

# Social Return on Investment Room Attendant Training Program



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## Introduction

BEST (Boston Education, Skills & Training) Corp. has been offering the Room Attendant Training Program (RATP) since 2008. The RATP is a six-week, 150-hour training that provides individuals with the skills necessary to find employment in the well-paid sector of Boston's hospitality industry, primarily as hotel housekeepers. Housekeeping is the largest classification in most hotels and the best way to enter the industry without a secondary degree. In 2016, BEST's program was registered by the Massachusetts Department of Labor as the country's first Housekeeping Pre-Apprenticeship Program.

186 participants have completed the program since 2011, with 85.5% finding new employment in the hospitality industry. Employers that are part of the Greater Boston Hospitality Employers (GBHE) network hire BEST graduates. These employers are signatories to a collective bargaining agreement with the UNITE HERE Local 26 union. Jobs at these hotels pay well and job expectations are clarified in a labor-management contract. On top of an hourly wage, employers pay an additional cost of approximately 50% of the hourly wage for a comprehensive benefits package that includes ongoing training at BEST for the Local 26 worker and his/her adult dependents.

BEST leverages this investment in incumbent worker training to secure city, state, and private funding for the RATP job seeker training. It turns out to be a very wise investment. RATP participants are unemployed and underemployed individuals who are likely to receive various benefits from the government including Medicaid (provided by MassHealth in Massachusetts) and Food Stamps (SNAP). The costs associated with providing these benefits are covered by government expenditures and, therefore, society as a whole. After finding employment within the GBHE network, the training participants receive health insurance sponsored by their new employers and no longer receive Medicaid benefits. In addition, none of the participants who found new employment continued to receive Food Stamps (SNAP).

BEST RATP graduates generally earn higher wages and salaries after placement, which generates additional tax revenue paid to the state, local, and federal government. This additional social benefit can be calculated to demonstrate the monetary value to society of the training program. This report will demonstrate the social benefit and return on investment of the RATP offered by BEST.

The surveying methodology employed to complete this analysis is relatively straightforward. The training program participants provided the information used in the calculations. Prior to beginning the training program, participants provide documentation of their current family financial situation as well as their personal income and other relevant information. After participants complete the program, the career coaches, who assist them in finding employment, perform regular check-ins with participants to determine job retention for placements. Career coaches also request a copy of each placed individual's first pay stub to confirm the hourly wages earned. BEST confirmed the job status of all program participants using data from the GBHE Trust Fund, who manages the Local 26 benefit plan. Through their data, we can cross-check whether or not a participant is still working at a partner hotel.

## Summary of Results

**\$5,294,572** in total social benefit savings for new participants from 2011 – 2016

- Calculation includes the following factors:
  - Government spending for unemployed and low income employees
    - \$3,543,998 of savings for Medicaid provided by MassHealth
    - \$544,317 in savings for Food Stamps (SNAP)
  - \$1,206,258 in additional tax revenue generated through new employment
- Calculation does not include:
  - Future savings associated with participants; only real savings to-date are captured

**678%** return on investment

- Based on initial funding requirements of \$4,200 per participant
- \$781,200 cost for 186 participants

**186** individuals participated in the Room Attendant Training Program since 2011

- Prior to completing the training program
  - 64 were unemployed (34.3%)
  - 66 were employed earning less than or equal to \$10 per hour (35.5%)
  - 45 were employed earning more than \$10 per hour (24.2%)
  - \$10.94 average hourly wage for those employed
  - Approximately \$2.8M in collective annual earned income
  - Only 5 individuals (2.7%) had employer-sponsored health insurance
- After completing the training program
  - 165 found new employment (88.7%)
  - 159 found new employment in the hospitality industry and receive a comprehensive benefit package, with employer-sponsored health insurance (85.5%)
  - 25 were unemployed (13.4%)
  - 5 were employed earning less than or equal to \$10 per hour (2.7%)
  - 156 were employed earning more than \$10 per hour (83.9%)
  - \$16.91 average hourly wage for those employed
- Approximately \$4.4M in collective annual earned income
- Average hourly income (for those employed) rose from \$10.46 to \$16.74 (60% increase)
- Retention rate 83% of Room Attendant graduates placed at partner hotels between 2011 and 2016 are still working there today.

## Methodology

There are four main factors considered when calculating the social benefit of the Room Attendant Training Program. In the subsequent sections, the methodology for each specific element of the calculation will be discussed.

*1. Cost to society of the participants:* 34.3% of participants were unemployed prior to participating in the program, and were therefore eligible to receive various government benefits, including Medicaid provided by MassHealth and Food Stamps (SNAP). Many of those who were employed before entering the training program had a household income low enough to maintain eligibility for both of these government assistance programs.

