BUREAU OF JUSTICE ASSISTANCE
JUSTICE AND MENTAL HEALTH COLLABORATIVE PROGRAM

Travis County, Texas

Phase I Strategic Plan

September 28, 2012

MORNINGSIDE
RESEARCH AND CONSULTING, INC

www.morningsideresearch.com

BUREAU OF JUSTICE ASSISTANCE
JUSTICE AND MENTAL HEALTH COLLABORATIVE PROGRAM
Travis County, Texas

Phase I Strategic Plan

September 28, 2012

Prepared by

Morningside Research and Consulting, Inc.
P.O. Box 4173
Austin, Texas 78765
Phone 512 302 4413 • Fax 512 302 4416
www.morningsideresearch.com

Table of Contents

I. Executive Summary

Project Goals

The Travis County Criminal Justice Planning (CJP) Office was awarded a Justice and Mental Health Collaboration Program planning grant by the U.S. Department of Justice, Bureau of Justice Assistance (BJA). The grant is designed to be Phase I in the development of a community-wide strategic plan to address the needs of individuals diagnosed with severe and persistent mental disorders, such as bipolar disorder and schizophrenia who are or become incarcerated in the Travis County Jail and have co-occurring substance use disorders. This group is defined as the target population. The purpose of the grant was to begin the process of creating a seamless, evidence-based continuum of care for the target population.

Methodology

A representative, community-wide Advisory Board and several sub-committees met to identify barriers to care and coordination of services for the target population as well as early intervention opportunities that would promote offender success and foster public safety. The Board agreed to use the Sequential Intercept Model (SIM) from the GAINS Center for Behavioral Health and Justice Transformation as the framework for this first phase of planning.

An initial cohort of 652 individuals met the defined criteria for the target population. Detailed data analysis regarding health care utilization, criminal justice involvement, and behavioral health patterns by this cohort are presented in this document.

Conclusions

The Advisory Board made progress in gathering and analyzing data related to the target population, identifying potential barriers to care, and selecting areas where improved coordination of care and collaboration would benefit individuals in the target population and the community. The Advisory Board served as a forum for improving communication and understanding among participating organizations about the benefits and challenges of existing services. The work of the Advisory Board, including the research, analysis, and discussions that occurred during this first phase of planning, is detailed in this strategic plan.

While the Advisory Board made significant strides in identifying opportunities for service delivery integration, additional research, data analysis, and planning remain to be completed. Phase II collaborative efforts for improved program planning and coordination of services are already underway. With the consumer as the center of the Advisory Board's continued efforts, and involvement from an Executive Committee of individuals who can impact local budgets and service delivery strategies, the participants in the Phase I planning process are ready to address the next steps in implementing the goals of the Mental Health Collaboration Program.

For more information about this grant or document please contact: Cathy McClaugherty, Senior Planner for Travis County Criminal Justice Planning, Cathy.McClaugherty@co.travis.tx.us, 512-854-4713.

II. Project Overview and Methodology

Project Overview

The Travis County Criminal Justice Planning (CJP) Office was awarded a Justice and Mental Health Collaboration Program planning grant by the U.S. Department of Justice, Bureau of Justice Assistance (BJA). The grant is designed to be Phase I in the development of a community-wide strategic plan to address the needs of individuals diagnosed with severe and persistent mental disorders, such as bipolar disorder and schizophrenia, and have co-occurring substance use disorders; and who are incarcerated in the Travis County Jail.

The purpose of the grant was to begin the process of creating a seamless, evidence-based continuum of care for the target population, address identified barriers to care and coordination of services, and enhance early intervention opportunities to promote offender success and foster public safety. The planning was to incorporate a trauma-informed, recovery oriented approach for the target population and to address the needs of women and the uninsured and underserved populations.

The grant application generated broad support and participation from the many public and private agencies providing services to the target population, including the following organizations that provided letters of support for the grant application: Austin City Council, Austin/Travis County Health and Human Services, Austin/Travis County Integral Care (ATCIC), Austin/Travis County Reentry Roundtable, Caritas of Austin, Central Health, Downtown Austin Community Court (DACC), Ending Chronic Homelessness Coalition (ECHO), Front Steps, Travis County Mental Health Public Defender's Office, National Alliance on Mental Illness (NAMI), Seton Healthcare Family, Travis County Attorney's Office, Travis County District Attorney's Office, Travis County Criminal Courts, and Travis County Sheriff's Office (TCSO).

Morningside Research and Consulting was contracted to facilitate the strategic planning process and draft the strategic plan.

Why Planning is Needed

The need for services to address the multiple challenges faced by the target population is well-documented. Mental health conditions are broadly defined by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services as "conditions that involve changes in thinking, mood, and/or behavior, and they are associated with distress or impaired functioning."[1] According to

[1] Facts about Common Mental Illness. http://promoteacceptance.samhsa.gov/publications/thefaxts.aspx Downloaded 8/30/12.

SAMHSA, when these conditions are more severe, they are called mental illnesses. Severe conditions include anxiety disorders, schizophrenia, and depressive and other mood disorders.

An estimated 26.2 percent of Americans over the age of 18 suffer from a diagnosable mental disorder with 2.6 percent suffering from a serious mental health issues.[2] More than 1 million Texans have a serious mental health issues.[3] Texas ranks 48th out of 50 states in per capita funding for behavioral health services.[4] According to the 2012 Community Action Network (CAN) Community Dashboard, 20 percent of the Travis County population—one in five people—reported poor mental health in 2010.[5]

Research has indicated that the incidence of serious mental health issues, such as schizophrenia, bipolar disorder, major depression, and post-traumatic stress disorder, is two to four times higher among individuals in prison than it is among those in the general population.[6] A 2010 report from Austin/Travis County Integral Care (ATCIC) found that between 17 and 20 percent of the inmates booked in Travis county have severe mental health issues.[7]

The community dashboard data from the Psychiatric Stakeholder Group provides the percent of inmates screened with both psychiatric and psychiatric special needs for fiscal years (FY) 2011 and FY 2012 year-to-date, the number of individuals in area hospital Emergency Departments (EDs) needing inpatient psychiatric services and the wait time for those psychiatric beds from the ED, and information on wait times and service levels for Psychiatric Evaluation Services (PES) and Mobile Crisis Outreach Teams (MCOT). These community-wide data demonstrate an increase in the volume of individuals and wait times for services in several of these measurement areas.

Defining the Target Population

The target population for the CJP grant includes individuals diagnosed with a priority population major mental disorders, as defined by the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV), have a co-occurring substance use disorder, and were booked into the Travis County Jail. The TCSO identified an initial cohort of

CJP Planning Grant Target Population Definition

- Booked in the Travis County Jail during calendar year 2011.
- Has a state-defined priority population mental health disorder.
- Has a co-occurring substance use disorder.
- A total of 652 individuals met this criteria in 2011, according to the Travis County Sheriff's Office
- The target population in 2011 is 24 percent female and 76 percent male.

[2] Stone, Susan, MD, JD. "Continuity of Care Task Force Final Report." August 2010.
[3] Ibid.
[4] Stone, Susan, MD, JD. and James R. Van Norman, MD. "Behavioral Health Community Indicators Project presentation." Web. www.indicatorsinitiative.org. Accessed July 1, 2012.
[5] Community Access Network Community Dashboard. Web. www.cancommunitydashboard.org. Accessed July 1, 2012.
[6] Hammett, Theodore M., Cheryl Roberts, and Sofia Kennedy, "Health-Related Issues in Prisoner Reentry," Crime & Delinquency 47, no. 3 (2002): 390-409.
[7] Austin Travis County Integral Care. "Jail Diversion Plan." March 1, 2010. Page 1. Print.

652 individuals who met this criteria during calendar year 2011. The target population is approximately one-quarter female and three-quarters male, and the entire target population is uninsured and or under-insured.

Creating the Advisory Board

The first priority for the project was the creation of an Advisory Board. According to the grant application, members of the Advisory Board were charged with developing short- and long-term goals and objectives designed to create a seamless continuum of care for the target population. In addition, the Advisory Board was to identify gaps in services, unmet mental health needs, and linkages for persons involved in the criminal justice system.

Approximately 50 stakeholders in the community received an invitation to join the Advisory Board. An introductory meeting was held on February 24, that was attended by 32 individuals. TCSO presented an overview of the target population and the meeting concluded with committees meetings and discussion about how to proceed.

Between 25 and 30 individuals have consistently attended each Advisory Board meeting. The Advisory Board currently has representation from multiple organizations, including mental health and substance abuse providers, law enforcement, pretrial services, courts, jails, community corrections, housing, health care, non-profit organizations, and consumer advocates. Advisory Board members were asked to sign participation agreements in which they agreed to assist in the development of short- and long-term goals and objectives to create a system of care for the target population. A full list of organizations that signed the Advisory Board Member Agreement committing to full participation in the process is provided in Appendix A. The agreement is also included in the Appendix.

The Advisory Board met as a large group on nine separate dates:

- February 24, 2012
- March 15, 2012
- March 27, 2012
- April 13, 2012
- May 1, 2012
- May 22, 2012
- June 15, 2012
- July 13, 2012
- August 28, 2012

Committees

The Advisory Board began discussions about gaps in services and unmet needs for the target population and identified topics for further deliberations. The Advisory Board formed three committees related to the topics of discussion that would inform Phase I of this strategic planning process as described below:

Data collection committee. The data collection committee worked on the following action items:

- Determine what data would assist with the strategic planning process.
- Identify existing available data.
- Identify who had the available data.
- Review existing data from Travis County Criminal Justice Planning for mental health treatment, law enforcement, and criminal justice outcomes.
- Identify gaps in data that were needed for service planning.
- Develop a plan for the creation of a uniform database.

Sustainability committee. The sustainability committee discussed the following topics:

- Create a list of funding sources/streams to continue sustainability and planning efforts.
- Gather information needed to apply for or obtain funding.
- Collaborate with policy makers on grant writing.
- Collaborate with policy makers on recommendations.

Service planning committee. The service planning committee discussed the following topics:

- Determine the strengths and weaknesses of existing services to the target population.
- Assess gaps/issues with existing services, paying specific attention to:
    a. trauma-informed care,
    b. justice-involved women, and
    c. locally un-served or underserved populations.
- Determine community needs for additional mental health, criminal justice, and substance abuse programs.
- Determine where efficiencies can be achieved by combining or co-locating existing services and programs.

Planning Documents

In the early stages of the planning process, Advisory Board members recommended several documents that contained information for guiding the planning efforts for this grant. Those reports were distributed and discussed as various points in the planning process. The documents that helped guide the planning efforts are included in the bibliography in Appendix B.

