (Tourist Oriented Directional Signing program) and relocated the responsibility. “Tourists Oriented Directional Signing "TODS" has been discontinued. A new signing system, WayFinder, will be used to enhance tourism within the Commonwealth. The WayFinder signing system will be under the responsibility of the PA Tourism Signing Trust.” “For more information, please contact Loisrae Graybill at (877) 272-1332.” The primary distinctions between the two previously-separate programs appears to have been (at least in the past) the arbitrary distinction between local directional signage on PADOT and municipal roadways (TODS) vs. PADOT administration of signage on US routes and interstates (LOGO).

Meanwhile, the Signing Trust website continues to have full information on both the LOGO and TODS program. The last online update for signage appears to have been in February of 2012 and fully covers policy and methodology for appropriate signage for the railroad that would be on PADOT right-of-way. The full policy manual is available online at http://palogo.org/sites/default/files/Logo%20Guidelines%202-6-2012.pdf. While the criteria are somewhat restrictive, the eligibility of the railroad project to qualify under the various guidelines appears appropriate for the project. TODS program guidelines are available at http://palogo.org/tods-program

This signage is not done by the Trust or PADOT and requires payment for the sign, application, and permit fee. Per sign costs can be estimated between $675-$875 through the local program.

The only real opportunity the railroad has to promote itself on its own property with a high traffic visibility is the Rt. 100 crossing on the north end of Pottstown. Any signage erected on the right-of-way itself would be within the rights as a property owner and could furnish additional directions, etc. to the appropriate locations.

Initial Publicity during Implementation

One of the expected ‘gifts’ that happens on the initial startup will be a potential flood of free publicity on the railroad in local newspapers and television. This can be somewhat controlled by the railroad through the use of press releases and media events. Properly executed, this free media coverage will drive the first two years of ridership as an experience for the local and regional resident population.
The initial enthusiasm based on this coverage blitz and resulting ridership can be anticipated. As the media is relatively hungry for anything ‘new and different’ the chance for stories and film on the operation will be multiple. The challenge is to sustain the coverage time as long as possible, get coverage in media beyond the daily newspapers, magazines, quarterlies, travel guides and magazines, national enthusiast magazines such as “Trains”, “Railfan”, and “Railpace”, and online travel bloggers that have surprising followings.

During this period the amount of paid advertising may actually be minimized, other than basic web/brochure/social activity, as publicity is effectively substituting for it. The changeover though typically happens between year 2 and 3 when the number of local riders begins to sharply decline and the railroad has to reach beyond its own back yard to find the larger sustainable market. The evolution to sustainable paid media sources and promotions then begins in earnest. The object will be to at least maintain ridership through year 3 instead of a steep decline. Based on our experience it is not uncommon for a startup to have good ridership in year one, excellent ridership in year two, and a disconcerting drop in year 3 as this evolution happens. As the sophistication and tuning of the paid media takes hold, ridership typically begins to increase again to a plateau level based on regional visitation.

Cooperative Media

A little cooperation can go a long way, particularly with hard data to back it up. During the first two years, it is critical to perform at least 2-3 on-board ridership surveys to determine areas of visitor draw, effectiveness of marketing efforts, and to have some hard demographic data to establish the railroad’s place in the community. Nowhere is this more important than in the use of cooperative media as the railroad matures into its market.

The concept here is that excursion railroads tend to produce new visitors rather than divert existing ones, and as a railroad establishes itself and reaches further out, it becomes more of a destination attraction to those that would otherwise never visit. That concept, when backed up with hard data, can be used to convince other local businesses that they need to market with the railroad as the ‘lead dog’ – and that advertising with the railroad is more effective than stand-alone. That makes everything from brochure space to magazine ads have the potential for cooperative advertising, once you can prove it. This is particularly common in ‘destination’ type magazines, where the railroad ad is typically paired with (and sometimes paid by) local motels and businesses. Web page space ads suddenly become possible, along with mutual promotional efforts. Even the smallest railroads benefit from cooperative advertising, as local franchised restaurants are often very willing to promote an attraction on placemats in exchange for advertising at or on materials distributed with the ticket, such as coupons. The object is twofold; get as much free cooperative advertising as possible, and make your own space valuable enough to be resold with partners. Over time, it can be made effective enough that an ‘on board magazine’ of ‘features’ about the railroad can be produced, entirely funded with paid advertising from local and regional businesses directed at the on-board riders. Most of these efforts have produced money, rather than cost it, and again, reinforce the concept of reciprocal and cooperative marketing rather than stand-alone efforts.

This in turn builds the loyalty between the community and the railroad, and that cannot be understated. Local businesses see the impact from riders, and adjust services and times to be open. This all begins the path to community support for the entire project.

Paid Media Sources

Most successful excursion railroads adopt a ‘we’ll try anything once’ attitude toward media work. Over the last 20 years, examples can be found of nearly every attempt to promote a railroad attraction. The limiting factor is usually
that the railroad can rarely afford much more than $1-$2 per rider per year in out-of-pocket marketing expense, based on typical ticket prices and ridership levels. That limits the media and the message.

Local and paid media are perhaps the most effective when it comes to special events, as it is both time-sensitive and locale-sensitive. The biggest paybacks on local and regional paid media such as newspapers and radio come from the ability to have an event that is a feature, limited-time or special nature; like ‘Day out with Thomas’, visiting steam, or some manner of historical reenactment. Free tickets can be given out on radio programs as promotions, coupons, and now even Groupon promotions on social media.

Radio, in particular, can be used to advantage with the sounds of a train; the steam whistle, bell, and ‘all aboard’ are particularly distinctive and successful. Radio time has proven to be particularly cost-effective for the excursion railroads that have tried it, and the effectiveness of the related sounds to stand out from the normal background noise of music and chatter has been well-demonstrated.

On the other hand, our reviews of paid regional television advertising are the exact opposite. The number of riders responding to ‘saw television commercial’ where the railroads were actually advertising on a regular basis for a generic experience typically comes in dead last on the media effectiveness survey. Because of the relatively high costs, the per-passenger effectiveness (dollars spent divided by survey response percentage) has not been particularly effective, even if the total analysis reason is unknown. This is based on some relatively large media-market efforts done by first-tier excursion railroads that attempted large-scale TV advertising programs directed at major metropolitan targets. While ridership results could be documented, the cost of the advertising programs (including production) did not result in proportionate ridership increases. It can be contested that results may have been due to ineffective ads, ad placement, etc., but the sheer dollar expenditures frequently drained the entire annual marketing budget. The style and effectiveness of these commercials can also be studied and analyzed, as most examples (TSRR included) are posted on YouTube. Many are actually well done, adding to the question of media effectiveness.

Television has been very successful with the indirect promotion efforts that can be done for far less if any out-of-pocket cost. Excursion railroads have been featured nearly everywhere in travel specials, History Channel shows, and now even in reality television. The appetite for interesting locations, sets, visuals, etc. should not be underestimated. The use of the railroad in commercials is another venture; some of them are truly unusual. The 2006 “Aflac Duck” was featured in a “Perils of Pauline” silent movie feature on the Northern Nevada Railroad Museum track. In 2013, the Sacramento Railroad Museum was the backdrop for an even more unusual ad – the “Our Time” dating site ad filmed outside, inside and around the entire museum site. The difficulty in these ventures is that it is easier to get paid as a filming site than be recognized as a filming site, in many cases only the most die-hard enthusiasts will actually recognize the museum or railroad featured unless it is negotiated into the contract as a requirement.
Another highly effective use of promotional funds has been the production of video programs that can be either sold to the customers as a souvenir DVD, or later shown on local PBS programs as a feature. These have proven to be extremely effective in Pennsylvania for promoting excursion railroads at comparatively low cost. The leader in this production effort has been “Great Scenic Railway Journeys”, series productions by Robert VanCamp. His work has achieved the first Emmy awards (2009) of a tourist railroad video in “Celebrating North America’s Steam Railways”. Shows like this have become a staple of PBS programming nationwide and have been directly credited for ridership gains for the railroads that are featured in his films. Railroads that have participated in this effort have often seen an instant ridership burst anytime the regional PBS stations replay these features, sometimes for years after the fact.

The Risks of Startup Implementation

The typical ‘critical path’ of an excursion railroad project is to get the track suitable for use. Buildings, equipment, etc. are usually not the reason the project cannot immediately begin. Colebrookdale has the distinct temptation and ability to attempt operations before they meet minimum public expectations because track is open and ready, and a locomotive is already on-site. What does that mean? Cars may not be painted or repaired, but legal to operate. A building may not be ready, but portable toilets are delivered. The ‘station’ may be, by necessity, a construction trailer on the site. These are practical, and sometimes necessary evolutionary growth steps, but they can also come at a price.

One of the biggest changes in consumer reaction and behavior in recent years is the relatively instant – and permanent - reviews posted of an attraction on social media and travel websites. When an event or attraction has a positive ‘buzz’ it is celebrated, but it is just as possible for an attraction to develop a negative ‘buzz’ that lingers long after the issues at hand have been addressed. Because of the accelerated startup schedule, and the difficulty of achieving some of the permanent improvements, shortcuts may be done that meet the implementation schedule in a practical manner. The inherent danger is that visitors come expecting an ‘historic’ operation, and spread the word that it is not worth visiting. Those reviews are relatively impossible to erase, easy to find, and rarely screened.

As a cautionary tale, an operation that was at one time very successful is now totally and completely closed with virtually no interest on reviving the passenger operation in any manner, in what is arguably the best tourism market in the entire state. The Gettysburg Railroad began as a purchase of the ex-Reading Gettysburg Branch in 1976; purely as a shortline freight railroad, with passenger excursions added by 1982. The excursion train consisted of a 2-8-0 and two cars, but it was steam, and it did ostensibly operate through one corner of the first-day battlefield at Gettysburg, beginning from the college campus and heading almost due north to Biglerville (not the primary battle area). Steam operations were popular enough to procure a larger steam locomotive and many more cars; ridership grew steadily to over 50,000 by 1994. In July 1995, poor steam maintenance practices led to a near-catastrophic boiler event on the line, resulting in the injury of the crew (no passengers) and permanent retirement of the steam program. The NTSB investigation resulted in a complete overhaul of FRA steam safety regulations that impacted every excursion operation in the US. The accident was not necessarily a PR disaster, but it began a series of events that was.

Ridership began to slip as soon as steam was discontinued. The original independent railroad owners sold the line to Rail America in 1996. Rail America attempted to continue the excursion program, but ridership continued to slide without steam, and the ride quality without it was relatively uninteresting. Facilities, cars, and entertainment quality steadily deteriorated to the point of being memorably poor. By 2001, Rail America resold the entire railroad including

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the passenger operation to Pioneer Railcorp. Pioneer attempted to continue the operation, but made relatively few improvements to the visitor experience. By 2002, ridership had plummeted to just over 6,000 riders in a market that had produced 50,000 under previous ownership. During this period of time, park attendance actually increased.

Within this framework, Pioneer attempted to lease the passenger operation and equipment to a third party, but there were no takers. Operations continued under Pioneer and ridership even recovered to 15,000 by 2007, but the rise of social media and online visitor reviews documented the experience all too well by that time. Trip Advisor and Yahoo! Travel entries savaged the excursion experience during 2008, with 13 of 19 Trip Advisor reviews citing the experience as “Terrible”.4

“Pitiful”
Reviewed July 6, 2008

We bought 5 tickets for what was advertised as a scenic railroad ride. Don’t waste your money!! We went through the woods to see other peoples backyards, a trailer park, and a few farms. The train stopped for 5 minutes so that you could spend more money for drinks and snacks. The return trip was in the same direction so that you could see all the same things once again. We were extremely disappointed and felt that we were scammed out of $67.00.

“Skip the Ghost Train in Gettysburg”
Reviewed August 11, 2008

We were very disappointed in the Pioneer Lines Scenic Railway Ghost Train trip on July 26, 2008.

We were a party of 6. Including two adults, two teenagers and two senior citizens. Everyone was BORED to tears!

It was terribly HOT inside the train. Not one of the ceiling fans were working and the train cars were not air conditioned.

The Hostess set the mood when she announced that the sound system was experiencing technical difficulties and the last car may not be able to hear her. There was sound system problems throughout the trip, and with the sound of the train this compounded the problem. The entire trip seemed like just a quarter mile down the track and back. The Engine House was a SAUNA., we were parked in there at least 10 minutes with no air movement. No Ghosts or orbs were seen. Which we really weren't expecting anyway. Save your money. It cost us $22.00 each. Time and money could have been spent doing something much more enjoyable, like visiting the new Visitor Center.

We couldn't wait to get off the train!

Richmond, Virginia
July 4, 2008

Trip Advisor cheerily stated that the railroad was “Ranked #31 of 32 attractions in Gettysburg”. #32 is an attraction that was never reviewed by anyone, so it defaulted to the very end of the list. The railroad effectively finished dead last.

The railroad did not reopen excursions for 20095. Freight operations continue and are successful.

The hostile online reviews not only served to chase away potential riders, but also may have left enough of a lingering distaste that Pioneer was unable to lease the services, despite a nationwide attempt in railroad classified advertising to find another operator. The online reviews still survive today, five years after the fact, and numerous online links to the expired website can still be found today. Online reviews have an infinite shelf life.

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4 Trip Advisor January 2013: http://www.tripadvisor.com/ShowUserReviews-g60798-d108122-r137092593-Pioneer_Lines_Scenic_Railway-Gettysburg_Pennsylvania.html#REVIEWS

5 Gettysburg Scenic Railway suspends 2009 season: http://www.eveningsun.com/ci_11707394
This is a relatively new phenomenon that excursion railroads in general – and particularly startups – must take great care in anticipating as part of the implementation process. When Strasburg Railroad started in 1958, it was a single car, a tiny diesel, and a temporary plywood-sheet ticket booth beside the tracks. It would be similarly savaged today online. At any rate, reviews and social media commentary must be carefully monitored on a daily basis – particularly for a startup, and apologies issued where necessary to react to bad experiences. One of the most difficult issues remains, and laughably so, that passengers are actually astounded and disappointed when they return the way they came. Even some of the best railroads such as Strasburg (which rate 197 “excellent” reviews out of 364) manage to find 12 “terrible” reviews including “The only problem is the 45 minute ride is 20 minutes out, turn around and come back the same route.” To Strasburg’s credit, any negative review is followed by what is essentially, an apology posted by management, so that potential customers know the comments are monitored.

It is unrealistic to assume that the entire project can be a ‘finished work’ upon opening. But it a caution that the experience not be overpromised either online or in print, and that where necessary, care is taken to explain to customers that you are ‘just getting started and accept our apologies for __________ (insert your issue here!)”.

If the operation is clearly identified as ‘home grown and volunteer’, it helps to elicit sympathy and understanding for what are sometimes obvious shortcomings. Little WK&S at Kempton manages to produce highly positive reviews, along with a memorable “They’re completely volunteer run which makes them not the biggest or the flashiest, but you’re always met with a smile.”