*2. Tax revenue collected by state, local, and federal agencies:* Individuals pay state and federal taxes on their earned income. Low income earners typically spend a large percentage of their income, thereby contributing to sales taxes as well. The additional tax revenue generated from the increased incomes of program participants can be considered a savings to society because it offsets the costs for others who are the beneficiaries of social programs.

*3. Historical data of Room Attendant Training Program:* BEST has been running the Room Attendant Training Program for approximately six years. For the purposes of this analysis, and to provide the most accurate and up-to-date information possible, we used only data from participants who started the program from January 2011-July 2016. To appreciate the value of the program, not only as a static figure, but to also demonstrate its long-term benefits, projected future earnings for participants should be considered. Since it is difficult to project these earnings, they are not included in this analysis; only actual savings through September 2016 are considered. Hence, please note that any savings noted here are real savings to date and that these savings most likely are significantly lower than total savings which will be realized in the future for participants who have already graduated from the program.

*4. Job retention rates:* Of the participants who are placed in hotel jobs, some retain their first position; others do not, but instead they find employment at another hotel. Still others do not retain their first position and never re-enter work in the hospitality industry. For this reason, it is important to have a method for determining, on average, how long an individual has been employed by their first employer. Additionally, for individuals who do not retain their first position, it is important to determine the percentage who find new employment at a comparable hotel with a collective bargaining agreement.

Data collection occurs at a few separate stages in the program. When an individual is accepted into the program, they provide general information and documentation about their current employment situation including hourly wages, average number of hours worked per week, family size, total household income, and any social benefits they are receiving. After completing the program, the participant provides the same data regarding their newfound employment, if applicable. From this data, the change in costs to society before and after the Room Attendant Training Program can be calculated. Several follow-up phone calls are also made at specific time intervals to determine the employment situation of each participant for the purposes of

**Any savings noted here are real savings to date and these savings most likely are significantly lower than total savings which will be realized in the future**

calculating retention. For this analysis, BEST was able to use data provided by the GBHE Trust Fund, who manages employee benefits, to triple check whether a BEST graduate is still, indeed, working at a particular hotel.

Finally, all of this information is used collaboratively with initial funding and cost per student data to calculate the return on investment for each dollar spent on the Room Attendant Training Program.

## Medicaid Calculation

At about 82.8%, Massachusetts has the highest rate of Medicaid coverage for eligible citizens in the country. This translates to a high cost to the state and federal governments, who are providing this coverage. Using federally mandated eligibility requirements and information provided by program participants, specifically family size and household income, it is possible to determine if the family qualifies for Medicaid insurance coverage provided by MassHealth. By helping participants find employment at hotels with comprehensive health insurance benefits, like the Greater Boston Hospitality Employers (GBHE) hotels, these costs are greatly reduced.

### *Medicaid Eligibility*

Adults in Massachusetts qualify for Medicaid if their household income is at or below 133% of the poverty line; children under the age of 18 qualify if their household income is at or below 150% of the poverty line. The poverty line varies, dependent upon family size and is displayed in the chart below:

Household Size	100%	133%	150%
1	\$11,670	\$15,521	\$17,505
2	\$15,730	\$20,921	\$23,595
3	\$19,790	\$26,321	\$29,685
4	\$23,850	\$31,721	\$35,775
5	\$27,910	\$37,120	\$41,865
6	\$31,970	\$42,520	\$47,955
7	\$36,030	\$47,920	\$54,045

Household income before intake to the Room Attendant Training Program is reported for each family with a member participating in the program as a range: \$0 - \$21,000, \$21,001 – \$28,000, \$28,001 - \$35,000 and so on. For simplicity purposes, we assumed that families' actual income fell at the mean value of the income range.

The estimated household income mentioned above is compared to the Medicaid eligibility income according to household size to determine if the adults and/or children in the household qualify for Medicaid. If the household estimated income is less than the established Medicaid eligibility lines, it is assumed the family qualifies.

**Example:**

**Medicaid Eligibility of Family**

Adults in household: 2

Children in household: 2

Household income range reported: \$28,001 - \$35,000

Estimated household income: \$31,500.50

Medicaid eligibility income requirement

133% for adults: \$31,721

150% for children: \$35,775

*Assumption: When using an estimated household income of the mean of the reported income range, all four members of this household would be eligible to receive Medicaid.*

However, because family income is reported as a range rather than an absolute value, we acknowledge that it is not always possible to tell if a family falls below the necessary poverty line to receive benefits; most families probably aren't earning exactly the mean of their reported income bracket. For instance, using the example above, if the family made more than \$31,721, all family members would actually not be eligible for Medicaid. There is no way to be certain that the family falls below the poverty line, however they may, and that needs to be taken into account to fully appreciate the social benefits of this program. In order to address this concern, there is a formula used to calculate an appropriate estimate for the costs.

