

# **OPERATION BOOTSTRAP**

**Petersburg, Virginia Economic Revitalization Project**

## **Financial Considerations**

by

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## Introduction

*Operation Bootstrap*, like all major projects, began as an idea. Another was added and still another. Eventually these were distilled into a concept. Once it was in place, the details were better defined. This evolution led to many drafts. The accompanying Version 407 is the seventh draft of the fourth version.

Ideas lead to more ideas and each version was an expanded version of the previous one. Version 1 simply called for putting the Petersburg Railroad into place. It became obvious that support facilities would be needed so Version 2 added a snack bar, exhibit area/museum and gift shop/ticket office. Simultaneous with this *The Antebellum Railroads of Petersburg, Virginia* was researched and written. It provides a comprehensive overview of the city's rail heritage. It ran 80 pages, so a poster of the same title was created to condense all of the information into a comprehensive and quickly readable summary.

The economic potential of the project became self-evident, so Version 3 expanded the idea into a complex of historic theme parks. Each of the many drafts provided a springboard for the next as more details were added. This version included many subjects, such as overall park development; design consideration; activities and entertainment; business organization; executive duties; details of the various attractions; a comprehensive marketing plan; budgets; projected financial consequences; and various business arrangements that could bring the complex into being. There was so much information that it was overwhelming. This led to the decision to address specific subjects in separate reports.

Version 4 reflects that change. It is more limited in scope. It presents a comprehensive overview of the completed Petersburg Parks. It describes attractions, activities and entertainments. In short, it clearly defines the goal. This version was the first to be made public. It was released in October 2011.

This report summarizes the financial information set forth in Version 3. The other information has not yet been compiled into separate reports.

The goal of Operation Bootstrap is to revitalize the downtown Petersburg economy by bringing a large number of visitors into the city. This is to be accomplished in accordance with the principal of maximizing potential while minimizing risk. It also strives to minimize the cash investment.

Project planning continues to evolve. Version 407 called for three basic phases of development. I felt that Phase 2 was too big a jump to take at one time, so decided to break it into two parts. Thus there are now four phases. It is anticipated that the first phase will require 18 months to complete. The next three phases can be completed in a year each. This will result in the Petersburg Parks, as described in Version 407, being completed, except for Main Street, in five years. However, the parks will continue to develop and expand.

At this point, the Petersburg Parks Project is in an advanced stage of concept development. The theme of each park has been established - such as Early America - and some attractions, activities and entertainments have been described. Extensive research will be required to determine exactly what specific structures and other things will be needed. The physical environment and the actions that will take place within it are so interrelated that they cannot be separated. They must be simultaneously developed. This approach precludes advance bids from contractors. Besides, the Petersburg Parks should be the general contractor as this gives it total control over everything.

The Petersburg Parks, by their very nature, require a reverse development approach. Rather than first designing everything and putting it out for bids, budgets should be established and the attractions should be designed to be built within those budgets. This approach also permits improvisation, the addition or substitution of details that can substantially increase the visitors' enjoyment. During the course of development, funds may be shifted from one attraction to another. The important thing is that the totals remains the same. This will require tight cost controls.

The cost of the Petersburg Parks is amazingly low. That is due to three major factors: (1) The City of Petersburg has already acquired the real estate and historic buildings and it has significantly improved the infrastructure; (2) the recent completion of Martin Luther King Bridge and the Pocahontas off ramp provides easy access; and (3) the nature of the attractions. They are simple, low tech, and easy and inexpensive to construct. The entire park complex cost about the same as one King's Dominion roller coaster, around \$20 million.