The initial burst of press and enthusiasm will likely buoy ridership for the first two years as a new and different experience, and also due to curiosity. Beyond that point, the railroad is ‘on its own’ and the ability to beg forgiveness decreases over time. As that market expands, and people research a destination attraction from a distance, the reliance on online reviews and resources grows. Anticipating this phenomenon is entirely possible, with numerous examples available of the pitfalls to avoid and the proven positive methods to nullify, if not entirely prevent, such activity from compromising the entire program.

Implementing the tourist passenger operation can happen incrementally. However, particularly for the early stages of implementation, each stage should be understood and perceived by the public as being a step on the way to something better. For instance, a single coach augmented by a baggage car, caboose, gondola, and diesel engine may suffice as a first season train, but visitors should be able to see the procurement and restoration of additional vintage coaches underway at the same time. While a simple platform and shelter in Pottstown and Boyertown may suffice for season one startup, visitors should be able to see the plans and progress for a proper station and retail and bathroom facilities clearly visible for the future.

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EQUIPMENT ANALYSIS

The high desirability of a steam locomotive for this project was emphasized by the Trust. The ability of a steam locomotive to be a viable alternative for this project is based upon the realities of operating factors seen by railroad museums and excursion railroads nationwide.

Ridership surveys are now often split 50/50 on whether or not steam is actually important to the ride experience, but if the impression of the railroad is to create an authentic historic experience rather than just a “train ride”, it is expected. In this case, the authentic historic vision of the operation envisioned by the Trust makes a steam locomotive part of the plan.

Steam is expensive; requiring either a large supporting ridership or a large and dedicated volunteer group behind it. A dedicated and skilled volunteer group for fundraising, restoration, operation and maintenance is now more critical than the ridership factor alone, as a steam locomotive is a labor-intensive machine.

Steam will always generate proportionately higher ridership, at significantly higher operational cost over time. That operational cost is often deferred into the future with the increased (and growing) cost of boiler tube replacement and ultrasonic boiler testing after either 1472 days under pressure or 15 calendar years, whichever comes first. Actual fuel costs in operation are often comparable to diesel, but the maintenance and major shop time is the difference. Balancing that additional ridership against actual out-of-pocket costs for labor and maintenance is the essential tradeoff.

Steam will also generate volunteer interest and support that would otherwise look elsewhere for a project to devote their time to. A number of volunteer railroad organizations exist purely to support the group's favorite locomotive. If that volunteer group includes individuals that can assist in capital repairs and machine shop work, the basic economics of steam change.

While steam locomotives do not necessarily have a higher initial cost to acquire, their cost grows dramatically with the fabrication of custom parts and renewal work during restoration. Measurement and certification of all components under pressure is required under Federal regulation, and the “Form 4” for calculation of maximum safe working pressure is required before the locomotive can ever be operated. Our cost estimates in the Capital Budget plan for a steam locomotive include comparable-based medium-sized locomotive restoration effort averages, funded by grants using paid labor, over the last five years. While it is possible to acquire a locomotive in working condition, the typical candidate locomotive is now one that is essentially in good condition but needs its 1472-day/15-year work completely redone. A budget reserve is included to assume that some significant portion of the boiler and/or firebox will need renewal.

Many excursion railroads have come to the conclusion that only a portion of the ridership is truly passionate about steam. Because of that, steam is not necessarily run on every trip or on every weekend, and is sometimes run at a premium ticket price. A careful balance must be made between consumption of days under pressure against the regulatory maximum 1472 day total (figuring 15 years) is 98 days per year. Any more days than that will reduce the maximum service life under 15 years; any fewer days are essentially wasted against the calendar life maximum.

A diesel locomotive is still assumed under the plan as either secondary or backup power. This locomotive is also included in the capital plan. This locomotive may be a standby available to the freight operator as well.
The more immediate, and significant, problem to implement operations on the Colebrookdale line is finding suitable, vintage, open window excursion coaches. Open-window, 1910-1925-era steel coaches are highly desired by the Trust to be the image and goal of the project to achieve the historic vision. It has become increasingly difficult to locate coaches that are suitable for interchange, are in operational – if not restored – condition, or can be made operational within the timeframes expected during this implementation. More modern, sealed window coaches are available but these were not the primary targets for the project. The cars that can be located are still structurally sound, but due to interchange mechanical restrictions such as roller bearings and couplers, are not easily moved on their own wheels to the Pottstown Norfolk Southern interchange.

Due to that factor, all the passenger cars that were inspected by Stone Consulting were assumed to be trucked into the project, and that is a significant extra cost, if a more predictable one that interchange by rail. Restoration of the candidate cars examined will need to be done in some kind of a shop building accessible to the railroad. Roof repairs are a typical requirement of clerestory-roofed cars of the early 1900’s era, and those repairs must be done under cover. A separate report was prepared for the Trust regarding inspection of selected cars under this project.

Like the steam locomotives, such vintage cars are generally dependent upon skilled volunteer labor to assist in the programs. While the cars themselves are not subject to as many regulatory operating restrictions as the locomotives, they are still required to meet minimum structural, air brake, and mechanical standards. Toilets need to be converted to some manner of retention system instead of the original open hopper discharges. Window glass on passenger coaches is a particular problem, as it is assumed to be ‘bulletproof’ glazing as required on passenger cars under the current CFR unless a waiver is formally requested. This waiver is almost always granted by the FRA for rural, slow-speed excursion railroads with no adjacent freight tracks, but it is not automatically granted without request.
OWNERSHIP AND OPERATIONS ALTERNATIVES

One of the biggest challenges for the Colebrookdale operation is determining the mechanism for implementing the ownership and operational structure to provide excursion operations, and navigating the thicket of regulatory, operational, and institutional barriers along the way. It is by nature, a detailed and sometimes confusing process, but it is also not unique. Public agencies, private railroads, and volunteer organizations have been successfully managing to implement such operations since the wholesale abandonment and widespread sale of light-density branch lines in the northeast since Conrail’s formation in 1976.

The discussion begins with the current situation. Berks County is now the complete owner of the railroad, having purchased it back from the previous operator, and substantially contributed to rehabilitation and upkeep. Berks County offered a public RFP process in 2008, and selected US Rail Partners to operate the line. They formed the Eastern Berks Gateway Railroad (EBGR) as a corporate subsidiary, a for-profit shortline railroad entity, to take responsibility for all rail operations on the line. EBGR also effectively assumes liability for the operation through its own insurance holding the County as a named insured.

The 2010 Operating Agreement between Berks County and EBGR detail, at length, the responsibilities and actions for each of the parties. While the entire contract will not be outlined here, the key issues that impact rail passenger operations include the following details:

- EBGR shall be permitted, but shall not be required, to provide rail passenger service including tourist or excursion service on the Line.
- Any and all additional maintenance or operating expenses including liability insurance and indemnification of the County for its liability shall be borne in the entirety by EBGR or the sponsor of the rail passenger service.
- EBGR may make permanent improvements on the site, and if the contract expires, will be reimbursed for depreciated value. Initial lease term is five years.
- EBGR is responsible to maintain FRA track class (FRA2, 25mph freight) and perform regular track maintenance.
- County is responsible for initial brushcutting, bridge maintenance, and extraordinary capital repairs.
- Lease payments are $4125 per quarter as long as revenue targets are met, and the lease payments may be offset by track maintenance performed at or above that level.
- EBGR is responsible for all STB and common-carrier notification procedures

The general terms of the operating agreement are in line with other public entity to private operator contracts within the State and nationally. Liability insurance levels are set at $10,000,000 of required coverage.

Passenger operations may be operated by EBGR, but may also be provided by a third party organization such as a nonprofit.

Parallels and Diversions

There is a wide variety of agreements attempted, and functioning, to establish the relationship between the three potential parties of a for-profit freight operator, a public property owner, and a nonprofit passenger operation such has been proposed for the Colebrookdale Railroad. Pennsylvania leads the national list with the most shortline freight railroads, and that also creates numerous opportunities for excursion passenger rail at various locations.
accomplished with a wide variety of methodologies for regular and special operations. Just within the State of Pennsylvania, and excluding Berks County; the relationships include:

### PENNSYLVANIA

<table>
<thead>
<tr>
<th>County</th>
<th>Rail owner</th>
<th>Freight Operator</th>
<th>Passenger Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lackawanna</td>
<td>Pennsylvania Northeast Regional Rail Authority</td>
<td>Delaware Lackawanna</td>
<td>Steamtown (NPS)</td>
</tr>
<tr>
<td>Monroe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tioga</td>
<td>Growth Resources of Wellsboro (nonprofit)</td>
<td>Wellsboro &amp; Comington (Genesee &amp; Wyoming)</td>
<td>Tioga Scenic Railroad (nonprofit)</td>
</tr>
<tr>
<td>Westmoreland</td>
<td>Westmoreland Co. IDA</td>
<td>Southwest Pennsylvania RR</td>
<td>Various; last was Mountain Laurel RR</td>
</tr>
<tr>
<td>Fayette</td>
<td>Fay-Penn Industrial Development Authority</td>
<td>Southwest Pennsylvania RR</td>
<td>Various; last was Fayette Central</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>until 2012</td>
</tr>
<tr>
<td>Warren; Elk</td>
<td>PADOT until 1985; sold</td>
<td>Allegheny Railroad</td>
<td>Allegheny on specials only</td>
</tr>
<tr>
<td>Venango/Crawford</td>
<td>Oil Creek RR Historical Society</td>
<td>Oil Creek &amp; Titusville (New York &amp; Lake Erie RR)</td>
<td>Oil Creek &amp; Titusville RR Historic pulled by NYLE</td>
</tr>
<tr>
<td>Centre</td>
<td>SEDA-COG Joint Rail Authority</td>
<td>Nittany &amp; Bald Eagle</td>
<td>Bellefonte Historical Railroad Society (nonprofit)</td>
</tr>
<tr>
<td>Northumberland</td>
<td>SEDA-COG Joint Rail Authority</td>
<td>Shamokin Valley</td>
<td>Shamokin Anthracite festival (sponsor) for SVRR; Sunbury Riverfest; Fort Discovery.</td>
</tr>
<tr>
<td>Lycoming</td>
<td>SEDA-COG Joint Rail Authority</td>
<td>Lycoming Valley</td>
<td>Williamsport Visitors Bureaus (sponsor) LVR, Inc.</td>
</tr>
<tr>
<td>Columbia, Montour</td>
<td>SEDA-COG Joint Rail Authority</td>
<td>North Shore Railroad</td>
<td>Danville Iron Heritage; Downtown Bloomsburg, Inc.</td>
</tr>
<tr>
<td>Wayne</td>
<td>Wayne County Chamber of Commerce</td>
<td>Flood damage 2005; carrier suspended; open</td>
<td>Stourbridge Line (Wayne Co. Chamber direct)</td>
</tr>
<tr>
<td>Bucks</td>
<td>Bucks County Railroad Preservation and Restoration Corporation (nonprofit)</td>
<td>New Hope &amp; Ivland for-profit w/freight</td>
<td>New Hope &amp; Ivland Railroad</td>
</tr>
</tbody>
</table>

Nationally, the variety and methodologies are similar and widespread, but all have experience with the potential outcomes for The Colebrookdale Railroad that involve either community or nonprofit ownership, freight operations, and passenger. All freight operations are for-profit. Passenger may be for profit or nonprofit. Samples include:

### NATIONAL

<table>
<thead>
<tr>
<th>Location</th>
<th>Rail owner</th>
<th>Freight Operator</th>
<th>Passenger Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adirondack State Park (119 miles)</td>
<td>NY Department of Transportation</td>
<td>Mohawk, Adirondack &amp; Northern Ry</td>
<td>Adirondack Scenic RR (3 sites) (vol. nonprofit)</td>
</tr>
<tr>
<td>Ellsworth, ME</td>
<td>Maine Department of Transportation</td>
<td>None (no connection)</td>
<td>Downeast Scenic Railroad (vol. nonprofit)</td>
</tr>
<tr>
<td>North Judson, IN</td>
<td>Town of North Judson, IN</td>
<td>Chesapeake &amp; Indiana Ry</td>
<td>Hoosier Valley Railroad Museum, Inc (nonprofit)</td>
</tr>
<tr>
<td>Sacramento, CA</td>
<td>California State RR Museum</td>
<td>Sacramento Southern Ry (Museum-owned for-profit)</td>
<td>California State Railroad Museum</td>
</tr>
</tbody>
</table>

| Stone Consulting     | Page 46                                                 |                                           |                                           |
Locally, regionally, and nationally, it is very unusual for the contracting entity on the public sector to be the actual County executive office, such as happened in Berks County; the only structure similar to Berks is the WMSR in Maryland. The typical means for public ownership and control of the right-of-way is for a Rail Authority or IDA to take title; these more arms-length relationships also mean that the Authority/IDA structure can, if need be, issue debt instruments for financing capital reconstruction in the event of significant damage. The public entities can continue to receive public funding and/or grants from all manner of funding sources. The county-level agency continues to retain control, but is not under the executive branch management system.

PADOT originally purchased a considerable amount of trackage from the bankrupt railroad trustees including all the mileage from Warren to Kane, PA to prevent railroad abandonment. PADOT subsequently resold these interests to the actual operating railroads and no longer controls any track miles within the state as the owner. PADOT, as the state, no longer controls any track in the Commonwealth, leaving it to localities, authorities and communities where necessary.

Ownership by public agencies and nonprofits within Pennsylvania varies widely; Nonprofit Growth Resources of Wellsboro owns their railroad and retains control even though the railroad itself is now wildly profitable within the Marcellus Shale development area. The nonprofit Oil Creek Railway Historical Society did the original purchase of the ex-Conrail trackage in 1986, putting them in the interesting position of owning the railroad that they then contract out for freight services. Westmoreland County IDA purchased their track directly from Conrail and CSX as a result of abandonment, they and Fayette County partnered the purchase and operator selection. Each IDA then owned the portion within their own counties but shares an operator. Westmoreland kept their portion while Fayette sold theirs to the for-profit operator in 2012. In some cases, such as Fayette Co. PA and Tioga Co. NY, the freight operations have grown so large that the original excursion passenger operations were effectively crowded out.

Particular situations in particular states have shaded these ownership decisions. Railroad property in New York is taxable for real estate purposes and 100% of shortline railroads have now passed their track to IDA’s, rail authorities, or nonprofits to avoid that tax burden. In Pennsylvania, the large number of branches abandoned in 1976 with
Conrail formation started an ‘every man for themselves’ reaction to preserving rail lines by any method possible and a wide variety of owners over time.

Within Berks County, two basic ownership alternatives exist for the future – continued County/public ownership of the line (although there is more precedence to a county agency controlling it than the Commissioners) or a nonprofit ownership that has the option of its own operator selection, freight operator, and passenger alternatives.