Sequential Intercept Model

The Sequential Intercept Model, or SIM, is a tool that was developed by researchers and psychiatrists to provide communities with a framework to better understand how individuals with mental health conditions interact and intercept with the criminal justice system. Individuals in the target population tend to cycle through the health care and mental health systems getting emergency or one-time services that address their current acute symptoms but never provide a long-term solution to the problem. Without a thorough review of the programs and processes within each intercept or the collaboration and integration of services across systems, the criminal justice system can become a revolving door for individuals within the target population.

History of the SIM. The graphic on the following page illustrates the original SIM that was developed in 2006 by psychiatrists and researchers concerned about the over-representation or "criminalization" of people with mental health issues within the criminal justice system.[8] These researchers believe that people with mental health issues should not "penetrate" the criminal justice system at a higher rate than those within the community without mental health issues. They believe that the "presence of mental illness should not result in unnecessary arrest or incarceration."[9]

The Advisory Board utilized a newer SIM model from the SAMHSA GAINS Center for Behavioral Health and Justice Transformation. A graphic representation of this model is also provided on the following page. According to the GAINS Center, the three responses that are needed in each community to help break the cycle of repeated involvement with the criminal justice system by those with serious mental health issues are:

- *Diversion programs* to keep people with serious mental health issues who do not need to be in the criminal justice system in the community.
- *Institutional services* to provide constitutionally adequate services in correctional facilities for people with serious mental health issues who need to be in the criminal justice system because of the severity of the crime.
- *Reentry transition programs* to link people with serious mental health issues to community-based services when they are discharged.[10]

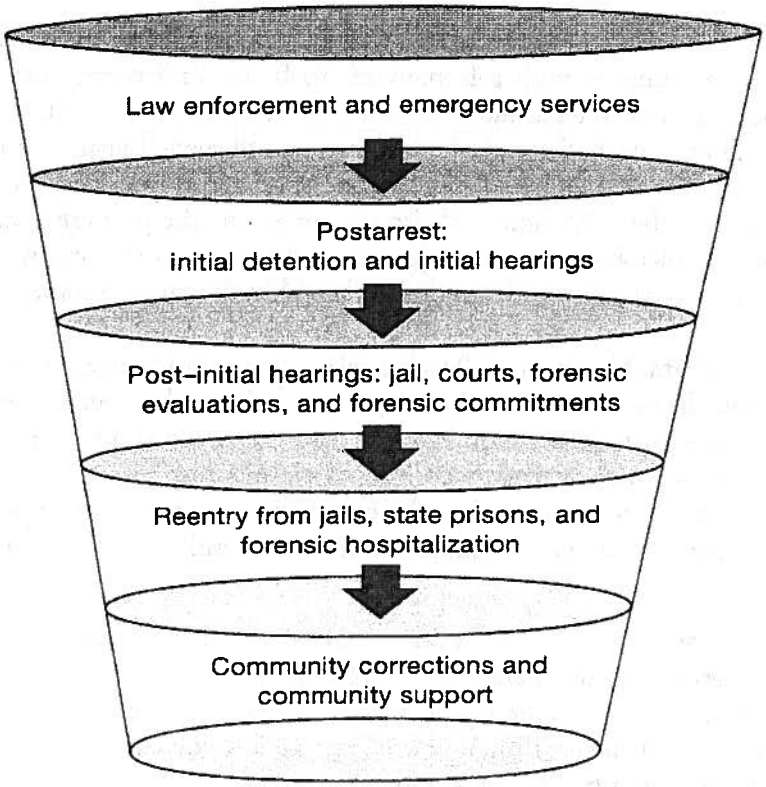
Advisory Board SIM. The Advisory Board chose to use the framework recommended by the GAINS Center as a tool to guide their Phase I assessment and planning efforts. The Advisory Board determined that the target population interacted with the criminal justice system in Travis County along the main five intercepts defined by this model, and added an initial "Intercept 0" for community services:

0. Community Services
1. Law Enforcement

[8] Munetz, Mark MD and Patricia Griffin, Ph.D. "Use of the Sequential Intercept Model as an Approach to Decriminalization of People with Serious Mental Illness." *Psychiatric Services* 57 (April 2006).
[9] Ibid.
[10] "Sequential Intercepts for Developing CJ-MH Partnerships." The CMHS National GAINS Center, Substance Abuse and Mental Health

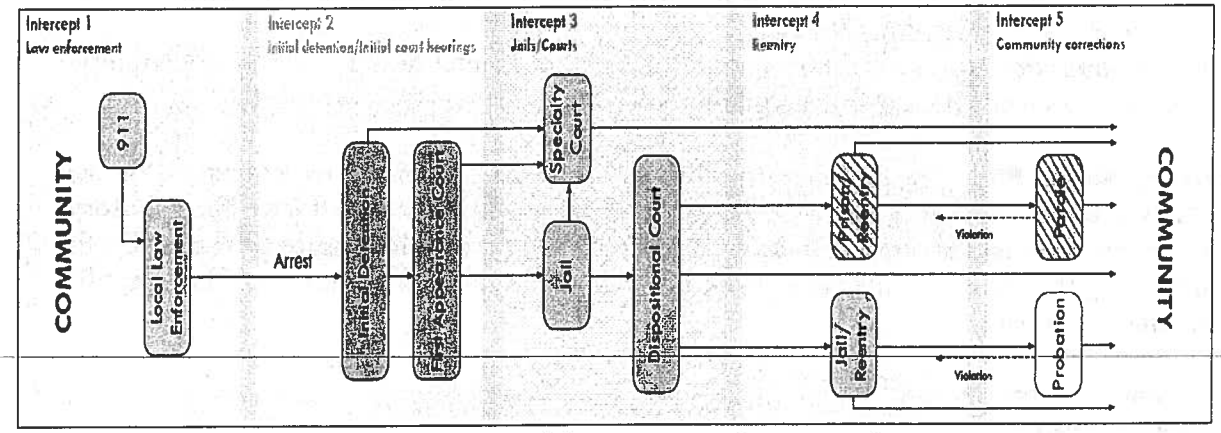
Original Sequential Intercept Model (SIM)

Best clinical practices: The ultimate intercept



Source: *Psychiatric Services*, April 2006, Vol. 57, No. 4, 544-549.

SIM Model Adopted by Travis County Mental Health Planning Grant Advisory Board



Source: Developing a Comprehensive Plan for Mental Health & Criminal Justice Collaboration: The Sequential Intercept Model. The National GAINS Center for Mental Health Services.

2. Initial Detention and Initial Court Hearings
3. Jails/Courts
4. Reentry
5. Community Corrections

The Advisory Board set as one short-term goal the completion of the SIM for each organization and program providing services to the target population within the county criminal justice system. In addition to the Advisory Board meetings, small group meetings were held focusing on each intercept in the model approved by the Advisory Board.

The Advisory Board made significant progress in identifying the existing services available within each intercept, the funding sources for those services, relevant data that was available, program gaps and barriers, and possible solutions. The intercept teams also identified existing best practices that are available for those programs. This analysis enabled the Advisory Board members to view the Travis County criminal justice system comprehensively and generated discussion about the interactions and relationships within and between the intercepts. The Advisory Board adjusted the SIM throughout the planning process to ensure that it accurately reflected the system of services available to the target population. The SIM is still a work in progress and will be updated with further planning in Phase II. The detailed SIM developed by the Advisory Board is shown in Appendix C.

Intercept 0. The Advisory Board included in the SIM an "Intercept 0" for community services and safety net providers that provide a system of care that is critical to early diversion by providing services to individuals to prevent their entry into the criminal justice system. Intercept 0 includes services that are available community-wide and are not limited to individuals in the criminal justice system. While some program components for Intercept 0 were completed during this planning process, the Advisory Board chose to focus their time on the other intercepts with the expectation that Intercept 0 will be further developed in future phases of this planning process.

A presentation was made to the Advisory Board in April by Central Health, the local healthcare district and taxing authority, on their work currently being conducted in coordination with ATCIC, the local mental health authority, on behalf of Texas Senator Kirk Watson's 10 Goals in 10 Years initiative.[11] This "10-in-10" initiative is focused on improving community health over the next 10 years with 10 specific goals, one of which is Goal 7, to provide needed psychiatric care and facilities.

The presentation to the Advisory Board included a diagram that illustrates the components of a comprehensive set of community services for individuals with mental health issues. Services on this diagram focus on a continuum of prevention and supported recovery services as well as on-going mental health and substance use screening services. The model supports the integration of primary care and behavioral health care services. This model for a continuum of community services is shown in Appendix D.

[11] Kirk Watson, Texas Senator. *"10 Goals in 10 Years."* http://www.kirkwatson.com/austins-health/10-goals-in-10-years. Accessed July 27, 2012.

Existing evidence-based practices. Included in the SIM are a number of existing programs and services, many of which are evidence-based best practices in place in the community for the target population and other uninsured, under-insured individuals who need access to supportive services. For example, permanent supportive housing is an evidenced-based practice. As noted in the SIM Intercepts 0, Community Services, and 4, Reentry, several organizations provide permanent supportive housing services, including Caritas of Austin, Foundation Communities, Green Doors, Front Steps and the St. Louise House program. These organizations have a combined capacity of just over 260 units, but not all of these units are available to ex-offenders.

The Crisis Intervention Teams (CIT) currently in place at the Travis County Sheriff's Office and Austin Police Departments, the mental health court dockets, and the Outpatient Competency Restoration Program identified in SIM Intercept 3, Jails and Courts, and many of the classes and programs affiliated with the Jails and Courts, such as the Rise Up and Power programs targeting individuals with substance use issues, GED education programs, and the peer and family support and reunification programs such as Parents and Children Together (PACT) are all best practice, evidence-based programs available to the target population and others in Travis County. These programs face a number of challenges, including lack of sustainable funding, modern educational teaching facilities and tools (computers and internet access), and community engagement on programs and issues related to ex-offenders.

Data Collection and Literature Review

In order to provide context and information for the first phase in the development of the strategic plan, Advisory Board members were asked to identify existing information, research, or literature about the target population to assist in the identification of gaps in current mental health services across the Travis County mental health and criminal justice systems. The Advisory Board identified several sources of information available at the local, regional, and national levels that document the issues related to individuals with co-occurring mental health conditions and substance use disorders and their encounters with the criminal justice system.

In addition, Morningside Research and Consulting collected and reviewed local, regional, and national data sources related to the target population. The reports and data sources document the fragmentation and barriers that exist for individuals with complex mental health needs who require access to coordinated and often continuing care and services across multiple systems and providers. This literature provides the context for understanding the target population as well as sub-populations, including the uninsured and under-insured populations, homeless individuals, and justice-involved women. The literature reviewed as part of this process is provided in Appendix B.