The cost estimates do not include the following:

- (1) Charges for use of the real estate and intellectual property.
- (2) Main Street Petersburg. This is a very big project and should be handled individually. The need for market testing, the large amount of rental space, and the impact that it will have on the existing retail community demands that it be phased in over a period of time.
- (3) Parking buildings. Phase 4 will result in very heavy customer traffic. This will require far more parking than can be provided by the parking lot. Parking buildings will be needed. They will be self-supporting as parking can be a separate charge from admissions, or the admissions price bumped up a dollar or two to cover it.
- (4) Real estate acquisitions. Several additional parcels of land have been identified in *Operation Bootstrap*. It may be necessary to purchase homes in Pocahontas village.
- (5) Additional income from expanded railroad operations, which would be a bonus.
- (6) There may be expenses that are not provided for. For example, it may not be possible to build a coffer dam at the east end of Lake Petersburg. If so, then a bridge will have to be constructed to carry the train tracks.
- (7) Bonuses paid to key executive for performance.

A major benefit of the low cost is low debt service. Cedar Fair, which operates King's Dominion and other amusement parks, paid out over \$180 million in interest during 2010. It almost surely paid out at least that amount again in principal.

The flip side is that amusement parks are very efficient. Only two or three employees are required to operate an automated ride that can accommodate a great many people every hour. By comparison, the Petersburg Parks provide personal experiences. That requires a lot of people. The number of employees per 1,000 guests will be probably be several times that of the major amusement parks. This is more than offset by the low cost of the parks.

The Petersburg Parks' income will come from two sources: admissions, and the sale of food and merchandise. The purpose of this revitalization plan is to bring customers into downtown Petersburg. Toward encouraging that, admissions prices are low.

Version 407 cited the admission prices to King's Dominion and Busch Gardens, but failed to provide those of Tweetsie Railroad, which is more comparable. It has a three-mile train ride, eight cheap traveling carnival-type rides for young children, and a dozen or so concessions such as old time photographs and snacks. Adult admission is \$34 and children's admission is \$22 for an average admissions price of \$28. The average King's Dominion visitor spends \$60 for admission and another \$40 on food and merchandise.

A basic underlying principal of *Operation Bootstrap* is to “pay as you go.” That is possible, but not immediately. That’s because the development funds for each phase must be advanced and it will take a year or so for each phase to realize its profits. Even though the Petersburg Parks do make back their cost in a very short time, the interim development must be financed.

Toward keeping the math simple, profits are not shown as being reinvested, but rather they are shown as being accumulated.

This report assumes that 100% of the development cost will be financed. Commercial loans are generally amortized over 15 years. Financing of \$1,000,000 at 5 percent interest will result in monthly payments of \$9,158, which is \$109,896 a year. Toward keeping the figures simple, debt service is rounded off to 11% a year, which includes both principal and interest. If a lower interest rate can be obtained, the cost of debt service will be less. This will have to be multiplied by the amount actually borrowed.

The projections show that a year after Phase 4 has been executed, there will be sufficient accumulated profits to pay off the entire development cost. In practice, profits for each year will be applied to the next stage of development.

## **Pre-organizational Expenses and Timing**

Earlier versions of *Operation Bootstrap* described Phase 1 in detail, but suffice for now to simply state that they included planning the entire complex.

The creative process requires going from the general to the specific. A master site plan must be prepared on a CAD (Computer-Aided-Design) program. These utilize layers which can be displayed or hidden. One layer must show all property lines to clearly define the area available for development, which will be shown on another layer. Another can be used for topography. The railroad is the skeleton of the complex as everything is built to it. A professional railroad engineer should design the track layout. Additional layers should be used to show utilities, track layout and the location and size of the various parks and attractions. With this outline in place, the specifics of each park can be plugged into the site plan as they are developed.

Early railroad technology was very simple, but is no longer readily available. The design of locomotives and rolling stock will require extensive research.

Setting up the Petersburg Parks organization, finding key employees, obtaining funding, and providing for the use of land and intellectual property will require time and effort.

Eighteen months should be allowed for this preliminary work and the construction of everything called for in Phase 1.

The goal should be to open the first phase on the first day of the tourist season, which is June first. Working backward from that, if the goal is to open in 2013, it is essential that the Petersburg Parks organization become operational no later than January 1, 2012.

