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The Potential Economic and Fiscal Impacts of a Jail Diversion Program and Restoration Center for Mental Health and Related Disorders in Baton Rouge

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# **Introduction and Overview**

Local jails are typically poorly equipped to deal with mental illness and related issues. Nonetheless, individuals with mental disorders are all too often incarcerated simply due to a lack of other options. Not only do these persons fail to receive needed and adequate treatment, but are also more likely to have various complications both when in custody and after release. At the same time, incarceration is costly for communities. In response to these concerns, programs have emerged across the country which seek to offer more appropriate options for both persons suffering from mental disorders and communities attempting to provide necessary services with scarce resources.

One type of program which has been successful in a number of communities across the United States is "jail diversion." The goal is to divert individuals away from jail and into more appropriate settings for treatment. Such programs can reduce time spent in jail without increasing public safety risks, resulting in better outcomes for persons with mental disorders as well as communities.

Even as the Baton Rouge (East Baton Rouge Parish) area faces a shortage of jail space, the number of inmates with mental health conditions and related issues has been increasing due to the closure of the Earl K. Long Hospital and downsizing of state mental health facilities. More recently, the Baton Rouge General Medical Center has announced the closure of the Emergency Room (ER) at its Mid-City Campus.<sup>1</sup> Many of the indigent patients treated at that ER (often on a recurring basis) have mental health issues, and therefore the need for an alternative to treat these individuals, other than jail, is more critical than ever for the Baton Rouge area. A jail diversion program has been proposed, offering a crisis care continuum to better serve individuals in need of treatment for mental disorders and the community as a whole.

In addition to the fact that it is typically an ineffective and inappropriate means of dealing with persons with mental health concerns, incarceration is costly for the parish and jail diversion programs have consistently proven to reduce direct expenses. In addition, such an initiative can improve outcomes through more appropriate treatment and the related reduction in societal

<sup>&</sup>lt;sup>1</sup> Griggs, Ted, Louisiana Offers Alternatives to Mid City ER; Community Still Wants Emergency Care Where They Live, The Advocate, March 11, 2015, http://theadvocate.com/news/11748851-123/state-offers-alternatives-to-mid; Riegel, Stephanie, \$2M Monthly Losses Lead BR General to Close Mid City ER, Greater Baton Rouge Business Report, February 3, 2015, http://www.businessreport.com/article/18m-state-not-enough-stave-off-closure-br-general-er-losing-2m-monthly.



costs of secondary effects of mental disorders (such as disability, homelessness, and mortality) as well as fostering increased productivity.

The Perryman Group (TPG) was recently asked to examine the potential economic and fiscal benefits of a jail diversion program and treatment center in Baton Rouge (East Baton Rouge Parish). This report presents the findings from this analysis.



### SUMMARY OF FINDINGS FROM THE PERRYMAN GROUP'S ANALYSIS: A Jail Diversion Program in Baton Rouge Can Save Money, Help the Economy, and Improve Outcomes

A jail diversion program and treatment center have the potential to not only provide economic and fiscal benefits for the Baton Rouge area, but also improve outcomes for persons with mental disorders and enhance overall community well-being.

- The economic and fiscal benefits of the proposed jail diversion program stem from two primary sources.
  - Direct cost savings: Incarceration is rarely an effective treatment option for persons with mental disorders, and it is more expensive for the parish; thus, overall outlays can be reduced through a jail diversion program. Cost savings are estimated to be \$3.0 million in the first year of operation, \$8.1 million per year at maturity, a total of \$24.6 million over the first 5 years of operations, and a total of \$54.9 million over the first 10 years.
  - Improved outcomes and the reduction of secondary effects: More appropriate treatment leads to better outcomes and, hence, a reduction in societal costs of secondary effects (such as disability, homelessness, and mortality) as well as increased productivity. In addition, the reduced requirements for public resources bring additional spending capacity to the community, thus generating multiplier effects on the local economy beyond the direct cost savings noted above.

Benefits of a Jail Diversion Program for the Baton Rouge Area				
Year 1 of Operations Annually at Maturity				
\$15.9 million	\$42.4 million	\$288.7 million		
173 permanent jobs	463 permanent jobs	3,149 person-years		
	Year 1 of Operations \$15.9 million	Year 1 of Operations       Annually at Maturity         \$15.9 million       \$42.4 million		

Note: Includes effects of spending of incremental funds available due to direct cost savings as well as secondary effects of improved outcomes.

During the initial year of operations, local taxing entities would see fiscal gains (in terms of lower outlays and increased tax revenues derived from additional economic activity) of about \$3.7 million including secondary benefits, and \$9.8 million per year upon maturity. A jail diversion program would save local taxing entities significant money. In addition, any increase in economic activity (such as that stemming from incremental spending which is possible due to reduced costs and secondary benefits of a jail diversion program) generates significant incremental tax receipts through channels such as higher retail sales, increased property values, and enhanced business revenues and profits and associated taxes.



# **Mental Health Overview**

Mental illness does not discriminate by race, gender, age, or socioeconomic status, although access to treatment may vary across different demographic cohorts. Taken in aggregate, mental disorders include an array of different diagnoses ranging from depression and substance abuse disorders to more serious illnesses such as schizophrenia. According to the National Institute of Mental Health, 18.6% of American adults suffer from a diagnosable mental disorder in any given year, or about 43.7 million people when applied to current US Census population estimates.<sup>2</sup>

The National Survey on Drug Use and Health (NSDUH) reports estimates for mental health across the nation. The NSDUH indicates that an estimated 9.6 million adults in the United States (4.1%) had a serious mental illness in 2012.<sup>3</sup> In the state of Louisiana, the prevalence of serious mental illness in adults was slightly higher than the national average, equaling 4.2%. The average percentage of adults with any mental illness in the state of Louisiana (20.1%) was also higher than the national average (18.6%).<sup>4</sup>

#### Mental Health Among Inmates

The prevalence of mental health problems among prisoners and inmates in the United States is an important trend that demands attention. A study by the Bureau of Justice Statistics from 2006 showed that more than half of the prison and jail inmates in the United States had a recent history or showed symptoms of a mental health problem. Specifically, the totals included 56% of state prisoners and 64% of local jail inmates.<sup>5</sup> However, only 24% of state prisoners and 21% of local jail inmates reported a recent history of mental health problems, measured by

 <sup>&</sup>lt;sup>2</sup> National Institutes of Health. National Institute of Mental Health. *Statistics*. (2012). Retrieved February 2, 2015, from http://www.nimh.nih.gov/health/topics/statistics/index.shtml.

<sup>&</sup>lt;sup>3</sup> National Institutes of Health. National Institute of Mental Health. *Statistics*. (2012). Retrieved February 2, 2015, from http://www.nimh.nih.gov/health/topics/statistics/index.shtml.

<sup>&</sup>lt;sup>4</sup> US Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. *National Survey on Drug Use and Health:Model-Based Prevalence Estimates* (50 States and the District of Columbia), 2012-2013,

September). Retrieved February 2, 2015, http://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2012-2013-p1/Tables/NSDUHsaePercents2013.pdf.

<sup>&</sup>lt;sup>5</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 1.

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whether an inmate had been told by a mental health professional that they had a disorder or had to stay overnight in a hospital, used prescribed medication, or received professional mental health therapy due to a mental health problem.<sup>6</sup> This discrepancy indicates that many prisoners and inmates are experiencing symptoms of a mental health disorder but have yet to have contact with a program that can help them to cope with and mitigate the adverse effects. Among inmates who had a mental health problem, only 49% in state prisons and 43% in local jails had ever received treatment. Furthermore, only 22% of state prisoners and 23% of local jail inmates who had a mental health issue received treatment during the year prior to their arrest, while only 34% and 18%, respectively, received assistance after incarceration.<sup>7</sup>

There was also a correlation between mental health problems and a greater likelihood of negative outcomes for prisoners and inmates. For example, prisoners and inmates were more likely to be charged with violating facility rules, including committing physical or verbal assault, and were also more likely to be injured in a fight since admission.<sup>8</sup> Furthermore, state prisoners and local jail inmates with a mental health problem were more likely to have a current or past violent offense and to have three or more prior incarcerations.<sup>9</sup> In addition, there is a large overlap between mental health disorders and substance dependence or abuse. For example, 76% of local jail inmates with a mental health problem also had a problem with substance dependence or abuse, accounting for 49% of the local jail population.<sup>10</sup> Drugs were a more significant problem than alcohol, as an estimated 63% of local jail inmates who had a mental problem were dependent on or abused drugs, while about 53% were dependent on or abused alcohol.<sup>11</sup>

Jails and prison systems across the country struggle to meet the needs of inmates with mental disorders. A 2009 study found that the prevalence of severe mental illness among inmates in jails was 14.5% for males and 31.0% for females.<sup>12</sup> The study was conducted during two time periods at two jails in Maryland and three jails in New York. Serious mental illness was defined as "major depressive disorder; depressive disorder not otherwise specified; bipolar disorder I, II

<sup>&</sup>lt;sup>6</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 1-2.

<sup>&</sup>lt;sup>7</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 9.

<sup>&</sup>lt;sup>8</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 1.

<sup>&</sup>lt;sup>9</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 1, 7-8.

<sup>&</sup>lt;sup>10</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 5-6.

<sup>&</sup>lt;sup>11</sup> James, Doris J. and Lauren E. Glaze, Mental Health Problems of Prison and Jail Inmates, U.S. Department of Justice Bureau of Justice Statistics, September 2006, p. 6.

<sup>&</sup>lt;sup>12</sup> Steadman, Henry J., Fred C. Osher, Pamela Clark Robbins, Brian Case, and Steven Samuels, Prevalence of Serious Mental Illness Among Jail Inmates, Psychiatric Services Vol. 60 No. 6 June 2009.

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and not otherwise specified; schizophrenia spectrum disorder; schizoaffective disorder; schizophreniform disorder; brief psychotic disorder; delusional disorder; and psychotic disorder not otherwise specified."<sup>13</sup> Inmates with serious mental illness require specialized treatment and services, and the strained resources of local jails make it extremely difficult or impossible for the specialized needs of these inmates to be adequately met.<sup>14</sup> The authors conclude "there is broad consensus that jails are not the optimal settings to provide acute psychiatric treatment" and that some type of jail diversion program is the preferred response that many communities have chosen.<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> Steadman, Henry J., Fred C. Osher, Pamela Clark Robbins, Brian Case, and Steven Samuels, Prevalence of Serious Mental Illness Among Jail Inmates, Psychiatric Services Vol. 60 No. 6 June 2009, p. 761.

<sup>&</sup>lt;sup>14</sup> Steadman, Henry J., Fred C. Osher, Pamela Clark Robbins, Brian Case, and Steven Samuels, Prevalence of Serious Mental Illness Among Jail Inmates, Psychiatric Services Vol. 60 No. 6 June 2009, p. 761.