It can also be seen that the multi-county rail agencies have an established presence; both Lackawanna and Monroe County, and the 11-county SEDA-COG organizations have sophisticated, staffed, and professional Rail Authority organizations. SEDA-COG recently went through an investigation phase deciding if the shortline railroads should be sold to the operators, and concluded that their retention of underlying industrial property control was too valuable to release. The other popular alternative within the Commonwealth is control of the railroad property via an Economic Development Agency (Fay-Penn) or Industrial Development Agency (Westmoreland).

**Profit/Nonprofit Ownership**

At least two Pennsylvania shortline/excursion properties are owned by specialty corporations, and provide significant and stable rail freight operations along with excursion passenger services. They achieve the goal in completely different ways.

In Bucks County, the New Hope & Ivyland railroad has had no fewer than three different owners; at first a for-profit excursion railroad, then the Bucks County Industrial Development Corporation, and starting in 1990, ownership by the for-profit Bucks County Railroad Preservation & Restoration Corporation. This organization has been the recipient of the PA Rail Freight grants for track restoration, as the railroad has maintained common-carrier freight service status. The operating entity, the New Hope & Ivyland Railroad, is still a for-profit entity although it encourages volunteers, and has various associations with nonprofit museums for special events. The railroad is also listed as a covered carrier for Railroad Retirement for common-carrier freight. While the railroad may look and act like a nonprofit, it is not organized that way.

In Crawford and Venango County, the Oil Creek and Titusville Railroad was originally purchased directly from Conrail by the Oil Creek Railway Historical Society, Inc. They did their own operator selection, and hired the New York and Lake Erie Railroad as the freight operator over the 13.5 mile railroad. NYLE formed the freight operator – Oil Creek and Titusville Lines LLS (OCTL) to handle all common-carrier freight. Under the terms of the agreement with OCTL, the Society owns the passenger cars, but OCTL provides under-the-frame maintenance. OCTL provides the locomotive crew, and either their own locomotive or a locomotive owned by the Society maintained by OCTL (there are three). OCTL is responsible for all railroad regulatory compliance, FRA filings, track standards compliance, and employee certification, training, and rules compliance. The Society is responsible for grant procurement for track rehab, non-freight buildings and grounds, all ticket sales and retail activity, promotion and volunteer activities.

The operational relationship may be unique – the Society contracts with OCTL to pull their passenger trains for a per-train fee – negotiated in the contract - which essentially reduces the passenger excursions to a freight car special move in the eyes of the operator. The operator is responsible for car inspection, terminal air test, and movement – and the contract dictates that completion of a terminal air test and movement of the train completes a ‘train fee’. It is of no concern of the operator if the train is empty or full; payment is based on train movement alone. The Society does not have to concern itself about any railroad regulations as it is not involved in the movement or operation of the
train. While there are on-board car hosts and volunteers, they are not directly involved in train movement in the eyes of the FRA.

The freight carrier has performed admirably for economic development and traffic increases. Conrail’s retreat left an out-of-service line with no traffic left in Titusville in 1986; OCTL now reports approximately 1500-2000 annual carloads of high-revenue plastics, wax, hardwood lumber, and general freight interchanged over Rouseville, PA. This is enough freight to justify the railroad but not show a significant profit; the addition of the passenger excursion activity as a per-train move makes the freight operator solidly profitable. The nonprofit status of the owner has qualified the railroad for a wide variety of Rail Freight Assistance Program grants, economic development grants as a tourism activity and museum, smaller historic preservation grants, and all manner of volunteer and discounted community services. OCTL has outlived many other excursion railroad attempts, and is stable and solid at an average ridership of roughly 20,000 per year.

This is one of the demonstrated cases where the nonprofit has managed to successfully own the railroad, manage the freight carrier, and evade the tangles of full common-carrier railroad regulation over a long period of time. As the complexity of regulatory compliance increases, this approach is a tested and proven approach to a nonprofit museum/excursion operation coexisting with the common-carrier freight operation over the same track with mutual financial benefit. This relationship is essentially explored financially under “Scenario 1” in the pro-forma exercises.

**Nonprofit without Freight**

This is essentially the operating definition of virtually every small operating railroad museum in the United States. A good example is the Wanamaker, Kempton and Southern; it owns and maintains its own track, is subject to some basic FRA safety and equipment standards (see below), but is not a freight carrier – primarily because it is now far away from an active freight connection.

A significant number of nonprofit railroad museums operate this way. The primary difficulty of this approach is that this places the excursion railroad in the position of being the only activity there to support minimum track maintenance standards established by the FRA. The longer the railroad and the lower the ridership, the more difficult this becomes for the nonprofit. There is a very distinct relationship between the ridership, revenue, and the ability to support required track maintenance. Because of this, public ownership of longer properties often becomes necessary. The champion of this is perhaps the 64-mile Cumbres & Toltec Scenic Railroad, owned by a joint authority formed between Colorado and New Mexico, which has contributed substantial capital contributions over the years to keep the excursion railroad operating through some of the most difficult railroad terrain in the entire US.

The general approach of such nonprofits is that they consider it an exemplary situation if they are fully self-supporting for all regular and capital maintenance activities. Any remaining cash flow is typically put into capital improvements to improve the visitor experience and restore additional equipment.

The nonprofit may or may not be considered as ‘insular’ (no contact with the public transportation system via highways, bridge crossings over navigable waterways, or connected general-system rail), but in the case of The Colebrookdale Railroad, there are enough bridges and crossings that this fact cannot be debated.
The common-carrier freight status cannot currently be controlled by the nonprofit, as the line is currently in the General Freight System by EBGR, as it was reopened in August 2010\(^7\). If the freight were to be discontinued, the appropriate STB vehicle is referred to as ‘service discontinuance’ would be required to be filed by the operator. This responsibility is specifically identified in the current operating agreement. This is different from abandonment, where actual physical removal of the railroad is sought, and in Chenango County NY the IDA involved vigorously opposed such a move. An example of such a filing and decision docket may be seen at the STB website in the case of THE NEW YORK, SUSQUEHANNA AND WESTERN RAILWAY CORPORATION — DISCONTINUANCE OF SERVICE EXEMPTION — IN BROOME AND CHENANGO COUNTIES, NY Decided: October 7, 2008 (STB Docket No. AB-286 (Sub-No. 5X))\(^8\).

It should be noted that the provisions for such a service discontinuance include verified statements that ‘no local freight traffic has moved over the line for at least two years’ and ‘no formal complaint filed by a user of rail service on the line (or by a state or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Surface Transportation Board (Board) or with any U.S. District Court or has been decided in favor of complainant within the 2-year period’. Given the current activity on the line, that would appear to extend even the initial filing attempt for another two years – placing the timetable for this decision well after any desired startup of passenger excursion activities on the line. While this may be an ultimate outcome in the future, it cannot be a quickly implemented one today.

If the nonprofit were to assume ownership of the line within that two year period, during which the common-carrier status was still in-process, it would be considered to still be within the General System for regulatory purposes. This immediately raises the entire issue of regulatory compliance and how that impacts operating costs for the nonprofit.

**Regulatory Impacts; Rail Passenger vs. Rail Freight**

Passenger operations and ownership/operations structures have evolved over the years. Over the last five years, the biggest single changes have resulted from steadily increasing regulatory restrictions on both freight and passenger operations; this has come as a result of accidents and incidents on the larger railroads that have cascaded down throughout the industry. The actual shortline and excursion passenger railroads remain relatively incident-free, but the applied regulations on all carriers often carry down and have unintended consequences for small railroads of all types. A good example of that regulatory cascading effect is in CFR 49 part 1580.201, where an excursion railroad, monorail, or amusement park train may now be required to have a designated Rail Security Coordinator if notified by Homeland Security, and that RSC is available 24 hours a day, 7 days a week.

In the eyes of the Federal Government, freight vs. passenger activities have completely different connotations, and within the law, are completely separated by regulatory function. This segregation is at the heart of the myriad of complexities growing out of this regulatory interpretation, and drives the majority of the options available for operations. In the question of ‘does the organization structure evolve and react to regulation, or does the regulation structure steer the organizational opportunities?’ the answer is ‘yes’! The problem is so closely linked (particularly for the Colebrookdale Railroad) that a basic background explanation of how regulations have come to limit effective choices is in order.


Railroads were originally organized as private corporations with land condemnation authority and state-issued charters enabling them the power to go where they needed to go. In exchange for that power, they had to provide public benefit was well as a private business – the designation of a common-carrier benefit and operation. That power and responsibility is diluted today, but still lingers today in the essential difference between common-carrier activities and a private industrial/commercial activity.

Rail passenger services as common-carrier activities are now effectively limited to transit agencies, for-profit contractors to public owners, and Amtrak. Tourist excursions, which by definition essentially bring the rider back to the point of origin, are not defined as transportation in the rail sense. Because of that, they are specifically exempt from all common-carrier regulation. While there are times that it can be argued that an excursion railroad provides actual transportation, they have not been challenged and are generally specifically excluded in regulations. Neither the activity, nor the railroad under it, is considered to be subject to Federal regulation, even if the railroad originally provided common-carrier services when it was built. Activities that the excursion railroad may do that otherwise impact the public at large (such as cross public highways, waterways, or have equipment that may be unsafe) are subject to Federal regulation, but generally at a lower level than as if they were a common-carrier.

The common-carrier responsibility is most evident if and when a railroad wants to exit the business; unlike a normal business they cannot just close and walk away when things go sour. They must ask for permission to abandon service, prove their economic case, offer their assets or operations to an alternate carrier, and pay the legal and filing fees to do so every step of the way. A non-common carrier such as an excursion railroad has no such burden.

Meanwhile, the act of moving a freight car to or from a connecting railroad instantly qualifies the railroad, and the activity, as a common-carrier railroad subject to full Federal regulation. This places the railroad squarely in the position of complying specifically with a phalanx of regulations encompassing employee safety standards, liability insurance levels for interchange, involuntary participation in the Railroad Retirement System, and other new regulations that appear on a moment’s notice, dictated as emergency orders by the FRA. Operating rules and standards, in particular, are far higher for a common-carrier freight operator than for a tourist excursion railroad. Generally, while the excursion rail operator has some ‘wiggle room’ to deliberately configure their operation in such a way as to reduce or avoid costly regulatory impact from passenger issues, the freight carrier does not.

The common carrier burden and regulatory problem has become not simply a matter of the potential of being fined for a potential violation (and fines for regulatory violation are by violation, not the size of the operator – a Class 1 fine is the same as a shortline fine) but the actual direct costs for complying. Such regulatory issues as railroad retirement payments instantly increase the cost of ‘Social Security’ benefits by a factor of 2 for employer costs on freight operations. Drug and alcohol testing are mandated, and even certified labs are designated, and the per-test cost cannot be avoided. Crew training, certification and testing for all become a significant issue, particularly when traveling to a distant location (or importing the teacher) must be done. The sum of these various costs has evolved to the point where the regulatory weight significantly drives the entire discussion on the method of organization, and that is very true of The Colebrookdale Railroad.

Meanwhile, the combination of the two – an excursion passenger operator on top of a common-carrier freight railroad, subjects the excursion passenger operator (and their customers) to an entirely different level of risks, and therefore, regulation. If a passenger train can conceivably collide with a freight train, the regulatory lights come on. The Federal position becomes that the equipment, crews, practices, and policies generally apply to the higher common-carrier standard; this has become most pronounced in employee qualification and safety issues. This area in particular has grown in application and complexity over the last five years.
In the lingo of the industry, there are essentially three specific levels of regulatory exposure for an excursion passenger railroad.

**Insular** – not connected to other railroads, crossing public highways or waterways; generally not impacting public safety. Example: full-sized amusement park or privately owned railroads; Illinois Railway Museum (no public crossings), other on-site museums.

**Non-insular – non-general system** – having public grade crossings, bridges over navigable waterways, but still not connected to the general freight system. Example: Wanamaker, Kempton & Southern; East Broad Top

**General System** – fully subject to regulation. Example: Lehigh Gorge Scenic operating over Reading & Northern; Strasburg; Steamtown, Adirondack Scenic

For The Colebrookdale Railroad, there are only two options available – either non-insular/non-general system, or full general system. The difference is not controlled by the passenger options; it is determined entirely by the presence of freight activity on the same line, and if that freight is active.

As long as there is any connection to the Norfolk Southern line at Pottstown, the passenger operation will be subjected – with some potential for waivers – to the same level of qualifications and regulatory compliance as the shortline freight railroad itself. If freight services were to be terminated (via a service discontinuance under STB regulation, and the connection physically separated) – the excursion rail operation would be considered as non-general system – non-insular.

What does that mean? Most excursion rail operations in similar situation effectively disable their interchange capability by physically removing a rail and laying it aside. It does not mean the NS interchange switch has to be removed, or significant lengths of track removed. In the event that passenger equipment is purchased, the rail may be put back in service temporarily for equipment moves only, then again removed. In some cases the removed rail rule is waived if the interchange connection is not physically able to be otherwise operated, such as heavily deteriorated conditions, tree growth, washouts, etc.
Tourist Railroads
FRA’s Exercise-of-Jurisdiction
Decision Tree

Is the track gage less than 24
inches?

YES
FRA will not exercise jurisdiction.
End of inquiry.

NO
Does railroad operate over the
general railroad system, or own
track that is part of the general
railroad system?

YES
All regulations (except 49 CFR parts
227, 238, 239) and safety statutes
apply. FRA entertains petitions for
waivers of regulations and the hours of
service laws. End of inquiry.

NO
Is the railroad carrier INSULAR or NON-
INSULAR?
- Rail-rail grade crossing that is in use? Non-
insular
- Public highway-rail grade crossing that is in
use? Non-insular
- Bridge over public road or waters used for
commercial navigation? Non-insular
- Operation within 30 feet of another railroad?
Non-insular

INSULAR
FKA does not exercise jurisdiction.\(^3\)
End of inquiry.

NON-INSULAR
FKA’s exercise of jurisdiction is limited to the
following:
- 49 CFR parts 171-179, 209, 210, 211, 215, 216,
222, 224, 225, 228, 230, 234, 237\(^4\)
- 49 U.S.C. ch. 201, 205, 207, 209
- FKA’s subpoena authority, civil penalty authority,
disqualification authority, emergency order authority.

Note: This chart is intended to provide
general guidance in broad terms. It is not
intended to serve as a complete explanation
of FKA’s policy or as a substitute for an
application of that policy to specific facts.

\(^1\) Part 222 (train horn) does not apply to passenger railroads that operate entirely off the general system and at speeds of 15 miles per hour or less over public highway-rail grade crossings.

\(^2\) Part 234 (reflectorization) only applies to those railroad freight cars and locomotives that cross a public or private highway-rail grade crossing, are used for revenue or work train service, and are not being used exclusively in passenger service.

\(^3\) Part 228, Subparts B & F, apply to train employees of both insular and non-insular tourist railroads. Hours of service restrictions on duty hours (49 U.S.C. ch. 211) apply to dispatcher and signal employees of tourist railroads.

\(^4\) Part 237 (bridge safety standards) applies to both insular and non-insular tourist railroads. See 75 Fed. Reg. 41282, 41284 &
41288 (July 15, 2010).