Key executives and staff members are President/CEO, Project Manager to build everything, Marketing Director, mechanical engineer and accountant. The key staff will be needed for 18 months and will cost \$526,500. After the parks open, these costs will be charged to current operating expenses, rather than to future phases.

## Phase 1

The goal of this phase is very simple: get the first train into operation. The locomotive will be replica of the *Liverpool*, purchased by the Petersburg Railroad in 1831. Its track (the “inner loop”) will circle Lake Petersburg and the trip can be completed in 15 minutes, which includes the time to load and unload passengers.

Trains must be operated out of Union Station. This magnificent building does not provide enough space for essential support services, such as a snack bar, gift shop and exhibit and/or museum space. The only viable place to house them is the nearby east bays of Southside Station. This will require that they be rebuilt and finished.

The biggest single cost is improvements to the infrastructure. This includes rebuilding and finishing Southside Station, getting Lake Petersburg into place, and demolishing most of the buildings on the former Roper Lumber property. These buildings almost surely have a wood frame, and the lumber should be salvaged and stored in other former Roper buildings as “aged” wood will later be needed for many other things. One of these buildings should be used as a railroad repair, construction and storage facility. No provision is made for parking, as it is assumed that the existing parking lot on River Street, west of Southside Station, will prove adequate. Estimated cost of the infrastructure is \$1,225,000.

Surprisingly, the railroad doesn’t cost that much. Constructing the locomotive, a tandem passenger car, a freight car and the putting in the tracks is estimated at \$455,000. About 60% of the needed track is already on site. The gift shop, snack bar and exhibits are budgeted at \$212,000. Other expenses include \$100,000 for advertising and promotion, office expenses and insurance for a total of \$140,000.

Total cost is budgeted is at \$2,558,500. Some items might cost more than expected. A \$441,500 contingency fund is included. It is far better to have it and not need it, then it is to need it and not have it. It brings the total to \$3,000,000.

First-year admissions are projected at only 90,000. The average admissions price is an extremely low \$12. Sales per visitor are projected at only \$10. Total income is projected at \$1,980,000. Operating expenses are projected at \$1,540,300. This leaves a profit of \$439,700. This represents a return in excess of 22% of sales. Few businesses break-even their first year, and few established businesses enjoy such high profits.

It should be noted that over half the cost will go into developing properties owned by the City of Petersburg. The Southside Station will have been reconstructed and the city will have a beautiful lake. Normally such work would have been paid for by the city.

Most visitors will spend an hour or so at the Petersburg Railroads theme park riding the train and visiting the gift shop and exhibits. They will want to do more and most will certainly visit Old Towne. Ninety-thousand new visitors a year will have an enormous impact on the local retail economy. That is the primary purpose of this plan.

Best of all, this plan calls for 100% financing. There are ample funds available for the modest debt service, so the Petersburg Parks will have improved the city infrastructure, boosted the retail economy, and made an excellent profit, all at no cost.

That is an outstanding start.

## Phase 2

The Petersburg Railroad with its two train depots and operating train constitute the first theme park. Phase 2 calls for adding two more: Early America and Battle for Petersburg.

This phase will result in more traffic, which will require far more parking. The existing lot on River Street is too small to handle it. Even if it were, then the number of cars would result in an Old Towne traffic jam nightmare and constant danger to pedestrians. The former Norfolk Southern lot must be converted into a parking lot. This will be a temporary lot, so costs should be kept to a minimum. The lot will have to be graded and should be covered with brown gravel. Parking aisles can be indicated by railroad ties. Lights should be provided. Traffic must be directed to the Pocahontas ramp on the Martin Luther King Bridge.

Each park will require bathrooms. The buildings housing them can initially be small to minimize costs, but should be designed to be expanded as needed. Each park will require water, sewers, underground electricity and communications, grading and landscaping.