Sharing Data Between Organizations

A goal for this initial phase of planning was to understand the multiple services and resources being utilized by individuals within the target population. Several organizations were able to sign HIPAA-compliant confidentiality agreements that allowed them to share information about

specific individuals in the target population. TSCO shared the names of the individuals in the target population with the following organizations:

- Integrated Care Collaboration (ICC), a partnership of regional safety-net providers that has gathered health care utilization data on uninsured and underinsured individuals for ten years. The names in the target population were matched against the ICC's extensive clinical database of health care encounters at area safety net medical providers by uninsured and underinsured individuals.

- Downtown Austin Community Courts (DACC) for matching with the DACC's frequent offender's list. DACC considers an individual to be a frequent offender if they have 25 or more Class C misdemeanors in a two-year time period.

- Austin/Travis County Integral Care (ATCIC), the local mental health authority, for a match with their current client population.

III. Target Population Analysis

Characteristics of the Target Population

The Travis County Sheriff's Office (TCSO) identified 652 individuals who had been booked into the Travis County Jail during calendar year (CY) 2011 with serious mental health issues and a co-occurring substance use disorder as defined by the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV).

Gender and Diagnosis

The target population is approximately one-quarter females (24 percent) and three-quarters male (76 percent). The average age of the female population is 36.6 and the average age of the male population is 37.4. The target population includes individuals with one of the following diagnoses:

- Bipolar disorder
- Major depression
- Schizophrenia
- Schizoaffective disorder
- Psychotic disorder—not otherwise specified (NOS)

The majority of the population (56 percent) has a diagnosis of bipolar disorder, followed by major depression (16 percent).[12]

TRAG Assessment Scores

In addition to having one or more of the diagnoses listed above, the individuals in the target population scored a three or higher on the Texas Recommended Assessment Guidelines (TRAG) screening tool in the co-occurring substance use area. The TRAG is used by the state of Texas to determine the level of care for which an individual is eligible and it is also used by the local mental health authority and TCSO for coordination and continuity of care for the individual. The TRAG is administered by TCSO once an inmate has been determined to have mental health issues. The TRAG matrix helps the service providers to know the type and extent of services needed based on a score of 1 to 5 that the individual assigns to each question in each of nine specific areas. The TCSO-administered TRAG uses seven of the nine areas:

- **Employment**: measures the degree of employment within the past year including number of jobs, days of employment, and whether there is a desire for work.
- **Functioning**: measures the ability to interact with others, maintain hygiene, function daily, fulfill role responsibilities, and to maintain activities such as sleeping and eating.

[12] Mills, Tonya, Danny Smith, and Catrina Stevens. "Travis County Mental Health Planning Grant Initial Cohort Analysis." July 2012.

- **Housing**: measures the individual's current housing or homelessness status.
- **Psychiatric hospitalization**: measures the number of times the individual has been hospitalized within the past 180 days to two years.
- **Risk of harm**: measures the extent to which a person is at risk for harming themselves or others.
- **Co-occurring substance use**: measures the frequency and duration of substance use and the cognitive, behavioral, and physiological consequences during the past 90 days.
- **Support needs**: measures the extent to which support is unavailable from family, friends and community sources and the likelihood that they are to provide help when needed.

An individual receives a score of one to five in each of the seven dimensions of the TRAG listed above. The higher the score, the higher the level of crisis for that individual in that area.

Using TRAG scores, the Travis County Justice and Public Safety (JPS) office conducted a detailed analysis of the target population specifically for this planning process. The analysis revealed five groups, or clusters, of individuals, as shown in the table below. Nearly one-half (49 percent) of the target population can be categorized as having high or moderate to high needs based on their most recent TRAG assessment scores.

Target Population by Crisis Cluster

Cluster	Female	Male	Total
High Need	42	126	**168 (26%)**
High to Moderate Need	46	106	**152 (23%)**
Moderate Need	7	54	**61 (9%)**
Low Need	32	119	**151 (23%)**
All Others	32	88	**120 (18%)**
TOTAL	159 (24%)	493 (76%)	**652 (100%)**

Source: Mills, Tonya, Danny Smith, and Catrina Stevens. *Travis County Mental Health Planning Grant Initial Cohort Analysis.* July 2012.

The High Need cluster indicates a level of crisis for these individuals across each area of the TRAG assessment, especially in the areas of functioning and housing. The High to Moderate High cluster is similar in their low level of functioning but the assessment indicates some level of stable housing.

The full report detailing the characteristics of the target population is included in Appendix E.

Health Care Utilization

Self-reported treatment. The Travis County Jail collects self-reported data from inmates on the types of community providers from which they are receiving treatment. As shown in the table below, the analysis by JPS shows that individuals in the High Need and High to Moderate Need clusters reported having no community providers at a greater rate (48 and 46 percent, respectively) than those in the other three clusters.

Self-Reported Use of Community Providers by Type by Target Population Cluster

Community Provider	High Need	High to Moderate Need	Moderate Need	Low Need	All Others
General Family Physician	2 (1%)	5 (3%)	1 (2%)	12 (8%)	4 (3%)
ATCIC	69 (41%)	70 (46%)	32 (52%)	66 (44%)	61 (51%)
No Community Provider	81 (48%)	49 (32%)	15 (25%)	38 (25%)	34 (28%)
Other	4 (2%)	1 (1%)	2 (3%)	5 (3%)	2 (2%)
Other—Corrections	2 (1%)	4 (3%)	3 (5%)	5 (3%)	4 (3%)
Private Psychiatrist	1 (1%)	20 (13%)	4 (7%)	18 (12%)	6 (5%)
VA	3 (2%)	3 (2%)	2 (3%)	4 (3%)	1 (1%)
Unknown	6 (4%)	0 (0%)	2 (3%)	3 (2%)	8 (7%)

Source: Mills, Tonya, Danny Smith, and Catrina Stevens. *Travis County Mental Health Planning Grant Initial Cohort Analysis.* July 2012.

ICC health care encounters. In order to learn more about the health care utilization of the target population, the Advisory Board requested that the individuals in the target population be matched against the Integrated Care Collaboration (ICC) ICare database, which includes health care services provided to individuals at local area safety net providers. Names of individuals from the target population and some of their known aliases were submitted to ICC and a match was found for the majority of the

Percentage of Medical Visits by Service Line (ICD-9 code grouping) Top 5 Categories

Category	High Need Cluster Individuals	Total All Clusters
Service Line—Mental Disorders	86%	88%
Factors influencing health status and contact with health service (V codes)	63%	57%
Symptoms, signs, and ill-defined conditions	54%	54%
Injury and poisoning	49%	50%
Diseases of the musculoskeletal system	41%	39%

Source: Integrated Care Collaboration, May 2012.

names on the list (482 or 74 percent).

As shown in the table on the previous page, a large majority, 88 percent of the matched individuals, had health care encounters at one or more of the local safety net providers where the diagnosis for that encounter was mental health related.

Matched individuals from each cluster group were also found to use the local hospital emergency departments (EDs) significantly more often than area clinics; between 85 and 97 percent of the matched individuals within each cluster had at least one ED visit during CY 2011 while only 21 to 36 percent of the population had a clinic visit during the same time period. While overall, the target population used local EDs more frequently than local primary care clinics, individuals in the High Need cluster also had fewer overall clinic visits than the group as a whole and more inpatient hospitalizations.

Patient Utilization by Visit Type

Category	High Need Cluster Individuals	Total All Clusters
Clinic visit	23%	28%
Emergency Department visit	92%	93%
Inpatient Hospitalization visit	20%	17%

Source: Integrated Care Collaboration, May 2012.

Appendix F contains more detailed data about the ICC analysis of the health care utilization of the target population. Additional detailed matches and analyses for Phase II of this project have already been requested and are being considered by the Data Committee at this time and include more detailed review of the types of healthcare services utilized at area safety net providers, including Austin/Travis County Emergency Management Services (EMS).

Substance Use

Based on TRAG scores, most individuals in the target population indicate a level of risk and crisis in the substance use dimension. While all 652 individuals in the target population scored a 3 (the minimum level for identification as part of the target population) or higher in the substance use dimension, over two-thirds of the target population (69 percent) scored a 4 or higher, which is indicative of significant need.

As an indication of the impact of intervention, criminal justice outcome data from the Road to Recovery Program (formerly Project Recovery) reviewed data from January 2000 to December 2010. Individuals arrested for public intoxication (PI) charges who subsequently enrolled in and completed the Road to Recovery program showed reductions in the average number of PI charges and total arrests in the 12 months following program admission from the year prior to program enrollment.[13]

[13] Travis County Criminal Courts Administration. Project Recovery overall statistics. December 2010.

Impact on Travis County Criminal Justice System

Travis County Jail. The impact of the target population on the criminal justice system was also analyzed by the Travis County JPS office for this planning process. A three-year review of the total booking history for the target population, from January 1, 2009, through December 31, 2011, was conducted. This analysis revealed that the individuals in the High Need cluster had a total of 4,387 bookings during the three-year time frame, or an average of 26 bookings and 427 jail bed days per person.

Impact to Travis County Jail by Target Population
3-Year Booking History
(January 1, 2009—December 31, 2011)

Cluster	Average bookings per person	Average JBD's per person	Average bookings per person per year	Average JBD's per person per year
High Need	26.11	427.38	8.70	142.46
High to Moderate Need	11.23	221.76	3.74	73.92
Moderate Need	17.92	387.46	5.97	129.15
Low Need	17.81	275.17	5.94	91.72
All Others	11.08	216.18	3.69	72.06

Source: Mills, Tonya, Danny Smith, and Catrina Stevens. *Travis County Mental Health Planning Grant Initial Cohort Analysis.* July 2012.

Downtown Austin Community Court. The list of individuals in the target population was also matched with data from the Downtown Austin Community Court (DACC), which processes Class C misdemeanor offenders. DACC offers offenders options for treatment or community restitution. The data match by cluster are provided in the table below. These data indicate that the majority of individuals in the High Need cluster (67 percent) were found to be part of the DACC frequent offenders data set—those individuals with 25 or more misdemeanors

Analysis of DACC and Target Population Data

Cluster	Target Population	DACC Match	Percentage
High Need	168	113	67%
High to Moderate Need	152	68	45%
Moderate Need	61	27	44%
Low Need	151	38	25%
All Others	120	45	38%
Total	**652**	**291**	**45%**

Source: Downtown Austin Community Court (DACC) analysis. July 12, 2012.

in a two-year time period. This finding is consistent with the low level of housing and functioning assessment scores for the High Need cluster.

