

An Analysis of Helping Up Mission

Prepared for
Helping Up Mission

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**STRATEGIC PARTNERSHIPS
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1.0 Executive Summary

Established in 1885, Helping Up Mission is a religious non-profit organization that provides services to those experiencing homelessness, poverty, and addiction. Their Spiritual Recovery Program is a residential year-long substance abuse and addiction treatment program for men, which incorporates mental and physical healthcare, personal growth, education, employment, and relapse prevention skills. Helping Up Mission also offers overnight guest services, graduate transitional housing, and a professional intern program. Currently, Helping Up Mission serves about 500 men who are in programs of varying lengths and stages of recovery.

Helping Up Mission fills a vital need in the community by helping men experiencing homelessness and addiction manage their illnesses and develop skills to re-engage with society. However, many of these benefits are not captured nor measured. For this reason, the Regional Economic Studies Institute (RESI) and the Center for Geographic Information Systems (CGIS), both organizations within the Department of Strategic Partnerships and Applied Research (SPAR) of Towson University (TU) and collectively the Project Team, completed an impact assessment of Helping Up Mission. This study was funded through TU's Baltimore Towson University (BTU) initiative and further strengthens the partnership between Helping Up Mission and Towson University faculty and staff.

To quantify the impact of Helping Up Mission in terms of the state and local economies, RESI considered cost savings associated with participating in programming at Helping Up Mission as well as additional economic activity from being able to participate in the economy after spending time at Helping Up Mission. Results are as follows:

- Each man who participates in the program for one year produces a total savings of \$14,263 to state and county governments. This represents the combined effects of:
 - \$4,075 per person per year due to incarceration;
 - \$8,969 per person per year due to hospitalizations; and
 - \$1,219 per person per year due to homelessness.
- Each man who successfully completes the program produces a total savings of \$5,167 per year post-graduation to state and county governments. This represents the combined effects of:
 - \$1,501 per person per year due to incarceration;
 - \$3,259 per person per year due to hospitalizations; and
 - \$406 per person per year due to homelessness.
- Each man who works for one year and reallocates spending from illicit drugs to goods and services in the state economy supports a total of:
 - 1.5 total jobs,
 - \$179,101 in economic output,
 - \$52,137 in employee compensation, and
 - \$9,855 in new state and local tax revenues.

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While these dollar figures are significant, they only represent a portion of the true impact of Helping Up Mission. They in no way capture the total benefit to the man who receives treatment to be able to live his life fully, to the friends and families of the men who receive this care, nor to society at large as its members thrive.

2.0 Introduction

Helping Up Mission is a non-profit organization located on East Baltimore Street in Baltimore, Maryland.^{1,2} It is a Christian-focused organization that provides services to those experiencing homelessness, poverty, and addiction.³ Established in 1885, it has been helping members of the Baltimore community for over a century.⁴ Each year, Helping Up Mission provides 1,200 meals a day, 6,700 counseling sessions, 182,500 nights of shelter, and over 155,000 clothing or personal care items.⁵

In 1994, their flagship program, the Spiritual Recovery Program was created, which is a residential year-long substance abuse and addiction program for men.^{6,7} The program incorporates multiple areas of healthy living such as counseling, personal growth, education, employment, support groups, and relapse prevention, among others.⁸ The program works to address the physical, psychological, spiritual, and social needs of participants.⁹ Other programs offered include graduate transitional housing and a professional intern program, as well as overnight guest services.¹⁰ Currently, Helping Up Mission serves approximately 500 men who are in programs of varying lengths and stages of recovery.^{11,12}

Although they primarily serve and treat males, the organization began offering services to women in 2017.¹³ In addition, each year they send 150 underprivileged children who live in Baltimore City to weeklong residential summer camps.¹⁴ With a yearly operating budget of over \$9 million, Helping Up Mission relies on individual donors, grants, foundations, trusts, churches, and corporate sponsors to help with funding.¹⁵ Other ways to contribute include volunteering, vehicle donations, contributing clothing, toiletries, and food supplies, or implementing workplace-giving campaigns.¹⁶

¹ Helping Up Mission, Inc, "Helping Up Mission, Inc," Baltimore Business Journal, July 20, 2018, accessed April 25, 2019, <https://www.bizjournals.com/baltimore/news/2018/07/20/helping-up-mission-inc.html>.

² "Contact Us," Helping Up Mission, accessed April 25, 2019, <https://helpingupmission.org/contact/>.

³ "Our Mission," Helping Up Mission, accessed April 25, 2019, <https://helpingupmission.org/about/>.

⁴ Helping Up Mission, Inc, "Helping Up Mission, Inc."

⁵ "Our Mission," Helping Up Mission.

⁶ Helping Up Mission, Inc, "Helping Up Mission, Inc."

⁷ "Programs," Helping Up Mission, accessed April 25, 2019, <https://helpingupmission.org/programs/#spiritual-recovery>.

⁸ "Programs," Helping Up Mission.

⁹ Ibid.

¹⁰ "Helping Up Mission of Baltimore City, Inc," mightycause, accessed April 25, 2019, <https://www.mightycause.com/organization/Helpingupmission>.

¹¹ Helping Up Mission, Inc, "Helping Up Mission, Inc."

¹² "Programs," Helping Up Mission.

¹³ Helping Up Mission, Inc, "Helping Up Mission, Inc."

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ "Ways to Give," Helping Up Mission, accessed April 25, 2019, <https://helpingupmission.org/ways-to-give/>.

The work that Helping Up Mission engages in is of vital importance to the men it assists in rebuilding their lives as they recover from addiction and homelessness. However, an assessment of the impact that Helping Up Mission has upon the broader community, including Baltimore City, the surrounding counties in the metropolitan area, and the state economy, is also important to consider and quantify. For this reason, the Regional Economic Studies Institute (RESI) and the Center for Geographic Information Systems (CGIS), both organizations within the Department of Strategic Partnerships and Applied Research (SPAR) of Towson University (TU) and collectively the Project Team, completed an impact assessment of Helping Up Mission. This study was funded through TU's Baltimore Towson University (BTU) initiative and further strengthens the partnership between Helping Up Mission and Towson University faculty and staff.

This impact assessment addresses both the economic impact of Helping Up Mission's services. The economic analysis focuses on both the impact while participants are in the program as well as once participants have graduated from the program.

This report will continue as follows:

- Section 3.0 will present an overview of the literature and secondary data to contextualize further analysis;
- Section 4.0 will present an overview of demographic and workforce data provided by Helping Up Mission;
- Section 5.0 will present the methodology used in the analysis;
- Section 6.0 will present the impact assessment of Helping Up Mission; and
- Section 7.0 will conclude the report.