These are very simple attractions and the budgets are believed to be more than adequate. Included in their cost are research, architectural work, and site plans. Creating a historic environment is essential. The parks are more akin to a motion picture set than a modern building project. Because of this, a motion picture production designer, working with historians, should be brought on board. His or her duties will include designing structures, obtaining props, and creating period costumes for the staff. All of this work will be contracted, so no permanent staff is required.

The two additional stops will increase the travel time of the railroad ride. A second train will be required. A reproduction of the *Pocahontas* will be used. Two more passenger cars will be built. One will be a tandem car for passengers and the other will be of the earlier coach design. There should also be a baggage car. This provides some variety to our rolling stock. They will certainly be used, but have additional value as exhibits.

Phase 2 cost is budgeted at \$2,155,000. The contingency fund increases the total cost to \$2,500,000.

The expanded railroad operation will attract more railroad buffs and Battle for Petersburg will result in the Petersburg Parks being a very popular Civil War attraction. Early America will appeal to families who want day trips. 175,000 visitors a year should be easily obtained.

The average admission price has been increased to \$18 and the sale of food and merchandise is expected to increase to \$14. This results in total income of \$5,760,000. Expenses are projected at \$4,343,500. This leaves a profit of \$1,416,500, which represents 24% of sales. Best yet, the profits cover 56% of the cost of Phase 2. It's not quite yet "pay as you go," but a two year recovery of all costs is excellent.

### Phase 3

Phase 3 adds Pocahontas Heritage Park and the Peter's Point Nature Center. They will require the same things detailed in Phase 2, above.

The main railroad line must be installed. It circles the entire park complex. There will be five stops (the depot and four parks) and a longer distance to cover, so travel time will significantly increase. There will also be a lot more visitors.

Meeting customers' transportation needs will require a third train. This is when we bring the state-of-art *City of Petersburg* on line. It will probably prove to be the most popular of all the locomotives. Five new passenger cars will be added. Two will be 8-wheel tandems and three will be the square-sided design. New rolling stock will include a square-sided boxcar, a baggage car and a mail car. The *City of Petersburg* will pull the square-sided passenger cars and the boxcar. The other two locomotive will now pull two or three passenger cars plus a baggage or freight car.

Locomotives became bigger and increasingly powerful. The *City of Petersburg* weighed 20 tons as compared to 7 tons for the *Liverpool*. It will cost at least twice as much to reconstruct.

Locomotives and rolling stock must be continually maintained and all railroads had extensive repair shops. The technology was simple and many railroads built their own equipment. The ever-increasing transportation needs of the Petersburg Parks will result in an ongoing need for more locomotives and rolling stock. The locomotives and rolling stock budgets for Phases 3 and 4 total \$2,950,000.

Having already put two historic trains in operation, the Petersburg Parks staff will be highly knowledgeable and experienced. They will be the experts on the subject. Serious consideration should be given to building everything "in house," as the cost savings can be substantial. The Appomattox Locomotive Works would provide the ideal facility to do so. However it is not called for until Phase 4. It may be wise to move this forward into Phase 3 because if railroad costs can be cut by 50% then that is a savings of \$1.5 million. This pays for over half the cost of the locomotive works. It also becomes another attraction for visitors as they can actually see locomotives and rolling stock being built. As an temporary alternative, Roper Lumber buildings can be used.

This phase also includes putting a retail store in each of the four parks, as modest budgets precluded this from being done earlier. They are budgeted at \$400,000 each. This includes \$300,000 each for the buildings, \$50,000 for store fixtures and decor, and \$50,000 for initial merchandise. Other stores and concessions can later be added.

Total budget is \$4,735,000. The contingency fund brings it up to \$5,000,000.

At this point, the City of Petersburg finally has a real theme park complex. Prior to this, it had the start of one. The increased critical mass will draw a lot more visitors. There is so much to do that visitors will spend the bulk of the day in the park complex. With its diverse resources, the Petersburg Parks are now poised to become Virginia's leading field trip destination. Annual attendance is projected at only 300,000, which may prove to be an extremely low projection.