<sup>&</sup>lt;sup>15</sup> Steadman, Henry J., Fred C. Osher, Pamela Clark Robbins, Brian Case, and Steven Samuels, Prevalence of Serious Mental Illness Among Jail Inmates, Psychiatric Services Vol. 60 No. 6 June 2009, p. 765.



### **Jail Diversion Programs**

The incarceration of mentally ill persons without any linkage to appropriate treatment can lead to perpetuation and exacerbation of the individual's problems and crimes, as well as the overcrowding of jails and potentially wasted tax dollars. It can also contribute to homelessness, exacerbation of various comorbidities, reduced productivity, and increased mortality. In an effort to combat the harmful side effects of incarcerating the mentally ill, jail diversion programs have emerged in various cities across the United States. "The goal of Jail Diversion programs is to direct individuals with mental health needs into community-based therapeutic services rather than incarceration."<sup>16</sup>

Re-Entry programs link individuals with appropriate mental health providers and community resources following their release from jail, helping them transition more successfully to daily life in their communities.<sup>17</sup> The jail diversion programs concentrate on linking the mentally ill offender to treatment in order to address the underlying cause of the criminal behavior rather than perpetually punishing the behavior via the generalized criminal system.<sup>18</sup>

There are two basic types of jail diversion programs: pre-booking and post-booking. In prebooking jail diversion initiatives, law enforcement officers or case managers "identify individuals with mental illness prior to arrest, stabilize their immediate crisis needs, and develop appropriate plans for treatment, often avoiding unnecessary incarceration." <sup>19</sup> This model, used in areas such as Bexar County (San Antonio), Texas, seeks to divert offenders at the first "point of diversion"—the initial interaction with a law enforcement officer.<sup>20</sup> The model relies heavily on officers being properly trained in crisis intervention and de-escalation techniques to appropriately identify and interact with offenders suffering from mental illness, as well as refer them to a stabilization and treatment facility. Pre-booking diversion allows the criminal justice system to avoid "criminalizing" mentally ill individuals who have committed non-violent offenses, thereby redirecting resources and taxpayer dollars from lengthy incarcerations to effective community mental health services which provide support for the offender. This type of pre-booking diversion program has been proposed as the best model for

<sup>&</sup>lt;sup>16</sup> Scherer, Rachel, Jail Diversion Programs for Those with Mental Illness: An Emphasis on Pre-Booking Diversion and Other Early Diversion Models, p. 10.

<sup>&</sup>lt;sup>17</sup> RHA Jail Diversion and Re-Entry Services, RHA Health Services, Inc., p. 1.

<sup>&</sup>lt;sup>18</sup> Scherer, Rachel, Jail Diversion Programs for Those with Mental Illness: An Emphasis on Pre-Booking Diversion and Other Early Diversion Models, p. 10.

<sup>&</sup>lt;sup>19</sup> RHA Jail Diversion and Re-Entry Services, RHA Health Services, Inc., p. 2.

<sup>&</sup>lt;sup>20</sup>Gonzales, Gilbert and Meena Dayak, Out of Jail and Into Treatment, Behavioral Healthcare, July 2006.



Baton Rouge based in large part on the results—both health-related and fiscal—observed in other cities that have implemented this model.

In contrast to pre-booking diversion programs, in post-booking diversion programs, all offenders are arrested and booked. After booking, case managers or specialized jail personnel screen and assess offenders with mental health needs and identify those individuals for whom pre-trial diversion is appropriate. They then develop a community-based treatment/stabilization plan to reduce the length of stay for these individuals. There are also court-based post-booking diversion programs which employ mental health clinicians who work within the courthouse to conduct assessments and, in cooperation with prosecutors, defense attorneys and judges, develop a treatment plan often to secure early release of the mentally ill offender. This model is frequently used in jurisdictions that have developed specialized mental health courts. Many jurisdictions have seen positive results from post-booking diversion programs. However, once booking occurs, mentally ill offenders are criminalized for what is essentially a mental illness issue, and fiscal resources are expended in a potentially unproductive manner. In most cases, an offender (even for low-level offenses) is incarcerated for the duration of the criminal process from booking through trial and sentencing and remains in custody between one and two months. This situation may be even more acute in Baton Rouge, as recent reports have indicated that some detainees, many for misdemeanor crimes, remain incarcerated for a substantially longer period of time before even being charged. For inmates with mental illness, these months spent in jail awaiting charging and trial is time they could be receiving treatment to ensure they do not re-offend.

#### Current Successful Jail Diversion Programs: San Antonio Case Study

Jail diversion programs focusing on mental disorders and related issues have been very successful in numerous areas around the country. Perhaps the foremost example of a model jail diversion program is that of Bexar County, Texas, which includes the City of San Antonio. The Bexar County program was developed to assist individuals diagnosed with major depression, schizophrenia, or bipolar disorder who have been accused of committing class B misdemeanors or less in avoiding jail.<sup>21</sup> The program's operations are funded through a combination of federal, state, and local funding, as well as from Medicaid, Medicare, and contributions from various

<sup>&</sup>lt;sup>21</sup> Cowell, Alexander J., Arnie Aldridge, Nahama Broner, and Jesse M. Hinde, Report 2: An Analysis of Cost-Shifting between the Treatment and Criminal Justice Systems, A Cost Analysis of the Bexar County, Texas, Jail Diversion Program, RTI International, May 2008, p. iii, 1-2.

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health organizations.<sup>22</sup> In fact, between 25 and 30% of the expenses incurred by the program are covered by Medicaid Administrative Claims provided from State and federal funds.<sup>23</sup> Studies by RTI International and others have demonstrated that this program has resulted in substantial expense reductions in the criminal justice system.<sup>24</sup> Recent data provided to TPG by the Center for Health Care Services in Bexar County illustrates that the total direct savings over a five-year period exceeds \$50 million, with a decidedly upward trend over time. These benefits occur through a variety of channels, including (1) diversions of public inebriates and those with mental illness from Emergency Room care, (2) reduction in ER use by injured prisoners, (3) decreased workloads for magistration and processing, (4) reduced wait times for competency restoration, (5) reductions in time in jail, and (6) time and employment cost savings for officers.

In addition to these direct cost reductions, other information reveals numerous other positive effects that the program has had on the community. For example, ER utilization has dropped by 40% since the opening of the first mental illness and substance abuse center built by the program.<sup>25</sup> This drop in utilization amounts to approximately \$4.7 million in savings.<sup>26</sup> Likewise, as of 2013, the corrections department in Bexar County claims a recidivism rate of only 6.6%, which is much lower than the rates in comparable counties in Texas such as Harris County (12.7%), Dallas County (22.6%), and Travis County (30.3%).<sup>27</sup>

Studies of similar programs conclude that jail diversion can reduce or eliminate jail time without increasing public safety risks, and "results in positive outcomes for individuals, systems, and communities."<sup>28</sup> Additionally, despite the increased expenditures on treatment in the short run,

<sup>&</sup>lt;sup>22</sup> Evans, Leon, Blueprint for Success: The Bexar County Model, The Center for Health Services, San Antonio, Texas, (n.d.), http://www.jtvf.org/wp-content/uploads/Feb-22-2011-Convening/fina-jail-text%20(2).pdf, p. 27.

<sup>&</sup>lt;sup>23</sup> Evans, Leon, Blueprint for Success: The Bexar County Model, The Center for Health Services, San Antonio, Texas, (n.d.), http://www.jtvf.org/wp-content/uploads/Feb-22-2011-Convening/fina-jail-text%20(2).pdf, p. 23.

<sup>&</sup>lt;sup>24</sup> See, for example Cowell, Alexander J., Arnie Aldridge, Nahama Broner, and Jesse M. Hinde, Report 2: An Analysis of Cost-Shifting between the Treatment and Criminal Justice Systems, A Cost Analysis of the Bexar County, Texas, Jail Diversion Program, RTI International, May 2008, p. ES-1; and Gonzales, Gilbert R., Enlightened Alternatives: How CIT and Diversion are Cutting Recidivism and Saving Millions, Mental Health and Substance Abuse Authority Bexar County, May 2, 2013, http://gainscenter.samhsa.gov/cms-assets/documents/113823-875279.citintercept-1-jtdr-grantee.pdf, p. 22.

<sup>&</sup>lt;sup>25</sup> Gonzales, Gilbert R., Enlightened Alternatives: How CIT and Diversion are Cutting Recidivism and Saving Millions, Mental Health and Substance Abuse Authority Bexar County, May 2, 2013, http://gainscenter.samhsa.gov/cmsassets/documents/113823-875279.citintercept-1-jtdr-grantee.pdf, p. 17.

<sup>&</sup>lt;sup>26</sup> Gonzales, Gilbert R., Enlightened Alternatives: How CIT and Diversion are Cutting Recidivism and Saving Millions, Mental Health and Substance Abuse Authority Bexar County, May 2, 2013, http://gainscenter.samhsa.gov/cmsassets/documents/113823-875279.citintercept-1-jtdr-grantee.pdf, p. 17.

<sup>&</sup>lt;sup>27</sup> Gonzales, Gilbert R., Enlightened Alternatives: How CIT and Diversion are Cutting Recidivism and Saving Millions, Mental Health and Substance Abuse Authority Bexar County, May 2, 2013, http://gainscenter.samhsa.gov/cmsassets/documents/113823-875279.citintercept-1-jtdr-grantee.pdf, p. 19.

<sup>&</sup>lt;sup>28</sup> Steadman, Henry J. and Michelle Naples, Assessing the Effectiveness of Jail Diversion Programs for Persons With Serious Mental Illness and Co-Occurring Substance Use Disorders, *Behavioral Sciences and the Law*, Vol. 23 (2005), p. 168.



studies have indicated that jail diversion for the mentally ill consistently saves taxpayer dollars.<sup>29</sup> These statistics indicate that a jail diversion program patterned after the ongoing initiative in Bexar County would not only be cost effective in Baton Rouge, but also beneficial to the overall criminal justice system, community well-being, and business activity.

#### East Baton Rouge Proposal

The East Baton Rouge Sheriff's Department has reported that the current jail is cramped, crumbling, outdated, and inefficient. The number of inmates exceeds the number of beds in the current prison, causing the parish to house between 400 and 800 inmates in other parish jails on a daily basis.<sup>30</sup> In fact, the parish has housed inmates in other parishes since 2006 and future projections for the inmate population show significantly higher numbers, which will likely result in an even greater shortage of bed space for the jail.<sup>31</sup> The cost of transporting the inmates to other jails, to and from court, and to medical appointments must be paid by the taxpayers in the community.<sup>32</sup> Additionally, the inmates housed in other jails are not benefiting from the parish's rehabilitation programs, thus mitigating the positive effects of any decreased recidivism resulting from those initiatives.<sup>33</sup>

The substantial increase in the number of inmates with mental health conditions and the closure of the Earl K. Long Hospital and downsizing of state mental health facilities, along with the problems faced by the parish jail, creates an immediate need for crisis care services to divert individuals away from jail and into treatment.<sup>34</sup> The need will become more pressing with the closure of the Baton Rouge General Mid-City ER, which saw almost 600 mental health

<sup>&</sup>lt;sup>29</sup> Steadman, Henry J. and Michelle Naples, Assessing the Effectiveness of Jail Diversion Programs for Persons With Serious Mental Illness and Co-Occurring Substance Use Disorders, *Behavioral Sciences and the Law*, Vol. 23 (2005), p. 168; Gorton, Joe and Keith Crew, Evaluation of the Black Hawk County Mental Health Jail Diversion Program, University of Northern Iowa, June 2014,

http://firstdcs.com/reports/2014.BHC%20MH%20Jail%20Diversion%20Program.pdf, p. 2.