\(^5\) See above references to Parts 228 and 237 for nuances relating to insularity.
Advantages and Disadvantages to General System

The basic advantage to a general system connection is that by definition, there is an economic reason to continue freight operations on the track. That economic advantage translates to more income available for the most expensive part of rail operations – track maintenance. The typical relationship between a nonprofit passenger organization, a for-profit shortline, and a public owner is for both operators to share, in some manner, the track maintenance responsibilities.

While a freight carrier can operate on poor-condition track ("excepted" track, prohibited from hazmat moves, speeds above 10 mph, and passenger operation), any passenger operations at all automatically require FRA Class 1 track standards, which are relatively minimal but at least allow 10 mph freight operations and 15 mph passenger speed. These Federal track standards at these low speeds primarily are determined by tie condition; as track standards increase the additional track geometry (cross-level, curve spirals) come into play and are increased in precision at each increased speed level step. The cost of maintenance rises with each level. Sharing the maintenance cost either by direct payment to the owner or the freight operator makes both operations more viable.

If the railroad continues in general system status, and freight traffic continues, the primary additional burdens to the passenger operator is of crew training, rules compliance, enhanced drug and alcohol testing programs, formal dispatching control (sometimes as a hired service in a remote location) and control for all train movements, and equipment compliance. This only applies, of course, if the passenger operator is attempting to provide their own crews and equipment over the same railroad as the freight carrier. That has been done on the Adirondack Scenic Railroad between a nonprofit and general system freight operation. It has also been done in the past on the Wellsboro & Corning, Tioga Scenic Railroad (NY), and the Bellefonte Scenic Railroad.

Escape hatch?

One of the interesting features of many FRA regulations is that waivers may be applied for in many situations where common-sense would indicate that while the letter of the law strongly indicates one thing, the facts of the particular issue on the ground are another. The waiver application process is relatively formal process but is also the lifeblood of certain issues like the exemption of passenger car glazing standards where the risk is minimal. The underlying law is in 49 CFR 211 Subpart C - PETITIONS FOR WAIVER OF SAFETY RULES. The overall guideline by the FRA is essentially to explain the situation and how it is not in conflict with public safety interests. The motto of 'well, you can always try to apply for a waiver' is a frequently used phrase in the business.

As long as freight service is continued over the line, the nonprofit will squarely have to comply with full General System rules for its crewmembers and equipment involved in operations. But what happens if freight service were to stop?

In this case the point of debate would indicate the presence or absence of actual freight service on the line, and a physical disconnect from the general rail system. In theory, that would relieve the passenger operator of general system regulations even if the service discontinuance was not yet legally possible to file during the two-year wait period. At this point this is only a theoretical debate, but would ring true given the regulatory definition tree to apply for non-general-system status under waiver. This would make a significant difference in the viability of the Colebrookdale Railroad excursion project if the freight operator was not present to assist in common-carrier operations, and that the discontinuance of service petition was in-flight.
The other ‘escape hatch’ that deserves to be mentioned is that there is no underlying reason why nonprofit ownership precludes future decisions about the economic opportunities on the line for freight. The growth of the viability of rail freight has caught several railroad museums in the interesting position of becoming a common-carrier railroad again, when they thought the railroad had long-ago lost the interest of industry. The most stunning development has been on the Tennessee Valley Railroad Museum, where one company (Allied Metals) reopened freight service along the museum line, and in 2011 a switching contract was secured with the Enterprise South Industrial Park to perform common-carrier services at the new Volkswagen of America plant in Chattanooga. This instantly required that TVRM fully qualify crews, begin railroad retirement on freight employees, and operate generally as a major freight railroad. The income from these operations is via a for-profit subsidiary owned by the non-profit, as this activity is outside the scope of IRS 501c(3) status. These activities have secured significant additional income for the museum, despite the added costs of regulatory compliance.

And for ownership?

While the operating rights on the railroad are heavily involved with common-carrier responsibility and regulatory requirements, the ownership issue is surprisingly uncomplicated in comparison. The operating entity, not the owner, is the one generally responsible for notification and compliance. While the STB must be notified if the operator of freight service changes, there is no similar notification for a change in property ownership.

The only exception to that rule that deserves specific mention is the new FRA bridge inspection rules attempt to finally clear the uncertainty of who is responsible for railroad bridges – the owner, or the operator. CFR 49 237 Bridge Inspection specifically assigns the bridge responsibility to the owner – not the operator, although responsibility for compliance may be assigned by sending the FRA a letter (CFR 49 237.3). This is one of few areas in the CFR that public agencies and owners are surprised with when they discover that they are subject to.

Monitoring the Impacts

Determining the full scope of all applicable regulatory impacts is a difficult job and a constantly moving target. Beyond that, the industry continues to struggle with differences in interpretation of the regulation by different FRA inspectors in different regions. A good sample of the moving target of interpretation was the 2011 administrative decision by the FRA that a ‘turntable is a bridge’ instantly subjecting several insular railroad museums with turntables (but no bridges) to the full FRA bridge inspection regulatory program, even though that was not part of the published regulation in the Federal Register. Surprise was an understatement.

While the Federal Register remains the legal notification document, the entire industry is put on alert via emails, online postings, and interpretation memos via membership in industry groups. For decades, the industry group on the point has been the Tourist Railway Association (TRAIN) (www.traininc.org); its 2012 merger with the Association of Railway Museums is now nearly fully implemented. Regulatory notices, changes, and interpretation impacts are broadcast and reported on a regular basis. The primary regulatory contact within TRAIN remains Robert T. Opal, an attorney with Union Pacific Railroad and a member of several railroad museums. He can be reached at RobertTOpal@aol.com. TRAIN and ARM members are often members of the original technical committees formed to comment on rulemaking, and in some cases (steam locomotive) were responsible for the entire rule overhaul.
FINANCIAL ANALYSIS

The exercise of generating a pro-forma excursion operating plan for The Colebrookdale Railroad was made against a background of reviewing financial statements from a wide variety of shortline and excursion railroads over the last 20 years. Stone Consulting has been responsible for shortline and excursion operator selections for over 25 projects (including Berks) and those submissions typically include submission of existing financial statements from existing railroads. While those are held under nondisclosure statements and cannot be republished in reports, they form a background of understanding the real-world results of such a plan.

The quality and consistency of such historic reporting varies wildly. The surprise that most agencies would be presented with is the number of operating railroads that are regularly audited by professional auditing firms, and can actually present audited financial statements that can and do show the potential for generating an actual profit.

Rule #1 when examining financial statements is to be aware of the widespread ability to move assets and expenses between subsidiary rail operations, either as administrative expenses or allocated costs for equipment. It is not uncommon for railroads to form ‘off the books’ subsidiaries to provide support services that the individual operating railroads ‘pay for’, sometimes via lease. That effectively moves allocated expenses between operations, and most, if not all, shortline concerns have multiple operating railroads in their management. Due to that, the advice to owners looking for lease payments has been to always work from gross income, never net, as virtually any shortline railroad operator can erase a net income if that is the basis for a lease payment. Expenses can vary wildly based on proration methodology and still clear an audit under GAAP. There are few standard costs developed for such an exercise, but averages can be estimated.

While the relative benefits of a for-profit or not-for-profit can be debated, one thing remains clear – the success of the enterprise depends on a positive annual cash flow. Given the seasonality involved, it also becomes relatively apparent that a significant line of credit for a startup must be developed, even if some ticket revenue is prepaid via online credit card payments.

The other truism is examining railroad operating statements is that a ‘profit’ can usually be generated – short term – at the expense of ignoring maintenance. The single biggest challenge in a long-term plan is determining if the amortized costs of capital maintenance are accounted for on an annual basis. A good example of that is steam locomotive boilers – good for 1472 days under pressure (or 15 calendar years), but at the end of that time the boiler tubes have to be removed, replaced, the boiler UT surveyed, and the locomotive reassembled. The $50,000-$400,000 boiler repair costs are the typical reason that steam locomotives are sometimes out of service for years while sufficient funds are pursued for rebuilding. This cost can be anticipated, and a boiler reserve built, in direct proportion to the operating days in a season or the 15-year calendar, but that is rarely done. That rule also applies for bridge repairs, crosstie replacements, and wheel replacements.

Capital Costs

For The Colebrookdale Railroad, the capital costs consist of equipment, site upgrades, and track additions, and relatively independent of ownership/operation alternatives. The capital costs have been estimated based upon contractor and purchase costs based upon typical grant-pricing results. These are not significantly discounted for either donated materials or volunteer labor. While it is likely, and possible, that some significant savings may develop, they are difficult if impossible to anticipate as they are based upon individual contributors making a decision to support a project.
The total capital costs are also segregated by priority. For The Colebrookdale Railroad, that consists of the following:

- **Priority 1:** Capital costs that need to be in-place before passenger operations can realistically begin
- **Priority 2:** Projects and costs that need to be completed by year 2 of operations to be a quality attraction
- **Priority 3:** Mid-term 3-5 year projects
- **Priority 4:** Long-term projects subject to sustained fundraising efforts

For Priority 1 – the anticipated costs include three excursion coaches (including transportation and repair), a pickup truck or maintenance vehicle dedicated to the project; some basic shop tools, train radios, office equipment, the addition of an additional passing siding at Boyertown (or similar costs made to relocate freight activity), site improvements at Boyertown and Pottstown for safe passenger boarding, and initial startup costs. That estimated total is $933,000. This assumes use of the freight operator locomotive on lease or per-train fee.

The passenger equipment may be the single largest item ($375,000) that may have the alternative of being funded as an operating lease, rather than capital costs, if suitable equipment can be found. Financial impacts are still best budgeted as a purchase, as first-year startup cash flow is still likely to be strained during year 1. Equipment, unlike other capital costs, is portable and can be funded via bank debt funding if necessary.

In-ground costs for site improvements (including track) are permanent, on-site improvements that will benefit the community and property owner beyond the railroad; site grading, cleanup and platform construction are items that can and should be participated in with the community and have no removable value. $150,000 is also put in as a reserve number for potential property acquisition costs as the majority of the potential shop sites involve acquisition.

Priority 2 capital costs primarily revolve around the construction of two critical structures – the shop/storage building and Boyertown depot. Construction, permitting and timeline issues will probably not allow these efforts to be online at startup.

Priority 3 is specifically a second locomotive – and if the Scenario 1 option is not possible (use freight carrier crew and locomotive), this item should be moved to Priority 1, as no other locomotive will be available. The second locomotive should still be planned for backup, maintenance, and unit rotation purposes.

Priority 4 – long term – addresses the interest of the group in securing a steam locomotive for the railroad. Simply put, there are few, if any, operational steam locomotives in “ready to run” condition, so any cost estimate is basically a combination of the purchase of an out-of-service locomotive and a 3-5 year process of restoration. Steam locomotive restoration costs are also a function of time and available volunteer labor. The $825,000 estimate is based on typical, and expensive, boiler and firebox repairs that are often necessary to bring a locomotive back into regular service. These can vary wildly based upon condition. Texas State Railroad’s 2-8-0 #300 was reconditioned in its 1472 rebuild for $379,000 including significant running gear repairs, but 2-8-2 #400 was discovered to have a thin rear door sheet requiring custom fabrication by a professional boiler shop escalating costs to $700,000. Professional locomotive restoration efforts, despite any claims, cannot be estimated until a locomotive is completely disassembled, the boiler and running gear ultrasonically tested looking for cracks and thin sections.
## COLEBROOKDALE RAILROAD EXCURSION IMPLEMENTATION
### CAPITAL COST ESTIMATES

**Rev. 2/20/13**

The table below outlines the budget estimates for various equipment items with specific priorities and costs. The table includes equipment such as coaches, locomotives, and maintenance vehicles, with associated purchase and transport costs, renovation and restoration costs, and priority levels. The note at the bottom indicates that the budget estimates are only for equipment cost, not specific equipment locations.

### Equipment Costs

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Quantity</th>
<th>Priority</th>
<th>Cost Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-window clerestory-style coaches</td>
<td>2 ea</td>
<td>Priority 1</td>
<td>Purchase: $85,000, Transportation: $20,000, Rehab: $45,000, Total: $150,000</td>
</tr>
<tr>
<td>Open-window clerestory-style coaches w/genset unit</td>
<td>1 ea</td>
<td>Priority 1</td>
<td>Purchase: $85,000, Transportation: $20,000, Rehab: $45,000, Total: $175,000</td>
</tr>
<tr>
<td>Open excursion car</td>
<td>1 ea</td>
<td>Priority 1</td>
<td>Purchase: $60,000, Transportation: $20,000, Rehab: $25,000, Total: $105,000</td>
</tr>
<tr>
<td>Diesel switching locomotive (second locomotive / standby, owned by nonprofit)</td>
<td>1 ea</td>
<td>Priority 1</td>
<td>Purchase: $125,000, Transportation: $18,000, Restoration: $5,000, Total: $148,000</td>
</tr>
<tr>
<td>Steam locomotive (restoration project)</td>
<td>1 ea</td>
<td>Priority 2</td>
<td>Restoration: $75,000, Total: $825,000</td>
</tr>
<tr>
<td>Maintenance vehicle (possibly hirail)</td>
<td>1 ea</td>
<td>Priority 1</td>
<td>Purchase: $12,000, Total: $12,000</td>
</tr>
<tr>
<td>LS</td>
<td>Budget for shop/repair equipment</td>
<td></td>
<td>Small tools, welder, jacks, etc.</td>
</tr>
<tr>
<td>Train radios (Handheld + base)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office equipment, misc</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Assumes FCC license $1500 also used from shortline

Total Equipment: $1,588,250
## COLEBROOKDALE RAILROAD EXCURSION IMPLEMENTATION
### CAPITAL COST ESTIMATES
Rev. 2/20/13

<table>
<thead>
<tr>
<th>Note: Budget estimates only, specific equipment not located</th>
<th>Total</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Track Additions

#### Boyertown

- **440 lf Track reconstruction for siding**
  - (above subgrade, w/rail & ties)
  - Cost: $185, $81,400, $81,400
  - Priority: 1
  - Total: $81,400

- **Siding for locomotive/car storage**
  - (possible Royer site as sample)
  - Cost: $10,000
  - Priority: 2

- **1 ea Turnout relocation (new timber)**
  - Cost: $10,000
  - Priority: 3

- **600 lf track construction on site**
  - Cost: $185, $111,000, $121,000
  - Priority: 4
  - Total: $121,000

- **Additional track storage space; estimate only**
  - **1 ea Turnout relocation (new timber)**
    - Cost: $10,000
    - Priority: 4
  - **500 lf track construction on site**
    - Cost: $185, $92,500, $102,500
    - Priority: 4
    - Total: $102,500

  **Total Track**
  - Cost: $304,900
  - Priority: 4

### Shop building for storage / rehab

- **2500 SF Shop building; pre-engineered**
  - Cost: $160,000
  - Priority: 2

### Station & Facilities

#### Boyertown:

- **1400SF building; lower-end 'new' constr.**
  - Tippetts
  - Cost: $425,000
  - Priority: 2
  - Total: $425,000

- **Architectural/Engineering**
  - Cost: $42,500
  - Priority: 1
  - Total: $42,500

- **Site improvements Boyertown**
  - TBD
  - Cost: $150,000
  - Priority: 1
  - Total: $150,000

- **Land/property acquisition (shop or sta. area)**
  - Cost: $150,000
  - Priority: 1
  - Total: $150,000

  **Total Boyertown**
  - Cost: $767,500

#### Pottsbwn

- **15x100 open boarding platform**
  - Cost: $405F
  - Priority: 1
  - Total: $60,000

- **Grading and improvements**
  - TBD
  - Cost: $25,000
  - Priority: 1
  - Total: $25,000
### COLEBROOKDALE RAILROAD EXCURSION IMPLEMENTATION
### CAPITAL COST ESTIMATES

**Rev. 2/20/13**

<table>
<thead>
<tr>
<th>Note: Budget estimates only, specific equipment not located</th>
<th>Total</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pottstown</td>
<td>$85,000</td>
<td></td>
</tr>
<tr>
<td>Total Building &amp; Facilities</td>
<td>$1,012,500</td>
<td></td>
</tr>
<tr>
<td><strong>Startup costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal, organizational, and permitting costs</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>Agreements, leases, zoning, environmental as-needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Capital Improvements</strong></td>
<td>$2,930,650</td>
<td>$1,044,150</td>
</tr>
</tbody>
</table>
FUNDING THE STARTUP

Methodologies for funding startup rail operations are as varied as the railroads themselves, but the success stories that can show some similarities to Colebrookdale bear repeating. There are some common threads that tend to run through numerous operations.