For example, a family of four that reports that their household income is \$21,001 - \$28,000 can easily be over the poverty line of \$23,850. The range between the low and high point in the income bracket is \$6,999 and the difference between the low point and the poverty line is \$2,849.  $\$2,849 / \$6,999$  is 40.71%, and we assume that this is the percentage of families of four within the \$21,001 - \$28,000 income bracket that are below the poverty line (we consider that we can reasonably assume that incomes are approximately equally distributed within the income bracket). So, we calculated the cost for Medicaid insurance coverage for every family of four that reported a household income of \$21,001 - \$28,000 and then multiplied that total by

40.71%; the resulting figure accurately represents a strong estimate of the actual costs of Medicaid insurance for that group of people.

The same formula was applied to all family sizes and all household income levels. The final calculation was to determine what individuals and families were no longer receiving benefits and thereby saving money for society. Those individuals that found employment at hotels with

**Those individuals that found employment at hotels with a collective bargaining agreement (CBA) are receiving health insurance for their entire family for \$12 a week; for an individual, it is \$4 a week.**

a collective bargaining agreement (CBA) are receiving health insurance for their entire family for \$12 a week; for an individual, it is \$4 a week. So any participant that ended up at a hotel with a CBA is no longer receiving any government assistance for paying for healthcare.

To calculate the actual savings to Medicaid, and not simply who is eligible, the following method was used. The average cost for an adult to be insured through Medicaid is \$5,283 per year and for a child it is \$3,590. It is estimated that approximately 82.8% of adults that are eligible for Medicaid in Massachusetts are actually covered and 97.0% of children that are eligible are covered. It is reasonable to assume that those eligible individuals that have participated in the Room Attendant Training program were covered at that same rate as the

general public. Based on this assumption, the cost for each individual eligible for Medicaid was calculated as 82.8% of \$5,283, which is \$4,374 and for children it was calculated to be 97.0% of \$3,863, which is \$3,482.

In some cases, the participant provided a family size but there was no indication as to whether or not that consisted of children or a spouse. For a family of four, it is a given that at least one of the individuals is an adult and two are children. The question arises as to whether or not they have a spouse, or are a single parent with three children. In this situation, the unknown is calculated as the average between the costs for a child and an adult. This way we can assume that we are covering both potentials in a reasonable way.

**Example:**

**Average family composition**

Family Size: 4

1 adult: \$4,374

Potential for one spouse or child:  $(\$4,374 + \$3,482) / 2 = \$3,928$

2 children:  $\$3,482 \times 2 = \$6,964$

Total cost for Medicaid insurance for a family of four in MA:

$$\$4,374 + \$3,928 + \$6,964 = \$15,266$$

This figure is then multiplied by the expected percentage of households under the poverty line for the household income range that was indicated at the initial data collection survey. In this way, we are able to determine a statistically likely cost for Medicaid insurance coverage for a family of four in the economic position that was indicated.

**Example:**

**Final Calculation**

Family Size: 4

Household income: \$21,001 - \$28,000

Expected percentage of families that size earning under the poverty line: 40.71%

Cost of Medicaid insurance for a family of four in MA: \$15,266

Calculated costs of Medicaid insurance for a family with these reported demographics: \$6,215

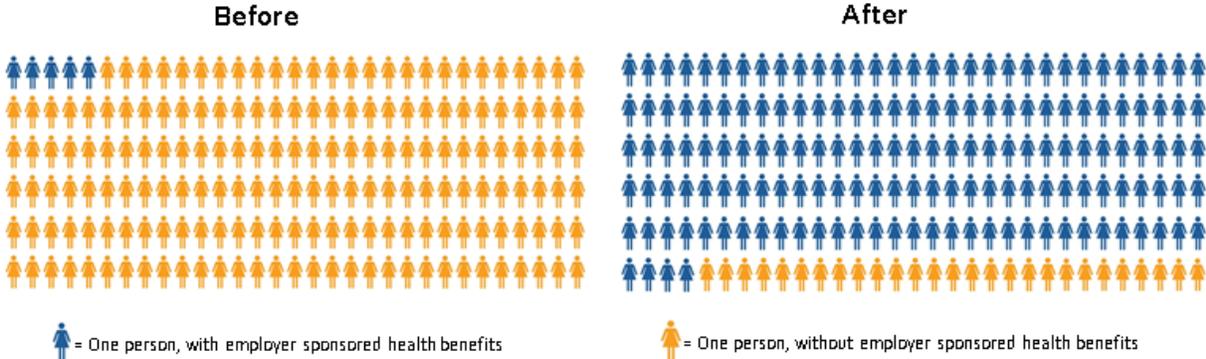
These costs can be applied to all children and adults in eligible households; however, only households in which the participant is placed in a GBHE hotel are utilized to calculate the savings to society. Individuals who are not placed in a GBHE hotel but who earn enough after the program that their household no longer qualifies for Medicaid may still be able to receive subsidized health insurance. Because we cannot be sure of the type of health insurance purchased by this population, they are not counted in the savings to society.