Use of Community Mental Health Services

The list of individuals in the target population was matched to the ATCIC database to determine the level of overlap between the target population and those currently receiving services from ATCIC. Of the total population of 652 individuals, ATCIC was able to identify nearly 500 of those individuals (497 or 76 percent) as having recently received services through ATCIC programs. Seventy-four percent of the matched individuals were male and 26 percent were female, which is consistent with the gender breakdown in the overall target population. Individuals within the target population were being treated by ATCIC predominantly for the following diagnoses:

- Bipolar Disorder—34 percent
- Major Depression—17 percent
- Schizophrenia—22 percent
- Substance Abuse—5 percent
- All other diagnoses—22 percent

Additional analysis is currently underway to capture a full set of ATCIC-administered TRAG score data on each individual from the target population matched with the ATCIC dataset.

Justice-Involved Women

Significant research has been conducted on the differences between male and female offenders within the criminal justice system. Differences exist in the "pathways" or patterns of crimes for males versus females as well as their levels of abuse and victimization, the presence of mental health issues, their socioeconomic status, and their experiences within the criminal justice system.[14]

Within the Travis County target population cohort, women represent only one-quarter of the entire population, but the majority (55 percent) of the women are grouped within the High Needs (26 percent) and the High to Moderate Needs (29 percent) cluster categories.[15] Of the 42 women in the High Needs cluster, 90 percent had a TRAG score of 4 or 5, indicating that these women are in crisis. Additional data analysis of the women within the target population, their utilization of mental health, community health, and criminal justice services can be conducted in subsequent planning efforts. A comparison with ICC healthcare data utilization could reveal additional patterns that could be used to inform recovery-oriented systems of care for the women in the target population.

[14] Modley, Phyllis and Rachelle Giguere. "Reentry Considerations for Women Offenders." 2010.
[15] Mills, Tonya, Danny Smith, and Catrina Stevens. "Travis County Mental Health Planning Grant Initial Cohort Analysis." July 2012.

Homelessness

The target population cohort analysis also indicates a level of crisis in the housing dimension of the TRAG for two out of five of the cluster groups. Individuals within the High Needs and Moderate Needs clusters had a higher than average number of individuals in crisis for housing.[16]

Several existing evidence-based practice programs related to housing in Travis county include both emergency, temporary, transitional, and permanent supportive housing units, but the funding is currently inadequate to serve Justice and Public Safety (JPS) clients for more than a 30-day time period, and there are insufficient housing providers in the community. The lack of sufficient housing resources is especially notable for females in the target population.

The Ending Community Homeless Coalition (ECHO) provided support for this grant through letters and participation, and they collect information on individuals experiencing homelessness. Analysis of the target population shows that housing is an issue for nearly one-third (29 percent) of the cohort and further analysis is needed on the overlap between the target population and the population served by ECHO. A recent set of survey data on Travis County homeless individuals by ECHO (who may or may not be part of the target population specifically) was linked to the ICC's clinical database repository and data are available on the results of that data matching. Some of those results are displayed in the table below.

Austin 100 Homes Campaign Survey Health Issues

Category	Number	Percent
Mental health issues cited	140	48%
Victims of physical attack while homeless	100	35%
Tri-morbid (substance use, medical problem, and mental health issues)	72	25%
3 visits to the ER in the last year	64	22%
3 visits to the ER in the last 3 months	49	17%

Source: 100 Homes, November 7-9, 2011, Vulnerability Index Survey data results. (N= 289 surveys)

A Travis County Veterans Intervention Project (VIP) collaboration has also collected and analyzed data that provides information on self-identified veterans who are arrested and/or who report homelessness at some point, but analytics and data matches have not yet been performed between the target population and any veterans data to date due to the small number of veterans identified within the target population to date. Phase II planning and evaluation will consider this additional analysis if needed.

[16] Mills, Tonya, Danny Smith, and Catrina Stevens. "Travis County Mental Health Planning Grant Initial Cohort Analysis." July 2012.

Cost Analysis

Travis County and the City of Austin are primarily responsible for funding the local criminal justice system. Adult probation services are provided by the Travis County Adult Probation department, which is funded primarily with state funding. Supplementary funding for some program areas identified in the Sequential Intercept Model (SIM) comes from federal, state, and sometimes local private and not-for-profit sources.

Estimated Criminal Justice Budget

The SIM developed by the Advisory Board includes a section in each program or service to specify the level of funding available. While the total funding identified in the SIM is nearly $3 million, this amount does not represent the full costs of providing services. Not all of the intercept planning groups specified the budget for their programs and funding allocations for some programs could not be easily separated from a program or agency allocation.

Jail Costs

Travis County JPS, TCSO, and the Travis County Planning and Budget office have collaborated to identify the costs of incarcerating individuals with mental health issues. These individuals are identified as either "psychiatric" and "psychiatric special needs" inmates; inmates identified as psychiatric special needs have higher needs and may require special housing separate from other inmates.

Travis County estimates that it costs approximately $92 per day in fixed costs and $12 per day in marginal costs to house a psychiatric inmate. The costs for psychiatric special needs inmates are $142 per day in fixed costs and $35 in marginal costs.[17] The county also estimates that it spends $100,000 a month on psychiatric medications for these inmates.[18]

The individuals in the target population who are in the High and High to Moderate Needs clusters are classified as part of the psychiatric special needs population, while individuals in the other three clusters are grouped into the psychiatric category. Based on the jail bed day utilization of these inmates, the total estimated costs for the target population is approximately $12,000 per person per year while the marginal cost is closer to $2,000 per person per year. A more detailed discussion of the difficulties in calculating costs and costs savings related to providing services to inmates with mental health issues can be found in Appendix E.

Emergency Department Cost Analysis

A list of individuals in the target population who had an ED visit at a Seton Healthcare Family facility have been submitted to Seton by ICC for a more detailed analysis on the level of care received by those individuals in order to determine a cost estimate for ED visits by individuals

[17] Mills, Tonya, Danny Smith, and Catrina Stevens. "Travis County Mental Health Planning Grant Initial Cohort Analysis." July 2012.
[18] Smith, Danny. Travis County Sheriff's Office. "Med Cost Data." Email to Sandy Simmons. August 29, 2012. Email.

with mental health issues.

Caution in Determining Costs

The costs discussed in the sections above do not capture the full costs to the community of providing services to the target population in jails and emergency rooms. Costs that are not captured in the data include the following:

- Booking costs.
- "Wear and tear" on staff: assaults, absenteeism, etc.
- Time spent by hospital staff that must remain in one-on-one contact with ED individuals with mental health issues.
- Police costs to respond to calls.
- Attorney costs associated with each booking.
- EMS costs.
- Costs to transport inmates.

The Advisory Board discussed the need to proceed carefully in discussing "costs", "cost-avoidance", and "cost-savings" to the community. Any program that is created to address the needs of the target population may have the potential to save money, but that may not result in the ability to reduce the number of jail beds, jail staff, ED beds, and ED staff in the short-term.

IV. Strategic Plan

This strategic plan is the culmination of the work of the Advisory Board and its committees over the six-month period beginning in February 2012 through August 2012. The strategic plan represents the deliberations and work of the Advisory Board based on the information, individuals, and resources that were available to the Advisory Board during this period.

The strategic plan is divided into the following sections:

- Guiding Principles
- Solutions Needed by Intercept
- Implementation Plan
- Sustainability Plan
- Collaboration Plan

Guiding Principles

The Advisory Board developed a set of guiding principles for continued strategic planning that would focus their efforts in the future:

1. Develop a robust continuum of community- based services focused on prevention and early diversion strategies.
2. Develop an effective system using evidence-based best practices that are measurable.
3. Increase communication and coordination of services between interagency offices, stakeholders, and partners.
4. Identify and seek future funding and collaborative opportunities.
5. Use technology and data-driven outcomes to inform decisions.
6. Maximize all available financing mechanisms.
7. Increase the ability to provide gender-specific services, culturally competent services, and use of trauma-informed care.

Solutions Needed by Intercept

The Advisory Board spent a significant amount of time discussing, reviewing and analyzing their own programs and policies as part of the Sequential Intercept Model (SIM) process for addressing long-term planning solutions to the existing gaps and barriers that confront individuals within the criminal justice system with mental health and substance use issues. After the gaps and barriers to services for this target population were reviewed, the Advisory Board and work groups focused on solutions for each intercept. The solutions and goals for each intercept are as follows:

Intercept 1: Law Enforcement—Austin Police and Travis County Sheriff

- Law enforcement would benefit from a Crisis Stabilization Unit, Detoxification Unit, or Crisis Care Center.
- Expand existing Austin Travis County Integral Care (ATCIC) Mobile Crisis Outreach and law enforcement Crisis Intervention Team (CIT) units to create a co-response team.
- Strategically increase the number of CIT officers for Austin Police Department and Travis County Sheriff's Office.

The foundations for a Detoxification Unit or sobering facility in Travis County have been discussed beginning as far back as 2000. The vision for this initiative includes reducing the Travis County Jail population by implementing proactive law enforcement strategies that allow for alternatives to arrest and maximizing options to divert repeat public intoxication offenders. A sobriety center in Travis County would work in collaboration with local health care providers and treatment facilities as well as permanent supportive housing/Housing First best practice models in a truly trauma-informed, culturally competent, recovery-oriented system of care.

Intercept 2: Initial Detention and Initial Court Hearing

- Robust screening and assessment by qualified staff that can follow the defendant through at least Intercepts 2 and 3 (length of time in system may require repeated assessment) including Class C misdemeanants; to include TRAG assessment by ATCIC for ATCIC clients and tools that measure trauma and women's risk and needs.
- Case Manager (AKA, Boundary Spanner, Court MH Officer, etc.) to increase the number of defendants released on personal bond pursuant to state law. Case manager would assist in re-entry from jail, support services, and compliance with court orders.
- Permanent supportive housing or transitional housing for defendants who would otherwise not be released on personal bond.
- Increased psychiatric providers with support staff (i.e. counselors) in the jail to provide evaluations within 3 days of booking along with staff to provide reentry planning for inmates being released.

Intercept 3: Jails and Courts

- Court Case Managers (AKA, Boundary Spanner, Court MH Officer, MH Pre Trial Officer, etc.) to increase the number of defendants released on personal bond pursuant to state law. Case manager would assist in re-entry from jail, support services and compliance with court orders. (Same priority as listed in Intercept 2).
- Overall increase in case managers and attorneys with the Mental Health Public Defenders office for felony and misdemeanor offenders. Also increase in case managers for the Downtown Austin Community Court.
- Housing for homeless defendants that need additional court supervision for equitable disposition of criminal charges.
- Increased capacity for residential and outpatient integrated treatment in conjunction with

mental health court dockets.