Transportation Enhancement Grants

Over the last 20 years, the single largest funding source for capital/startup/rehabilitation operations for railroad museums, restored facilities, and operating excursion railroads has been the ISTEA-style funding and USDOT (Federal Highways) Transportation Enhancement Grants. While these are federal grants, they are administered on a state level, and therefore subject to significant differences between states. They require significant planning and strategy to successfully receive, but in terms of grant size and eligibility, they are generally without equal.

Whether known as ISTEA, TEA-21, SAFETEA, MAP-21, or other acronyms, the essential funding mechanism is an 80% reimbursement program for eligible expenditures considered to be transportation enhancement under the enabling legislation – which was just renewed as part of the 2012 Transportation Bill. Within that enabling legislation is specific language that describes the following eligible activity areas:

Eligible Activities

Transportation enhancement activity:--The term "transportation enhancement activity" means, with respect to any project or the area to be served by the project, any of the following activities as the activities relate to surface transportation:

1. Provision of facilities for pedestrians and bicycles.
2. Provision of safety and educational activities for pedestrians and bicyclists.
3. Acquisition of scenic easements and scenic or historic sites (including historic battlefields).
4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
5. Landscaping and other scenic beautification.
6. Historic preservation.
7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).
8. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails).
9. Inventory, control, and removal of outdoor advertising.
10. Archaeological planning and research.
11. Environmental mitigation--
   i. to address water pollution due to highway runoff; or,
   ii. reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
12. Establishment of transportation museums. (language removed in MAP-21)

The latest version of this program- MAP21, managed to preserve the eligibility for history transportation facilities (including rail) but removed the establishment of new transportation museums.

http://www.fhwa.dot.gov/environment/transportation_enhancements/
The number of similar projects funded nationwide in part or in whole via TEA-21 funding for heritage rail is truly impressive, along with the relatively large potential size of the grants. The downside to this style of grant is twofold; one that the process for fitting a railroad project through what is typically a state highway DOT can be daunting – labor, material specifications, procurement procedures, reimbursement procedures, and prevailing wage rules all apply. The entire program is not an up-front grant, so the organization or sponsor must pay for the material and/or project, submit the paid invoices, and then be reimbursed after invoice review. That can put substantial financial stress on an organization and they must be prepared for the cash flow impacts.

The second major issue with these grants as they apply to railroad projects is eligibility. The project has to be determined as eligible for placement on the national and/or state historic registers, not necessarily already on it, but eligible. That means that a full application to put the property and/or eligible grant-receiving assets must be already in place before the grant procurement is attempted. The nomination process for the state register – often synonymous with the national register, then becomes a prerequisite to receiving the grant. That’s not as impossible as it sounds, because again, the goal is eligibility, not necessarily placement on the registers, and most railroad preservation and restoration projects are eligible in theory if not in practice. For Colebrookdale, the research work has been done; the question then becomes what can be nominated. Equipment cannot be nominated until received (and it should have either direct history to the state it is in or be representative of it), and ‘artifacts’ may be considered eligible if movable even if buildings typically lose their eligibility if not in the original location. These finer points of nomination and eligibility are handled through the State Historic Preservation Office on a regular basis. In Pennsylvania that is the Pennsylvania Museum & Historic Commission.

For Pennsylvania, the history of TEA-21-style grant funding is mixed. Well-known projects have been awarded grants in the past, including the rebuilding of the steam locomotive #1361 at Altoona. Past grant awards have also been made to the East Broad Top for site preservation that were ultimately turned back to the state due to timing, size, and reluctance of the owner to commit to the match funding (typically 20%). Turnback of grant awards is not uncommon on a nationwide basis, particularly if projects were not properly estimated and bid amounts turn out to be well beyond the original grant amounts.

Enhancement funding grants typically involves an ‘environmental’ review, which would seem generally unnecessary, except that the definition of environmental includes historic and cultural impacts. That in turn means that the projects must have a plan that is reviewed at the state historic preservation level to ensure that the ‘restoration’ of the historic facility or artifact isn’t essentially destruction. This review has, in other states, sometimes been problematic, including the insistence of one state that rail pattern weight could not be replaced or upgraded, and another state that determined that wood pedestrian walkways had to be replaced on bridges exactly as they showed on the original 1917 ICC valuation pictures – despite the obvious safety risks they created by making the bridges into an attractive nuisance. Pennsylvania has no particular record of being impractical with their environmental/history reviews, however.

One specific thing that should be mentioned is that the Transportation Enhancement funds are virtually the only funding mechanism available for large, and relatively expensive, steam locomotive restoration programs. The majority of national-grade steam reboilering and restorations over $100,000 have been funded at least in-part by some manner of enhancement funding. Texas has no fewer than four; Pennsylvania has one (K4s 1361 at Altoona).

Within the promise of relatively easy project eligibility and potentially large grant amounts is the warning that this PA-administered grant program is also under the directives of the various Municipal Planning Organizations, and those MPO’s also select any rail programs competitively against other enhancement activities like pedestrian walkways,
bike paths, and trails. In Erie County, PA the local railroad museum has been completely unable to receive Enhancement funding for major structural repairs as the entire MPO-awarded enhancement amount went to pedestrian walkways within the City of Erie. Therefore, the need to understand the interests of the MPO, what projects you are competing against, and the political interests of them is equally necessary. If the railroad project is well-known and publicly supported, it makes the job far easier.

**Pennsylvania Rail Grants Program**

Normally, this would not be mentioned in an excursion rail study report, but because The Colebrookdale Railroad is considered to be a freight-carrying common-carrier railroad, the impact of this program must be mentioned. In this case the fact that the railroad is an excursion operation is purely coincidental to the primary function as a freight-carrier, and the grant is made purely on the basis as a freight carrier.

PA Rail Grants are essentially in two styles, the “Capital Grant” program, generally referred to as RTAP funding, that is underwritten by state bond issues, and the “Rail Freight” program, generally referred to as RFAP. The RFAP program is a much smaller, annually-appropriated amount of the general fund budget from Transportation, and has ranged from $5 million to over $12 million dollars depending on the administration and the year. RTAP funding is a completely different process that begins with the nomination of specific projects into a Capital Budgets bill (requiring a sponsoring legislator for your line item) with virtually no upper limit on amount; then an appropriation process against the bill, then an application process for the project to determine priority against competitive projects statewide, and finally a grant award.

RFAP funding is typically directed at relatively small, specific rail improvement projects and can be done either by the railroad or a served industry. “New” projects have a ceiling of $250,000 per grant, and “Maintenance” projects have had a ceiling of $750,000 per grant. Eligibility, funding, and program rules for RFAP and RTAP were just re-issued in 2013 and have not yet been fully digested or implemented; none have been awarded under the new rules. All projects are considered to be competitive. History tends to indicate that both RFAP and RTAP projects are well-distributed across the state, and the total number of statewide projects is typically between 15 and 30 per funding cycle. Some projects can be truly large in scope for the RTAP side. There is no restriction or preference on whether the property has any historic significance.

The primary value of these two programs to this project is simple – these grants are often the primary methodology to receive tie and track maintenance funds, along with major bridge repairs. As funding amounts for these activities can be in the millions and the activities such as bridge and tie work are usually not funded by other means, they are a significant and critical funding methodology for shortlines in the Commonwealth. As long as freight activity and common-carrier status are preserved on the branch, the railroad and the freight carrier are at least eligible, even if the passenger activity is an indirect beneficiary.

The Colebrookdale operation should not feel in any manner different from a far more visible applicant; the Strasburg Railroad received a significant Rail Freight grant for the replacement of their only bridge so that heavier freight services could be made directly into Strasburg.

For this railroad, the RTAP/RFAP programs are long-term strategic, and a definite consideration for justification to retain common-carrier freight services. Without freight activity, the line would not be eligible at all.
Other Grant Programs

While there have been other grant programs used for the benefit of excursion railroads, most are relatively small and unusual compared to Enhancement funding and Rail Freight grants within Pennsylvania. But, excursion railroads are also by definition an historic site, a benefit-producing business, and a nonprofit organization if volunteer-based; that combination makes for all manner of various smaller grants.

Oil Creek and Titusville, as well as at least three other operations, uses their depot building as a Pennsylvania Visitors Center. Generally this requires that there is a minimal staffing period at the station (which they have anyway) and that there are restrooms, parking, etc. This enables the structure and the organization to qualify for grants from organizations as diverse as National Scenic Byways, that awarded $4 million to the Laurel Highlands Visitors Center project in 2011. Grant application information is available at http://www.bywaysonline.org/grants/. Similar smaller grants exist through various Convention and Visitors bureaus at the county and regional level. These grant styles might be the most useful for structural and site improvements at Boyertown if the structure itself is not eligible for historic-style funding. Bellefonte, PA, uses their depot as an excursion train station, a Pennsylvania Convention & Visitors Bureau office, and a Chamber of Commerce. This allows an on-site paid staff person in the office during business hours. In these cases, the grants are more closely related to direct operational cost support, which can include building maintenance and repair.

Another significant funding source successfully used by excursion railroads is to double the use of their depot as a Chamber of Commerce site. Chamber of Commerce structures owned by the 501c(6) corporation are often eligible for restoration and repair grants with or without a railroad component. This has been done is several states other than Pennsylvania, but was particularly effective in Bellefonte for the restoration and operation of the depot for the Historic Bellefonte (PA) Rail excursion operation back in 1970’s. This approach was also done by the Monticello (IL) Railway Museum for their depot restoration and current operations by providing manpower and maintenance to an otherwise unmanned building. Pennsylvania historically offered limited grants via the Department of Community and Economic Development for marketing efforts; but this state-level program was severely cut back in 2011. While Chamber 501c(6) status is different from conventional 501c(3), it has opportunities for different funding sources from private industry and private foundations. The key is multiple-use of the structure for more than one community function and to tap more than one source of nonprofit activity.

The ability of the project to define visitation, economic impacts, and jobs can also determine eligibility for economic development grants of all styles from both state and federal sources. The original purchase of the Wellsboro & Conning Railroad was actually accomplished by an Appalachia Regional Commission Grant in 1993 purely as an economic development effort to preserve rail service to the Sylvania plant in Wellsboro. This far-sighted investment in rail transportation had the spin-off of allowing the Tioga Scenic Railroad (Owego, NY) to relocate to Tioga County Pennsylvania and then operate into Wellsboro; it also has become renowned as the single most stunning shortline railroad resurgence in the Northeast when intensive Marcellus shale drilling activity triggered thousands of carloads of inbound sand and facilitated an unprecedented local economic boom. This history now justifies the initial grant investment that preserved the railroad line, and relates in at least some manner to connecting economic development investment in rail corridor preservation. It now has a highly successful precedent.

10 http://bellefonte.com/ourtown/trainstation.html
11 http://www.monticellochamber.org/
12 http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/regional-marketing-partnership-grant-program
While the funding levels and grant sizes are far less than in the past, this project would appear to qualify for specific improvements (particularly the depot/loading area upgrades) under Pennsylvania Community Development Block Grants, submitted by the communities themselves. This would be particularly appropriate for both Boyertown and Pottstown for all or distinct portions of the boarding area projects that would be ineligible either for historic restoration or freight-related grants from other programs. Boyertown and Pottstown will have to make their own determinations for priorities within the communities, but the underlying logic of funding part or all of these sub-projects under this or a similar methodology remains.
**OPERATING PRO-FORMA**

The operating pro-formas are based on three different scenarios, all projected against the same ridership and revenue estimates as a comparative exercise.

Two revenue estimate levels were initially prepared; one for 15,000 annual riders, and one for 30,000. Both of those estimates are relatively conservative based upon the existing performance of the Lehigh Gorge Scenic at 59,000. A 15,000 ridership level compares to the sub-par ridership results of the Gettysburg Railroad in a good market; the 30,000 ridership level is also tempered by the fact that peak fall and winter capacity may be restricted based upon train length under initial operations.

All scenarios include a common basis for revenues. Those include:

- A typical ‘round trip adult’ ticket price basis of $12. For comparison, Strasburg is now $14 for standard coach; WK&S is $8.00, Lehigh Gorge Scenic is $12.
- Discounted tickets are offered for children, groups, and school trips.
- No licensed events (Thomas or Polar Express) are included.
- Santa and special event trains are priced at $17 with on-board entertainment. For comparison, Polar Express licensed events are now typically $35 per ticket.
- At least some premium services are offered at a higher ticket price - $15 for open car or similar.
- Retail sales are estimated at $4 per passenger with a 40% margin gross profit after inventory and sales costs, resulting in a $1.60 per rider net income due to retail.

The three different expense scenarios are based on the following ownership/operational alternatives:

**Scenario 1: “Oil Creek & Titusville” model**

Under this alternative, the non-profit operator contracts with the existing freight operator to pull the passenger cars for a flat fee in the same manner as a freight car. The OCTL model has a negotiated fee that covers the cost of crew, locomotive, fuel, operating supplies, and maintenance of the relatively large passenger car fleet between the floor. A single run to Rynd Farm and back is double the comparative length of Colebrookdale, and this expense tends to be linear in terms of both time and distance, so should be less. The per-train fee must be enough for the freight operator to cover their expenses but not so much to consume all cash flow of the nonprofit. It could be a base fee plus a percentage of riders over a breakeven level, but that is not done at OCTL.