The estimated Medicaid savings per year for each participant working in a GBHE hotel is then multiplied by a yearly multiplier, described in the 'Retention Rate and Time Frame' section below, to account for the total length of time in the evaluation period and job retention.

It should be noted that in Massachusetts, Medicaid costs are paid 50% by the federal government and 50% by the state government. For this reason, savings must be attributed to both the federal and state government. For the purpose of this analysis, savings to the federal and state governments will not be identified independently.

Based on the calculations outlined above, the total savings to society for all households that are no longer utilizing Medicaid is approximately \$3,543,998.

**Figure 1. The number of people receiving comprehensive, employer sponsored health benefits before and after the program**



## Other Social Services

In addition to qualifying for Medicaid, many low-income households receive other forms of government sponsored assistance. At intake, participants were asked to identify benefits they receive, including: Temporary Assistance for Needy Families (TANF), Transitional Assistance for Families with Dependent Children (TAFDC), SNAP (Supplemental Nutrition Assistance Program - Food Stamps), Supplemental Security Income (SS) and Social Security Disability Insurance (SSDI), Veterans' Benefits, or Unemployment Benefits. Costs for these programs vary on necessity, usually calculated by comparing family size with household income.

Conveniently, for the purposes of calculating costs, only benefits for those participants who actually received placements and are no longer eligible, thereby demonstrating a savings, need to be calculated. The additional services received by individuals who gained new employment after the program were Food Stamps. For this reason, the calculations associated with Food Stamps are the only ones necessary to calculate these savings.

### ***Supplemental Nutrition Assistance Program (SNAP - Food Stamps)***

Food Stamps is the only benefit that program participants indicated receiving. Because information was provided voluntarily, unlike the Medicaid information in the previous section, only a calculation determining costs, not eligibility, is needed.

**From 2011 to 2016,  
approximately  
\$544,317 in Food  
Stamps associated  
costs are saved.**

The majority of those who indicated receiving Food Stamps found new employment after participating in the training program, which increased their household income to a level at which they were no longer eligible for Food Stamps, saving those costs. The cost is approximately \$133 for each family member receiving Food Stamps each month. With the information provided by the participants regarding family size, it is possible to calculate the total costs associated with providing Food Stamps to these participants.

#### **Example:**

##### **Annual Food Stamps Family Costs**

Family Size: 4

Cost to provide Food Stamps per person each month: \$133

4 people x \$133 per person = \$532 in Food Stamps savings each month

\$532 in Food Stamps costs each month x 12 months = \$6,384 in Food Stamps cost per year

Based on these calculations, it was demonstrated that, from 2011 to 2016, approximately \$544,317 in Food Stamps associated costs are saved.

## Additional Tax Revenue Generated

After completing the Room Attendant Training Program, BEST career coaches assist each participant with finding a job in the hospitality industry, usually as a room attendant in a GBHE hotel. By mid-2016, GBHE room attendants were earning \$20.28 per hour and were offered employer sponsored health insurance as part of a benefit package worth approximately \$9.54 per hour. With effectively all participants earning higher wages and annual salaries, there is also an increase in tax revenue generated for the state, local, and federal government. Tax revenue pays for the social programs that many low-income individuals and families may receive. To fully calculate the return on investment for the Room Attendant Training Program, it is necessary to calculate the additional tax revenue that is generated at these new jobs.

**The total annual salary, the annual salary increase for the participant, and the percentage of income contributed to taxes are all key components of determining this figure.**

There are several important factors that are necessary for this calculation. The total annual salary, the annual salary increase for the participant, and the percentage of income contributed to taxes are all key components of determining this figure.

### *Annual Salary and Annual Salary Increase*

Upon obtaining new employment, participants provide a pay stub detailing their paid hourly wage and the number of hours that they work each week. BEST staff members also perform quarterly check-ins with each participant, during which they discuss participants' current employment status. Many participants, specifically those who found employment at GBHE hotels, are now earning significantly more per hour than they were when they first started at their positions. There are a few reasons for this. In the collective bargaining agreement, there are required annual wage increases for all GBHE employees. As an acknowledgment of BEST's value-add in screening and training services, most GBHE hotels hire Room Attendant Training Program graduates at the full union rate. However, those who are hired at 70% of the full union rate begin earning the full rate within six months to one year of their hire date. For the purposes of this analysis, the wage from the most recent quarterly check-in is used as that participant's current hourly wage. This figure fairly represents an average wage for each participant, although typically higher than the placement wage, it does not account for union mandated wage increases, which would be included in a future projection. Also, many participants only earned their initial placement wage for a short period of time before being bumped up to full union salary.