<sup>&</sup>lt;sup>30</sup> Impact of the Proposed New Jail and Mental Health Evaluation Facility on the Sheriff, East Baton Rouge Parish Sheriff's Office, (n.d.), p. 2.

<sup>&</sup>lt;sup>31</sup> East Baton Rouge Parish Jail Needs Assessment: Restoration Center & Draft Projections, GraceHebert Architects, p. 21-25.

<sup>&</sup>lt;sup>32</sup> Impact of the Proposed New Jail and Mental Health Evaluation Facility on the Sheriff, East Baton Rouge Parish Sheriff's Office, (n.d.), p. 2.

<sup>&</sup>lt;sup>33</sup> Impact of the Proposed New Jail and Mental Health Evaluation Facility on the Sheriff, East Baton Rouge Parish Sheriff's Office, (n.d.), p. 2.

 <sup>&</sup>lt;sup>34</sup> Public Safety Capital Improvements Summary, Parish of East Baton Rouge Capital Improvements District, January
 14, 2015, p. 5; East Baton Rouge Parish Jail Needs Assessment: Restoration Center & Draft Projections,
 GraceHebert Architects, p. 3-5.



related patients in the fourth quarter of 2014 alone.<sup>35</sup> Given that the Sheriff's Department has no alternative at present but to book into jail those individuals with mental illness who have allegedly committed minor infractions, diversion into a treatment center would not only be more humane, but also more cost-effective.<sup>36</sup>

In response to this situation, the development of a center has been proposed in order to provide "24-hour crisis assessment; evaluation, stabilization, and intervention; a sobering unit; a detox unit; a minor medical center; an outpatient mental health clinic; recovery counseling support; and inpatient psychiatric services."<sup>37</sup> This facility is aimed at providing individuals with mental illness and/or substance abuse problems the treatment required to prevent recidivism in the legal system.<sup>38</sup>

It is anticipated that the center and its programs would save millions of dollars by creating more efficient solutions prior to booking "rather than paying for jail space and recurring episode costs on the back end due to the lack of an early intervention process."<sup>39</sup> Additionally, the facility would save taxpayer money by reducing by several hours the wait times for medical clearance.<sup>40</sup> This capacity also increases the efficiency and productivity of law enforcement officials. Moreover, individuals in need of treatment for mental disorders and related issues would be able to receive assistance through the center, which also leads to other benefits including reductions in comorbidity costs and homelessness and increases in productivity and life expectancy.

<sup>&</sup>lt;sup>35</sup> Psychiatric ED Consults October-December 2014, Baton Rouge General Mid-City.

<sup>&</sup>lt;sup>36</sup> Impact of the Proposed New Jail and Mental Health Evaluation Facility on the Sheriff, East Baton Rouge Parish Sheriff's Office, (n.d.), p. 6.

<sup>&</sup>lt;sup>37</sup> Public Safety Capital Improvements Summary, Parish of East Baton Rouge Capital Improvements District, January 14, 2015, p. 5.

<sup>&</sup>lt;sup>38</sup> Public Safety Capital Improvements Summary, Parish of East Baton Rouge Capital Improvements District, January 14, 2015, p. 5.

<sup>&</sup>lt;sup>39</sup> Public Safety Capital Improvements Summary, Parish of East Baton Rouge Capital Improvements District, January 14, 2015, p. 5; East Baton Rouge Parish Jail Needs Assessment: Restoration Center & Draft Projections, GraceHebert Architects, p. 11.

 <sup>&</sup>lt;sup>40</sup> Public Safety Capital Improvements Summary, Parish of East Baton Rouge Capital Improvements District, January 14, 2015, p. 5; East Baton Rouge Parish Jail Needs Assessment: Restoration Center & Draft Projections, GraceHebert Architects, p. 10.



# Economic Benefits of a Jail Diversion Program in Baton Rouge

The economic and fiscal benefits of the proposed jail diversion program stem from two primary sources. First, direct costs are reduced as individuals receive needed treatment for mental disorders through the crisis care continuum rather than spending time in jail. Incarceration is rarely an effective treatment option for persons with mental disorders, and it is more expensive for the parish; thus, overall outlays can be reduced through a jail diversion program. As these direct cost savings are spent for other goods and services, they lead to incremental spending and, thus, economic benefits.

The second major aspect of benefits involves improved outcomes stemming from more appropriate treatment and, hence, reduction in societal costs of secondary effects (such as disability, homelessness, and mortality) as well as increased productivity. In addition, the reduced requirements for public resources bring additional spending capacity to the community, thus generating multiplier effects on the local economy.

#### **Direct Cost Savings**

The Perryman Group reviewed results achieved in other areas which have implemented jail diversion programs. While the scope and specifics of these programs varies, the outcomes were consistently positive, with improvement for individuals with mental disorders as well as cost savings.

In order to quantify the likely cost savings stemming from the new Baton Rouge treatment facility, The Perryman Group first studied the actual results achieved with the implementation of the similar program in Bexar County (San Antonio), Texas, which was described earlier. This initiative is serving as a model for the Baton Rouge project. Personnel from the Bexar County program, including CEO Leon Evans, have been of great assistance in this study and have made detailed data available on all aspects of the Center for Health Care Services and its operations and results. The San Antonio results were carefully adjusted to reflect the specific characteristics of the Baton Rouge study area. In particular, TPG considered factors such as (1) population size and growth patterns; (2) custodial population size, demographics, and projections; (3) relative cost factors (labor and operations); and (4) local income and spending



patterns. Extensive information regarding the Baton Rouge initiative was used in this process, as well as data from the US Department of Commerce and the US Department of Labor. The relevant impact assessment model (described in the Appendices) was also calibrated to the specific industrial characteristics of the Baton Rouge economy, and all monetary values were converted to constant (2014) dollars.

TPG assumed that the Baton Rouge center will follow the same ramp-up period as the San Antonio facility, achieving 90% of the effectiveness of the San Antonio facility at maturity. As noted, the magnitude of program offerings was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the center (assuming patterns similar to San Antonio). It should be noted that the savings could be even more substantial in Baton Rouge in that (1) there is evidence that the incarceration period prior to processing may be longer than that observed in San Antonio and (2) the declining availability of alternative resources may lead to greater strain on the criminal justice system.<sup>41</sup>

#### Direct cost savings were found to be

- \$3.0 million in the initial year of operation of the program,
- \$8.1 million per year once the program reaches a mature state,
- \$24.6 million in total over the first five years, and
- **\$54.9 million** in total over the first 10 years.

It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also fully adjusted to reflect relative patterns in San Antonio and Baton Rouge, and only net benefits (accounting for local outlays for the program) are included.

### Reduction in Secondary Costs

Mental health and substance abuse issues involve a notable economic component, with spillover effects in the overall economy including coexisting condition costs, disability payments, homelessness, lost earning potential, and incarceration. The Perryman Group

<sup>&</sup>lt;sup>41</sup> Bethencourt, Daniel, Some Baton Rouge Inmates Serving Excessive Jail Time: What's the Cause; How's It Being Fixed?, The Advocate, January 26, 2015, http://theadvocate.com/news/11429444-123/defendants-held-excessive-time-before.



estimated the potential economic benefits associated with reducing these costs through a jail diversion program and more effective treatment for mental disorders.

In many cases, mental disorders contribute to other health problems, including substance abuse and cigarette use, both of which involve higher-than-average health care costs.<sup>42</sup> The percentage of adults 18 and older who reported using illicit drugs within the past year was 27.6% for those with a mental illness versus 13.0% for those without.<sup>43</sup> Similarly, the percentage of cigarette use was 37.6% among individuals with mental disorders compared to 24.4% of individuals without.<sup>44</sup> TPG calculated costs associated with comorbidities and disabilities based on information regarding hospital discharges and disability payments adjusted for the specific spending patterns in Baton Rouge. Only the incremental costs to be avoided through the programs of the center were incorporated into the analysis.

Homelessness is also part of the social loss associated with severe mental health and substance abuse issues. Roughly a quarter of the homeless population suffers from serious mental illness and nearly half suffer from severe mental illness and/or substance abuse disorders, resulting in significant economic costs to society.<sup>45</sup> To determine the direct effects of this phenomenon, an approximation was derived based on (1) the estimated number of homeless persons in Baton Rouge, (2) the proportion of both chronic and non-chronic members of the population suffering from mental health and substance abuse issues, and (3) the annual cost of maintaining an individual in both groups (converted to constant 2014 dollars). Only the segment likely to be positively impacted by the programs of the center were considered. Moreover, because most of the expense resulting from homelessness is manifested in emergency room care, incarceration, disability, and similar outlays, each of these categories is reduced in the final simulations in order to isolate the specific effects.

Mental disorders are also a major cause of lost productivity. The National Institutes of Health's National Institute of Mental Health (NIMH) reported that the cost of major mental disorders in lost earnings alone totaled at least \$193 billion annually.<sup>46</sup> Those with serious mental disorders earned significantly less each year (\$22,545) compared to those without serious disorders

http://www2.nami.org/factsheets/mentalillness\_factsheet.pdf.

<sup>&</sup>lt;sup>42</sup> Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, U.S. Department of Health and Human Services, November 2014, p. 47.

<sup>&</sup>lt;sup>43</sup> Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, U.S. Department of Health and Human Services, November 2014, p. 47.

<sup>&</sup>lt;sup>44</sup> Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, U.S. Department of Health and Human Services, November 2014, p. 47.

<sup>&</sup>lt;sup>45</sup> Mental Illness Facts and Numbers, National Alliance on Mental Illness, March 2013,

<sup>&</sup>lt;sup>46</sup> National Institutes of Health. National Institute of Mental Health. Mental disorders cost society billions in unearned income. (2008 May 7). *ScienceDaily*.

http://www.sciencedaily.com/releases/2008/05/080507083940.htm.