While this report aims to quantify the economic impact of Helping Up Mission, please note that this analysis represents a small component of the overall reach of Helping Up Mission; it in no way captures every type of impact nor the total benefits to society of Helping Up Mission.

3.0 Secondary Data and Literature Review

According to the Department of Health and Human Services (HHS), a homeless person is defined as "an individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations, and an individual who is a resident in transitional housing."¹⁷ Experts estimate that homelessness has been a problem in the United States since the colonial era with population numbers ebbing and flowing over time.¹⁸ In recent history, the United States experienced a sharp increase in the homeless population during the 1980's—mainly as a result of a shrinking low-income housing

¹⁷ National Health Care for the Homeless, "What is the Official Definition of Homelessness," accessed June 4, 2019, <https://www.nhchc.org/faq/official-definition-homelessness/>.

¹⁸ European Association for American Studies, "Kenneth L. Kusmer, Down and out, on the Road: The Homeless in American History," accessed June 4, 2019, <https://www.eaas.eu/publications/book-reviews/93-kenneth-l-kusmer-down-and-out-on-the-road-the-homeless-in-american-history>.

stock and increasing wealth disparities.¹⁹ The homeless population reflects a diverse group of individuals who are prone to suffer from a variety of mental and physical health problems.²⁰ They are also more likely to experience substance and alcohol addiction than the general population.²¹

Due to the transient and elusive nature of this population, enumerating the homeless presents many challenges. Over the years new methods for more accurately calculating the population have emerged. Since 2007, the Department of Housing and Urban Development (HUD) has conducted Point-in-Time (PIT) counts in local communities across the United States.²² According to the most recent count, approximately 552,000 individuals in the United States were experiencing homelessness over one evening in 2018—with the majority (70 percent) of the individuals counted being male.²³ At the national level, the number of people experiencing homelessness has decreased since 2007.²⁴ Maryland’s homeless population hit an all-time high of 11,698 in 2009 but has been on a general downward trend since that time.²⁵ The 2018 HUD count reported 7,100 people experiencing homelessness in Maryland, with 75 percent considered sheltered individuals.²⁶

Finding suitable shelter for homeless individuals is not the only challenge when dealing with this vulnerable sector. In particular, substance abuse has an extremely complex relationship with homelessness, as it can contribute to—and be worsened by—homelessness. Substance abuse disorders have shown to pose an increased risk for first-time homelessness.²⁷ Furthermore, a survey from 2014 revealed that substance abuse and the lack of treatment services tied for the third leading cause of homelessness.²⁸

Additionally, a lack of stable housing has been associated with higher levels of drug use.²⁹ There have been many surveys that elaborate on the intricate relationship between homelessness and substance abuse. For example, a large trial focused on smoking cessation found that more

¹⁹ Barrett Lee, “Stability and Change in an Urban Homeless Population,” *Demography* 26, no. 2(1989) 324, accessed June 4, 2019, https://www.jstor.org/stable/2061529?seq=1#metadata_info_tab_contents.

²⁰ National Coalition for the Homeless, “Substance Abuse and Homelessness,” accessed June 5, 2019, <https://nationalhomeless.org/wp-content/uploads/2017/06/Substance-Abuse-and-Homelessness.pdf>.

²¹ Ibid.

²² HUD Exchange, “PIT and HIC Guides, Tools, and Webinars,” accessed June 4, 2019, <https://www.hudexchange.info/programs/hdx/guides/pit-hic/#general-pit-guides-and-tools>.

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

²⁷ RJ Thompson, et al., “Substance-Use Disorders and Poverty as Prospective Predictors of First-Time Homelessness in the United States,” *American Journal of Public Health*, (2013):S282, accessed June 5, 2019, <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2013.301302>.

²⁸ National Coalition for the Homeless, “Substance Abuse and Homelessness,” accessed June 5, 2019, <https://nationalhomeless.org/wp-content/uploads/2017/06/Substance-Abuse-and-Homelessness.pdf>.

²⁹ RJ Thompson, et al., “Substance-Use Disorders and Poverty as Prospective Predictors of First-Time Homelessness in the United States,” *American Journal of Public Health*, (2013):S282, accessed June 4, 2019, <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2013.301302>

than 80 percent of the sample reported a lifetime history of drug abuse or dependence, and 55 percent reported a lifetime history of alcohol abuse or dependence.³⁰ In addition, one national study indicated that 95 percent of non-treatment seeking smokers endorsed a lifetime history of problematic alcohol or illicit substance use.³¹ Similarly, a study that followed 254 homeless adults over the period of a year found high incidences of positive urine tests for illicit drug use mostly as a result of crack/cocaine use.³²

Substance abuse is responsible for over \$740 billion in annual costs in the United States.³³ Yet, estimates published in the National Survey on Drug Use and Health indicate that only 13 percent of adults with a substance use disorder received treatment at a specialty facility in 2017.³⁴ According to the Substance Abuse and Mental Health Services Administration (SAMHSA), substance use disorders “occur when recurrent alcohol or illicit drug use causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home.”³⁵ Although substance use disorder (SUD) rates were lower in 2014 than in 2002, illicit drug use increased over that same time frame.^{36,37} Conversely, alcohol use disorder, which comprises the majority of SUDs, decreased from 7.9 percent in 2002 to 6.8 percent in 2014.³⁸ As of 2016, 19,048,000 adults had a SUD, with that number dropping to 18,708,000 in 2017.³⁹ The two most common reasons for lack of treatment are that individuals are either not ready to quit or they do not have adequate health insurance and thus cannot afford the associated costs.⁴⁰

Substance abuse disorders are not the only significant issues when dealing with this population. According to HUD, “mental illnesses, either by themselves or in combination with substance

³⁰ Kolawole S, Okuyemi, et al., “Smoking characteristics and comorbidities in the power to quit randomized clinical trial for homeless smokers,” *Nicotine & tobacco research : Official Journal of the Society for Research on Nicotine and Tobacco* vol. 15,1 (2013): 22-8, accessed June 4, 2019, <https://doi:10.1093/ntr/nts030>

³¹ Travis P. Baggett and Nancy A. Rigotti, “Cigarette Smoking and Advice to Quit in a National Sample of Homeless Adults”, *American Journal of Preventative Medicine*, (2010): 39(2): 168. <https://www.sciencedirect.com/science/article/pii/S0749379710003223?via%3Dihub>, accessed June 5, 2019.