According to BEST career coaches, many of whom have experience in Human Resources at hotels, hospitality workers in their first years of employment, and sometimes extending beyond that timeframe, may be seasonal employees. Many new (low seniority) hotel employees work

**Example:**

**Annual Salary of Average Program Participant (2016)**

After hourly wage: \$20.98 per hour

After hourly hours worked per week: 40

$\$20.98 \text{ per hour} \times 40 \text{ hours per week} = \$839.20 \text{ per week}$

$\$839.20 \text{ per week} \times 38 \text{ weeks} = \$31,889 \text{ new annual salary}$

approximately 38 weeks out of the year, with the winter months off. When calculating their yearly earnings, the hourly wage is multiplied by the average hours per week and then again, by 38 weeks a year. This provides a fair calculation for annual salary for each program participant.

This new annual salary is compared versus the family's pre-intake annual salary (which was estimated to be the mean of the income range they reported at intake, as mentioned prior) in order to calculate each family's annual salary increase due to the program.

Many participants were unemployed when beginning this training program. It is apparent that they are motivated individuals, however, so it is unfair to assume that all individuals who were unemployed before beginning the program will remain unemployed for the entire length of time considered by this analysis. For this reason, all unemployed individuals' families were allocated to the \$0 - \$21,000 income range and assigned the mean value of the range as their estimated family income pre-intake.

***Tax Rate***

The final piece of information necessary to determine the additional tax revenue generated by program participants at their new jobs is the actual percentage of their income that is paid in taxes. The US tax code is well known for being overly complicated; however, there are certain resources available that provide an estimate for the percentage of earned income contributed to taxes based on household income. The calculation here will combine two of these estimates, one for federal income tax and the other for state and local tax contributions, in order to determine what the tax rates should be for program participants.

First, the Massachusetts Budget and Policy Center provides calculations for the aggregated percentage of tax contributed to the state and local government based on household income. It demonstrates that although most low-income individuals do not contribute very much in personal income tax, they do contribute to taxes in other ways. One way is by paying a larger percentage of their income in sales taxes on purchases that they make. The table below

documents this information and demonstrates the aggregate percent applied to each household income level.

Second, the Tax Policy Center, which is a collaboration of the Urban Institute and the Brookings Institution, developed a calculation that estimates the percentage of income contributed to federal taxes. Again, it is demonstrated that lower income households contribute very small amounts to the federal income tax and, in certain circumstances, receive money back in the form of an Earned Income Tax Credit. This study takes this into account and provides a figure for the individual tax contribution, as a percentage of total household income.

<b>Household Income Level</b>	<b>State and Local</b>	<b>Federal</b>	<b>Total Tax Contribution</b>
\$0 - \$10,000	9.5%	1.5%	11.0%
\$10,001 - \$20,000	9.5%	1.0%	10.5%
\$20,001 - \$30,000	9.3%	5.7%	15.0%
\$30,001 - \$40,000	9.3%	9.9%	19.2%
\$40,001 - \$50,000	9.4%	12.4%	21.8%
\$50,001 - \$75,000	9.4%	14.9%	24.3%

With the estimated household income, annual household income increase, and total tax contribution calculated for each program participant, we can calculate the additional tax revenue generated as a result of new employment. It is important to calculate the additional tax revenue generated by calculating the tax revenue generated for the entire household before participation in the program and then subtracting it from the tax revenue generated from the entire household after finding new employment. Many program participants experienced a wage gain large enough to move their household through several of the household income levels in the chart above. For this reason, the respective tax rates are applied to the different annual salaries reported by each individual before and the average annual salary after program participation. The new tax rate has an effect on the taxes contributed for all wage earners in that household. This analysis ignores other wage earners because we do not have access to this data.

### Example:

#### Total Tax Increase After Program Participation

Before household income range: \$21,001 - \$28,000

Estimated annual household income, pre-intake: \$24,500

Average annual household income, post-program: \$31,886

\$24,500 household income → 15.0% of income contributed to state, local, and federal taxes (see chart above)

$\$24,500 \times 15.0\%$  in tax contributions = \$3,675 in annual household tax contributions

\$31,886 in new household income → 19.2% of income contributed to state, local, and federal taxes (see chart above)

$\$31,886$  new household income  $\times 19.2\%$  in tax contributions = \$6,122 in after program household tax contributions each year

$\$6,122$  in after program tax contributions - \$3,675 in prior tax contributions = \$2,447 in additional annual household total tax contributions generated

These calculations reflect the additional tax revenue generated for all three levels of government for one year. For each year the participant remains active as an employee at his or her placement, or in a comparable position, their household will contribute this much in additional tax revenue.

