

The Fortunate Richard Association

The noblest question in the world is

What good may I do in it?

(from Poor Richard's Almanack, Benjamin Franklin)

October 1, 2008

Independent Mathematical Contractors, Inc.
University of Washington, Tacoma
Tacoma, WA 98402

Dear IMC:

The mission of the Fortunate Richard Association is to promote the American optimism represented by Benjamin Franklin. Our name comes from the 1785 parody of Franklin's *Poor Richard's Almanack* called *Fortunate Richard* by French mathematician Charles-Joseph Mathon de la Cour. The Frenchman wrote that Fortunate Richard left a small sum of money in his will to be used only after it had collected interest for 500 years. Franklin, who was 79 years old at the time, wrote to the Frenchman, thanking him for a great idea and telling him that he had decided to leave a bequest of 1,000 pounds (about \$4,400 at the time) each to his native Boston and his adopted Philadelphia to gather interest in trust for 200 years.

"...I wish to be useful even after my Death, if possible, in forming and advancing other young men that may be serviceable to their Country both in Boston and Philadelphia. To this end I devote Two thousand Pounds Sterling, which I give, one thousand thereof to the Inhabitants of the Town of Boston in Massachusetts, and the other thousand to the Inhabitants of the City of Philadelphia, in Trust and for the Uses, Interests and Purposes hereinafter mentioned and declared....."

Franklin's plan for the money given to Boston was to lend money to young apprentices at 5% interest with the provision that each borrower should pay each year

"...with the yearly Interest, one tenth part of the Principal, which sums of Principal and Interest shall be again set to fresh Borrowers.....If this plan is executed and succeeds as projected without interruption for one hundred Years, the Sum will be one hundred and thirty-one thousand Pounds of which I would have the Managers of the Donation to the Inhabitants of the Town of Boston, then lay out at their discretion one hundred thousand Pounds in Public Works.....The remaining thirty-one thousand Pounds, I would have continued to be set out on Interest in the manner above directed for another hundred Years.....At the end of this second term if no unfortunate accident has prevented the operation the sum will be Four Millions and Sixty-one Thousand Pounds...."

Unfortunately, it was not always possible to find as many borrowers as Franklin had planned, but the Bostonian managers of the trust did the best they could. In January 1894,

at the end of 100 years from the inception of the Franklin gift, the fund had grown from 1000 pounds to almost 90,000 pounds. In 100 years the original capital had multiplied about 90 times instead of the 131 times Franklin had imagined.

The [Philadelphia Inquirer article by Clark DeLeon](#) from February 1993 describes the situation in Philadelphia and Boston at the end of the second hundred years. It also gives some interesting insights into contemporary city government.

We need your services to prepare for a “Fortunate Richard pitch” to a local Tacoma benefactor. As such please complete the following tasks:

1. Verify Franklin’s original calculations. If 1000 pounds were invested for 100 years at 5% interest, would the balance be 131,000 pounds? What rate of interest, compounded annually, would have multiplied Franklin's original bequest by 90? How about compounded continuously?
2. Determine the average rate of return for Philadelphia’s trust over the 200 year period, assuming that the city spent 50,000 pounds after the first hundred years.
3. Determine the average rate of return for Boston’s trust over the 200 year period, assuming that the city spent 50,000 pounds after the first hundred years.
4. Prepare several investment scenarios to entice our prospective benefactor with trust periods of 50 years, 100 years, and 500 years, different spending and reinvestment rules, and reasonable rates of return.

Your diligence and hard work may lead the future citizenry of Tacoma to a brighter more learned future. As we are making our presentation early in November, we need your final report no later than November 5 at midnight. Communicate your consulting team members to Dr. Jennifer Quinn on or before October 17. If you would like assistance finding like-minded associates, Dr. Quinn has agreed to facilitate that process. Contact her prior to October 10 if you need assistance. Finally, a verbal progress report needs to be made prior to October 24. We look forward to your report (2.5-5 pages in length).

Every mindful of our inspirational source we leave you with this thought, “*Work while it is called today for you know not how much you may be hindered tomorrow.*”

Sincerely,

Everely Hopeful

President

The Fortunate Richard Association, Tacoma Chapter