In this scenario, the freight operator is fully regulated by the FRA and continues to operate in the manner it does now. In the eyes of the operator and the FRA, the passenger train is just another freight movement for a charge. The freight operator does not burden themselves with promotion, advertising, ticketing, customer relations, or retail activity. Ridership reporting to the FRA is under the reporting marks of the freight railroad.

Crew members are fully qualified under FRA regulation, paid, and under railroad retirement. Signal maintenance continues to be the responsibility of the freight carrier, as well as track maintenance. In short, the freight railroad simply picks up a new, reliable, and predictable customer.

If volunteers want to operate the train, they become employees of the freight railroad, pass drug and alcohol testing, are subject to hours of service, crew training and qualification, and must pass rules tests.
The only additional cost that typically becomes a bone of contention is the additional track inspections (weekly) that are only required for passenger train moves under 49 CFR 213.233. These additional track inspections that might not otherwise have to be done (either pre-move or twice weekly) must be done by a certified track inspector – typically an employee of the railroad – and are not free. For this pro-forma, 15 additional track inspections are budgeted that would otherwise not be required.

Insurance costs are typically the single-largest line item, and are based on a combination of liability limits and gross passenger revenues. This pro-forma was reviewed with Robert McCarthy, railroad insurance broker; www.mcrai.com. He is also the agent that handles the OCTL. Specific insurance language within the existing operating agreement was reviewed as part of this study. Volunteer insurance was included. The cost of property insurance continues to be born primarily by the freight operator.

Under this scenario the nonprofit is responsible for interior/exterior, but not mechanical, maintenance to the passenger cars (i.e. non-FRA compliance items).

Operating and janitorial expenses are minimal for startup station facilities by do exist.

While the initial startup may be all volunteer, the 30,000 ridership model includes one full-time (or two part-time) paid staff members to the nonprofit.

Advertising and promotion direct cost was placed at $1.25/rider against the initial startup and $1.00 at the 30,000 level.

At the 30,000 ridership level, this results in a relatively healthy cash flow as high as $170,000 per year. The question becomes then, if this cash flow is reinvested in the property for museum and site development, used to pay debt service for asset / property, or is invested back in the operation as promotion and staffing. This is a relatively bare-bones pro-forma for a 30,000 passenger operation to see if it was possible to generate income for debt service under any scenario. While the 15,000 ridership level under this scenario is essentially break-even, this alternative does generate some level of net cash.

**Scenario 2: “Non-Insular – non-General System” model**

This scenario mirrors a typical operating railroad museum model nationwide where the railroad controls all its own activities, and is either the track owner or pays some manner of minimal lease payment to the track owner but still maintains it in full. The ‘rail is pulled’ at the junction and there is no freight activity online.

The big difference in this scenario is that as the track owner, the operating entity is now responsible for the direct operating costs of the train for fuel and consumable expenses, and the significant costs of ongoing track maintenance to continue at least an FRA I track class (minimum for passenger) over the entire 8.6 mile railroad. Minimal annual levels for regular tie replacement are included, as well as an estimated annual cost for geometry correction by a railroad contractor (raising and surfacing), brush cutting, weed control.

The operator is now also the one responsible for maintaining the two grade crossing systems and for monthly inspection. This cost can vary wildly depending on what certified inspector is available and how far they have to come to service and test the grade crossing flashers.

The operating entity is now responsible for all locomotive and equipment maintenance. For a volunteer organization, this is primarily the costs of contract work on components and materials.
The operating entity is now also responsible for FRA compliance for minimal regulatory levels for engineer and conductor certification. This may require either offsite training or bringing in an engineer trainer to certify volunteers. This is the general compliance and training costs under 49 CFR Part 240 that apply to non-general-system costs as well as drug and alcohol testing for certified crewmembers.

This pro-forma results is a much lower cash flow than Scenario 1, but is still at a minimal break-even basis – which is typical for the average operating railroad museum of similar size. The operation is self-sustaining by maximizing volunteer resources, creative use of labor and relationships with the community, but is still subject to the risk of extraordinary capital repair expense that can only funded via grants or community assistance. Some cash may be generated for debt service with careful budgeting; this estimate indicates it may be as much as $70,000 per year. Fundraising and donations continue to be the primary methodology for funding significant capital programs rather than generated internal cash flow.

**Scenario 3: “General System – Common Carrier” model**

Within this option, the ‘nonprofit’ entity also becomes responsible to handle the common-carrier freight activity. As a fully-connected general system carrier, the immediate conflict becomes that the freight activity is no longer eligible as a nontaxable activity under a 501c(3) designation making a separate organization necessary to handle the freight.

Individuals directly involved in the common-carrier freight activity are subject to railroad retirement. That means, effectively that they are also paid. While the total number of subject employees can be minimized, they cannot be completely eliminated. While this may not necessarily result in full-time employment for a crew, the total impact of the various paid freight activities basically add up to a full-time employee group for estimating purposes.

A significant added expense at this level is the additional cost of regulatory compliance; full formal rules compliance including hours of service monitoring and full-scope drug and alcohol testing programs, and the formal dispatching procedures required for train movements. Equipment is typically no longer covered for exemption for antiquated/historic applications and will have full glazing requirements required.

As a common-carrier, the ‘railroad’ is also required to have railroad protective liability insurance; this is typically dictated by the connecting carrier (NS) and is specifically to cover the responsibility for outbound freight car inspection and load safety that a railroad incurs with its interchange partners.

Shortline railroads and shortline railroad groups can spread much of this regulatory and insurance compliance cost across multiple operations in a far more efficient way. In this case, the entire operating burden falls on the 2012 freight activity levels of roughly 160 cars at $350 per car.

Not surprisingly, it can be seen that the additional labor, benefits, insurance and compliance cost is likely to produce an operating deficit, and not necessarily a small one.

**Other Scenarios?**

This is by no means the only possibility set available on the line given the current situation. In the OCTL world, the nonprofit owns the railroad (which was procured in 1986) through a wide combination of donations, various state-level grants including an $82,000 grant by the state EDA as a tourism development effort and an interest-free loan\(^\text{13}\)

controls the operator selection and contracting process. This reduces the potential number of involved entities by one.

If the nonprofit were the owner, rather than the County, Scenario 1 could re-emerge at any point out of Scenario 2 even if freight service were to entirely cease at some point.

Another potential scenario is for the underlying asset value to be separated, with the real estate retained by the County, yet the rail assets be transferred along with all above-ground rights and responsibilities. This would establish the right-of-way as one item, with the rail assets as another. This approach could conceivably solve the concern of county right-of-way control vs. ‘owning the railroad’ and controlling the operating rights on it. The rail value is typically the only asset that qualifies for FRA RIF loan processes, but it must be owned by the railroad entity that is making the loan application instead of a third party, and can be used as collateral for 80% of net liquidation value. Underlying real estate is typically not available for collateral by commercial lending institutions or the FRA, just the track. The disadvantage of that is while it removes the County from the responsibility of being a ‘railroad’, it still leaves the County within the liability path and would still require liability insurance coverage as a named insured. Separation of the land and railroad assets has been done under sale/lease agreements before; it is unusual but not unique. Several sale/lease separation agreements have been made in New York State between operating railroads and IDA’s to place the property (but not necessarily the above-ground improvements) under public ownership to remove real estate taxation burden.
# Pro-Forma Comparisons
## Operations Analysis Ver 2.3 - 30K ridership analysis
21-Feb-13

### Scenario 1 - EBGR as contractor (OCTL model)
All-volunteer basis - EBGR on freight - general system
Seasonal Operation RT

<table>
<thead>
<tr>
<th>Count</th>
<th>calc/ea</th>
<th>Wks</th>
<th>Trips</th>
<th>mile/trip</th>
<th>Annual</th>
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<tr>
<td>Excursion - base operations</td>
<td>22860</td>
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<tr>
<td>Adult</td>
<td>17442</td>
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<td>School 1.7% est</td>
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<td><strong>Santa/Winter</strong></td>
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<td>Adult 50%</td>
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<td>Child 50%</td>
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<td>Thomas TBD</td>
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<td>Dinner Train With meal</td>
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<td>$42.00 If operated</td>
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<td><strong>TOTAL TICKET SALES</strong></td>
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<td>$12.61 weighted avg.</td>
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| Retail sales, Gross | $4.00 | | 60% | | $120,000 |
| less: COGS % or actual | | | | | ($72,000) |
| Per Rider/visitor net | $1.60 | | | | $48,000 |
| Per Rider Net Income Retail | | | | | $48,000 |

### Freight Revenue
Revenue from Freight Operations

No freight operations this scenario

### Membership Activities
Donations & Misc.
Fund drives and fundraising

$10,000

**Total Revenue**

$436,330

### OPERATING METRICS

Ridership

30,000

Reported train miles

3,856

Psgr / train mile

7.78

Rev. per train mile

$98.12

### Train Operating Expense

#### Haulage Fee Option Basis:

- Number of trips: 216
- Number of Days: 120
- Per trip basis: $325
- Per day basis 2X: $70,200

#### Direct Cost Basis:

- Crew labor
  - Included with haulage: Volunteer
  - not applicable: $0

- Freight operations labor
  - Included with haulage: $0

- Benefits
  - Protection power: $0

- Track Inspection - weekly FRAI
  - Addtl wks: 15
  - $250
  - $3,750

- Locomotive Fuel & oil
  - Included with haulage: $0

- Locomotive Lease/day
  - Included with haulage: $0

- Lube Oil/Sand/Other
  - Included with haulage: $0

$73,950
Pro-Forma Comparisons
Operations Analysis  Ver 2.3 - 30K ridership analysis
21-Feb-13

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Seasonal Operation</td>
<td>RT</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>cal/cal</td>
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<td>Track Maintenance - annual</td>
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<td>Tie count per year replacement</td>
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<td>45 per yr/mile</td>
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<td>Ties - Ind. Tie new</td>
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<td>Insertion</td>
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<td>$30 labor</td>
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<td>Disposal of scrap ties</td>
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<td>Replacement tie plates</td>
<td></td>
<td>10% $10 ea</td>
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<tr>
<td>Surfacing &amp; Bolting - annual</td>
<td></td>
<td>FRA1 $5,000 mile</td>
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<tr>
<td>Weed Spray - 2 per yr.</td>
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<td>contractor</td>
</tr>
<tr>
<td>Signal Inspect &amp; maint monthly</td>
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<td>Freight carrier</td>
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<tr>
<td>Signal utilities</td>
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<td>Freight carrier</td>
</tr>
<tr>
<td>Brush Cutting - annual</td>
<td></td>
<td>Freight carrier</td>
</tr>
<tr>
<td>Bridge Inspection - annual</td>
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<td>Freight carrier</td>
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<tr>
<td>Misc. track materials</td>
<td></td>
<td>per mile $0</td>
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<tr>
<td>Freight Car Hire - RR/day</td>
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<td>No freight this scenario</td>
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<tr>
<td>Program Expenses</td>
<td></td>
<td>Licensed activities only</td>
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<tr>
<td>Licensing fees</td>
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<td>Santa/elves (per trip)</td>
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<td>Special Events entertainment</td>
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<td>all service costs</td>
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<tr>
<td>Dinner Train caterer/food</td>
<td></td>
<td>Volunteer</td>
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<tr>
<td>Equipment Maintenance</td>
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<td>Volunteer</td>
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<tr>
<td>Shop Labor</td>
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<td>Benefits</td>
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<td>Locomotive maintenance</td>
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<td>Passenger Car Maintenance</td>
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<tr>
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<td>Annual est.</td>
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<tr>
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<td>Purchases</td>
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<td>Car Cleaning</td>
<td></td>
<td>30 Wks/yr</td>
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<td>Buildings &amp; Grounds</td>
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<td>Station upkeep</td>
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<td>Maintenance</td>
<td></td>
<td>Station services</td>
</tr>
<tr>
<td>Station Rental</td>
<td></td>
<td>Town donation</td>
</tr>
<tr>
<td>Sewage (retention tanks)</td>
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<td>Utilities</td>
<td></td>
<td>Station allocated expense</td>
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<td>Administration</td>
<td></td>
<td>Full time equivalent (may be 2 PT pos)</td>
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<td>General Mgr.</td>
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<tr>
<td>Benefits</td>
<td></td>
<td>Volunteer</td>
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<tr>
<td>Marketing</td>
<td></td>
<td>Volunteer</td>
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<tr>
<td>Accounting</td>
<td></td>
<td>Volunteer</td>
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<tr>
<td>Retail</td>
<td></td>
<td>Annual audit 990?</td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
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### Pro-Forma Comparisons
Operations Analysis Ver 2.3 - 30K ridership analysis

21-Feb-13

<table>
<thead>
<tr>
<th>Scenario 1 - EBGR as contractor (OCTL model)</th>
<th>All-volunteer basis - EBRG on freight - general system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seasonal Operation</strong></td>
<td><strong>RT</strong></td>
</tr>
<tr>
<td>Count</td>
<td>calc/ea</td>
</tr>
<tr>
<td><strong>Other Administration</strong></td>
<td></td>
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<tr>
<td>Advertising, brochures</td>
<td>$1.00</td>
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<td>Office Rental</td>
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<tr>
<td>Misc. Office postage &amp; supplies</td>
<td></td>
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<td>Train Radios</td>
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<td>FRA compliance &amp; training</td>
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<tr>
<td>Phones, Internet, Cell</td>
<td></td>
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<tr>
<td>Credit Card processing</td>
<td></td>
</tr>
<tr>
<td>Fees and permits</td>
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<tr>
<td>Interest &amp; misc</td>
<td></td>
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<tr>
<td>Insurance:</td>
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</tr>
<tr>
<td>Liability on 10M only</td>
<td>Fee quote</td>
</tr>
<tr>
<td>Freight Liability</td>
<td>NR</td>
</tr>
<tr>
<td>Volunteers</td>
<td>Fee quote</td>
</tr>
<tr>
<td>Workmens comp</td>
<td>$0 TBD if paid</td>
</tr>
<tr>
<td>Property insurance</td>
<td>$0</td>
</tr>
<tr>
<td>Directors &amp; officers</td>
<td>$0</td>
</tr>
<tr>
<td>Equipment</td>
<td>County agreement?</td>
</tr>
</tbody>
</table>

**Membership Activities**
- Commissions & fundraising: $1,800
- Dues & subscriptions: $1,000
- Membership services: Donations & member recog.: $1,200

| **Total Operating Expense** | $258,875 |
| **Net income before debt service** | $177,455 |

- Land/Lease/Mortgage payments: Based on estimate on 3M @ 4% 30yr: $171,870
- Building and/or Depreciation: $0
- Additional Startup Costs: $0

| **Total Operating Expense** | $430,744 |

| **Cash Flow from Operations** | on sales: $5,586, 1.28% |

| **Capitalized fund applications** |          |
| New buildings and improvements      | TBD      |
| Building & Equipment cap. exp.      | $0       |

| **Total Capitalized Activities** | $0 |

| **Extraordinary item** | Taxes (for-profit) | $0 |

| **Net Cash Flow** | $5,586, 1.28% |
## Pro-Forma Comparisons
### Operations Analysis Ver 2.3 - 30K ridership analysis
21-Feb-13