# The Potential Economic and Fiscal Impacts of a Jail Diversion Program and Restoration Center for Mental Health and Related Disorders in Baton Rouge



(\$38,852).<sup>47</sup> These values were adjusted to 2014 prices and population values, then allocated to Baton Rouge based on its percentage of adults suffering from severe mental illness or substance abuse and relative earning capacity. Once this value is obtained, it is possible to approximate lost productivity and other measures of foregone economic activity. This process involves (1) allocating the lost earnings across industrial categories based on employment patterns in the area, (2) using the relationships between income and output reflecting the direct coefficients of the Baton Rouge submodel of the US Multi-Regional Impact Assessment System (described in Appendix B) to derive productivity losses, and (3) applying analogous techniques with regards to the expenditure and jobs parameters. With the exception of the induced spending from the lost wages, no "multiplier" effects are derived for this segment of the analysis. The productivity effects and their consequences for other aspects of economic activity are fully captured in the direct calculation. As with other aspects of the secondary benefits, only the gains likely to be observed in the population group impacted by the center were considered.

Research has shown that those with severe mental health and substance abuse problems have shorter life spans, thus resulting in substantial losses in aggregate welfare.<sup>48</sup> Mental disorders and undiagnosed or untreated mental illness are linked to suicide, with a large majority of people who commit suicide having a diagnosable mental disorder. Utilizing data regarding this differential and estimates of the number of affected persons and age-adjusted standard death rates in Baton Rouge, TPG computed the number of excess deaths and the corresponding annual reduction in life-years on a cumulative basis. These factors are then translated into economic terms on an annualized basis using the value of a quality-adjusted life-year (QALY), a concept used in evaluating the efficacy of investments in new medical research and technology, with coefficients to reflect the relative disparity in the earning capacity of persons with major mental health and substance issues. More effective treatment for the relevant population will reduce this loss to the local economy.

<sup>&</sup>lt;sup>47</sup> National Institutes of Health. National Institute of Mental Health. Mental disorders cost society billions in unearned income. (2008 May 7). *ScienceDaily*.

http://www.sciencedaily.com/releases/2008/05/080507083940.htm.

<sup>&</sup>lt;sup>48</sup> Norton, Amy, Mental Health Disorders May Shorten Life Span: Study, HealthDay, February 11, 2015, http://consumer.healthday.com/mental-health-information-25/anxiety-news-33/mental-health-disorders-mayshorten-lifespan-696398.html.



#### Economic Benefits Measured

A jail diversion program of crisis care services has the potential to directly reduce costs through utilization of mental health treatment facilities rather than incarceration. In addition, secondary cost categories can be reduced through effective treatment offered within a jail diversion program. In assessing overall effects, it is assumed that (1) since these costs are borne by local taxpayers, treatment, comorbidity and disability, and incarceration affect various sectors in proportion to their proportion of area tax burden, both in terms of direct outlays and incidence of indirect payments; (2) lost earnings and mortality result in foregone spending in accordance with standard consumer purchasing patterns for the region, fully adjusted to account for leakages from the spending stream; and (3) homelessness has spillover harms which reflect the patterns in the underlying areas in which outlays are incurred. Note that no multiplier effects are ascribed to the losses in productivity, as they are fully captured in the initial calculation process.

The Perryman Group estimated these benefits of the proposed facility

- during its initial year of operation (assumed to be 2017);
- on an annual basis at maturity (assumed to be in approximately 2032 to allow time for ramping up of operations and realization of full results); and
- cumulatively over the first five and 10 years of operations.

All monetary values are given in constant (2014) dollars.



#### Economic Benefits in First Year of Operation

During the initial year of its operation, the net direct cost savings associated with the jail diversion and related programs total about **\$3.0 million**. As these savings are spent for other purposes, they lead to incremental economic activity of an estimated **\$4.0 million** in total gross product and **48** permanent jobs in the Baton Rouge area. When secondary effects are included, the overall total economic benefits in the initial year of operation of the jail diversion program include **\$15.9 million** in gross product and **173** permanent jobs. Additional detail is provided in the table below as well as the Appendices to this report.

### The Total Initial Annual Impact Associated with the Implementation of a Restoration Center for Mental Health And Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

(Dollar amounts in Millions)

	Total Expenditures	<b>Output</b> (Gross Product)	Personal Income	<b>Employment</b> (Permanent- Jobs)
Spending of Direct Cost Savings*	\$7.208	\$4.001	\$2.425	48
Reductions in Comorbidities and Disability Expenses	\$6.071	\$3.370	\$2.042	40
Reduced Homelessness Expenses	\$0.654	\$0.363	\$0.220	4
Enhanced Income and Productivity	\$13.016	\$6.237	\$3.858	57
Reduced Mortality Expenses	\$3.854	\$1.891	\$1.170	24
TOTAL ANNUAL IMPACT: Initial Year of Facility Operations	\$30.802	\$15.863	\$9.71 <b>5</b>	173

SOURCE: The Perryman Group

\*Monetary values in constant (2014) dollars. As direct cost savings are spent for other purposes, they generate incremental economic benefits as noted. Methods used, assumptions, and additional detail may be found elsewhere in this report as well as in the Appendices. Totals may not add due to rounding.



The benefits of the program will increase as the program ramps up operations and matures. The Perryman Group estimates that the overall economic effects of direct cost savings associated with the jail diversion program would include **\$10.7 million** in total gross product and **128** permanent jobs in the Baton Rouge area at a mature operational level (with direct annual cost savings of **\$8.1 million**). With the addition of secondary effects, the overall total economic benefits once the jail diversion program reaches maturity include **\$42.4 million** in gross product and **463** permanent jobs. See the table below and Appendices to this report for further detail.

#### The Total Annual Impact at Maturity Associated with the Implementation of a Restoration Center for Mental Health And Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

(Dollar amounts in Millions)

	Total	Output	Personal	Employment
	Expenditures	(Gross Product)	Income	(Permanent- Jobs)
Spending of Direct Cost Savings*	\$19.287	\$10.708	\$6.489	128
Reductions in Comorbidities and Disability Expenses	\$16.246	\$9.019	\$5.466	108
Reduced Homelessness Expenses	\$1.750	\$0.972	\$0.589	12
Enhanced Income and Productivity	\$34.830	\$16.691	\$10.324	153
Reduced Mortality Expenses	\$10.313	\$5.059	\$3.130	63
TOTAL ANNUAL IMPACT: At Maturity	\$82.427	\$42.448	\$25.997	463

SOURCE: The Perryman Group

\*Monetary values in constant (2014) dollars. As direct cost savings are spent for other purposes, they generate incremental economic benefits as noted. Methods used, assumptions, and additional detail may be found elsewhere in this report as well as in the Appendices. Totals may not add due to rounding.



The Perryman Group also measured the cumulative effects of the Baton Rouge jail diversion program over two time horizons: Years 1-5 and Years 1-10. For the Baton Rouge area, the addition to business activity stemming from the jail diversion program was found to include

- during the first five years of the program: \$24.6 million net cost savings, \$32.7 million in total gross product and 390 person-years of employment from cost savings (\$129.6 million in gross product, and 1,414 person-years of employment when secondary effects are considered) and
- during the first 10 years of the program: \$54.9 million in net cost savings, \$72.8 million in total gross product, and 869 person-years of employment from cost savings (\$288.7 million in gross product and 3,149 person-years of employment with secondary effects).

### The Cumulative Impact of Implementation of a Restoration Center for Mental Health And Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish): Cost Savings and Total Benefits\*

(Dollar amounts in Millions)					
	Years		Years 1-10		
	1-5       Spending of Cost Savings     Total Benefits		Spending of Cost Savings	Total Benefits	
Total Expenditures	\$58.884	\$251.647	\$131.156	\$560.508	
Output (Gross Product)	\$32.690	\$129.593	\$72.812	\$288.652	
Personal Income	\$19.809	\$79.368	\$44.123	\$176.782	
<b>Employment</b> (Person-Years)	390	1,414	869	3,149	

SOURCE: The Perryman Group

\*Total benefits stem from spending direct cost savings for other purposes as well as reductions in comorbidity and disability expenses, gains in income and productivity, improvements in homelessness, and reduced mortality. Methods used, assumptions, and additional detail may be found elsewhere in this report as well as in the Appendices. Monetary values are expressed in constant (2014) dollars to eliminate the effects of inflation.



#### **Fiscal Effects**

The increases in economic activity stemming from the jail diversion program will generate significant incremental cost savings and tax receipts. The Perryman Group estimates that once the program reaches maturity, the annual fiscal benefit to local taxing entities will include **\$8.5 million** from direct cost savings **(\$9.8 million** when secondary effects are considered). The cumulative gains for local governments are estimated to include

- **\$25.9 million** from cost savings and **\$30.1 million** when secondary effects are included during the **first five years** of operations and
- \$57.7 million from cost savings and \$67.0 million with secondary effects during the first 10 years of operations.

Note that (1) the incremental revenues stem solely from expanded economic activity and (2) the jail diversion program has the additional benefit of reducing the need for larger jail facilities and associated costs over and above these measured gains, a phenomenon which has occurred in Bexar County.



# Conclusion

Jail diversion programs focusing on mental disorders and related issues can not only reduce costs, but also improve outcomes for persons with mental disorders and provide notable spillover benefits for communities which implement them. East Baton Rouge Parish is considering such an initiative, along with the development of crisis care services to provide appropriate evaluation, intervention, and other mental health and substance disorder treatment.

The Perryman Group estimates that the program could lead to millions in economic benefits each year from the overall effects of direct cost savings and improvement in secondary consequences of mental disorders such as disability, homelessness, mortality, and reduced productivity. These increases in economic activity in turn generate significant incremental tax receipts.

By offering needed treatment to persons with mental health and related concerns through a jail diversion program and associated crisis care services, East Baton Rouge Parish can not only improve lives, but also better allocate scarce resources and enhance overall community well-being. The program is clearly a worthy and beneficial investment.



# **APPENDICES**



# **Appendix A: About The Perryman Group**

- The Perryman Group (TPG) is an economic research and analysis firm based in Waco, Texas. The firm has more than 30 years of experience in assessing the economic impact of corporate expansions, regulatory changes, real estate developments, public policy initiatives, and myriad other factors affecting business activity. TPG has conducted hundreds of impact analyses for local areas, regions, and states throughout the United States. Impact studies have been performed for hundreds of clients including many of the largest corporations in the world, governmental entities at all levels, educational institutions, major health care systems, utilities, and economic development organizations.
- Dr. M. Ray Perryman, founder and President of the firm, developed the US Multi-Regional Impact Assessment System (USMRIAS—used in this study) in the early 1980s and has consistently maintained, expanded, and updated it since that time. The model has been used in hundreds of diverse applications and has an excellent reputation for reliability.
- TPG has measured the economic and fiscal effects of health oriented efforts in many contexts, with a specific focus on mental health programs on several occasions. In particular, the firm has conducted, among others, an assessment on the return on investment in mental health and substance abuse initiatives for the state of Texas, as well as an analysis of a crisis intervention approach in the Dallas area and the effects of expanding a major national mental health facility.