- Readily accessible medication post-jail release to prevent any gaps in treatment until individual can access needed service providers and care.
- Additional psychiatrists at Travis County Correctional Center so that defendants with 'PSY' designation see the psychiatrist prior to initial court settings.

Intercept 4: Reentry

- Seek additional resources to add capacity for integrated physical and behavioral health services, no-barrier housing programs (i.e. Housing First), and employment and income stability.
- Streamline the process for client reentry through continued organization and program self-evaluation.
- Improve system capacity with additional case management for high need clients, information and referral (I & R) system development, and increased partnerships with local service agencies.
- Strategize to find more ways to identify, collect, and share relevant data.
- Seek ways to improve communication and collaboration across organizations, for example through memoranda of understanding (MOU), networking meetings, and other appropriate tools.
- Provide early and continuing training services for individuals who interact with the target population through the utilization of existing subject matter experts and training staff or other pro-bono opportunities.

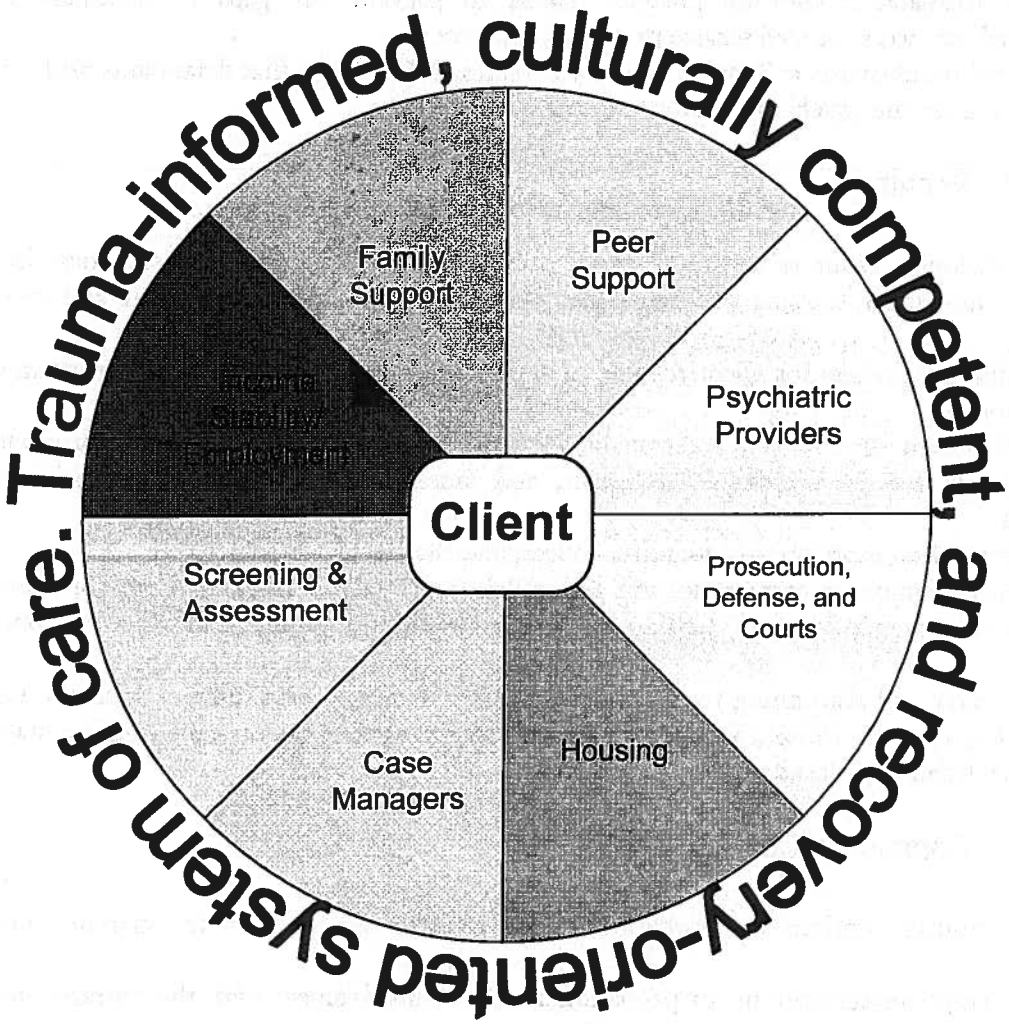
Intercept 5: Community Corrections

- Increase housing options for probationers due to involvement with the criminal justice system.
- Increase employment options for probationers due to involvement with the criminal justice system.
- Increase treatment options for MH probationers dually diagnosed with Mental Health and Substance Use Disorders:
    - Seek increased funding for all levels of substance use treatment services and re-entry services
    - Lobby for increased reimbursement rates for substance use and treatment providers
- Increase ability to provide gender-specific services, culturally competent services, and use of trauma-informed care.
- Promote recovery oriented systems of care and peer support.

System Components Critical for Successful Diversion

The Advisory Board determined that each of the solutions described within each intercept is a critical component of a system that successfully diverts the target population from the criminal justice system or from continued involvement in the criminal justice system. These system

Components Needed for Successful Diversion



components are summarized and illustrated in the diagram above. The system works if it is client -centered, trauma-informed and recovery-oriented. Each component includes accountability and coordination of services, as well as maximizing the use of technology. For example, the housing component should include a centralized database for housing searches by case managers, and other on-line housing assessment tools that would increase access to housing information and availability.

Implementation Plan and Next Steps

The Advisory Board identified the next steps that they would like to take to continue and implement the planning that was started with this grant.

1. Continue the Advisory Board and create an Executive Committee.

Significant strides have been accomplished with the formation of the Advisory Board and the level of commitment by its members remain high. Continued collaboration and communication through the monthly meetings is critical during the next stage of planning to keep the agencies and partners focused on their shared goals and targets. A first step in the next phase of this project however, should also include the creation of an Executive Board or committee, comprised of elected officials and providers, who can work together to approve recommendations from the Advisory Board as well as advocate for changes to local budgets to implement those recommendations.

2. Continue to study and collect data regularly on the target population.

The target population of 652 individuals has been identified and grouped into clusters that allow for ease of study. Continued analytics of this population in terms of their overall heath care and criminal justice patterns are important to establish potential pilot program and cost savings strategies. Continued targeted analysis of the High Need cluster that has demonstrated high utilization of health care and criminal justice services could allow future predictive modeling for clusters that represent lower levels of need and utilization. Data sharing and data matching efforts should also continue. Some of the specific data gathering efforts that were unable to be completed during this planning process that the Advisory Board would like to complete include:

- Review the offenses committed by the target population to better understand the reasons for the high jail bed day utilization.
- Review the costs associated with incompetent defendants.
- Analyze utilization of EMS services by target population.
- Develop a methodology to assess the full costs of all community resources utilized by the target population.

3. Continue to update the Sequential Intercept Model with relevant information.

The Sequential Intercept Model (SIM) is a living document that will require updates and maintenance on relevant program information, funding and service data, and identification of best practices.

4. Identify and assess funding opportunities.

Current state and local budget situations require dedicated time and effort spent on maximizing efficiencies within current services and seeking new funding sources and opportunities.

5. Identify the services needed to address the solutions identified by intercept.

The Advisory Board discussed the desire for the service planning committee to meet again after the conclusion of this planning process for the purpose of identifying a set of services that would begin to address the solutions needed within each intercept.

6. Develop pilot projects for the target population.

Pilot projects could focus on one population across all intercepts in order to increase the level of responsive to a specific group of individuals, either one of the clusters identified in the data analysis or a specific demographic such as women.

7. Seek and promote trauma-informed and trauma-specific, recovery-oriented systems of care.

Trauma-informed care (TIC) occurs when "services are based on an understanding of the vulnerabilities or triggers of trauma survivors that traditional service delivery approaches may exacerbate, so that these services and programs can be more supportive and avoid re-traumatization."[19] The questions asked by providers in a trauma-informed system of care shift from "what is wrong with you?" to "what has happened to you?"

The Travis County Adult Probation Department has already hosted a community meeting with criminal justice and service providers to present trauma-informed care principles provided by the Substance Abuse and Mental Heath Services Administration (SAMHSA). The probation department has focused its efforts on two of their treatment programs—SMART and Counseling Center—to introduce TIC principles into the delivery of these programs. The SMART program orientation has already been revised to represent the TIC principles.

8. Evaluate the process and outcomes of the implementation efforts.

The need for evaluation includes assessing new programs and services that have been created and measuring whether or not they have been effective. This effort also includes establishing benchmarks for current services and current expectations to measure against future outcomes. For the goal of early diversion, the following can be tracked:

- Was there an impact on individual recidivism?
- Was there successful pre-trial diversion?

[19] Welcome to the National Center for Trauma Informed Care. Substance Abuse and Mental Health Services Administration. www.samhsa.gov/nctic. Accessed June 29, 2012.

- Did the program/intervention shorten the length of stay within the criminal justice system?
- Did the individual successfully complete probation?
- Compare final disposition of individuals who were successfully diverted to the non-diverted population in areas such as improved mental health, housing, and employment stability.

9. Implement the goals stated in the following Sustainability and Collaboration Plans.

The planning grant application specified that the Advisory Board would develop a Sustainability Plan and a Collaboration Plan. Both of those plans are included below and contain goals for implementation.

Sustainability Plan

The goal of the sustainability plan is to ensure funding exists that will allow the community (1) to continue planning and (2) to implement the identified strategies in the years to come. The following three goals are designed to sustain the efforts of the Advisory Board and advocate for cooperation and collaboration with multiple organizations.

Goal 1. Provide a continuing forum in which key decision-makers and policy planners in the criminal justice and mental health systems will collaborate on research and pertinent data to better plan and recommend to policy makers prioritized approaches to criminal justice and mental health policy and program planning.

The Advisory Board has accomplished the initial steps of this deliverable by creating the Board and its committees, defining the target population, and linking with systems that can provide a comprehensive view of the individuals' overall utilization patterns and service needs. These data will allow the Advisory Board members to continue to engage and work with city, county, and state organizations to better coordinate and improve efficiency of care.

Goal 2. Create a list of funding sources/streams to continue efforts and sustainability of planning efforts.

The Sustainability committee developed a list of objectives to meet this deliverable with the following process:

- Research and create a list of funding sources/streams to sustain planning and continue efforts.
- Review community partners' history in funding.
- Leverage partnerships, consider joint grant writing.
- Provide a continuing forum in which decision makers and policy planners in criminal justice and mental health systems will meet to better plan and make recommendations.