The average admissions price is increased to \$22, but is still inexpensive. The addition of stores to each park will result in a big jump in the sales of food and merchandise. The projections show it increasing from \$14 to \$22, which might be very low, as it is a little over half of that realized by King's Dominion.

In spite of the low prices, income is projected at \$13,200,000. Expenses should run \$7,638,700, leaving a profit of \$5,561,300. This represents over 42% of sales. Phase 3 would make back its entire cost in its first year in operation. That is "pay as you go."

## **Phase 4**

At this point, the Petersburg Parks will have established an excellent financial performance record, so it is time to really commit to them. Phase 4 adds two more theme parks - the Appomattox Locomotive Works and City of Industry. All the other parks will be expanded to service increased customer flow. The railroad must again be expanded. All of this will require \$10,300,000. Adding the contingency fund brings the total to \$11,000,000.

Upon completion of this phase the Petersburg Railroads will be by far the largest and most comprehensive railroad attraction in the entire world. The Great Locomotive Chase will become the Petersburg Parks' signature entertainment event and will attract a great many people. The educational field-trip program should be running at full blast and the parks will be a must-see destination for every bus tour of the state. Annual attendance should run at least 800,000.

The average admissions price is still a remarkably low \$28. Sales per visitor should run at least \$25. Total income is projected at \$42,400,000. Expenses are projected at \$19,171,100. Profits are an outrageous \$23,228,900, which is over 54% of sales.

The Petersburg Parks will recover the \$10 million cost in one year and earn a \$10 million profit. Now we are getting into some serious money.

This vividly demonstrates the "bigger the better" principle.

## **Main Street**

It may be wise to construct part of Main Street simultaneously with Phase 3 or Phase 4. It should be the 1750-1815 period and only the southern half of the street needs to be constructed. This will provide spaces for 24 retail stores with an average space of 2,500 square feet each. Part of this first-floor space can be used for Petersburg Park attractions and stores. The rest can be leased to appropriate retailers. To the extent possible, this space should be pre-leased.

This also provides a place to test the marketability of hotel rooms and apartments, which should be a prerequisite for future Main Street development.

Phase 3 calls for 194 seasonal employees. Phase 4 calls for 316. Providing housing for the summer will cost \$2,000 per employee. That's \$387,200 and \$633,600 for the two phases. \$330,000 pays the debt service on \$3 million. It would better to use the funds to construct part of Main Street than it would be to pay for hotel rooms. A cafeteria and laundry will be needed.

The complex should offer hotel rooms for different budgets. These will be the low-cost rooms. During the off-season, these rooms can be rented to schools for overnight field-trips, which may become quite common. They can also be rented to travelers on a tight budget, such as senior-citizen tour groups. Rental of the first-floor retail stores will result in additional income.

## **Cash Flow**

The Phase 2 through 4 spreadsheets list the accumulated profits. They are the sum of the prior profits and the current phase profits. Although these funds may be reinvested back into the complex as it develops, the spreadsheets show 100% outside financing, just to keep the math simple. At the end of Phase 4, the accumulated profits are \$30,646,400. The entire parks complex has cost \$21,500,000. Thus the parks have earned back their entire cost and an eight million dollar profit. Paying off the debt, increases the profits. And they will still be growing.

## **Future Profits**

The above shows that upon completion of Phase 4, the Petersburg Parks should yield \$23.3 million a year in profits. Actually it will be more than that. The operating expenses included \$2,365,000 in debt service. The loans will be paid off, so profits increase to \$25.6 million. At some point, admissions prices can be substantially increased. This will result in the loss of some traffic, but that will be more than offset by the higher prices. This could increase profits by as much as 50%.

When complete, Main Street will generate over \$9.4 million in rental income. It is an expensive project and debt service will be very high, yet it should generate a 20% profit. That's another \$2 million a year.