³² C.S. North., et al., *Social Psychiatry and Epidemiology* (2010) 45: 1055, accessed June 5, 2019, <https://doi.org/10.1007/s00127-009-0144-z>

³³ National Institute on Drug Abuse, “Trends & Statistics,” updated April 2017, accessed June 3, 2019, <https://www.drugabuse.gov/related-topics/trends-statistics>.

³⁴ Substance Abuse and Mental Health Services Administration, “Results from the 2017 National Survey on Drug Use and Health: Detailed Tables,” Table 5.25B, Table 5.3A, accessed June 3, 2019, <https://www.samhsa.gov/data/report/2017-nsduh-detailed-tables>.

³⁵ Rachel N. Lipari, Struther L. Van Horn, “Trends in Substance Use Disorders Among Adults Aged 18 or Older,” Substance Abuse and Mental Health Services Administration (June 29, 2017), accessed June 3, 2019, https://www.samhsa.gov/data/sites/default/files/report_2790/ShortReport-2790.html.

³⁶ “Nationwide Trends,” National Institute on Drug Abuse, revised June 2015, accessed June 5, 2019, <https://www.drugabuse.gov/publications/drugfacts/nationwide-trends>.

³⁷ Lipari, Van Horn, “Trends in Substance Use Disorders Among Adults Aged 18 or Older.”

³⁸ Ibid.

³⁹ Substance Abuse and Mental Health Services Administration, “Results from the 2017 National Survey on Drug Use and Health: Detailed Tables,” Table 5.3A, accessed June 3, 2019, <https://www.samhsa.gov/data/report/2017-nsduh-detailed-tables>.

⁴⁰ Lipari, Van Horn, “Trends in Substance Use Disorders Among Adults Aged 18 or Older.”

abuse, are the most common disabling conditions among adults.”⁴¹ According to HUD, approximately 24 percent of homeless adults residing in shelters experience some mental health disorders alone, while 53.4 percent experience mental illness and/or substance abuse issues.⁴²

Homelessness results in significant social as well as economic costs, in addition to those specifically associated with substance use. The difficulty in enumerating all of the interventions necessary for dealing with this population presents challenges when trying to measure the ultimate costs of homelessness. A study by Vanderbilt University emphasizes that these costs are largely unknown because they are spread among many different agencies dealing with specific issues related to the homeless population. The goal of the study was to try to adequately quantify the economics of homelessness in Nashville, TN. The study found the following categories to be applicable when analyzing the cost of homelessness:

- Hospital costs,
- Clinic costs,
- Emergency medical services costs,
- Veterans Affairs (VA),
- Social Services (SS) costs,
- Shelter Services costs,
- Police Costs,
- Jail costs,
- Court costs,
- Addiction treatment, and
- Advocacy costs.⁴³

Homelessness is truly a public health concern and, according to experts in the field, more thorough and in-depth studies are needed to “inform public health policy and clinical interventions to reduce poverty and homelessness, as well as efforts to address substance-use disorders among homeless individuals,”⁴⁴ Adequately quantifying the costs of homelessness, particularly at the local level, can be a catalyst for developing better-targeted treatments and programming to serve this vulnerable population.

⁴¹ U.S. Department of Housing and Urban Development (2011), “The 2010 Annual Homeless Assessment Report to Congress. Washington DC: U.S: Department of Housing and Urban Development,”⁴⁷ accessed June 5, 2019, <https://www.hudexchange.info/resources/documents/2010HomelessAssessmentReport.pdf>, Accessed June 5, 2019

⁴² Ibid.

⁴³ Douglas D. Perkins, et al., “The Hidden Costs of Homelessness in Nashville: A Report to the Nashville Metro Homelessness Commission,” accessed June 5, 2019, <https://my.vanderbilt.edu/.../Costs-of-Homelessness.Final-Report.doc>.

⁴⁴ Ronald G. Thompson, et al., “Substance-Use Disorders and Poverty as Prospective Predictors of First-Time Homelessness in the United States,” accessed June 4, 2019, <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2013.301302>.

4.0 Demographic Data from Helping Up Mission Intake and Employment Placements

Since Helping Up Mission began collecting data in 2006, they have enrolled, on average, 478 men per year. These men are overwhelmingly homeless and struggling with active addiction, with almost 83 percent reporting that they were homeless prior to entering Helping Up Mission. The length of homelessness among entrants varies considerably. Some have only been homeless for one month, while others have been chronically homeless for over 60 years. The median length of homelessness is two months, as shown in Figure 1.

Figure 1: Resident Intake Characteristics (2017 to 2019)

Characteristic	Statistic
Homeless	
No	17%
Yes	83%
Chemical Dependency	
Drugs	49%
Alcohol	20%
Both	25%
None	6%
Incarcerated	
No	26%
Yes	74%
Hospitalized	
No	50%
Yes	50%
Months Homeless	
Median [Min, Max]	2 [0, 812]
Age (Years)	
Median [Min, Max]	41 [18, 86]
Age of First Use (Years)	
Median [Min, Max]	15 [1, 54]
Years of Active Drug Use	
Median [Min, Max]	17 [0, 58]
Spending per Day on Drugs (\$)	
Median [Min, Max]	\$40 [0, 1000]
Number of Months Incarcerated	
Median [Min, Max]	7 [0, 576]

Source: Helping Up Mission

Almost three quarters of admitted men have been incarcerated, with a median time served of seven months. The vast majority of these arrests have been for non-violent charges, likely

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related to their struggle with homelessness and addiction. Over 99 percent were not charged for a violent crime or arson.

Roughly 94 percent of all entrants struggle with some form of chemical addiction, with non-alcohol drugs being the most common. Heroin and cocaine are the drug of choice for almost 60 percent of all residents. Alcohol is the next most common drug of choice at 26 percent. Addiction among these men started early, with the median first use age of 15.

Despite being located in Baltimore City, Helping Up Mission has become an increasingly important provider of addiction rehabilitation to other regions. Figure 2 showcases the geographic reach of Helping Up Mission and how that reach has changed over time. Between 2006 and 2012, the majority of residents had been residing in Baltimore City, averaging 60 percent of all intakes. However, in recent years, there has been a shift from intake from the city to other regions. Between 2006 and 2019, residents from Baltimore County have risen 11 percentage points as a proportion of total intakes. There have also been substantial increases from Harford County and Prince George’s County, as well as from other regions both in and out of Maryland.