## Retention Rate and Time Frame

**Participants who found employment in the earlier years have demonstrated greater savings to society simply because they have continued working, and contributing to society, for a longer period of time.**

The Room Attendant Training Program has been providing program participants with the skills, training, and network necessary to find good employment in the hospitality industry since 2009. This analysis focuses on the outcomes produced in the previous thirteen program cycles, going back to the beginning of 2011. All other calculations in this analysis focus on a period of one year. This time frame makes the most sense when considering factors like annual salary, which is generally reported as a product of a single year. However, participants who found employment in the earlier years have demonstrated greater savings to society simply because they have continued working, and contributing to society, for a longer period of time; this should be considered in the final calculations.

Program participant retention in their new positions must be

considered as well. It is one thing for them to get placed in a new position, but it is another thing to continue to be employed at that same job two years later. Turnover rates are relatively high in the hospitality industry, but program participants have demonstrated high rates of retention. This fact is important both for employers, who face significant costs when finding new employees, and for program participants themselves who have demonstrated their motivation and ability to maintain good careers.

These are two important statistics that, after being measured, are both part of a formula to calculate an individualized yearly multiplier for each participant. The yearly multiplier is multiplied by the individual results for each participant's social benefit calculations in order to determine the entire savings to society over the given period of time.

## Retention Rate

After placement, each program participant is contacted every three months by a BEST employee for a quarterly check-in for at least two years. During these conversations, participants are asked about their current work status including whether or not they are still employed, how much they are making per hour, and how many hours they are working per week. According to these check-ins, many of the participants are still employed at their first job placements. A few, however, left those jobs and found comparable positions elsewhere. Fewer still are no longer working at all.

From these quarterly check-ins and by cross-checking with data from the GBHE benefits provider, it is apparent that those with the highest retention rates are those who found the best placements. 83% of those finding employment after the training program were still employed during their most recent quarterly check-in. Not only does this training program provide opportunity for a new job, it provides participants with in-demand skills sets that prepare them for a career.

The retention rate percentage does not directly impact the initial calculations because every calculation for each participant is done individually and they only reflect the length of time each participant was employed. However, it does have an effect when extrapolating into the future. Calculating the retention rate for the future is impossible, which is why we chose not to project savings into the future; however, we believe that based on the strong retention rates shown by our participants, the savings to society will continue to grow exponentially in the future as we graduate more participants from our programs and they stay employed by GBHE employers long-term.

**Turnover rates are relatively high in the hospitality industry, but program participants have demonstrated high rates of retention.**

## Time Frame

Over 50% of the program participants from the beginning of 2011 have been employed at their initial placement jobs for over three years. Participants placed more recently are also

overwhelmingly still employed; however, because they have not been employed as long as those placed in 2011, more recent participants have not yet reached a higher earning potential. The cutoff date for determining potential earnings is December 31, 2016. The yearly multiplier will first reflect the length of time between each program participant's first day at his or her new job and December 31, 2016.

**Example:**

**Number of Years Employed (Yearly Multiplier)**

Participant job start date: 4/25/2011

Cut-off date: 12/31/2016

$12/31/2016 - 4/25/2011 = 2,077$  days between these two dates

$2,077 / 365 = 5.69$  years employed

If the program participant lost his or her job and did not find a comparable position, such as another position at a GBHE hotel, then the cutoff date is the last day working at their original placement.

**Example:**

**Participant job start date: 4/1/2013**

Termination date: 6/15/2013

$6/15/2013 - 4/1/2013 = 1,163$  days between these two dates

$1,163 / 365 = 3.19$  years employed

## Findings in Detail

### *Population Demographic Changes*

Many of the placed program participants are now part of a different economic bracket than before the participation. Most of them earn a higher hourly wage which translates to greater annual income. Many are no longer eligible for the same social services as before. More, still, are employed by Greater Boston Hospitality Employers (GBHE) and receive a very comprehensive, and low cost, health insurance package, meaning they no longer require Medicaid, regardless of their new income.

### *Finding New Employment*

The fundamental purpose of the Room Attendant Training Program is to provide participants with new, quality employment. The foundation of a strong career with a family sustaining wage is achieved by many, and this is an important outcome metric for determining the success of the program as a whole. From 2011 through 2016, there were 186 program graduates. 159 of them, who represent 85.5% of the population, found new employment as a result of the training program with good hourly wages and excellent benefit packages.

From 2011 through 2016, there were 186 program graduates. 159 of them, who represent 85.5% of the population, found new employment as a result of the training program with good hourly wages and excellent benefit packages.

### *Wage Increases and Additional Hours Worked*

Measuring the change in average hourly wages for participants is not necessary for calculating the social return on investment; however, it is an important statistic to measure and track as an independent evaluation metric.