Goal 3. The Advisory Board should re-form a sustainability committee to ensure additional funding, including from local, state and federal sources, to create systemic change and

institutionalize the efforts made by the Board. To accomplish this deliverable the Sustainability committee will:

- Create a policy that ensures administrative adoption of strategies in the plan.
- Include collaborations with MOUs to continue the program in the absence of federal funding.
- Create policies and collaborations that will ensure planning efforts at the local level are connected to any state level planning activities.
- Begin work on a community-coalition approach to sustainability that includes MOUs on funding.
- Funding efforts continue beyond the grant funding year.
- Secure funds for implementation and expansion of services.
- Sustained efforts and adoption by state agencies.

The committee has already begun to collaborate and engage community leaders, including elected officials (state representatives and county commissioners) and community stakeholders and planners from multiple agencies and organizations representing the target population.

Collaboration Plan

The goal of the collaboration plan is to maintain and strengthen the communication and relationships among the providers of services, funders of services, program staff, and policy-makers in order to determine the best and most efficient ways of addressing the needs of the target population.

Existing Planning Efforts

A number of community planning or collaborative groups are currently in existence in Travis County that address the needs of individuals in the target population and others in the community. These groups include:

- Austin Recovery Oriented System of Care (Austin ROSC)
- Austin/Travis County Mental Health Jail Diversion Committee
- Austin/Travis County Reentry Roundtable
- Behavioral Health Planning Partnership
- Community Action Network (CAN)
- Community Justice Council
- Ending Chronic Homelessness Coalition (ECHO)
- Indicator Improvement Initiative (formerly Mayor's Mental Health Task Force)
- Psychiatric Stakeholders Group
- St. David's Foundation
- Texas Senator Kirk Watson's 10 Goals in 10 Years Initiative

Each of these stakeholder groups and programs is addressing various components of mental

health indicator data collection, mental health assessments and services, law enforcement, court dockets, and legal representation. For example, the Indicator Improvement Initiative has spent several years developing a set of behavioral health community indicators that are now monitored and updated on an annual basis. Some of the specialized focus and work of these groups specifically addresses the needs of the target population across the criminal justice and mental health systems.

The Advisory Board formed for this planning grant is a collaborative and representative board that can continue to work in conjunction with the existing, related planning groups in the community. Information provided within the Sequential Intercept Model (SIM) also documents areas of existing and future collaborative opportunities.

Areas Where Collaboration Is Challenging

The SIM in Appendix C identifies several areas that could benefit from improved coordination and collaboration to address the needs of the target population, including:

- Attorney-client privilege, non-searchable database fields, and a lack of integrated data systems are among the challenges for judges and courts who often need to track individuals at specific points in time and/or determine an individual's complete criminal history and their competency status.
- The need for coordination between the jails, the Downtown Austin Community Courts (DACC) case management staff, and other local reentry and community corrections programs and staff. Case management staff and others may not be notified when defendants are scheduled for release, which makes it difficult to locate the hard-to-reach individuals for follow-up and follow-through services. A lack of follow-up services with the case manager can mean that these individuals will cycle back into the system.
- The need for continuity of care between programs started in the jail and programs available in the community.
- Defendants with completed sentences have very little pre-release planning for their reentry into the community and the services needed. For example, an individual may lose their Medicaid eligibility while in the jail thus making it difficult to access services and needed medications upon release from the jail.

Collaboration Goals

Increased and deliberate collaboration will result in three desired outcomes: better data sharing to facilitate planning and evaluation, increased use of technology to facilitate communication and expand and streamline service delivery, and increased participation in current planning efforts that are seeking to expand community services, which will benefit the target population as well as the entire community.

Data sharing. The fragmented nature of the data and data systems currently used in the mental health care and criminal justice systems contributes to the difficulties in understanding the needs

of the target population and collecting information that will assist in developing solutions.

While a shared database is not a realistic goal, at least not in the short-term, this planning process has shown that data sharing and data matching across organizations can yield a considerable amount of relevant information to support planning efforts. Continued data sharing utilizing the resources within the Integrated Care Collaboration (ICC) and other community partners provides Travis County with a unique opportunity to track, analyze, and evaluate the impact on the target population as service programs are implemented over time.

Using technology to increase collaboration. The increased use of technology could address some of the challenges to collaboration that are identified in the SIM. These include, but are not limited to:

- Considering on-line collaboration tools and systems that would allow any employee access to questions and answers or information that could increase communication and productivity across departments.
- Considering implementation of tele-psychiatry programs:
  - Partner with local mental health authorities for telemedicine and video conferencing capabilities at jails for intake services and crisis consultations.
  - Partner with area hospitals to develop telemedicine evaluation and consultation program for crisis stabilization and jail diversion to more appropriate levels of care.
- Automate the process of determining and tracking competency status for all defendants.
- Add additional data fields and increase user access to existing databases that contain relevant data on defendant status, location, or other relevant information.

Participating in current community collaboration efforts. In order to address collaboration and continued linkages with the health care community and providers, the Advisory Board should stay involved in and collaborate with the local "10 in 10" and the Texas Health and Human Services Commission (HHSC) Medicaid 1115 waiver program efforts (the waiver programs are collectively called the Texas Healthcare Transformation and Quality Improvement Programs). Travis County is joining with five surrounding counties to form a Regional Healthcare Partnership to develop Delivery System Reform Incentive Payment (DSRIP) projects as part of the 1115 waiver. The DSRIP projects focus on core areas of infrastructure development, program innovation and redesign, quality improvements, and population-based improvement projects that are designed to:

- Enhance outpatient service capacity in the community.
- Increase integrated behavioral and primary health care services.
- Develop comprehensive crisis stabilization services.
- Develop provider workforce capacity.

Conclusion

This plan represents the initial phase of work completed by a community Advisory Board that includes state, county and city officials, service delivery providers, and advocacy groups. The

July
2012

[Travis County – Mental Health Planning Grant Initial Cohort Analysis]

[ANALYSIS AND FINDINGS BY:]

Tonya Mills, Travis County Justice and Public Safety
Danny Smith, Travis County Sheriff's Office
Catrina Stevens, Travis County Criminal Justice Planning

Overview

An initial cohort was established by the Data Sub Committee of the Mental Health Planning Grant. The data originated from the Travis County Sheriff's Office Corrections Management System. Because the intended population of the grant are individuals with a serious mental illness who have a co-occurring substance abuse disorder, selection criteria for the data was that the population be coded as one of the

"Priority Population" which are individuals with a diagnosis of:

- Bipolar Disorder
- Major Depression
- Schizophrenia
- Schizoaffective Disorder, as well as
- Psychotic Disorder – Not otherwise Specified

In addition to the primary diagnosis from above, the cohort must have scored three or higher on the Texas Recommended Assessment Guidelines (TRAG) assessment, in the Co-Occurring Substance Use dimension.

The TRAG measures nine specific areas, which include Criminal Justice Involvement and a Quick Inventory of Depressive Symptomology. For the purposes of the Travis County Jail, seven of the nine dimensions were used. Those are the seven dimensions considered in this analysis. The seven dimensions are:

- **Employment** - measures the degree of employment within the past year including number of jobs, days of employment and whether there is a desire for work.
- **Functioning** - measures the ability to interact with others, maintain hygiene, function daily, fulfill role responsibilities and to maintain activities such as sleep and eating.
- **Housing** - measures the individual's current housing or homelessness status.
- **Psychiatric Hospitalization** - measures the number of times the individual has been hospitalized within the past 180 days to two years.
- **Risk of Harm** –measures the extent to which a person is at risk for harming themselves or others.
- **Co-Occurring Substance Use** - measures the frequency and duration of use and the cognitive, behavioral and physiological consequences during the past 90 days.
- **Support Needs** - measures the extent to which support is unavailable from family, friends and community sources and the likelihood that they are to provide help when needed.

The cohort consisted of 652 individuals, 159 females and 493 males. A breakdown of the total cohort by sex and diagnosis is outlined in the table on the following page.

Diagnosis	Female	Male	Total	Percentage
Bipolar Disorder	113	251	364	56%
Major Depression	25	76	101	16%
Schizophrenia	2	20	22	3%
Schizoaffective Disorder	11	88	99	15%
Psychotic Disorder NOS	8	58	66	10%
Total	159	493	652	
Average Age	36.65	37.43	37.24	

While understanding the diagnosis is important for planning purposes, the clustering of the data was done based on needs assessment as indicated by the individual TRAG scores. In each of the seven dimensions of the TRAG a score from one to five is given. The higher the TRAG score the higher the indication of "crisis" in that dimension. Once correlated based on TRAG, four distinct clusters or groups were identified and one group which captured all others. The clusters are:

- **High Needs Cluster**: This cluster was developed as a result of the indication of crisis in both the Functioning and Housing dimension of the TRAG assessment. There are **168 individuals** at an **average age of 40** (***42 females with an average age of 38 and 126 males with an average age of 41***).

  This cluster would require a high level of support, to include, if possible, housing and intensive community case management. Because the level of functioning is so poor for individuals in this cluster, the ability to effectively case manage them would likely be contingent on some transitional housing so that the case managers were able to connect with their clients and ensure connection and/or continuity of services. This group had a higher than average percentage assessing in the high/risk or crisis levels across all dimensions of the TRAG.

- **High to Moderate Needs Cluster**: This cluster was developed as a result of an indication of crisis in the Functioning dimension however Housing scores indicate some stability. This cluster consists of **152 individuals** with an **average age of 35** (***46 females with an average age of 36 and 106 males with an average age of 34***).

  While the High Need cluster also included individuals who had poor functioning, this cluster is different in that despite stable housing, these clients continue to function poorly, be in crisis and interact with the criminal justice system. This group would require a high level of support related to intensive community case management. Because this group reports having housing, connection with case managers should be easier than with those in clients within High Need.

- **Moderate Needs Cluster**: This cluster was developed as a result of an indication of crisis in the Support dimension however their level of functioning was assessed as somewhat stable. This cluster consists of **61 individuals** with an **average age of 38** (***7 females with an average age of 36 and 54 males with an average age of 38***).

  The Moderate Need cluster is different from the High and High/Moderate clusters in that the level of functioning for these individuals is higher. When isolated, this cluster demonstrates a higher than average percentage of individuals struggling with housing and employment/means. This cluster of individuals may require a higher level of support initially, to include transitional housing, however once stable the support level may be reduced.

- **Low Needs Cluster**: This cluster was developed as a result of low need or risk indicated in the Employment, Functioning and Housing dimensions. This cluster consists of **151 individuals** with an **average age of 36** (***32 females with an average age of 35 and 119 males with an average age of 36***).