Figure 2: Place of Last Residence

Last Residence	Total Men Served, 2006 to 2019	Annual Percent Change, 2006 to 2019
Baltimore City	2,740	-16%
Baltimore County	928	11%
Anne Arundel County	359	-1%
Other	356	5%
Harford County	183	3%
Howard County	114	0%
Montgomery County	81	-1%
Carroll County	73	-1%
Prince George’s County	69	2%
Pennsylvania	62	0%
Frederick County	50	1%
Virginia	48	-1%
Washington DC	36	-1%
Delaware	23	-2%

Source: Helping Up Mission

The financial toll of addiction on entrants is evidenced by the daily amount spent on their habit, overall spending a median of \$40 per day. However, this amount varies dramatically by drug type. For example, alcohol and marijuana have the lowest amount spent of \$20 per day—a still considerably high number. Those whose drugs of choice are prescription opiates or cocaine spend the most, at \$100 and \$61 per day, respectively. A complete list is found below in Figure 3.

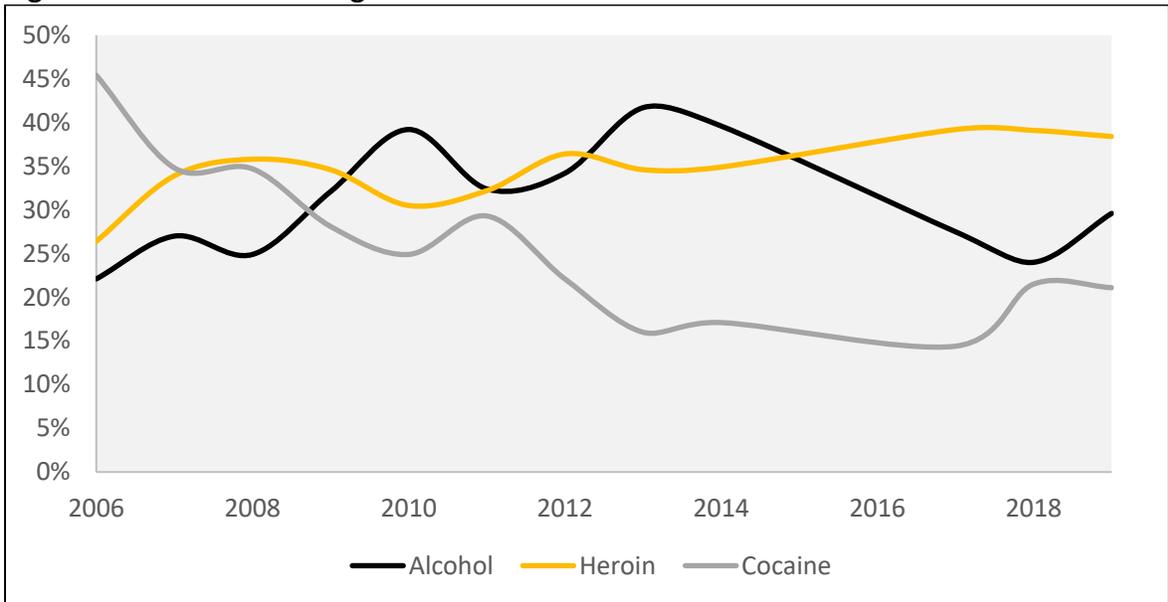
Figure 3: Dollars Spent Per Day on Addiction by Drug of Choice

	Median Spending	Number of Respondents
Alcohol	\$20	359
Benzodiazepines	\$26	10
Cocaine	\$61	290
Heroin	\$51	548
Marijuana	\$21	76
Methamphetamine	\$51	14
None	\$ 0	62
Other Prescription Drug(s)	\$25	4
Oxy/Hydro/Other Prescription Opiates	\$100	30
Spice, Molly - MDA	\$ 21	13
Overall	\$40	1,406

Source: Helping Up Mission

Most of the characteristics presented above have remained relatively consistent over time. However, the drug of choice is one variable that has varied dramatically. In the beginning years for which data are available, those struggling with cocaine addiction represented over 45 percent of entrants; as of 2019, that number has dropped to 21 percent. Heroin, as seen below in Figure 4, shows a distinct upward trend, starting at 26 percent in 2006 and rising to 38 percent in 2019. Alcohol shows substantial volatility, with a significant increase between 2010 and 2013, but overall trend remains relatively flat over time.

Figure 4: Entrants and Drug of Choice as a Percent of Total



Source: Helping Up Mission

After completing the first six months of the Spiritual Recovery Program during which significant emphasis is placed on more immediate, internally focused needs, participants gain work

experience through job placements.⁴⁵ As seen below in Figure 5, between 2014 and 2019, a total of 668 residents have been placed into jobs with a median hourly wage of \$12.80 per hour. The plurality of these placements—27 percent—are placed into construction jobs followed by the Food Service, Transportation and Storage, and Service industries.

Figure 5: Employment and Current Hourly Wages

Industry	Median Current Hourly Wage (\$2019)	Percent of Placements
Construction	\$13.20	27%
Food Service	\$11.40	14%
Transportation and Storage	\$12.90	9%
Service	\$12.70	8%
Custodial / Janitorial	\$11.10	7%
Warehouse	\$12.90	6%
Manufacturing	\$15.20	5%
Health, Counseling and Social Services	\$14.90	3%
Wholesale and Commercial Sales	\$11.80	3%
Administration and Support Services	\$12.80	2%
Automotive Service/Repair	\$15.20	2%
Hotel	\$13.40	2%
Utilities	\$15.90	2%
Arts, Entertainment and Recreation	\$11.10	1%
Finance and Insurance	\$12.90	1%
Industrial	\$17.50	1%
Professional, Technical and Scientific	\$15.90	1%
Retail	\$10.70	1%
Self-Employed	\$15.90	1%
Welding	\$16.00	1%
Barber	\$11.30	0%
Education	\$11.30	0%
Management	NA	0%
Media and Communications	\$13.70	0%
Real Estate and Rentals	\$15.00	0%
Overall	\$12.80	100%

Source: Helping Up Mission

5.0 Methodology

RESI utilized two different approaches to capture the impact of Helping Up Mission: one considered cost savings to society, while the other considered economic and fiscal impacts

⁴⁵ “Spiritual Recovery Program,” Helping Up Mission, accessed June 5, 2019, <https://helpingupmission.org/programs/#life-prep>.

associated with men who participate in Helping Up Mission and are then able to engage in the state's economy.

To estimate cost savings, RESI used an expected value approach by using data from Helping Up Mission's intake data to estimate the percent of participants who had previously been homeless, incarcerated, and hospitalized in the previous year. RESI then consulted the literature, public data sources, and, where available, the Helping Up Mission intake data to determine standardized spending totals associated with these statuses.