One of the defining elements of the Room Attendant Training Program is its focus on ensuring that participants are placed in well-paid jobs. Most program participants work at positions for higher hourly wages after the program than before. Higher hourly wages are one of the primary motivating forces for participants enrolling in the training program.

Measuring the change in average hourly wages for participants is not necessary for calculating the social return on investment; however, it is an important statistic to measure and track as an independent evaluation metric.

A breakdown of statistics of the program by year can be found below.

Year	Average Wage at Intake	Average Wage after Training	MA Minimum Wage	Average Wage at Intake as % of MA Minimum Wage	Average Wage after Training as % of MA Minimum Wage
2011	\$ 8.72	\$ 14.66	\$ 8.00	109%	183%
2012	\$ 9.01	\$ 14.85	\$ 8.00	113%	186%
2013	\$ 9.39	\$ 15.28	\$ 8.00	117%	191%
2014	\$ 10.24	\$ 17.47	\$ 8.00	128%	218%
2015	\$ 12.09	\$ 18.91	\$ 9.00	134%	210%
2016	\$ 13.20	\$ 18.87	\$ 10.00	132%	189%

As is mentioned several times throughout this report, a large majority of the program participants who were placed are employed by GBHE hotels, where the starting pay for room attendants is currently set at more than \$20 per hour.

It is important to note that these averages are only measuring the wages of the program participants who were employed at either stage of the process, before or after training. This average does not include those who were unemployed at either stage.

Another contributing factor to annual salary is the number of hours worked each week. Many individuals working in low wage positions only work part time. Prior to participating in the program, employed participants were working an average of 34.99 hours per week. After completing the program, participants who were employed worked an average of 38.6 hours per week. When combined with the hourly wage increases, this results in a large addition to total annual salary for program participants.

**After completing the program, participants who were employed worked an average of 38.6 hours per week. When combined with the hourly wage increases, this results in a large addition to total annual salary for program participants.**

### ***Social Services Dependency***

The majority of the savings from the Room Attendant Training Program result from removing participants' dependency on social service programs, specifically Medicaid and Food Stamps. The cost to provide these benefits is very high and reducing the necessity for them is financially beneficial for all levels of government.

**48 program participants were initially receiving Food Stamps from the government, and 39 of them found new employment removing their eligibility for the program.**

To determine eligibility for Medicaid, a formula was developed to determine whether or not a household's income was below the 133% of the poverty line threshold. Children of families earning below 150% of the poverty line are also eligible. For a more detailed description of the formula developed for determining eligibility, as well as how the costs for providing the service were calculated, please see the section 'Medicaid Calculation', on pages 6 through 9. Overall, \$3,543,998 in Medicaid savings was realized between 2011 and 2016 due to the BEST's Room Attendant Training Program.

Food Stamps was the only other benefit that was indicated by program participants as being received by participants who found new positions. 48 program participants were initially receiving Food Stamps from the government, and 39 of them found new employment removing their eligibility for the program.

## Social Return on Investment

The social return on investment statistic demonstrates the value of the Room Attendant Training Program based on the initial cost of providing social services and the savings to society generated. As a result of participating in the training program many individuals gain new employment with higher wages, are less likely to depend on social services, and generate additional tax revenue. The methodologies and calculations from the sections above indicate the savings to society for the training program, and the following sections will put those savings into perspective by comparing them to the initial costs of the Room Attendant Training Program.

### *Cost for Providing the Program*

In order to put into perspective the savings that are a result of the program, the initial cost for program services is the other piece necessary for the final equation. As one might speculate, there are many costs associated with providing comprehensive services to program participants. The funding for these projects has historically been provided by grants from various funding agencies, including the City of Boston Office of Workforce Development, the Commonwealth of Massachusetts, SkillWorks, and English for New Bostonians.

There are several necessary expenses for the full-time training program, including classroom space, instructors, administrative staff, career coaches to assist participants in finding jobs after completing the course, and specialty trainers who focus on topics such as ergonomics and housekeeping skills. Additionally, significant funds are required to run comprehensive screening processes to select program participants. Only one in ten applicants is ultimately approved for the program. Based on these factors, BEST has calculated, during a separate analysis, that the cost for providing the Room Attendant Training Program is \$4,200<sup>1</sup> per participant. This takes into account all of the costs associated with the training program, including outreach and screening, administration, and documentation costs. Even though staff may not be working directly with the program participants to provide training, they are working toward the final goal of providing a committed group of individuals with these skills.

#### **Calculation:**

*Cost to provide training: \$4,200 per participant*

*Total number of participants: 186 participants*

*\$4,200 per participant x 186 participants = \$781,200 to provide training*

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<sup>1</sup> The cost of the training program has increased over the years, but for the purpose of this report, we've used this average.