#### M. RAY PERRYMAN

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#### ACADEMIC BACKGROUND

Ph.D. in Economics, Rice University B.S. in Mathematics, Baylor University

#### SELECTED ACADEMIC/PROFESSIONAL POSITIONS AND ACTIVITY (Current and Former)

Business Economist-in-Residence, Cox School of Business, Southern Methodist University University Professor and Economist-in-Residence, Baylor University Herman Brown Professor of Economics, Baylor University Founder and Director, Center for the Advancement of Economic Analysis, Baylor University President. Southwestern Economics Association President, Southwestern Society of Economists Editor, The Southwestern Journal of Economic Abstracts Editor, International Series in Economic Modeling (book series) Editor and Author, The Perryman Report & Texas Letter (monthly economic newsletter) Editor and Author, The Perryman Report (monthly economic newsletter) Editor and Author, The Perryman Economic Forecast (subscription forecasting service) Author, "The Economist" (syndicated weekly newspaper column) Editorial Advisor and Author, The Perryman Texas Letter Host, The Perryman Report, daily radio broadcast on the Texas State Network Assistant Editor, The Journal of Economics Author, The Perryman Permian Basin Oil Report Contributing Economist, "Marketplace Radio," National Public Radio Published or presented 400 academic papers Authored or edited 5 books

#### SELECTED ADVISORY/CONSULTING ACTIVITY (Current and Former)

Advisor or Member for more than 50 governmental entities at the international, federal, state, and regional levels including: Federal Task Force on the Savings and Loan Crisis, Congress of the United States; Joint Economic Committee, Congress of the United States; United States Senate Academic Advisory Committee on the North American Free Trade Agreement; and Governor's Task Force on Economic Growth

Economic Advisor, United States Senate

Economic Advisor, United States House of Representatives

Economic Advisor, Office of the President

Economic Advisor, US Departments of the Treasury, Labor, Agriculture, the Interior, Commerce, Energy, and Housing and Urban Development

Economic Consultant, Federal Communications Commission

Economic Advisor, Office of the Governor, State of Texas



Economic Advisor, Committees on Finance, State Affairs, and Economic Development, **Texas Senate** Economic Advisor, Office of the Speaker, Texas House of Representatives Economic Advisor, Committees on Ways and Means, Business and Industry, Economic Development, Transportation, Healthcare, Appropriations, and Science and Technology, **Texas House of Representatives** Economic Advisor, Interim Committee on NAFTA and GATT, Texas House of Representatives Economic Advisor, Texas Higher Education Task Force Economic Advisor, Joint Select Committee on Public School Finance, Texas Legislature Economic Advisor, Ministry of Economic Affairs, Republic of China Chairman of the Board and President, Texas Manufacturing Technology Center Chairman, Blue Cross & Blue Shield of Texas Local Affiliate Board Member, Board of Directors, Texas Health Care Services Corporation Member, Board of Directors, Real Estate Council of Dallas Chairman, Texas Legislative Conference President, Board of Directors, Texas Leadership Institute Member, Board of Visitors, Scott & White Hospital Director, Women's Financial Services, Southern Methodist University Advisory Director, Texas Association of Business and Chambers of Commerce Advisory Director, Chase Bank Director of projects, studies, and analyses for more than 2,000 clients, including major corporations, public utilities, government agencies, and financial services groups

Published more than 2,000 trade articles and columns

#### SELECTED HONORS AND AWARDS

Doctoris Honoris Causa degree, International Institute for Advanced Studies Lifetime Achievement Award, International Institute for Advanced Studies

- Citation for Outstanding Initiative in Promoting World Trade, China External Development and Trade Administration
- Citation for Meritorious Efforts in Promoting World Capitalism (including the People's Republic of China), The Democracy Foundation
- Citation for Promoting International Academic Exchange, The Asia and World Institute Citation for Outstanding Advisory Contributions, Congress of the United States Presidential Medal of Merit
- Award for Outstanding Research Achievement in Economic Modeling, Systems Research Foundation

Outstanding Texas Leader (John Ben Shepperd Memorial Award)

Named the Outstanding Young Person in the World in the Field of Economics and Business Innovation, one of five Outstanding Young Texans, one of ten Outstanding Young Americans, and one of ten Outstanding Young Persons in the World

2012 Texan of the Year, Texas Legislative Conference



## **Appendix B: Methods Used**

#### US Multi-Regional Impact Assessment System

- The basic modeling technique employed in this study is known as dynamic input-output analysis. This methodology essentially uses extensive survey data, industry information, and a variety of corroborative source materials to create a matrix describing the various goods and services (known as resources or inputs) required to produce one unit (a dollar's worth) of output for a given sector. Once the base information is compiled, it can be mathematically simulated to generate evaluations of the magnitude of successive rounds of activity involved in the overall production process.
- There are two essential steps in conducting an input-output analysis once the system is operational. The first major endeavor is to accurately define the levels of direct activity to be evaluated; this process was described within the report. In the case of a prospective evaluation, it is necessary to first calculate reasonable estimates of the direct activity.
- The second major phase of the analysis is the simulation of the input-output system to measure overall economic effects as the stimulus ripples through the economy. The Perryman Group developed the US Multi-Regional Impact Assessment System (USMRIAS) for this purpose more than 35 years ago and has consistently maintained and updated it since that time. The specific submodel used in the current application reflects the specific structure of the Baton Rouge (East Baton Rouge Parish) economy.
- The USMRIAS is somewhat similar in format to the Input-Output Model of the United States and the Regional Input-Output Modeling System, both of which are maintained by the US Department of Commerce. The model developed by TPG, however, incorporates several important enhancements and refinements. Specifically, the expanded system includes (1) comprehensive 500-sector coverage for any county, multicounty, or urban region; (2) calculation of both total expenditures and value-added by industry and region; (3) direct estimation of expenditures for multiple basic input choices (expenditures, output, income, or employment); (4) extensive parameter localization; (5) price adjustments for real and nominal assessments by sectors and areas; (6) measurement of the induced impacts associated with payrolls and consumer spending; (7) embedded modules to estimate multi-sectoral direct spending effects; (8)



estimation of retail spending activity by consumers; and (9) comprehensive linkage and integration capabilities with a wide variety of econometric, real estate, occupational, and fiscal impact models. Moreover, the model uses specific local taxing patterns to estimate the fiscal effects of activity on a detailed sectoral basis. The models used for the present investigation reflect the specific industrial characteristics of the Baton Rouge Metropolitan Statistical area and have been thoroughly tested for reasonableness and historical reliability.

- The impact assessment (input-output) process essentially estimates the amounts of all types of goods and services required to produce one unit (a dollar's worth) of a specific type of output. For purposes of illustrating the nature of the system, it is useful to think of inputs and outputs in dollar (rather than physical) terms. As an example, the construction of a new building will require specific dollar amounts of lumber, glass, concrete, hand tools, architectural services, interior design services, paint, plumbing, and numerous other elements. Each of these suppliers must, in turn, purchase additional dollar amounts of inputs. This process continues through multiple rounds of production, thus generating subsequent increments to business activity. The initial process of building the facility is known as the direct effect. The ensuing transactions in the output chain constitute the indirect effect.
- Another pattern that arises in response to any direct economic activity comes from the
  payroll dollars received by employees at each stage of the production cycle. As workers
  are compensated, they use some of their income for taxes, savings, and purchases from
  external markets. A substantial portion, however, is spent locally on food, clothing,
  health care services, utilities, housing, recreation, and other items. Typical purchasing
  patterns in the relevant areas are obtained from the ACCRA Cost of Living Index, a
  privately compiled inter-regional measure which has been widely used for several
  decades, and the Consumer Expenditure Survey of the US Department of Labor. These
  initial outlays by area residents generate further secondary activity as local providers
  acquire inputs to meet this consumer demand. These consumer spending impacts are
  known as the induced effect. The USMRIAS is designed to provide realistic, yet
  conservative, estimates of these phenomena.
- Sources for information used in this process include the Bureau of the Census, the Bureau of Labor Statistics, the Regional Economic Information System of the US Department of Commerce, and other public and private sources. The pricing data are compiled from the US Department of Labor and the US Department of Commerce. The verification and testing procedures make use of extensive public and private sources.



- Impacts were measured in constant 2014 dollars to eliminate the effects of inflation.
- The USMRIAS generates estimates of the effect on several measures of business activity. The most comprehensive measure of economic activity used in this study is Total Expenditures. This measure incorporates every dollar that changes hands in any transaction. For example, suppose a farmer sells wheat to a miller for \$0.50; the miller then sells flour to a baker for \$0.75; the baker, in turn, sells bread to a customer for \$1.25. The Total Expenditures recorded in this instance would be \$2.50, that is, \$0.50 + \$0.75 + \$1.25. This measure is quite broad, but is useful in that (1) it reflects the overall interplay of all industries in the economy, and (2) some key fiscal variables such as sales taxes are linked to aggregate spending.
- A second measure of business activity frequently employed in this analysis is that of Gross Product. This indicator represents the regional equivalent of Gross Domestic Product, the most commonly reported statistic regarding national economic performance. In other words, the Gross Product of Arkansas is the amount of US output that is produced in that state; it is defined as the value of all final goods produced in a given region for a specific period of time. Stated differently, it captures the amount of value-added (gross area product) over intermediate goods and services at each stage of the production process, that is, it eliminates the double counting in the Total Expenditures concept. Using the example above, the Gross Product is \$1.25 (the value of the bread) rather than \$2.50. Alternatively, it may be viewed as the sum of the valueadded by the farmer, \$0.50; the miller, \$0.25 (\$0.75 - \$0.50); and the baker, \$0.50 (\$1.25 - \$0.75). The total value-added is, therefore, \$1.25, which is equivalent to the final value of the bread. In many industries, the primary component of value-added is the wage and salary payments to employees.
- The third gauge of economic activity used in this evaluation is **Personal Income**. As the name implies, Personal Income is simply the income received by individuals, whether in the form of wages, salaries, interest, dividends, proprietors' profits, or other sources. It may thus be viewed as the segment of overall impacts which flows directly to the citizenry.
- The fourth measure, Retail Sales, represents the component of Total Expenditures which occurs in retail outlets (general merchandise stores, automobile dealers and service stations, building materials stores, food stores, drugstores, restaurants, and so forth). Retail Sales is a commonly used measure of consumer activity.
- The final aggregates used are **Permanent Jobs** and **Person-Years of Employment**. The Person-Years of Employment measure reveals the full-time equivalent jobs generated by



an activity. It should be noted that, unlike the dollar values described above, Permanent Jobs is a "stock" rather than a "flow." In other words, if an area produces \$1 million in output in 2013 and \$1 million in 2014, it is appropriate to say that \$2 million was achieved in the 2013-2014 period. If the same area has 100 people working in 2013 and 100 in 2014, it only has 100 Permanent Jobs. When a flow of jobs is measured, such as in a construction project or a cumulative assessment over multiple years, it is appropriate to measure employment in Person-Years (a person working for a year). This concept is distinct from Permanent Jobs, which anticipates that the relevant positions will be maintained on a continuing basis.