RESI developed three scenarios and their associated costs—before a man enters Helping Up Mission, while he is in the program, and once he completes the program. Categories in each scenario include incarceration, hospitalization, and homelessness, all of which are based on the literature, publically available data sources, and intake data provided by Helping Up Mission. The percentage of Helping Up Mission participants who indicated that they had experienced these various categories during intake was considered to be the “baseline” scenario. For the “during program” scenario, RESI assumed that no participants were homeless since they reside at the mission; hospitalization and incarceration rates were determined from the exit data provided by Helping Up Mission. For the “post-program” scenario, RESI assumed that there would be a 33 percent decrease in the likelihood that someone would be incarcerated, hospitalized, and homeless. This percent is based on estimates from previous impact evaluations of long-term residential substance abuse treatment programs.^{46,47}

RESI also calculated the median length of incarceration and homelessness in months as well as the median amount of money spent per-day on a participant's addiction. RESI chose to use median values as a measure of central tendency to account for the wide disparities in the self-reported data.

For the economic and fiscal impact analysis of a participant once he has graduated, RESI conservatively assumed that a graduate would be employed in a similar job with comparable wages to those that he received while in the program. As seen in Figure 5, participants hold positions across a wide range of industries. To estimate the impact of the “average” graduate, RESI weighted the wage data by industry. RESI then entered this weighted data into the IMPLAN input-output model to estimate the impact of a year's worth of full time wages by the average graduate. These results from the IMPLAN model represent the additional economic activity supported by the individual as he works, by his employer as they obtain supplies for the job, and as the individual purchases goods and services for his household.

⁴⁶ Michael Prendergast, et al., “Outcome Evaluation of the Forever Free Substance Abuse Treatment Program: One-Year Post-Release Outcomes,” Final Report to the National Institute of Justice, March 2003, accessed April 25, 2019, <https://www.ncjrs.gov/pdffiles1/nij/grants/199685.pdf>.

⁴⁷ Lawrence Greenfield, et al., “Effectiveness of Long-term Residential Substance Abuse Treatment for Women: Findings from Three National Studies,” *The American Journal of Drug and Alcohol Abuse*, August 2004, accessed April 25, 2019, <https://www.ncbi.nlm.nih.gov/pubmed/15540492>.

In addition, RESI considered the money that a graduate would not be spending (presumably in the black market) to purchase illegal drugs, which he would then be able to spend in the economy. RESI thus determined the median spending per day on drugs from the intake form data provided by Helping Up Mission, calculated annual spending, and inputted this value as an increase in household income, as the graduate has additional funds to spend in the economy.

6.0 Impact Assessment of Helping Up Mission

To measure the impact of Helping Up Mission, RESI calculated both cost savings estimates associated with a participant during his time at Helping Up Mission as well as the economic and fiscal impacts associated with him fully participating in the economy after graduation. While these estimates do provide a quantifiable measure of Helping Up Mission's influence, they only account for a very specific component of the full reach of Helping Up Mission. As such, they should be viewed conservatively.

6.1 Costs Savings to State and Local Governments

As discussed in Section 3, state and local governments currently expend significant dollars due to homelessness and substance abuse issues. Three of the largest categories of spending by local governments are for costs associated with incarceration, hospitalization, and providing shelter for the local homeless population. Helping Up Mission provides fiscal benefits to state and local governments by reducing required expenditures. For example, local governments fund shelters for the homeless population. During a participant's time at Helping Up Mission, the program provides housing, saving the government money.

To quantify local fiscal impacts of Helping Up Mission, RESI first considered the cost savings of Helping Up Mission under three scenarios:

- The baseline, or before a participant arrives at Helping Up Mission;
- During program, or while a participant is in the Spiritual Recovery Program; and
- Post program, or once a participant has completed his tenure at Helping Up Mission.

6.1.1 Incarceration

RESI estimated that 19 percent of Helping Up Mission participants have been incarcerated in the previous year, with a median length of incarceration of seven months. Only 2 percent are assumed to be incarcerated while in the program (as indicated by those who are dismissed from the program due to an outstanding warrant or incarceration). After the program, this percentage is estimated to be 13 percent, based on previous impact evaluations of long-term

residential substance abuse treatment programs.^{48,49} These studies estimate a roughly 33 percent decline in relapse and recidivism rates due to these programs.⁵⁰

Overall costs associated with seven months of incarceration for a single person in Maryland are approximately \$23,957⁵¹; under the three scenarios, this is an expected cost of \$4,504 under the baseline scenario (or prior to coming to Helping Up Mission), \$429 while someone is in the Spiritual Recovery Program at Helping Up Mission, and \$3,003 once someone has completed the program. These cost savings of not incarcerating someone relative to the expected cost under the baseline are \$4,075 while someone is attending Helping Up Mission and \$1,501 once someone has finished at Helping Up Mission. These statistics are presented in Figure 6 below.

Figure 6: Cost Savings to Governments From Incarceration

Scenario	Total Cost of Incarceration	Probability of Incarceration in 12-month Timeframe	Estimated Cost of Incarceration	Cost Savings Relative to Baseline
Baseline	\$23,957	19%	\$4,504	n/a
During Program	\$23,957	2%	\$429	\$4,075
Post Program	\$23,957	13%	\$3,003	\$1,501

Sources: Helping Up Mission, RESI, Various

6.1.2 Hospitalization

The total expected cost of hospitalization was estimated to be approximately \$40,402, based on the average number of emergency room and emergency room-to-inpatient hospital visits per year multiplied by the expected costs per stay for both types of visits for substance-related stays. These data were gathered from the Healthcare Cost and Utilization Project (HCUP).^{52,53}

⁴⁸ Michael Prendergast, et al., "Outcome Evaluation of the Forever Free Substance Abuse Treatment Program: One-Year Post-Release Outcomes," Final Report to the National Institute of Justice, March 2003, accessed April 25, 2019, <https://www.ncjrs.gov/pdffiles1/nij/grants/199685.pdf>.

⁴⁹ Lawrence Greenfield, et al., "Effectiveness of Long-term Residential Substance Abuse Treatment for Women: Findings from Three National Studies," The American Journal of Drug and Alcohol Abuse, August 2004, accessed April 25, 2019, <https://www.ncbi.nlm.nih.gov/pubmed/15540492>.

⁵⁰ Helping Up Mission indicates that approximately 25 percent of residents will return to the facility at some point. The 33 percent helps to capture those residents who relapse, but may be admitted to different facility or elect to discontinue treatment.