  The Low Need Cluster is different from any of the other clusters evaluated in that the assessment indicates little risk/crisis as opposed to high.

  This cluster would require the lowest level of support because they already have stable employment/means, housing, supports and are functioning at higher levels. It is believed that this group would benefit from someplace to check in as the need arises to help them avoid contact with the criminal justice system.

- **All Others**: This was developed as a result of those not yet clustered by need. Their functioning, housing and supports are mostly stable making them outliers from the other clusters, yet they demonstrate a high level of need with respect to employment/means and co-occurring substance use. This cluster consists of **120 individuals** with an **average age of 38** (***32 females with an average age of 38 and 88 males with an average age of 37***).

This Cluster is different from any of the other clusters evaluated in that the assessment indicates little risk/crisis in most areas yet emerge as high risk in two. This group, like the Low Needs cluster would benefit from substance abuse treatment and a day resource center or "check-in" for periods when they are struggling. They have relatively high functioning and low support needs, but may require some assistance with respect to housing and will likely require support related to employment or benefits.

This cluster may require varying levels of support. Because they are functioning at higher levels and housing and supports appear stable, they may require mostly lower levels of support. However, this cluster indicates a high level of need in the area of employment/means which may initially require higher needs. It is believed that this group, too, would benefit from a day treatment center and/or someplace to check in as the need arises to help them avoid contact with the criminal justice system.

The following analysis looks at each of the clusters specifically.

High Needs Cluster

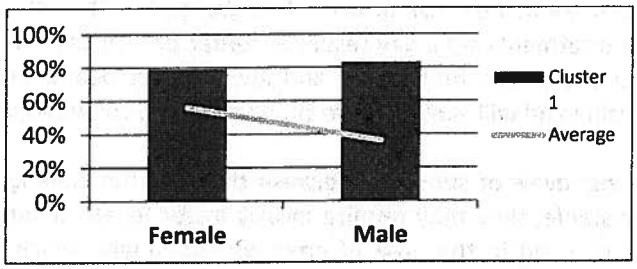
The High Needs cluster was developed as a result of the indication of crisis in both the Functioning and Housing dimension of the TRAG assessment. This cluster consists of **168 individuals** with an **average age of 40** (***42 females with an average age of 38 and 126 males with an average age of 41***).

Within this cluster it was found that an indication of crisis in Functioning and Housing likely indicates crisis in most of the other dimensions as well.

The following examines the High Needs cluster with respect to each of the seven TRAG dimensions evaluated, and compares the percentage of individuals assessed in "crisis" in each of the dimensions for this cluster to the average of the overall cohort of 652.

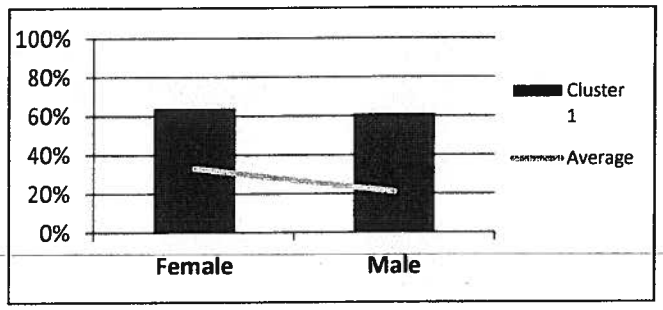
➔ Employment Dimension

Individuals in High Needs cluster showed a higher than average percentage in "crisis" with respect to employment and/or means to provide for their wellbeing. Crisis is defined as a score of four or five on the TRAG dimension.



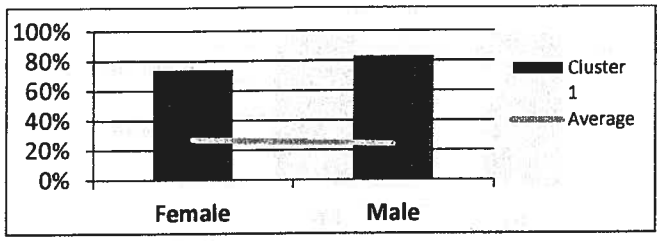
➔ Functioning Dimension

Because this cluster assumes an indication of crisis in both the Functioning and Housing dimensions, it would be expected that the group would be higher than average in this dimension as well.



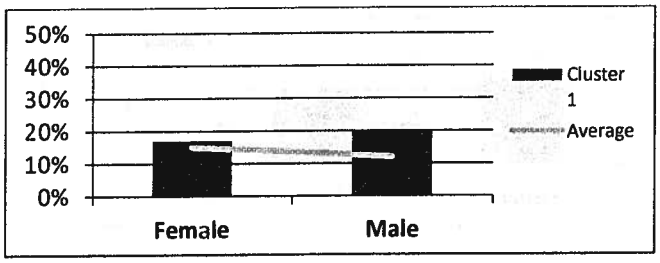
➔ Housing Dimension

Like the Functioning Dimension, the Housing Dimension would be expected to be higher than the average as this group is based on crisis in each of these dimensions.



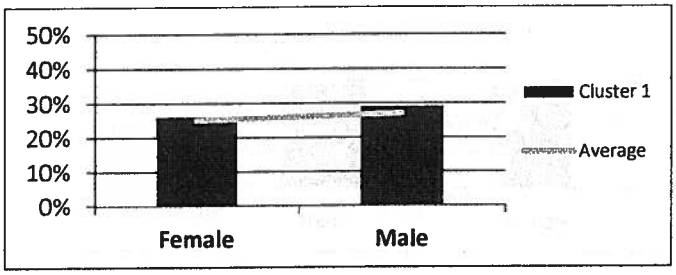
➔ Psychiatric Hospitalizations Dimension

The scoring for psychiatric hospitalizations ranges from 180 days to two years. Crisis scores of four and five would indicate numerous hospitalizations within the last two years, with multiple during the last six months. The High Needs cluster is only slightly higher than the average but is slightly behind the rate of High/Moderate Needs group (discussed in the next section) in this dimension.



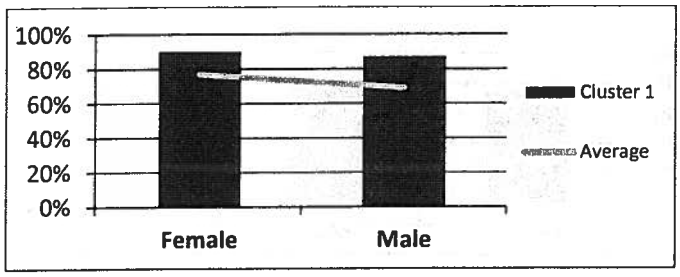
➔ Risk of Harm Dimension

The High Needs cluster demonstrated a slightly higher than average risk of harm score as well, though here too it was lower than the High/Moderate group.



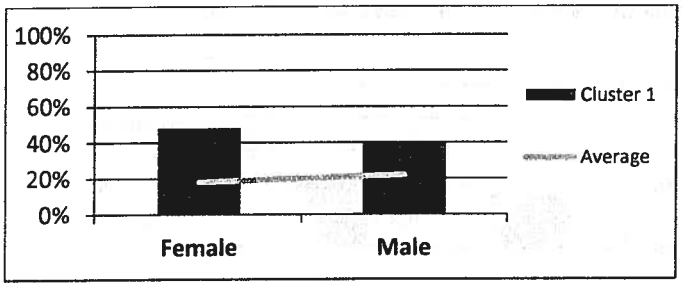
➔ Substance Abuse Dimension

Because all of the individuals in the entire cohort rated from three to five on the Co-Occurring Substance Use dimension, the average of individuals considered in crisis is higher. However, the High Needs cluster demonstrated remarkably high average scores in this dimension with 90% of the females and 87% of the males scoring a four or a five.



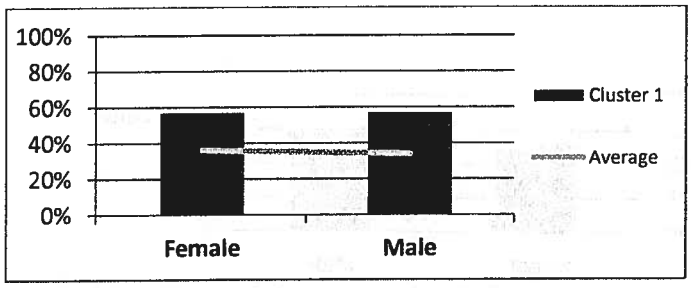
➔ Support Dimension

As with many of the other dimensions, the High Needs cluster demonstrated considerably higher than average scores with respect to assessing in a crisis range.



➔ Overall TRAG

When considering the aggregate totals in each of the dimensions and the percentage indicating crisis, overall 57% (57% - females and 57% - males) of the High Needs cluster assessed in crisis range. This is 21-23% higher than the average across all seven dimensions.



➔ Community Providers

The Travis County Jail provided data related to the community providers treating each individual. This was evaluated for each cluster to help inform what resources are being accessed by individual clients in each of the clusters. This data is self-reported and vetted to some extend by counseling staff for individual clients that are known to the staff. Additional work will be done with the Travis County Sheriff's Office and the Integrated Collaborative Care (ICC) to further analyze what types and amount of services are being consumed by individuals within each cluster. This information will be aggregated by cluster.

Community providers for the High Needs cluster, as indicated by the Travis County Jail data are outlined on the table below.

Community Provider	Female	Male	Total	Percentage
General Family Physician	0	2	2	1%
ATC/IC	21	48	69	41%
No Community Provider	17	64	81	48%
Other	3	1	4	2%
Other - Corrections	0	2	2	1%
Private Psychiatrist	1	0	1	1%
VA	0	3	3	2%
Unknown	0	6	6	4%

The highest percentage of this group (48%) report that they have no provider in the community with respect to their mental illness. This should be vetted with the ICC because it is self-reported, however if that percentage holds true it is concerning that the group with the highest level of need is under-served in the community.

Summing up The High Needs cluster: Individuals in the **High Needs cluster** would require a high level of support, to include, if possible, housing and intensive community case management. Because initially their level of functioning is so poor, the ability to effectively case manage would likely be contingent on some transitional housing to that the case managers were able to connect with their clients and ensure connection and/or continuity of services.

Future consideration for any programming targeting clients like those in this cluster could be assessment driven where TRAG scores in both the Functioning and Housing dimensions indicate crisis, scoring either a four or five in both dimensions.