# **Appendix C: Detailed Sectoral Results**



**Initial Year Benefits** 



### The Initial Annual Impact of Cost Savings Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employmen
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$74,720	\$21,553	\$13,939	0
Mining	\$27,662	\$6,265	\$3,149	0
Construction	\$224,975	\$116,591	\$96,078	1
Nondurable Manufacturing	\$831,478	\$248,875	\$133,190	2
Durable Manufacturing	\$203,615	\$84,700	\$54,533	1
Transportation and Utilities	\$519,886	\$180,091	\$99,609	1
Information	\$317,727	\$193,858	\$83,542	1
Wholesale Trade	\$384,365	\$260,097	\$149,974	2
Retail Trade	\$2,338,136	\$1,834,507	\$1,080,601	29
Finance, Insurance, and Real Estate	\$1,156,825	\$383,361	\$165,401	2
Business Services	\$395,164	\$253,259	\$206,594	2
Health Services	\$226,361	\$158,074	\$133,653	2
Other Services	\$506,643	\$260,082	\$204,472	5
TOTAL	\$7,207,556	\$4,001,312	\$2,424,737	48

\*Amount reflects the overall effect of estimated cost avoidance. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



The Initial Net Annual Impact of Reductions in Comorbidities and Disability Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

		i itoago i aiioi		
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$62,939	\$18,155	\$11,741	0
Mining	\$23,301	\$5,277	\$2,652	0
Construction	\$189,503	\$98,208	\$80,930	1
Nondurable Manufacturing	\$700,379	\$209,635	\$112,190	2
Durable Manufacturing	\$171,511	\$71,345	\$45,935	1
Transportation and Utilities	\$437,916	\$151,697	\$83,904	1
Information	\$267,631	\$163,292	\$70,370	1
Wholesale Trade	\$323,762	\$219,088	\$126,328	1
Retail Trade	\$1,969,484	\$1,545,261	\$910,223	25
Finance, Insurance, and Real Estate	\$974,429	\$322,917	\$139,322	1
Business Services	\$332,859	\$213,328	\$174,021	2
Health Services	\$190,671	\$133,151	\$112,580	2
Other Services	\$426,761	\$219,075	\$172,233	4
TOTAL	\$6,071,145	\$3,370,428	\$2,042,431	40

\*This amount represents the net effect of improvements in health outcomes as a result of the treatment provided by the Center. It is fully adjusted to reflect the operational costs that occur locally. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



### The Initial Annual Impact of Reduced Homelessness Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

	Last Dator	i Nouge i ano		
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$6,781	\$1,956	\$1,265	0
Mining	\$2,510	\$568	\$286	0
Construction	\$20,416	\$10,580	\$8,719	0
Nondurable Manufacturing	\$75,454	\$22,585	\$12,087	0
Durable Manufacturing	\$18,477	\$7,686	\$4,949	0
Transportation and Utilities	\$47,178	\$16,343	\$9,039	0
Information	\$28,833	\$17,592	\$7,581	0
Wholesale Trade	\$34,880	\$23,603	\$13,610	0
Retail Trade	\$212,178	\$166,475	\$98,061	3
Finance, Insurance, and Real Estate	\$104,978	\$34,789	\$15,010	0
Business Services	\$35,860	\$22,982	\$18,748	0
Health Services	\$20,541	\$14,345	\$12,129	0
Other Services	\$45,976	\$23,601	\$18,555	0
TOTAL	\$654,061	\$363,105	\$220,036	4
*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1)				

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



# The Initial Annual Impact of Enhanced Income and Productivity Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

	(East Bato)	i itougo i uitoi		
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$97,988	\$31,375	\$17,920	0
Mining	\$200,372	\$81,580	\$33,342	0
Construction	\$601,255	\$323,449	\$255,061	3
Nondurable Manufacturing	\$2,440,491	\$686,131	\$377,412	2
Durable Manufacturing	\$612,437	\$257,325	\$184,873	2
Transportation and Utilities	\$1,362,132	\$403,798	\$217,046	2
Information	\$331,193	\$218,630	\$97,865	1
Wholesale Trade	\$607,305	\$465,076	\$271,766	2
Retail Trade	\$1,756,207	\$1,357,425	\$794,914	23
Finance, Insurance, and Real Estate	\$2,660,812	\$847,672	\$299,761	3
Business Services	\$972,131	\$694,738	\$602,927	6
Health Services	\$547,977	\$431,046	\$358,823	6
Other Services	\$825,424	\$438,926	\$346,416	7
TOTAL	\$13,015,724	\$6,237,171	\$3,858,126	57
*Amount reflects imp	provements typically obse	rved with appropriate trea	atment. This estimate as	sumes that (1)

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



### The Initial Annual Impact of Reduced Mortality Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

	Last Bator	i nouge i anoi		
Sector	Total Expenditures	Real Gross Product	Personal Income	Employmen
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$41,486	\$12,392	\$7,974	0
Mining	\$6,044	\$1,411	\$819	0
Construction	\$112,771	\$57,257	\$47,183	1
Nondurable Manufacturing	\$403,412	\$116,446	\$61,551	1
Durable Manufacturing	\$67,087	\$26,573	\$17,242	0
Transportation and Utilities	\$334,314	\$107,989	\$58,129	1
Information	\$134,054	\$82,551	\$35,611	0
Wholesale Trade	\$126,033	\$85,287	\$49,177	1
Retail Trade	\$1,075,327	\$815,962	\$475,990	14
Finance, Insurance, and Real Estate	\$801,716	\$143,760	\$57,011	1
Business Services	\$166,047	\$97,745	\$79,735	1
Health Services	\$201,970	\$143,152	\$121,036	2
Other Services	\$383,491	\$200,057	\$158,121	3
TOTAL	\$3,853,752	\$1,890,581	\$1,169,578	24

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



# The Total Initial Annual Impact Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2017\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$283,914	\$85,431	\$52,839	1
Mining	\$259,889	\$95,101	\$40,248	0
Construction	\$1,148,920	\$606,085	\$487,971	6
Nondurable Manufacturing	\$4,451,215	\$1,283,673	\$696,429	7
Durable Manufacturing	\$1,073,127	\$447,629	\$307,531	3
Transportation and Utilities	\$2,701,425	\$859,917	\$467,728	4
Information	\$1,079,437	\$675,923	\$294,969	3
Wholesale Trade	\$1,476,346	\$1,053,151	\$610,856	6
Retail Trade	\$7,351,332	\$5,719,630	\$3,359,789	93
Finance, Insurance, and Real Estate	\$5,698,760	\$1,732,498	\$676,504	7
Business Services	\$1,902,061	\$1,282,052	\$1,082,025	12
Health Services	\$1,187,519	\$879,767	\$738,221	12
Other Services	\$2,188,295	\$1,141,741	\$899,798	20
TOTAL	\$30,802,238	\$15,862,598	\$9,714,908	173

\*Amount includes effects of direct cost savings, reductions in comorbidity and disability expenses, gains in income and productivity, improvements in homelessness, and reduced mortality. The estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



Annual Benefits at Maturity



# The Annual Impact (at Maturity) of Cost Savings Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032

Sector	Total Expenditures	<b>Real Gross Product</b>	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$199,952	\$57,676	\$37,301	1
Mining	\$74,024	\$16,764	\$8,426	0
Construction	\$602,032	\$311,997	\$257,105	3
Nondurable Manufacturing	\$2,225,035	\$665,991	\$356,416	6
Durable Manufacturing	\$544,873	\$226,657	\$145,931	2
Transportation and Utilities	\$1,391,214	\$481,925	\$266,555	3
Information	\$850,237	\$518,763	\$223,559	2
Wholesale Trade	\$1,028,561	\$696,021	\$401,332	4
Retail Trade	\$6,256,853	\$4,909,141	\$2,891,689	79
Finance, Insurance, and Real Estate	\$3,095,664	\$1,025,874	\$442,612	5
Business Services	\$1,057,460	\$677,721	\$552,847	6
Health Services	\$605,741	\$423,007	\$357,656	6
Other Services	\$1,355,776	\$695,979	\$547,168	12
TOTAL	\$19,287,425	\$10,707,515	\$6,488,599	128

\*Amount reflects the overall effect of estimated cost avoidance. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



The Net Annual Impact (at Maturity) of Reductions in Comorbidities and Disability Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$168,425	\$48,582	\$31,420	0
Mining	\$62,353	\$14,121	\$7,098	0
Construction	\$507,110	\$262,805	\$216,568	3
Nondurable Manufacturing	\$1,874,215	\$560,984	\$300,220	5
Durable Manufacturing	\$458,963	\$190,920	\$122,922	2
Transportation and Utilities	\$1,171,862	\$405,940	\$224,527	2
Information	\$716,181	\$436,970	\$188,311	2
Wholesale Trade	\$866,389	\$586,280	\$338,054	4
Retail Trade	\$5,270,339	\$4,135,119	\$2,435,759	66
Finance, Insurance, and Real Estate	\$2,607,573	\$864,125	\$372,826	4
Business Services	\$890,731	\$570,865	\$465,680	5
Health Services	\$510,235	\$356,312	\$301,265	5
Other Services	\$1,142,012	\$586,244	\$460,897	10
TOTAL	\$16,246,388	\$9,019,267	\$5,465,545	108

\*This amount represents the net effect of improvements in health outcomes as a result of the treatment provided by the Center. It is fully adjusted to reflect the operational costs that occur locally. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Annual Impact (at Maturity) of Reduced Homelessness Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032\*

	Last Bator	i itouge i alisi	1) 2002	
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$18,145	\$5,234	\$3,385	0
Mining	\$6,717	\$1,521	\$765	0
Construction	\$54,632	\$28,313	\$23,331	0
Nondurable Manufacturing	\$201,914	\$60,436	\$32,344	1
Durable Manufacturing	\$49,445	\$20,568	\$13,243	0
Transportation and Utilities	\$126,248	\$43,733	\$24,189	0
Information	\$77,156	\$47,076	\$20,287	0
Wholesale Trade	\$93,338	\$63,161	\$36,419	0
Retail Trade	\$567,788	\$445,487	\$262,411	7
Finance, Insurance, and Real Estate	\$280,921	\$93,094	\$40,166	0
Business Services	\$95,961	\$61,501	\$50,169	1
Health Services	\$54,969	\$38,386	\$32,456	1
Other Services	\$123,032	\$63,158	\$49,654	1
TOTAL	\$1,750,267	\$971,670	\$588,818	12
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\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



#### The Annual Impact (at Maturity) of Enhanced Income and Productivity Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032\*