Expanded railroad operations can be another major source of income.

## **Future Development**

At this point, the Petersburg Parks are a major attraction. The basic Operation Bootstrap plan has been implemented with the exception of the bulk of Main Street, which should be phased in over the new few years.

In one sense, the Petersburg Parks will never be completed as well managed attractions bring in more and more visitors each year. This will require continual expansion of the core parks and attractions. Ever increasing attendance will also require more things for visitors to do and they help to spread out the crowds. Adding new attractions also encourages return visits.

Petersburg's biggest asset is its history and it has a wealth of it to draw upon. Some can provide the basis for an attraction, but other subjects are so extensive that they can justify a theme park. For example, Petersburg was occupied by the English twice during the Revolutionary war. Lafayette bombarded the city from the heights on the north side of the Appomattox River, and it was proclaimed, "It's the Colonials on the Heights," which is the origin of our neighboring city's name. After the second occupation, the English army departed for Yorktown, where it was defeated by General George Washington. That disaster cost England her American colonies.

Virginia rewarded its Revolutionary War veterans with land grants in the state westernmost county, Kentucky. That origin is readily apparent today as almost every county and city is named after a Revolutionary War hero. This resulted in the first great westward migration. Fort Henry was the first "Gateway to the West" in 1646. Its successor, the City of Petersburg, still held that distinction 150 years later.

The point is that Petersburg has been around for over 360 years. Few American towns can boast such a long and diverse history. There are many areas that have yet to be explored.

## Summary

The first Petersburg Railroad had an enormous economic impact on the city. It resulted in the heart of the business district moving from Old Street to Washington Street to be near the railroad. Contemporary accounts tell that city attracted many new businesses and of the soaring real estate prices. The Petersburg Parks will have even an even bigger impact.

Petersburg will become a major destination. The large number of visitors will result in a booming downtown retail economy. This will create a major demand for retail space. This will result in extensive new development. The Ferguson Plumbing building and two others on Old Street were destroyed by the 1993 tornado, and have not yet been rebuilt or repaired.

The block at the southeast corner of Bollingbrook and 2nd Street was destroyed by fire a few years ago. The Roundtree Pontiac lot is up for sale. Both properties will probably be developed into hotels by other parties.

The area north of Bollingbrook and east of Second Street is in poor condition. It will surely be developed. Real estate prices will increase substantially.

The Petersburg Parks will create a great many jobs. It will require at least 248 full time employees. Most of these jobs are unique in that they do not require advanced education as much they do personality and the ability to interact with people. Such jobs are rare.

The Petersburg Parks will result in spin-off local industries. It will be a major job just keeping the parks supplied in period costumes. Such work can be jobbed out to “work at home mothers,” which is another unique situation. Local entrepreneurs will certainly make or provide souvenirs. Arrowheads and mini balls can be collected locally. Other products can be made in cottage industries. The Appomattox Locomotive Works will manufacture brass railroad bells and whistles and other things.

Petersburg will once again convey a dynamic, energetic and imaginative image. This will reverse the population decline, as many people will discover Petersburg’s many wonderful historic homes and want one. There will be many more restorations and even reconstructions. This new image will also attract new industries. This will add even more jobs, as will the expanding retail economy.

Local hotels will enjoy a long-sought prosperity.

All of these things will result in very large increases in the tax revenues. Did anyone mention an entertainment tax?

There has been mention of revitalization plans over the years. No specifics have been set forth, but essentially the common wisdom is that their purpose was to increase customer traffic to the downtown retail area. This plan accomplishes that goal, but it also goes way beyond that. The Petersburg Parks can provide the City of Petersburg with a major source of income that can be used for everything from education to infrastructure.

I will once again close this document with the prediction made by the mysterious voice to Iowa farmer Kevin Costner, as he walked through his cornfields in the movie *Field of Dreams*:

**“If you build it, they will come.”**