⁵¹ National Institute of Corrections, "Maryland 2016," May 08, 2018, accessed April 25, 2019, <https://nicic.gov/state-statistics/2016/maryland>.

⁵² Kathryn R. Fingar, et al., "Geographic Variation in Substance-Related Inpatient Stays Across States and Counties in the United States, 2013-2015 #245," Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality, November 2018, accessed April 25, 2019, https://hcup-us.ahrq.gov/reports/statbriefs/sb245-Substance-Inpatient-Stays-Across-US-Counties.jsp?utm_source=ahrq&utm_medium=en-11&utm_term=&utm_content=11&utm_campaign=ahrq_en11_13_2018.

⁵³ Rosanna Coffey, et al., "Emergency Department Use for Mental and Substance Use Disorders," Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality, August 23, 2010, accessed April 25, 2019, https://www.hcup-us.ahrq.gov/reports/ED_Multivar_Rpt_Revision_Final072010.pdf

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Figure 7 delineates this calculation in more detail. First, the average cost per stay for inpatient substance abuse episodes for Maryland was separated out by drug category. The report by HCUP found that the cost for an emergency room visit for opioid use was roughly 62 percent of the cost of an inpatient visit.⁵⁴ This 62 percent was extrapolated to all drug categories to get an estimate for the cost per stay for emergency department visits.

To get the expected cost per episode, the cost figures were multiplied by the proportion of Helping Up Residents who listed that particular drug as their drug of choice. This yields an estimated cost per episode of \$6,640 for emergency departments and \$10,757 for inpatient visits. This cost, however, assumes only one episode per year. The HCUP report finds that those struggling with substance abuse disorder will be admitted to an ER facility roughly 4 times per year and will end up being admitted as an inpatient one of those times.⁵⁵

Multiplying the expected cost per episode with the number of episodes per year yields the total expected cost per year of \$40,402.

Figure 7: Hospitalization Cost Calculation

	Emergency Department	Inpatient	Drug of Choice Percentage for HUM Participants
Cost Per Stay			
Cannabis	\$5,866.67	\$9,504.00	6%
Stimulants	\$6,266.67	\$10,152.00	24%
Alcohol	\$7,200.00	\$11,664.00	27%
Opioids	\$6,600.00	\$10,692.00	44%
Cost Per Episode for Average HUM Participant	\$6,640.18	\$10,757.09	
Number of Expected Episodes Per Year	4.27	1.12	
Cost Per Year for Average HUM Participant	\$28,353.56	\$12,047.94	
Total Expected Cost (Emergency Department + Inpatient)			\$40,402

Sources: HCUP, Helping Up Mission, RESI

Based on the intake data for the Spiritual Recovery Program, 24 percent of those entering the program indicated that they had been referred by a hospital, leading to an expected cost of \$9,777 under the baseline scenario.

While at Helping Up Mission, approximately 2 percent of participants receive a psychiatric or medical discharge, leading to an expected hospitalization cost of \$808 while a participant is in

⁵⁴ “Emergency Department Use for Mental and Substance Use Disorders,” Rosanna Coffey, et al.

⁵⁵ “Emergency Department Use for Mental and Substance Use Disorders,” Rosanna Coffey, et al.

the program.⁵⁶ After leaving Helping Up Mission, a participant has an estimated probability of returning to the hospital of 33 percent, based on a 33 percent reduction in the baseline as seen with relapse and incarceration rates, corresponding with an expected cost of \$6,518. These reduced probabilities during the program and afterwards lead to cost savings of \$8,969 and \$3,259, respectively. Additionally, please note that these cost savings do not account for any change in health insurance (for example, enrollment in Medicaid or a private insurer) nor the value of the health care that a participant receives while at Helping Up Mission, which could have a great impact upon and/or alleviate chronic health conditions, potentially leading to additional cost savings. Cost savings to local governments from hospitalization are presented in Figure 8 below.

Figure 8: Cost Savings to Governments From Hospitalization

Scenario	Total Cost of Hospitalization	Probability of Hospitalization in 12-Month Timeframe	Estimated Cost of Hospitalization	Cost Savings Relative to Baseline
Baseline	\$40,402	24%	\$9,777	n/a
During Program	\$40,402	2%	\$808	\$8,969
Post Program	\$40,402	16%	\$6,518	\$3,259

Sources: Helping Up Mission, RESI, Various

6.1.3 Homelessness

When adjusted for inflation into 2019 dollars, a study cited in the 2017 United States Interagency Council on Homelessness indicated that the annual cost of chronic homelessness was approximately \$8,851, which includes the cost of shelter, rental assistance, and supportive services.^{57,58} During the intake process, 83 percent of participants indicated that they had previously experienced homelessness, for a median length of two months. As such, the expected cost of homelessness prior to arriving at Helping Up Mission was estimated to be \$1,219 under the baseline scenario, reflecting the expected cost of being homeless for two months (\$1,475) multiplied by the probability of being homeless.

Since Helping Up Mission is a residential program, rates of homelessness were considered to be 0 percent while a participant is in the program, indicating no cost of homelessness during this time. After the program, the 33 percent reduction from the relapse and re-incarceration data was applied to the rate of homelessness, equating to a 55 percent probability of homelessness

⁵⁶ Note that is hospitalization rate is likely low since a number of participants will leave for other procedures (e.g., orthopedic care) but then return to Helping Up Mission. However, since this report is based on the impact due to substance abuse, it is difficult to characterize how these treatment rates differ from those without substance abuse disorder.

⁵⁷ United States Interagency Council on Homelessness, “Ending Chronic Homelessness in 2017,” accessed April 25, 2019, https://www.usich.gov/resources/uploads/asset_library/Ending_Chronic_Homelessness_in_2017.pdf

⁵⁸ Dennis P. Culhane, et al., “Public Service Reductions Associated with Placement of Homeless Persons with Severe Mental Illness in Supportive Housing,” *Housing Policy Debate* 13 (1): 107 – 163, accessed April 25, 2019, https://shnny.org/uploads/The_Culhane_Report.pdf.

post-program; this represents an expected cost of \$812. Based on these figures, the cost savings of Helping Up Mission with respect to homelessness are \$1,219 while a participant is in the program and \$406 once he has left the program. Figure 9 below outlines the costs and savings associated with local governments providing shelter for the homeless.