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Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$262,215	\$83,959	\$47,953	1
Mining	\$536,194	\$218,309	\$89,224	0
Construction	\$1,608,960	\$865,550	\$682,544	8
Nondurable Manufacturing	\$6,530,757	\$1,836,088	\$1,009,954	6
Durable Manufacturing	\$1,638,881	\$688,601	\$494,720	4
Transportation and Utilities	\$3,645,066	\$1,080,563	\$580,815	4
Information	\$886,273	\$585,053	\$261,886	2
Wholesale Trade	\$1,625,150	\$1,244,543	\$727,247	7
Retail Trade	\$4,699,612	\$3,632,471	\$2,127,190	61
Finance, Insurance, and Real Estate	\$7,120,334	\$2,268,371	\$802,160	8
Business Services	\$2,601,423	\$1,859,120	\$1,613,434	16
Health Services	\$1,466,386	\$1,153,479	\$960,209	15
Other Services	\$2,208,835	\$1,174,567	\$927,010	20
TOTAL	\$34,830,085	\$16,690,673	\$10,324,347	153
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\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Annual Impact (at Maturity) of Reduced Mortality Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032\*

	Last Dator	i Nouge i ano	11)—2032	
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
Agriculture	\$111,016	\$33,162	\$21,338	0
Mining	\$16,172	\$3,776	\$2,191	0
Construction	\$301,775	\$153,219	\$126,262	2
Nondurable Manufacturing	\$1,079,531	\$311,609	\$164,711	3
Durable Manufacturing	\$179,526	\$71,110	\$46,138	1
Transportation and Utilities	\$894,624	\$288,978	\$155,553	1
Information	\$358,728	\$220,907	\$95,294	1
Wholesale Trade	\$337,264	\$228,227	\$131,598	1
Retail Trade	\$2,877,576	\$2,183,515	\$1,273,749	37
Finance, Insurance, and Real Estate	\$2,145,393	\$384,702	\$152,562	2
Business Services	\$444,343	\$261,565	\$213,370	2
Health Services	\$540,471	\$383,074	\$323,893	5
Other Services	\$1,026,223	\$535,352	\$423,132	9
TOTAL	\$10,312,643	\$5,059,197	\$3,129,793	63

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Total Annual Impact (at Maturity) Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)—2032\*

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Total Expenditures	Real Gross Product	Personal Income	Employment
(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Permanent Jobs)
\$759,753	\$228,613	\$141,398	2
\$695,462	\$254,490	\$107,704	0
\$3,074,510	\$1,621,884	\$1,305,811	16
\$11,911,453	\$3,435,109	\$1,863,645	19
\$2,871,688	\$1,197,856	\$822,954	8
\$7,229,014	\$2,301,139	\$1,251,640	11
\$2,888,575	\$1,808,770	\$789,338	7
\$3,950,702	\$2,818,232	\$1,634,650	16
\$19,672,169	\$15,305,734	\$8,990,798	250
\$15,249,885	\$4,636,166	\$1,810,326	18
\$5,089,916	\$3,430,771	\$2,895,499	31
\$3,177,802	\$2,354,258	\$1,975,479	31
\$5,855,878	\$3,055,299	\$2,407,861	52
\$82,426,808	\$42,448,322	\$25,997,101	463
	Total Expenditures         (2014 Dollars)         \$759,753         \$695,462         \$3,074,510         \$11,911,453         \$2,871,688         \$7,229,014         \$2,888,575         \$3,950,702         \$19,672,169         \$15,249,885         \$5,089,916         \$3,177,802         \$5,855,878	Total Expenditures         Real Gross Product           (2014 Dollars)         (2014 Dollars)           \$759,753         \$228,613           \$695,462         \$254,490           \$3,074,510         \$1,621,884           \$11,911,453         \$3,435,109           \$2,871,688         \$1,197,856           \$2,871,688         \$1,197,856           \$7,229,014         \$2,301,139           \$2,888,575         \$1,808,770           \$3,950,702         \$2,818,232           \$19,672,169         \$15,305,734           \$15,249,885         \$4,636,166           \$5,089,916         \$3,430,771           \$3,177,802         \$2,354,258           \$5,855,878         \$3,055,299	Total ExpendituresReal Gross ProductPersonal Income(2014 Dollars)(2014 Dollars)(2014 Dollars)\$759,753\$228,613\$141,398\$695,462\$254,490\$107,704\$3,074,510\$1,621,884\$1,305,811\$11,911,453\$3,435,109\$1,863,645\$2,871,688\$1,197,856\$822,954\$7,229,014\$2,301,139\$1,251,640\$2,888,575\$1,808,770\$789,338\$3,950,702\$2,818,232\$1,634,650\$19,672,169\$15,305,734\$8,990,798\$15,249,885\$4,636,166\$1,810,326\$5,089,916\$3,430,771\$2,895,499\$3,177,802\$2,354,258\$1,975,479\$5,855,878\$3,055,299\$2,407,861

\*Amount includes effects of direct cost savings, reductions in comorbidity and disability expenses, gains in income and productivity, improvements in homelessness, and reduced mortality. The estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



Cumulative Impact: Years 1-5



# The Cumulative Impact (Years 1-5) of Cost Savings Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$610,446	\$176,083	\$113,880	2
Mining	\$225,994	\$51,180	\$25,725	0
Construction	\$1,837,987	\$952,519	\$784,935	11
Nondurable Manufacturing	\$6,792,966	\$2,033,250	\$1,088,128	17
Durable Manufacturing	\$1,663,481	\$691,977	\$445,522	6
Transportation and Utilities	\$4,247,335	\$1,471,302	\$813,784	8
Information	\$2,595,749	\$1,583,768	\$682,519	6
Wholesale Trade	\$3,140,166	\$2,124,930	\$1,225,254	13
Retail Trade	\$19,101,985	\$14,987,458	\$8,828,241	240
Finance, Insurance, and Real Estate	\$9,450,970	\$3,131,962	\$1,351,281	14
Business Services	\$3,228,392	\$2,069,062	\$1,687,824	20
Health Services	\$1,849,310	\$1,291,427	\$1,091,914	17
Other Services	\$4,139,144	\$2,124,801	\$1,670,488	37
TOTAL	\$58,883,926	\$32,689,719	\$19,809,497	390

\*Amount reflects the overall effect of estimated cost avoidance. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that is it patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



The Cumulative Net Impact (Years 1-5) of Reductions in Comorbidities and Disability Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$514,198	\$148,320	\$95,925	1
Mining	\$190,362	\$43,110	\$21,669	0
Construction	\$1,548,193	\$802,336	\$661,175	9
Nondurable Manufacturing	\$5,721,923	\$1,712,669	\$916,563	14
Durable Manufacturing	\$1,401,201	\$582,873	\$375,277	5
Transportation and Utilities	\$3,577,660	\$1,239,322	\$685,475	7
Information	\$2,186,479	\$1,334,057	\$574,907	5
Wholesale Trade	\$2,645,058	\$1,789,894	\$1,032,069	11
Retail Trade	\$16,090,187	\$12,624,395	\$7,436,297	203
Finance, Insurance, and Real Estate	\$7,960,841	\$2,638,147	\$1,138,226	12
Business Services	\$2,719,374	\$1,742,834	\$1,421,706	16
Health Services	\$1,557,731	\$1,087,809	\$919,752	14
Other Services	\$3,486,528	\$1,789,785	\$1,407,104	32
TOTAL	\$49,599,734	\$27,535,551	\$16,686,145	329
*This amount represe	ents the net effect of imp	rovements in health outco	mes as a result of the tre	atment provided

\*This amount represents the net effect of improvements in health outcomes as a result of the treatment provided by the Center. It is fully adjusted to reflect the operational costs that occur locally. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars. SOURCE: US Multi-Regional Impact Assessment System, The Perryman Group



#### The Cumulative Impact (Years 1-5) of Reduced Homelessness Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

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Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$55,396	\$15,979	\$10,334	0
Mining	\$20,508	\$4,644	\$2,334	0
Construction	\$166,791	\$86,438	\$71,230	1
Nondurable Manufacturing	\$616,438	\$184,510	\$98,744	2
Durable Manufacturing	\$150,955	\$62,794	\$40,430	1
Transportation and Utilities	\$385,431	\$133,515	\$73,848	1
Information	\$235,555	\$143,721	\$61,936	1
Wholesale Trade	\$284,959	\$192,830	\$111,188	1
Retail Trade	\$1,733,439	\$1,360,060	\$801,132	22
Finance, Insurance, and Real Estate	\$857,643	\$284,215	\$122,624	1
Business Services	\$292,965	\$187,760	\$153,164	2
Health Services	\$167,818	\$117,193	\$99,087	2
Other Services	\$375,613	\$192,818	\$151,591	3
TOTAL	\$5,343,511	\$2,966,478	\$1,797,643	35

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



## The Cumulative Impact (Years 1-5) of Enhanced Income and Productivity Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

	1			
Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$800,533	\$256,324	\$146,398	2
Mining	\$1,636,986	\$666,489	\$272,398	1
Construction	\$4,912,106	\$2,642,497	\$2,083,785	23
Nondurable Manufacturing	\$19,938,204	\$5,605,521	\$3,083,359	19
Durable Manufacturing	\$5,003,454	\$2,102,278	\$1,510,367	13
Transportation and Utilities	\$11,128,276	\$3,298,928	\$1,773,212	13
Information	\$2,705,764	\$1,786,150	\$799,531	7
Wholesale Trade	\$4,961,533	\$3,799,551	\$2,220,263	20
Retail Trade	\$14,347,775	\$11,089,824	\$6,494,247	186
Finance, Insurance, and Real Estate	\$21,738,166	\$6,925,267	\$2,448,971	24
Business Services	\$7,942,065	\$5,675,837	\$4,925,764	50
Health Services	\$4,476,831	\$3,521,535	\$2,931,490	47
Other Services	\$6,743,507	\$3,585,919	\$2,830,133	61
TOTAL	\$106,335,200	\$50,956,121	\$31,519,919	466

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Cumulative Impact (Years 1-5) of Reduced Mortality Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

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Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$338,929	\$101,241	\$65,145	1
Mining	\$49,374	\$11,527	\$6,690	0
Construction	\$921,309	\$467,774	\$385,475	5
Nondurable Manufacturing	\$3,295,776	\$951,333	\$502,859	8
Durable Manufacturing	\$548,086	\$217,096	\$140,859	2
Transportation and Utilities	\$2,731,260	\$882,242	\$474,900	4
Information	\$1,095,185	\$674,424	\$290,931	3
Wholesale Trade	\$1,029,658	\$696,771	\$401,765	4
Retail Trade	\$8,785,154	\$6,666,207	\$3,888,716	112
Finance, Insurance, and Real Estate	\$6,549,821	\$1,174,485	\$465,767	5
Business Services	\$1,356,566	\$798,549	\$651,411	8
Health Services	\$1,650,042	\$1,169,514	\$988,835	16
Other Services	\$3,133,028	\$1,634,412	\$1,291,810	27
TOTAL	\$31,484,189	\$15,445,576	\$9,555,162	193