### ***Social Return on Investment Calculation***

A social return on investment takes into account several factors to demonstrate the value of the training program as measured by the benefits it produces. This particular methodology is focused on the savings to society as a result of moving people off of government sponsored benefit programs, such as Medicaid or Food Stamps, and simultaneously generating additional tax revenue from their new, higher paid employment.

**This means that for every \$1.00 invested in initial training costs for these program participants, \$6.78 in savings is generated for the state, local, and federal governments.**

By comparing the resulting savings to society from the training program to the cost of providing the program, one can calculate the social return on investment of this training program. The higher the social return on investment, the greater the effect the training program has on savings for the state, local, and federal levels of government.

To calculate the social return on investment, one must divide the savings resulting from the training program by the initial investment, the cost associated with providing the training.

#### **Calculation:**

*Savings resulting from MassHealth: \$3,543,998*

*Savings resulting from additional tax revenue: \$1,206,256*

*Savings resulting from Food Stamps: \$548,845*

*Total cost for training 186 program participants: \$781,200*

*$\$3,543,998 + \$1,206,256 + \$548,845 = \$5,299,100$  in total savings to the government*

*$\$5,299,100$  in savings /  $\$781,200$  initial investment = 6.78 return on investment*

*$6.7366 = 673.66\%$  social return on investment*

The final calculated social return on investment is 678%. This means that for every \$1.00 invested in initial training costs for these program participants, \$6.78 in savings is generated for the state, local, and federal governments.

## Conclusion

The Room Attendant Training Program, provided by BEST Hospitality Training, has had a substantial social impact on many residents in the Boston community. With a return on investment of 678%, new enrollments saved society over \$5.3 million from 2011-2016. 186 individuals have participated in the training program in this period of time and are now consistently contributing more to society in the form of increased tax. Assuming these individuals remain employed at comparable jobs in the hospitality industry, their contributions and savings to society will persist.

The costs to the government have decreased, and the tax revenue generated by participants' new incomes has increased. These are important characteristics of an impressive and successful workforce development program.

It has also been demonstrated, through this study and others, that employees who are paid more and have better working conditions take more pride in their work and are more likely to be retained. The hotels at which the Room Attendant Training Program participants find employment have demonstrated higher retention rates than many other hotels and other industry employers. High retention is not only a positive outcome for the employer, who will spend less money training new employees, but for the economy as a whole. Employees moving from position to position reduces the efficiency of the workforce. By training individuals for particular careers in which those individuals retain employment, the program saves employers money that would usually be spent on training costs. It is estimated that employers spend anywhere from 30%-200% of an employee's annual salary on training a new employee. These are funds which can now be reinvested elsewhere.

**With a return on investment of 678%, new enrollments saved society over \$5.3 million from 2011-2016.**

In addition to the demonstrated economic effects of this training program, the impact should also be viewed through the lens of social justice. Yes, the significant return on investment is valuable; however, it is also important to note that 186 individuals who participated in the program have been given the opportunity for a good career in a growing industry, an opportunity which they may not have had otherwise. Many program participants did not have a U.S. high school diploma, spoke English as a second language, and/or were unemployed before beginning the training program. All of these factors can limit a job-seeker's options. With the help of training and BEST's reputation among high road hospitality employers, individuals are able to gain new employment. The jobs gained by training program participants provide a very good hourly wage, often over twice the minimum wage, and comprehensive medical benefits. The recent trends have demonstrated that the rising cost of healthcare is one of the leading causes of financial oppression and bankruptcy in the United States. Gaining a job with comprehensive health benefits could, therefore, reduce the risk of an individual entering poverty and lessen their financial stress. The Local 26 benefits also include a defined variable benefit contribution plan, a further commitment and cost to the employer and a proven anti-poverty tool as workers age. A GBHE hotel worker who stays on the job for 25 years (and they do) will get over \$900 a month from this plan after retirement.

BEST's training program does more than simply train people; it takes individuals who previously faced difficulty and limited options in finding a permanent career and provides them with the skills and network necessary to find and keep good employment in the hospitality industry.

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Timothy Abbot is an M.B.A. candidate at the Wharton School of the University of Pennsylvania. Prior to business school, Tim spent five years working for Oliver Wyman, a global management consulting firm, where he managed strategic engagements for various clients within the healthcare space. Tim completed his undergraduate studies at Dartmouth College, graduating with a B.A. *cum laude* in Chemistry.

Jillian Ardrey recently graduated with her M.B.A. from MIT Sloan School of Management. While at school, she focused on how strategy and analytics intersect within technology companies and interned as a Sr. Product Manager at Amazon, but was also heavily involved in many social impact initiatives. Before school, Jillian worked in strategy at Carnival Corporation & plc and was a member of Anheuser-Busch InBev North America's premier class of their leadership training program. Jillian works as an Associate at McKinsey & Co.

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