Figure 9: Cost Savings to Governments From Homelessness

Scenario	Total Cost of Shelter for Homeless	Probability of Homelessness in 12-Month Timeframe	Estimated Cost of Shelter for Homeless	Cost Savings Relative to Baseline
Baseline	\$1,475	83%	\$1,219	n/a
During Program	\$1,475	0%	\$0	\$1,219
Post Program	\$1,475	55%	\$812	\$406

Sources: Helping Up Mission, RESI, Various

6.1.4 Overall Cost Savings

The previous sections detailed the individual costs and savings associated with each economic element of being homeless. Figure 10 summarizes the results of this analysis.

Figure 10: Cost Savings Associated with Helping Up Mission by Scenario (\$2019)

Scenario	Incarceration	Hospitalization	Homelessness	Total
During Program	\$4,075	\$8,969	\$1,219	\$14,263
Post Program	\$1,501	\$3,259	\$406	\$4,760

Sources: Helping Up Mission, RESI, Various

Before seeking help at Helping Up Mission, the total expected cost of these men is estimated to be \$28,573 per person per year. During the program, this cost declines to \$1,237, reflecting a total savings of \$14,263. Once a man graduates from the program, the economic cost decreases, resulting in savings of \$4,760 per person per year. The savings post-graduation are lower than the savings while the participant is actively receiving services from Helping Up Mission, reflecting the unfortunate fact that some relapse occurs after graduation.

6.2 Economic and Fiscal Impact Analysis

To estimate the economic and fiscal impacts associated with a participant after he has completed his time at Helping Up Mission, RESI considered the wages associated with his employment after completing the program. Participants and graduates are employed across a variety of industries during their time in the program and after. As such, RESI modeled employment using a weighted average of the 14 most common industries and wages. RESI then entered this employment and compensation into the IMPLAN model, which estimated the additional economic activity supported by this employee, the supplies and resources he needs to do his job, and the household spending he does. Impacts are for the state of Maryland and are presented in 2019 dollars.

Figure 11: Economic Impacts Associated with Employment After Completing Helping Up Mission's Spiritual Recovery Program

	Direct	Indirect	Induced	Total
Employment	1.0	0.2	0.2	1.4
Output	\$94,906	\$28,468	\$38,545	\$161,920
Employee Compensation	\$26,976	\$8,957	\$11,076	\$47,009

Sources: Helping Up Mission, IMPLAN, RESI

As seen above, one participant from Helping Up Mission working in the construction industry after finishing the program supports economic activity that employs an additional 0.4 workers, \$67,013 in output, and \$20,034 in employee compensation. The economic impacts presented above also generate tax revenues at the state and local levels. Figure 12 presents these impacts.

Figure 12: Total Fiscal Impacts Associated with Employment After Completing Helping Up Mission's Spiritual Recovery Program

Tax Type	Amount
Property	\$2,758
Income	\$2,310
Sales	\$2,755
Payroll	\$77
Other	\$878
Total	\$8,777

Sources: Helping Up Mission, IMPLAN, RESI

State and local tax revenues supported by economic activity stemming from one participant after his time at Helping Up Mission total \$8,777. These fiscal impacts are comprised primarily of property taxes (\$2,758), sales taxes (\$2,755), and income taxes (\$2,310).

In addition, RESI assumed that money that participants had been spending on substances prior to entering Helping Up Mission could instead be spent in the market economy. As such, RESI considered the economic and fiscal impacts of a year's worth of the median daily spending on drugs instead entering the economy. The results of this analysis are presented below in Figure 13. Each man who forgoes spending money on drugs generates \$17,181 in output and \$5,128 in employee compensation.

Figure 13: Economic Impacts Associated with Reallocating Spending into the State Economy

	Direct	Indirect	Induced	Total
Employment	0.0	0.0	0.1	0.1
Output	\$0	\$0	\$17,181	\$17,181
Employee Compensation	\$0	\$0	\$5,128	\$5,128

Sources: Helping Up Mission, IMPLAN, RESI

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The economic impacts presented above also generate tax revenues at the state and local levels. Figure 14 presents these impacts.

Figure 14: Total Fiscal Impacts Associated with Reallocating Spending into the State Economy

Tax Type	Amount
Property	\$369
Income	\$199
Sales	\$374
Payroll	\$9
Other	\$127
Total	\$1,078

Sources: Helping Up Mission, IMPLAN, RESI

As shown in Figure 14, the total fiscal impacts of one man reallocating his daily spending on drugs into the economy supports \$1,078 in state and local tax revenues. At \$374 annually, sales taxes comprise the plurality of these impacts, followed by property taxes, at \$369.

When both the economic activity related to employment and reallocated money are considered, economic and fiscal impacts rise. Impacts are for the state of Maryland and are presented in 2019 dollars.

Figure 15: Economic Impacts Associated with Both Employment and Reallocated Spending

	Direct	Indirect	Induced	Total
Employment	1.0	0.2	0.3	1.5
Output	\$94,906	\$28,468	\$55,726	\$179,101
Employee Compensation	\$26,976	\$8,957	\$16,204	\$52,137

Sources: Helping Up Mission, IMPLAN, RESI

By being gainfully employed and spending money in the state economy instead of on drugs, each individual supports an additional 0.5 jobs, \$84,194 in output, and \$25,162 in employee compensation in Maryland. This additional economic activity also benefits state and local governments via increased tax revenues, as described in Figure 16 below.

Figure 16: Total Fiscal Impacts Associated with Both Employment and Reallocated Spending

Tax Type	Amount
Property	\$3,127
Income	\$2,509
Sales	\$3,129
Payroll	\$86
Other	\$1,005
Total	\$9,855

Sources: Helping Up Mission, IMPLAN, RESI

For each individual who is employed annually at the median wage of participants at Helping Up Mission and also reallocates the median daily spending into the state economy, \$9,855 in state and local tax revenues are supported. These fiscal impacts are comprised primarily of sales (\$3,129), property (\$3,127), and income (\$2,509) taxes.

7.0 Conclusion

Each year, Helping Up Mission is able to help over 478 men receive the treatment and help needed to fight substance abuse issues. Without this help, many of these men would continue struggling with addiction and homelessness. In addition to the moral obligation of society to help these men, the potential economic benefits associated with the lack of incarceration, homelessness, hospitalizations, and spending in the black market are substantial.

RESI estimates that each man who successfully completes the program produces a fiscal savings of:

- \$1,501 per person per year due to incarceration,;
- \$3,259 per person per year due to hospitalizations; and
- \$406 per person per year due to homelessness.

In addition to the cost savings associated with successful completion of the program, RESI also estimated the cost savings during the program. While in the program, each man produces a fiscal savings of:

- \$4,075 per person per year due to incarceration;
- \$8,969 per person per year due to hospitalizations; and
- \$1,219 per person per year due to homelessness.