### Scenario 2 - Volunteer operation on passenger/stand alone
**Nonprofit maintaining railroad**

<table>
<thead>
<tr>
<th>Seasonal Operation</th>
<th>RT</th>
<th>Trips</th>
<th>miles</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Rate</td>
<td>Wks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Passenger Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excursion - base operations</td>
<td>22860</td>
<td>216</td>
<td></td>
<td>17</td>
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<tr>
<td>Adult</td>
<td>17442</td>
<td>$12.00</td>
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<td>$209,306</td>
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<td>Open car 10% typ.</td>
<td>1143</td>
<td>$15.00</td>
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<td>$17,145</td>
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<tr>
<td>Child 17% typ.</td>
<td>3886</td>
<td>$9.00</td>
<td></td>
<td>$34,976</td>
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<td>Group 5% est</td>
<td>1143</td>
<td>$10.00</td>
<td></td>
<td>$11,430</td>
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<td>School 1.7% est</td>
<td>389</td>
<td>$5.00</td>
<td></td>
<td>$1,943</td>
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<tr>
<td>Santa/Winter</td>
<td>7140</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adult 50%</td>
<td>3570</td>
<td>$17.00 Specials</td>
<td></td>
<td>$60,890</td>
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<tr>
<td>Child 50%</td>
<td>3570</td>
<td>$12.00 Specials</td>
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<td>$42,840</td>
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<tr>
<td>Thomas TBD</td>
<td>0</td>
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<td>$0</td>
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<tr>
<td>Dinner Train With meal</td>
<td></td>
<td></td>
<td>$42.00</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL TICKET SALES</strong></td>
<td>30000</td>
<td></td>
<td></td>
<td>$378,330</td>
</tr>
</tbody>
</table>

**Retail sales, Gross**

- $4.00
- 60% $120,000
- Per Rider/Visitor net $72,000
- Per Rider Net Income Retail $48,000

**Freight Revenue**

- Revenue from Freight Operations $48,000

### Membership Activities
**Donations & Misc.**

- $10,000

**Total Revenue**

- $436,330

### OPERATING METRICS

- 30,000
- 3,856
- 7.78
- **$98.12**

### Train Operating Expense

**Haulage Fee Option Basis:**

- Number of trips 216
- Number of Days 120

**Direct Cost Basis:**

- Crew labor: Total excursions 216 Volunteer not applicable $0
- Freight operations labor
- Benefits
- Track Inspection - weekly FRAI All inspections 30 $250 $7,500 $22,983 included
- Locomotive Fuel & oil
- Locomotive Lease/day
- Lube Oil/Sand/Other See fuel tab - calculated included $30,483
### Scenario 2 - Volunteer operation on passenger/stand alone rail

**Nonprofit maintaining railroad trips**

<table>
<thead>
<tr>
<th></th>
<th>Seasonal Operation</th>
<th>RT</th>
<th>Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Rate</td>
<td>Wks</td>
<td>Trips</td>
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<tr>
<td>Track Maintenance - annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tie count per year replacement</td>
<td>8.5</td>
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<td>Ties - ind. Tie new</td>
<td>$70</td>
<td>$30</td>
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<tr>
<td>Insertion</td>
<td>$5</td>
<td></td>
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<td>Disposal of scrap ties</td>
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<td></td>
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<td></td>
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<tr>
<td>Replacement tie plates</td>
<td>10%</td>
<td></td>
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<td></td>
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<tr>
<td>Surfacing &amp; Bolting - annual</td>
<td>FRA1</td>
<td>$5,000</td>
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<tr>
<td>Weed Spray - 2 per yr.</td>
<td>contractor</td>
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<tr>
<td>Signal Inspect &amp; maint monthly</td>
<td>2</td>
<td>$2,400</td>
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<td></td>
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<tr>
<td>Signal utilities</td>
<td>2</td>
<td>$50</td>
<td></td>
<td></td>
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<tr>
<td>Brush Cutting - annual</td>
<td>Contractor</td>
<td>$5,000</td>
<td></td>
<td></td>
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<tr>
<td>Bridge Inspection - annual</td>
<td>Contractor</td>
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<td></td>
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<tr>
<td>Misc. track materials</td>
<td>As needed</td>
<td>$13,535</td>
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<td></td>
</tr>
</tbody>
</table>

**Freight Car Hire - RR/day**

None w/2 trips/wk (note 1) $0

**Program Expenses**

|                      |          |          |          |        |
| License fees | $100.00 | $32 | $0 | $4,600 |

**Equipment Maintenance**

|                      |          |          |          |        |
| Shop Labor | $16,000 | $7,500 | $3,600 | $42,100 |

**Buildings & Grounds**

|                      |          |          |          |        |
| Station upkeep | $5,000 | $1,500 | $6,500 |

**Administration**

|                      |          |          |          |        |
| General Mgr. | $45,000 | $15,750 | Volunteer |
| Marketing | $5,000 | $65,750 | Volunteer |
| Accounting |          |          | Volunteer |
| Benefits |          |          | Volunteer |
| Retail |          |          | Volunteer |
### Pro-Forma Comparisons
**Operations Analysis Ver 2.3 - 30K ridership analysis**
21-Feb-13

#### Scenario 2 - Volunteer operation on passenger/stand alone Nonprofit maintaining railroad

<table>
<thead>
<tr>
<th></th>
<th>Seasonal Operation</th>
<th>RT</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count Rate Wks Trips miles</td>
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<td><strong>Other Administration</strong></td>
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<tr>
<td>Advertising, brochures</td>
<td>$1.00 rider</td>
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<td>$30,000</td>
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<tr>
<td>Office Rental</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Misc. Office postage &amp; supplies</td>
<td></td>
<td></td>
<td>$5,000</td>
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<tr>
<td>Train Radios</td>
<td></td>
<td></td>
<td>$5,000</td>
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<tr>
<td>FRA compliance &amp; training</td>
<td>Training costs offsite</td>
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<td>$1,800</td>
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<td>Phones, Internet, Cell</td>
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<td>Credit Card processing</td>
<td>Fee rate 2.5% 60% sales</td>
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<td>Interest &amp; misc</td>
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<td>$1,500</td>
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<td>Liability on 10M only</td>
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<td>Freight Liability</td>
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<td>Volunteers</td>
<td>Fee quote $500</td>
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<td>Workmens comp</td>
<td>$0 TBD if paid</td>
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</tr>
<tr>
<td>Property insurance</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Directors &amp; officers</td>
<td>$0</td>
<td></td>
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<tr>
<td>Equipment</td>
<td>Still required? $0</td>
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<td>$35,500 $94,075</td>
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<td><strong>Membership Activities</strong></td>
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<tr>
<td>Commissions &amp; fundraising</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dues &amp; subscriptions</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Membership services</td>
<td>$1,200</td>
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<td>$4,000</td>
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<tr>
<td><strong>Total Operating Expense</strong></td>
<td></td>
<td></td>
<td>$362,553</td>
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<tr>
<td><strong>Net income before debt service</strong></td>
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<td>$73,777</td>
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<td>Land/Lease/Mortgage payments</td>
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<td>Building and/or Depreciation</td>
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<tr>
<td>Additional Startup Costs</td>
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<td></td>
<td>$171,870</td>
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<tr>
<td><strong>Total Operating Expense</strong></td>
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<td></td>
<td>$534,422</td>
</tr>
<tr>
<td><strong>Cash Flow from Operations</strong></td>
<td></td>
<td></td>
<td>$(98,092)</td>
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<tr>
<td>On sales</td>
<td></td>
<td></td>
<td>-22.48%</td>
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<td>Passenger Revenue</td>
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<td></td>
</tr>
<tr>
<td>Excursion - base operations</td>
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<tr>
<td>Adult</td>
<td></td>
<td></td>
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<tr>
<td>17442</td>
<td>$12.00</td>
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<tr>
<td>Open car 10% typ.</td>
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<tr>
<td>1143</td>
<td>$15.00</td>
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<tr>
<td>Child 17% typ.</td>
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<tr>
<td>3886</td>
<td>$9.00</td>
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<td></td>
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<tr>
<td>Group 5% est</td>
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<td></td>
</tr>
<tr>
<td>1143</td>
<td>$10.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School 1.7% est</td>
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</tr>
<tr>
<td>389</td>
<td>$5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa/Winter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult 50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3570</td>
<td>$17.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3570</td>
<td>$12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas TBD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner Train With meal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>$42.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL TICKET SALES**

| 30000 | $378,330 |

**Retail sales, Gross**

| $4.00  | $120,000 |
| Less: COGS % or actual | 60% | ($72,000) |

**Freight Revenue**

<table>
<thead>
<tr>
<th>Revenue from Freight Operations</th>
<th>Scrap</th>
<th>Misc</th>
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<tr>
<td></td>
<td>150</td>
<td>10</td>
</tr>
<tr>
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<td>$350</td>
<td>$350</td>
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**Membership Activities**

**Donations & Misc.**

<table>
<thead>
<tr>
<th>Total Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$492,330</td>
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**OPERATING METRICS**

<table>
<thead>
<tr>
<th>30,000</th>
<th>3,856</th>
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<tbody>
<tr>
<td>7.78</td>
<td>$98.12</td>
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</table>

**Train Operating Expense**

*Hauge Fee Option Basis:*

<table>
<thead>
<tr>
<th>Number of trips</th>
<th>216</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Days</td>
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**Direct Cost Basis:**

<table>
<thead>
<tr>
<th>Crew labor</th>
<th>Total excursions</th>
<th>216</th>
<th>Volunteer part time eng/cond</th>
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</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>RR retirement rates</td>
<td>$26,035</td>
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<td></td>
<td>Track Inspection - weekly FRAI</td>
<td>All inspections</td>
<td>30</td>
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<tr>
<td>Locomotive Fuel &amp; oil</td>
<td>See fuel tab - with freight activity</td>
<td>$33,116</td>
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<tr>
<td>Locomotive Lease/day</td>
<td>included</td>
<td>$128,651</td>
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<tr>
<td>Lube Oil/Sand/Other</td>
<td>included</td>
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</table>
### Scenario 3 - General System connect w/freight

#### Paid employees PT with RR Retirement

<table>
<thead>
<tr>
<th>Count</th>
<th>Rate</th>
<th>Wks</th>
<th>Trips</th>
<th>RT</th>
<th>Ann.</th>
<th>Revenue</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Track Maintenance - annual

- Tie count per year replacement
- Ties - ind. Tie new
  - $70 material
  - $30 labor
- Insertion
- Disposal of scrap ties
  - $5 disposal
- Replacement tie plates
  - 20% $10 ea
- Surfacing & Bolting - annual
  - FRA1 $6,000 mile
- Weed Spray - 2 per yr.
  - Contractor $10,000
- Signal Inspect & maint monthly
  - 2 $2,400 yr
  - Contractor $4,800
- Signal utilities
  - 2 $50 mo
  - Contractor $1,200
- Brush Cutting - annual
  - Contractor $5,000
- Bridge Inspection - annual
  - Contractor $7,000
- Misc. track materials
  - As need per mile avg. $18,395
  - $4,000 $156,355

#### Freight Car Hire - RR/day

- None w/2 trips/wk (note 1)
- $0

#### Program Expenses

- Licensing fees
- Special Events entertainment
- Dinner Train caterer/food
- Based on 30% std contract $0
- Santa/elves (per tri) 46 $100.00 $4,600
  - all service costs 0 $32 $0 $4,600

#### Equipment Maintenance

- Shop Labor
- Benefits
- Volunteer 0.0% $0
- Locomotive maintenance
  - Owned 1 $16,000 $16,000
- Passenger Car Maintenance
  - all maint 3 $7,500 $22,500
- Shop Utilities
- Shop supplies & materials $3,600
- Car Cleaning
  - $42,100

#### Buildings & Grounds

- Maintenance
- Station upkeep $5,000
- Station Rental
- Town donation TBD
- Sewage (retention tanks)
- Town services $0
- Utilities
  - Station allocated expense $1,500 $6,500

#### Administration

- General Mgr.
  - Benefits $45,000
- Marketing
  - Benefits $15,750
- Accounting
  - Sheet B $0
- Benefits $0
- Retail
  - Sheet B $0
- Benefits $0
- Other Admin.
  - Included above $60,750
## Scenario 3 - General System connect w/freight
Paid employees PT with RR Retirement

<table>
<thead>
<tr>
<th></th>
<th>Seasonal Operation</th>
<th>RT</th>
<th>Ann.</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Rate</td>
<td>Wks</td>
<td>Trips</td>
<td>miles</td>
</tr>
<tr>
<td>Other Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising, brochures</td>
<td>$1.00 rider</td>
<td></td>
<td></td>
<td>$30,000</td>
</tr>
<tr>
<td>Office Rental</td>
<td>$4,800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Office postage &amp; supplies</td>
<td>$5,000</td>
<td></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td>Train Radios</td>
<td>$5,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRA compliance &amp; training</td>
<td>Training costs offsite</td>
<td></td>
<td></td>
<td>$1,800</td>
</tr>
<tr>
<td>Phones, Internet, Cell</td>
<td>$6,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Card processing</td>
<td>Fee rate 2.5%</td>
<td></td>
<td></td>
<td>$7,475</td>
</tr>
<tr>
<td>Fees and permits</td>
<td>$1,800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest &amp; misc</td>
<td>$1,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability on 10M only</td>
<td>Fee quote</td>
<td></td>
<td></td>
<td>$35,000</td>
</tr>
<tr>
<td>Freight Liability</td>
<td>Required</td>
<td></td>
<td></td>
<td>$10,000 stand alone</td>
</tr>
<tr>
<td>Volunteers</td>
<td>Still required?</td>
<td></td>
<td></td>
<td>$750 est. only</td>
</tr>
<tr>
<td>Workmens comp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directors &amp; officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership Activities</td>
<td></td>
<td></td>
<td></td>
<td>$1,200</td>
</tr>
<tr>
<td>Commissions &amp; fundraising</td>
<td></td>
<td></td>
<td></td>
<td>$1,800</td>
</tr>
<tr>
<td>Dues &amp; subscriptions</td>
<td>$1,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership services</td>
<td>$1,200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Operating Expense</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$512,581</strong></td>
</tr>
</tbody>
</table>

**Net income before debt service**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land/Lease/Mortgage payments</td>
<td></td>
<td></td>
<td></td>
<td>$171,870</td>
</tr>
<tr>
<td>Building and/or Depreciation</td>
<td></td>
<td></td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td>Additional Startup Costs</td>
<td></td>
<td></td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Operating Expense</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$684,451</strong></td>
</tr>
</tbody>
</table>

**Cash Flow from Operations**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On sales</td>
<td></td>
<td></td>
<td></td>
<td>($192,121)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-39.02%</td>
</tr>
</tbody>
</table>
ECONOMIC IMPACT ANALYSIS

Economic Impact Modeling

Input-output analysis is a key component of most regional economic modeling of the employment, output, and income impacts of transportation infrastructure investments. Input-output analysis quantifies the multiple economic effects resulting from a change in the final demand for a specific product or service. For example, a person being paid to work on a transportation project will spend some of those wages to buy goods and services. The money he or she spends shows up as sales and wages to other parties, who spend the money elsewhere, and so on. This chain of effects, known as the "multiplier," captures the distributive effects of transportation capital spending and operating benefits across a broad range of industries. Typically, the input-output multipliers are driven by the initial, direct benefits and costs of the project as determined during engineering and/or feasibility analysis. In this analysis, this is an operating entity over several years, and input numbers are developed from actual expenditures, budgets, and attendance.