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Total Cumulative Impact (Years 1-5) Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$2,319,502	\$697,949	\$431,682	6
Mining	\$2,123,224	\$776,951	\$328,817	1
Construction	\$9,386,386	\$4,951,564	\$3,986,600	49
Nondurable Manufacturing	\$36,365,308	\$10,487,283	\$5,689,653	59
Durable Manufacturing	\$8,767,178	\$3,657,019	\$2,512,455	26
Transportation and Utilities	\$22,069,962	\$7,025,309	\$3,821,219	33
Information	\$8,818,732	\$5,522,120	\$2,409,825	22
Wholesale Trade	\$12,061,375	\$8,603,977	\$4,990,537	49
Retail Trade	\$60,058,539	\$46,727,943	\$27,448,634	763
Finance, Insurance, and Real Estate	\$46,557,440	\$14,154,076	\$5,526,869	56
Business Services	\$15,539,362	\$10,474,042	\$8,839,870	95
Health Services	\$9,701,732	\$7,187,478	\$6,031,078	96
Other Services	\$17,877,820	\$9,327,736	\$7,351,126	160
TOTAL	\$251,646,561	\$129,593,446	\$79,368,366	1,414

\*Amount includes effects of direct cost savings, reductions in comorbidity and disability expenses, gains in income and productivity, improvements in homelessness, and reduced mortality. The estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



Cumulative Impact: Years 1-10



# The Cumulative Impact (Years 1-10) of Cost Savings Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$1,359,685	\$392,201	\$253,652	4
Mining	\$503,371	\$113,996	\$57,299	0
Construction	\$4,093,863	\$2,121,605	\$1,748,335	23
Nondurable Manufacturing	\$15,130,396	\$4,528,784	\$2,423,655	38
Durable Manufacturing	\$3,705,175	\$1,541,282	\$992,340	13
Transportation and Utilities	\$9,460,353	\$3,277,122	\$1,812,592	18
Information	\$5,781,673	\$3,527,626	\$1,520,218	13
Wholesale Trade	\$6,994,288	\$4,732,989	\$2,729,084	29
Retail Trade	\$42,547,039	\$33,382,498	\$19,663,689	536
Finance, Insurance, and Real Estate	\$21,050,732	\$6,976,013	\$3,009,793	31
Business Services	\$7,190,799	\$4,608,550	\$3,759,396	44
Health Services	\$4,119,084	\$2,876,477	\$2,432,087	38
Other Services	\$9,219,373	\$4,732,702	\$3,720,783	83
TOTAL	\$131,155,831	\$72,811,845	\$44,122,924	869

\*Amount reflects the overall effect of estimated cost avoidance. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



## The Cumulative Net Impact (Years 1-10) of Reductions in Comorbidities and Disability Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

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Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$1,145,304	\$330,363	\$213,659	3
Mining	\$424,005	\$96,023	\$48,265	0
Construction	\$3,448,386	\$1,787,093	\$1,472,676	20
Nondurable Manufacturing	\$12,744,796	\$3,814,734	\$2,041,519	32
Durable Manufacturing	\$3,120,982	\$1,298,269	\$835,878	11
Transportation and Utilities	\$7,968,745	\$2,760,420	\$1,526,802	15
Information	\$4,870,080	\$2,971,427	\$1,280,526	11
Wholesale Trade	\$5,891,503	\$3,986,742	\$2,298,791	24
Retail Trade	\$35,838,674	\$28,119,100	\$16,563,328	451
Finance, Insurance, and Real Estate	\$17,731,676	\$5,876,109	\$2,535,241	26
Business Services	\$6,057,030	\$3,881,922	\$3,166,654	37
Health Services	\$3,469,630	\$2,422,944	\$2,048,622	32
Other Services	\$7,765,761	\$3,986,500	\$3,134,129	70
TOTAL	\$110,476,572	\$61,331,646	\$37,166,089	732

\*This amount represents the net effect of improvements in health outcomes as a result of the treatment provided by the Center. It is fully adjusted to reflect the operational costs that occur locally. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



#### The Cumulative Impact (Years 1-10) of Reduced Homelessness Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$123,387	\$35,591	\$23,018	0
Mining	\$45,679	\$10,345	\$5,200	0
Construction	\$371,504	\$192,528	\$158,655	2
Nondurable Manufacturing	\$1,373,031	\$410,971	\$219,938	3
Durable Manufacturing	\$336,232	\$139,866	\$90,051	1
Transportation and Utilities	\$858,494	\$297,387	\$164,486	2
Information	\$524,667	\$320,120	\$137,954	1
Wholesale Trade	\$634,707	\$429,502	\$247,655	3
Retail Trade	\$3,860,996	\$3,029,346	\$1,784,411	49
Finance, Insurance, and Real Estate	\$1,910,281	\$633,049	\$273,128	3
Business Services	\$652,540	\$418,210	\$341,152	4
Health Services	\$373,793	\$261,030	\$220,703	3
Other Services	\$836,626	\$429,476	\$337,648	8
TOTAL	\$11,901,935	\$6,607,422	\$4,004,002	79

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Cumulative Impact (Years 1-10) of Enhanced Income and Productivity Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

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Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$1,783,078	\$570,927	\$326,081	5
Mining	\$3,646,160	\$1,484,513	\$606,730	2
Construction	\$10,941,039	\$5,885,799	\$4,641,344	52
Nondurable Manufacturing	\$44,409,601	\$12,485,524	\$6,867,758	42
Durable Manufacturing	\$11,144,505	\$4,682,536	\$3,364,134	28
Transportation and Utilities	\$24,786,702	\$7,347,907	\$3,949,584	29
Information	\$6,026,717	\$3,978,403	\$1,780,846	16
Wholesale Trade	\$11,051,130	\$8,462,977	\$4,945,329	45
Retail Trade	\$31,957,691	\$24,701,054	\$14,465,041	415
Finance, Insurance, and Real Estate	\$48,418,768	\$15,425,079	\$5,454,747	54
Business Services	\$17,689,854	\$12,642,145	\$10,971,460	110
Health Services	\$9,971,525	\$7,843,734	\$6,529,490	105
Other Services	\$15,020,233	\$7,987,140	\$6,303,732	135
TOTAL	\$236,847,004	\$113,497,738	\$70,206,275	1,037

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Cumulative Impact (Years 1-10) of Reduced Mortality Expenses Associated with the Implementation of a Restoration Center for Mental Health and Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

(			1
Total Expenditures	Real Gross Product	Personal Income	Employment
(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
\$754,918	\$225,501	\$145,102	2
\$109,974	\$25,674	\$14,900	0
\$2,052,089	\$1,041,903	\$858,593	12
\$7,340,888	\$2,118,964	\$1,120,049	18
\$1,220,787	\$483,552	\$313,744	4
\$6,083,506	\$1,965,072	\$1,057,774	10
\$2,439,374	\$1,502,186	\$648,009	6
\$2,293,421	\$1,551,962	\$894,875	10
\$19,567,720	\$14,848,057	\$8,661,580	249
¢14 F09 004	¢2.616.004	¢1 027 422	10
			10
\$3,021,563	\$1,778,658	\$1,450,929	17
\$3,675,241	\$2,604,931	\$2,202,493	35
\$6,978,389	\$3,640,428	\$2,877,328	59
\$70,126,693	\$34,402,892	\$21,282,808	431
	\$754,918 \$109,974 \$2,052,089 \$7,340,888 \$1,220,787 \$6,083,506 \$2,439,374 \$2,293,421 \$19,567,720 \$14,588,824 \$3,021,563 \$3,675,241 \$6,978,389	Total ExpendituresReal Gross Product(2014 Dollars)(2014 Dollars)\$754,918\$225,501\$109,974\$25,674\$2,052,089\$1,041,903\$7,340,888\$2,118,964\$1,220,787\$483,552\$6,083,506\$1,965,072\$2,439,374\$1,502,186\$2,293,421\$1,551,962\$19,567,720\$14,848,057\$14,588,824\$2,616,004\$3,021,563\$1,778,658\$3,675,241\$2,604,931\$6,978,389\$3,640,428	(2014 Dollars)(2014 Dollars)(2014 Dollars)\$754,918\$225,501\$145,102\$109,974\$25,674\$14,900\$2,052,089\$1,041,903\$858,593\$7,340,888\$2,118,964\$1,120,049\$1,220,787\$483,552\$313,744\$6,083,506\$1,965,072\$1,057,774\$2,439,374\$1,502,186\$648,009\$2,293,421\$1,551,962\$894,875\$19,567,720\$14,848,057\$8,661,580\$14,588,824\$2,616,004\$1,037,432\$3,021,563\$1,778,658\$1,450,929\$3,675,241\$2,604,931\$2,202,493\$6,978,389\$3,640,428\$2,877,328

\*Amount reflects improvements typically observed with appropriate treatment. This estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.



# The Total Cumulative Impact (Years 1-10) Associated with the Implementation of a Restoration Center for Mental Health And Substance Abuse Issues on Business Activity in Baton Rouge (East Baton Rouge Parish)\*

Sector	Total Expenditures	Real Gross Product	Personal Income	Employment
	(2014 Dollars)	(2014 Dollars)	(2014 Dollars)	(Person-Years)
Agriculture	\$5,166,372	\$1,554,584	\$961,513	14
Mining	\$4,729,189	\$1,730,551	\$732,394	2
Construction	\$20,906,880	\$11,028,927	\$8,879,603	109
Nondurable Manufacturing	\$80,998,711	\$23,358,978	\$12,672,919	132
Durable Manufacturing	\$19,527,682	\$8,145,505	\$5,596,147	57
Transportation and Utilities	\$49,157,800	\$15,647,908	\$8,511,239	73
Information	\$19,642,511	\$12,299,762	\$5,367,553	48
Wholesale Trade	\$26,865,050	\$19,164,172	\$11,115,734	110
Retail Trade	\$133,772,120	\$104,080,054	\$61,138,049	1,699
Finance, Insurance, and Real Estate	\$103,700,282	\$31,526,254	\$12,310,340	124
Business Services	\$34,611,786	\$23,329,485	\$19,689,591	211
Health Services	\$21,609,272	\$16,009,116	\$13,433,395	214
Other Services	\$39,820,381	\$20,776,247	\$16,373,620	356
TOTAL	\$560,508,036	\$288,651,543	\$176,782,098	3,149

\*Amount includes effects of direct cost savings, reductions in comorbidity and disability expenses, gains in income and productivity, improvements in homelessness, and reduced mortality. The estimate assumes that (1) the Center will follow the same ramp-up period as the San Antonio facility that it is patterned after and (2) it will achieve 90% of the effectiveness of the San Antonio facility. The size of the facility was fully adjusted to reflect the size of the relevant jail population relative to San Antonio as well as the segment of the overall population likely to make use of the Center (assuming patterns similar to San Antonio). It is further assumed that growth beyond the initial ramp-up period will reflect projected expansion in the relevant jail population as well as growth in the overall population segment in the area likely to make use of the facility and its various programs. Costs were also adjusted to reflect relative patterns in San Antonio and Baton Rouge and all monetary values are given in constant (2014) dollars.