Through an economic and fiscal impact lens, each man who successfully completes the Helping Up Mission Spiritual Recovery Program and receives a job generates 1.4 jobs, almost \$162,000 in output, and over \$47,000 in employee compensation. These newly employed members of society produce more fiscal revenue for state and local governments, with each man giving back almost \$9,000 each year they are employed.

There are also substantial benefits associated with money that had previously been spent on drugs instead entering the state economy. For instance, if the \$40 per day spent on drugs were instead to be spent on goods and services at businesses, this economic activity would support \$1,078 in state and local tax revenues over the course of a year.

In total, the economic impacts (per person per year) associated with both employment and forgone spending on drugs adds 1.5 jobs, over \$52,000 and \$179,000 in employee compensation and output, respectively. The fiscal impacts are also substantial, generating almost \$10,000 per person per year for state and local governments.

As mentioned earlier, these estimates should be viewed conservatively. A number of non-measurable impacts were not able to be captured. For example, the amenity value of the

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region is expected to increase as well. The less people there are living on the streets, the more attractive the city and region is for people looking to move in. Homelessness can be perceived to increase crime—and whether true or not, this can have a very real impact on net migration to a particular area. Programs like Helping Up Mission have the capacity to allay peoples' fears of the homeless community without criminalizing homelessness.

With these impacts and cost savings in mind, it becomes apparent that getting these men the resources they need to recover is not only the right thing to do, but there economic gains to be made. These savings not only benefit Baltimore City, but also extend to the region as well as the state as a whole.

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Appendix A—Detailed Modeling Methodology

A.1 IMPLAN Overview

To quantify the economic impact of construction and operations activity, RESI utilized the IMPLAN input/output model. This model enumerates the economic impact of each dollar earned and spent by the following: employees of the event, other supporting vendors (business services, retail, etc.), each dollar spent by these vendors on other firms and each dollar spent by the households of the event's employees, other vendors' employees, and other businesses' employees.

Economists measure three types of economic impacts: direct, indirect, and induced impacts. The direct economic effects are generated as the event create jobs and hire workers to support the event's activities. The indirect economic impacts occur as the vendors purchase goods and services from other firms. In either case, the increases in employment generate an increase in household income, as new job opportunities are created and income levels rise. This drives the induced economic impacts that result from households increasing their purchases at local businesses.

Consider the following example. A new firm opens in a region and directly employs 100 workers. The firm purchases supplies, both from outside the region as well as from local suppliers, which leads to increased business for local firms, thereby hypothetically creating jobs for another 100 workers. This is called the indirect effect. The workers at the firm and at suppliers spend their income mostly in the local area, hypothetically creating jobs for another 50 workers. This is the induced effect. The direct, indirect and induced effects add up to 250 jobs created from the original 100 jobs. Thus, in terms of employment, the total economic impact of the firm in our example is 250.⁵⁹

A.2 IMPLAN Glossary and Impact Examples

This section contains a glossary of IMPLAN terms and examples of economic impacts by type.

⁵⁹ Total economic impact is defined as the sum of direct, indirect, and induced effects.

Figure 17: IMPLAN Glossary

Term	Definition
Direct Impact	This phrase refers to an economic impact that is the result of the activity being modeled; a direct impact is when a dollar enters the economy.
Economic Impact	This phrase refers to the changes in the economy resulting from a specific event or other activity. RESI typically reports employment, output, and employee compensation impacts.
Employee Compensation	This term refers to the change in employee compensation (including all salaries and wages, as well as benefits, and payroll taxes paid by an employer) associated with the job and state GDP/output creation resulting from district activity which has been modeled in IMPLAN.
Employment	This term refers to the number of jobs supported as a result of the event or other activity which has been modeled in IMPLAN.
IMPLAN	This term refers to the input/output modeling software used to model changes in the economy in a particular region. The user builds a model based on prepackaged economic data from IMPLAN (typically at the state or county level), then enters input figures—an industry change of employment or sales, a household change of income, and/or several other input types—for the industry sectors expected to be impacted as a “scenario.” IMPLAN runs the scenario created in the model and produces the outputs.
Indirect Impact	An economic impact that is the result of supply purchases for the activity being modeled; after a dollar is spent (the direct impact), the indirect impact is when the business that was paid uses that dollar to buy supplies or materials.
Induced Impact	An economic impact that is the result of increased household income from the modeled activity; after a dollar is spent (the direct impact) and paid to an employee, the induced impact is when an employee can then make purchases because of their increased income.
Output	This term refers to the economic activity created as a result of a specific event or other activity that has been modeled in IMPLAN.

Sources: IMPLAN, RESI

As an example of the different types of impacts, consider the economic impacts associated with a doctor’s office. In this example, a doctor has just seen a patient.

Figure 18: Economic Impact Example

	Direct Impact	Indirect Impact	Induced Impact
Employment	The doctor	The stethoscope maker	A waiter
Output	Healthcare	The stethoscope	A meal at a restaurant
Employee Compensation	The doctor’s salary	The stethoscope maker’s salary	The waiter’s salary

Source: RESI

In the example above, the doctor is the direct employment impact, as she is working at the medical facility. The direct output is the care that the patient receives, and the direct employee compensation impact is the salary that the doctor receives. When treating her patient, the doctor uses a stethoscope as a “supply.” Indirect impacts are related to this stethoscope: the worker who assembles it is the indirect employment impact, the stethoscope is the indirect output impact, and the salary that that the stethoscope maker receives is the indirect employee compensation impact. Once the doctor or the stethoscope maker receive their paychecks, they can go into the local economy and make purchases. Economic activity related to these purchases is the induced effect. For example, if the doctor goes out to dinner after receiving her paycheck, the waiter is induced employment, her meal is the induced output, and the wages that the waiter receives are the induced employee compensation.

A.3 Input Assumptions

RESI determined economic impacts based on the methodology outlined in Section 5.0. Additionally, RESI’s analysis includes the following modeling assumptions:

- Economic impact multipliers are developed from IMPLAN input/output software.
- IMPLAN data are based on the North American Industrial Classification System (NAICS).
- IMPLAN employment multipliers are adjusted for inflation using the Bureau of Labor Statistic’s CPI-U.
- Impacts are based on 2017 IMPLAN data for the state of Maryland.
- Impacts are represented in 2019 dollars.
- Employment impacts include both full- and part-time employees. IMPLAN does not differentiate between full- and part-time employment.

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