The simplest regional economic models are direct applications of input-output models. These applications are "static" in the sense that they provide an all-at-once view of economic effects, without a time component that is necessary for understanding when the effects will be realized. More sophisticated applications of regional economic models supplement input-output relationships with simulation techniques to forecast the year-to-year effects of projects on economic and demographic patterns. The most complex EIA models are those that integrate travel demand models, land use models, dynamic simulation economic models, and input-output models.

RIMS II Economic Analysis Methods

The standard method for determining the total economic impact a project or program will have on state and local levels is known as the RIMS II (Regional Input-Output Modeling System”) multipliers. The original RIMS method for estimating impacts was developed in the mid-1970s by the U.S. Department of Commerce’s Bureau of Economic Analysis. It has since been updated and refined and is now known as RIMS II.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the distribution of the inputs purchased and the outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: US Bureau of Economic Analysis (BEA) national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and BEA’s regional economic accounts, which are used to adjust the national I-O table in order to reflect a region’s industrial structure and trading patterns.

Using RIMS II for impact analyses has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry or group of industries in the national I-O table. The cost of estimating regional multipliers is relatively low because of the accessibility of the main data sources for RIMS II. According to empirical tests, the estimates based on RIMS II are similar in magnitude to the estimates based on relatively expensive surveys.

To effectively use the multipliers for impact analysis, geographically and industrially detailed information is entered for the initial direct changes in output, earnings, or employment that are associated with the project or program under study. The multipliers can then be used to estimate the total impact of the project or program on regional output, earnings, or employment.
Because of the widespread and recommended use of RIMS modeling methods, comparative projects can often be compared for relative economic impacts, as a standard measurement framework has been used. RIMS II multipliers are used extensively by the federal government, most states and counties.

**Colebrookdale Railroad Input Data**

The Economic Impact Analysis was performed using the entire Capital Budget estimates for Priority 1-4 programs, and Scenario 1 and Scenario 2, using 30,000 ridership level projections for budgets, revenues, and expenditures.

One of the most significant statistics of any excursion railroad is the impact of the overall program on creating a destination attraction, producing a measurable effect on local businesses through the generation of overnight stays. That is most significant when the overnight stay involved hotel or motel lodging, generating additional business in food, secondary attractions, and support services for the region. This impact creates the most identifiable, and most visible, result of the excursion railroad concept.

This project, as currently envisioned, is a relatively short excursion program that would not necessarily be considered as a destination attraction at startup. The large population that is available within a 2-3 hour drive further reduces the potential to develop predictable overnight stays at this point in the study.

There are two factors for excursion railroads that create predictable and high-percentag etage overnight stays – late evening activities such as Polar Express, dinner trains, and murder-mystery trains, and the physical location of the railroad at a distant edge from the target metropolitan markets. While this operation is likely to produce overnight stays, the conservative base of the economic impact analysis has assumed a primarily day-trip market.

The following tables calculate the impact in two distinct sections:

- Direct economic impact of the operating and capital budgets of the railroad.
- Secondary economic impact of the customers of the railroad based upon overnight stays including lodging, food, and other regional impacts.

Third-level impacts, such as the service industries that supply the suppliers, are not included. While many economic impact analysis studies may choose to include and estimate this third-stage employment impact level, it is generally considered to be speculative at best. This is an important element when examining comparative economic impact analysis calculations.
### IMPACT OF THE COLEBROOKDALE RAILROAD EXCURSION OPERATION ON TOTAL REGIONAL BUSINESS OUTPUT – CAPITAL BUDGET ONLY

<table>
<thead>
<tr>
<th>Category of Expenditure</th>
<th>Direct Expenditures</th>
<th>Output Multiplier a/</th>
<th>Impact on Output b/</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPENDITURES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equip. Purchase – Rolling Stock, Locos</td>
<td>638,000</td>
<td>2.4796</td>
<td></td>
<td>$1,581,985</td>
</tr>
<tr>
<td>Repair/Restoration</td>
<td>915,000</td>
<td>2.4693</td>
<td></td>
<td>$2,259,410</td>
</tr>
<tr>
<td>Track Work – New Construction</td>
<td>304,900</td>
<td>2.5972</td>
<td></td>
<td>$791,886</td>
</tr>
<tr>
<td>Equipment Purchase</td>
<td>35,250</td>
<td>2.5580</td>
<td></td>
<td>$90,170</td>
</tr>
<tr>
<td>Buildings – New Construction</td>
<td>820,000</td>
<td>2.5972</td>
<td></td>
<td>$2,129,704</td>
</tr>
<tr>
<td>Property Acquisition</td>
<td>150,000</td>
<td>1.3055</td>
<td></td>
<td>$195,825</td>
</tr>
<tr>
<td>Legal/Professional Fees</td>
<td>67,500</td>
<td>2.2643</td>
<td></td>
<td>$152,840</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$2,930,650</td>
<td></td>
<td></td>
<td>$7,201,819</td>
</tr>
</tbody>
</table>

a/ Each entry represents the total dollar change in output from all industries for each dollar of output delivered to final demand.
IMPACT OF THE COLEBROOKDALE RAILROAD RAIL OPERATING BUDGET
ON TOTAL REGIONAL BUSINESS OUTPUT – EXPENSES

SCENARIO #1 – OCTL model (freight operator pulls trains for fee)

<table>
<thead>
<tr>
<th>Category of Expenditure</th>
<th>Direct Expenditures</th>
<th>Output Multiplier a/</th>
<th>Impact on Output b/</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPENDITURES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>45,000</td>
<td>1.4114</td>
<td>$63,513</td>
<td></td>
</tr>
<tr>
<td>Payroll Overhead</td>
<td>15,750</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Miscellaneous Expenses</td>
<td>6,500</td>
<td>2.4693</td>
<td>$16,703</td>
<td></td>
</tr>
<tr>
<td>Purchases -</td>
<td>3,600</td>
<td>2.5697</td>
<td>$9,251</td>
<td></td>
</tr>
<tr>
<td>Contract Fees</td>
<td>73,950</td>
<td>2.2643</td>
<td>$167,445</td>
<td></td>
</tr>
<tr>
<td>Gift Shop Goods</td>
<td>72,000</td>
<td>2.0097</td>
<td>$144,698</td>
<td></td>
</tr>
<tr>
<td>Maintenance/Repairs</td>
<td>20,000</td>
<td>2.3791</td>
<td>$47,582</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>35,500</td>
<td>2.7386</td>
<td>$97,220</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>30,000</td>
<td>2.2643</td>
<td>$67,929</td>
<td></td>
</tr>
<tr>
<td>Office Supplies</td>
<td>5,000</td>
<td>2.2847</td>
<td>$11,424</td>
<td></td>
</tr>
<tr>
<td>Prof. Fees</td>
<td>12,075</td>
<td>2.2643</td>
<td>$27,341</td>
<td></td>
</tr>
<tr>
<td>Telephone/Internet</td>
<td>6,000</td>
<td>1.7735</td>
<td>$10,641</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>1,500</td>
<td>2.1030</td>
<td>$3,155</td>
<td></td>
</tr>
</tbody>
</table>
Membership Activities 4,000 2.2643 $9,057

TOTAL $330,875 $675,959

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

NON-RAIL ACTIVITIES – Scenario 1

In estimating the non-rail economic impact on the area, we are forced to use projected preliminary ridership numbers since no hard reservation data exists. For the purpose of this study, we are assuming that all Colebrookdale Railroad riders have been drawn to the area because of multiple recreational opportunities, including The Colebrookdale Railroad’s various excursion runs. We are using the current standard “family unit” representing 3.1 individuals (two adults, 1.1 children). While we are very much aware that a percentage of the traffic may generate overnights within the area, for this study we are treating all traffic as day trippers.

Estimated non-rail related tourism expenditures by visitors:

Day Trip Parties (ridership / individuals) 11,267 ($82.50/per party/day) $929,528

Total Estimated Economic Impact

$929,528 x 1.9650 multiplier $1,826,523
## Total Economic Impact – Summary (Table)

### TOTAL ECONOMIC IMPACT – Colebrookdale Railroad – Scenario 1

<table>
<thead>
<tr>
<th></th>
<th>$ IMPACT ON TOTAL OUTPUT</th>
<th>INCREMENTAL JOB CREATION a,b</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATING BUDGET <em>(Table A)</em></td>
<td>$675,959</td>
<td></td>
</tr>
<tr>
<td>WAGES AND PAYROLL <em>(Table A)</em></td>
<td>$60,750</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ECONOMIC IMPACT – RAILROAD OPERATION</strong></td>
<td><strong>$736,709</strong></td>
<td><strong>21.0</strong></td>
</tr>
<tr>
<td><strong>TOTAL ECONOMIC IMPACT – RAILROAD CAPITAL BUDGET</strong></td>
<td><strong>$7,201,819</strong></td>
<td><strong>205.2</strong></td>
</tr>
<tr>
<td><strong>TOTAL ECONOMIC IMPACT – NON-RAILROAD OPERATION</strong></td>
<td><strong>$1,826,523</strong></td>
<td><strong>52.0</strong></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$9,765,051</strong></td>
<td><strong>278.2</strong></td>
</tr>
</tbody>
</table>

a/ Equivalent full-year jobs.

b/ Projection of jobs supported is based on the RIMS II models for the State of Pennsylvania. The actual number of jobs supported 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.

Regional Input-Output Modeling System (RIMS II)
## IMPACT OF THE COLEBROOKDALE RAILROAD RAIL OPERATING BUDGET ON TOTAL REGIONAL BUSINESS OUTPUT – EXPENSES

**SCENARIO #2 – Stand-alone volunteer operation, no freight**

<table>
<thead>
<tr>
<th>Category of Expenditure</th>
<th>Direct Expenditures</th>
<th>Output Multiplier a/</th>
<th>Impact on Output b/</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>50,000</td>
<td>1.4114</td>
<td></td>
<td>$70,570</td>
</tr>
<tr>
<td>Payroll Overhead</td>
<td>15,750</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Track Maintenance</td>
<td>108,045</td>
<td>2.4693</td>
<td></td>
<td>$266,796</td>
</tr>
<tr>
<td>Fuel</td>
<td>22,983</td>
<td>1.8107</td>
<td></td>
<td>$41,615</td>
</tr>
<tr>
<td>Purchases – parts/pieces</td>
<td>8,600</td>
<td>2.5697</td>
<td></td>
<td>$22,099</td>
</tr>
<tr>
<td>Maintenance – Trackside</td>
<td>5,000</td>
<td>2.3791</td>
<td></td>
<td>$11,896</td>
</tr>
<tr>
<td>Maintenance – Rolling Stock</td>
<td>38,500</td>
<td>2.3791</td>
<td></td>
<td>$91,595</td>
</tr>
<tr>
<td>Gift Shop Costs</td>
<td>72,000</td>
<td>2.0097</td>
<td></td>
<td>$144,698</td>
</tr>
<tr>
<td>Insurance</td>
<td>35,500</td>
<td>2.7386</td>
<td></td>
<td>$97,220</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>5,000</td>
<td>2.2847</td>
<td></td>
<td>$11,424</td>
</tr>
<tr>
<td>Advertising</td>
<td>30,000</td>
<td>2.2643</td>
<td></td>
<td>$67,929</td>
</tr>
<tr>
<td>Taxes/Licenses &amp; Credit Card Fees</td>
<td>9,275</td>
<td>2.2605</td>
<td></td>
<td>$20,966</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
<td>-----</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Prof. Fees</td>
<td>20,900</td>
<td>2.2643</td>
<td>$47,324</td>
<td></td>
</tr>
<tr>
<td>Telephone/Internet</td>
<td>6,000</td>
<td>1.7735</td>
<td>$10,641</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>1,500</td>
<td>2.1030</td>
<td>$3,155</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Activities</td>
<td>5,500</td>
<td>2.2643</td>
<td>$12,454</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$434,553</strong></td>
<td></td>
<td><strong>$920,381</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

**NON-RAIL ACTIVITIES – Scenario 2**

In estimating the non-rail economic impact on the area, we are forced to use projected preliminary ridership numbers since no hard reservation data exists. For the purpose of this study, we are assuming that all Colebrookdale Railroad riders have been drawn to the area because of multiple recreational opportunities, including The Colebrookdale Railroad's various excursion runs. We are using the current standard “family unit” representing 3.1 individuals (two adults, 1.1 child). While we are very much aware that a percentage of the traffic may generate overnights within the area, for this study we are treating all traffic as day trippers.

Estimated non-rail related tourism expenditures by visitors:

\[
\text{Day Trip Parties (ridership / individuals)} \times \text{($82.50 \text{ per party/day}})\] \quad \text{11,267} \times \text{($82.50 \text{ per party/day})} \quad $929,528

**Total Estimated Economic Impact**

\[
\text{Total Estimated Economic Impact} = \text{Day Trip Parties} \times \text{Multiplier} = 929,528 \times 1.9650 = \text{$1,826,523$}
\]
### Total Economic Impact – Summary (Table )

<table>
<thead>
<tr>
<th>TOTAL ECONOMIC IMPACT – Colebrookdale Railroad – Scenario 2</th>
<th>$ IMPACT ON TOTAL OUTPUT</th>
<th>INCREMENTAL JOB CREATION a, b</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATING BUDGET (Table A)</td>
<td>$920,381</td>
<td></td>
</tr>
<tr>
<td>WAGES AND PAYROLL (Table A)</td>
<td>$65,750</td>
<td></td>
</tr>
<tr>
<td>TOTAL ECONOMIC IMPACT – RAILROAD OPERATION</td>
<td>$986,131</td>
<td>28.1</td>
</tr>
<tr>
<td>TOTAL ECONOMIC IMPACT – RAILROAD CAPITAL BUDGET</td>
<td>$7,201,819</td>
<td>205.2</td>
</tr>
<tr>
<td>TOTAL ECONOMIC IMPACT – NON-RAILROAD OPERATION</td>
<td>$1,826,523</td>
<td>52.0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>$10,014,473</td>
<td>285.3</td>
</tr>
</tbody>
</table>

a/ Equivalent full-year jobs.

b/ Projection of jobs supported is based on the RIMS II models for the State of Pennsylvania. The actual number of jobs supported 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.

Regional Input-Output Modeling System (RIMS II)