High to Moderate Needs Cluster

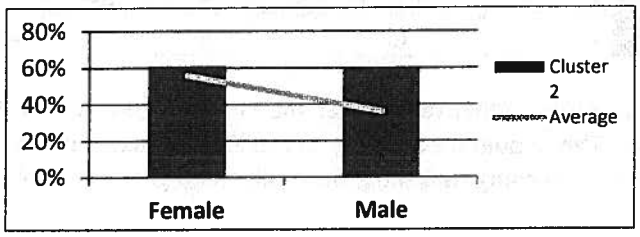
The High/Moderate Needs cluster was developed as a result of an indication of crisis in the Functioning dimension however Housing scores indicate some stability. This cluster consists of **152 individuals** with an **average age of 35** (***46 females with an average age of 36 and 106 males with an average age of 34***).

While High Needs cluster also includes individuals who have poor functioning, High/Moderate Needs cluster is different in that despite stable housing, these clients continue to function poorly, be in crisis and interact with the criminal justice system. Service delivery to this group would look different from services required by High Needs cluster from the housing perspective only. So while they may still need a high level of case management services, since housing would not be necessary The High/Moderate Needs cluster may be less costly to serve.

The following examines The High/Moderate Needs cluster with respect to each of the seven TRAG dimensions evaluated, and compares the percentage of individuals assessed in "crisis" in each of the dimensions for this cluster to the average of the overall cohort of 652.

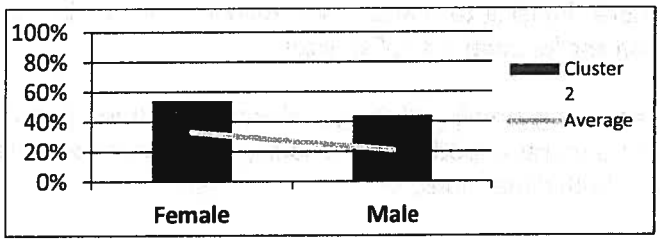
➔ Employment Dimension

Individuals in The High/Moderate Needs cluster also showed a higher than average percentage in "crisis" with respect to employment and/or means to provide for their wellbeing. The average in crisis for The High/Moderate Needs cluster is slightly lower however to that of High Needs cluster. This might indicate that some of the individuals in this cluster that have housing, are either employed or they are receiving benefits to help support them and their housing.



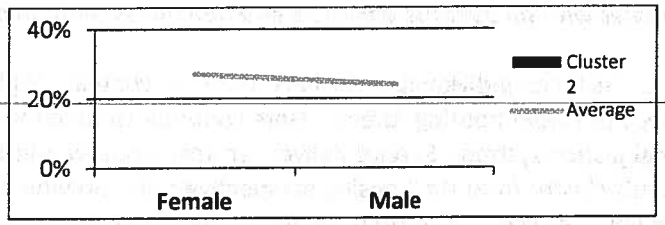
➔ Functioning Dimension

Because this cluster assumes an indication of crisis in both the Functioning and Housing dimensions, it would be expected that the group would be higher than average in this dimension as well.



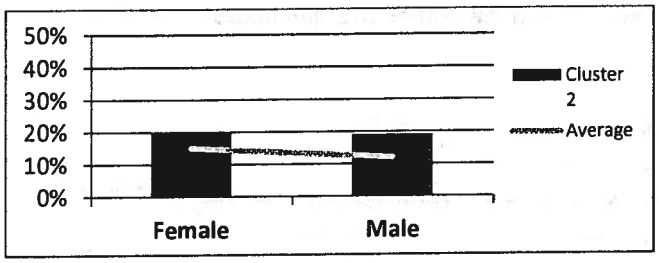
➔ Housing Dimension

Everyone in this cluster scored a 1 or 2 on this dimension, indicating stable/semi-stable housing. This group would consist of individuals that may live with family or in board and care homes or on their own. They remain a high need cluster because despite their access to housing, they continue to function poorly.



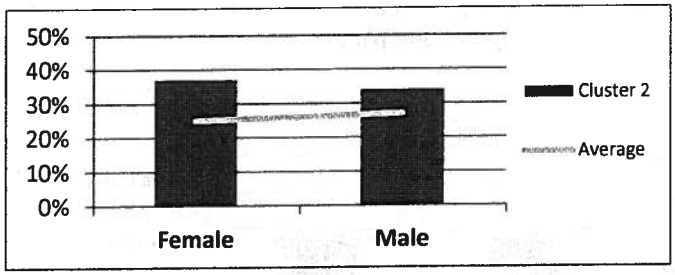
➔ Psychiatric Hospitalizations Dimension

The High/Moderate Needs cluster has the highest percentage of individuals assessing in the four and five range of the TRAG. This further indicates the high level of need and poor functioning level of this cluster.



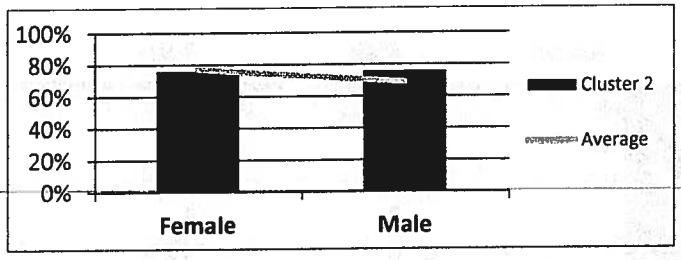
➔ Risk of Harm Dimension

The High/Moderate Needs cluster demonstrated the highest average in "crisis" with respect to the Risk of Harm score as well.



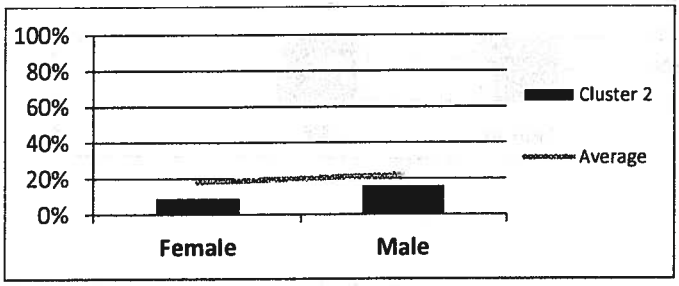
➔ Substance Abuse Dimension

Because all of the individuals in the entire cohort rated from three to five on the Co-Occurring Substance Use dimension, the average of individuals considered in crisis is higher. The females in The High/Moderate Needs cluster have a slightly lower than average percentage in the four and five range and the males slightly higher.



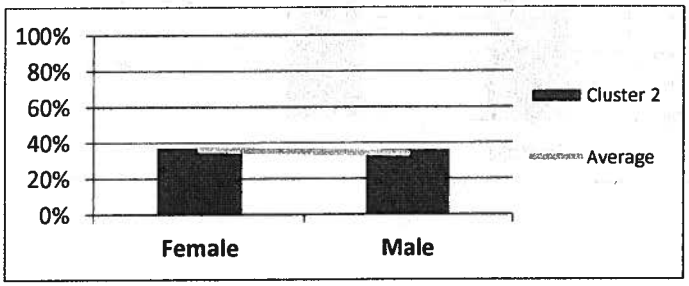
➔ Support Dimension

The High/Moderate Needs cluster has a lower than average number of individuals in the "crisis" range of support.



➔ Overall TRAG

When considering the aggregate totals in each of the dimensions and the percentage indicating crisis, overall 37% - females and 36% - males of The High/Moderate Needs cluster assessed in crisis range. This is consistent with the average across all seven dimensions.



➔ Community Providers

Community providers for The High/Moderate Needs cluster, as indicated by the Travis County Jail data are outlined on the following page.

Community Provider	Female	Male	Total	Percentage
General Family Physician	2	3	5	3%
ATC/IC	24	46	70	46%
No Community Provider	13	36	49	32%
Other	1	0	1	1%
Other - Corrections	0	4	4	3%
Private Psychiatrist	6	14	20	13%
VA	0	3	3	2%
Unknown	0	0	0	0%

The highest percentage of the High/Moderate Needs cluster (46%) report being served in the community by ATC/IC. Still a high percentage of a high need/poor functioning group report no community service.

Summing up The High/Moderate Needs cluster: Individuals in **the High/Moderate Needs cluster – High to Moderate Need**; would require a high level of support related to intensive community case management. Because this group reports having housing, connection with case managers should be easier than with those in clients in The High Needs cluster.

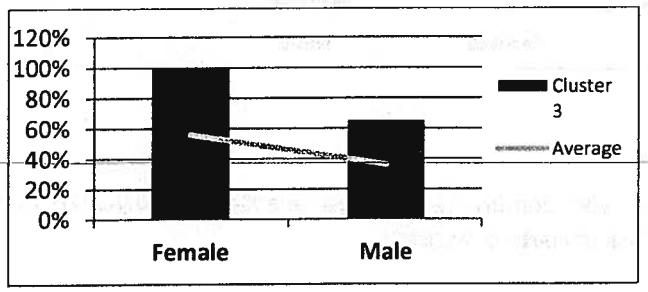
Future consideration for any programming targeting clients like those in The High/Moderate Needs cluster could be assessment driven. This can be accomplished by evaluating TRAG scores in both the

Moderate Needs Cluster

The Moderate Needs cluster is identified as "Moderate Need". This cluster was developed as a result of an indication of crisis in the Support dimension however their level of functioning was assessed as somewhat stable. This cluster consists of **61 individuals** with an **average age of 38** (***7 females with an average age of 36 and 54 males with an average age of 38***).

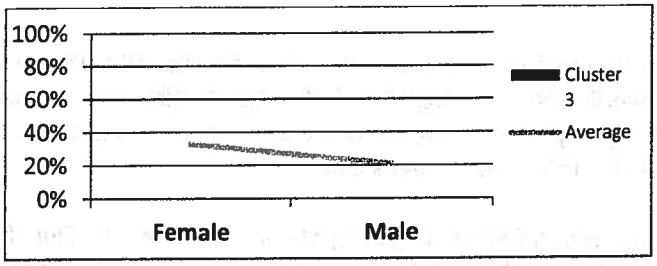
The Moderate Needs cluster is different from Clusters 1 and 2 in that the level of functioning for these individuals is higher. When isolated, The Moderate Needs cluster demonstrates a higher than average percentage of individuals struggling with housing and employment/means.
The following examines The Moderate Needs cluster with respect to each of the seven TRAG dimensions evaluated, and compares the percentage of individuals assessed in "crisis" in each of the dimensions for this cluster to the average of the overall cohort of 652.

➔ Employment Dimension
Individuals in The Moderate Needs cluster showed a much higher than average percentage in "crisis" with respect to employment and/or means to provide for their wellbeing. The average in crisis for The Moderate Needs cluster is slightly higher to that of High Needs cluster and a considerably higher percentage than that of The High/Moderate Needs cluster.



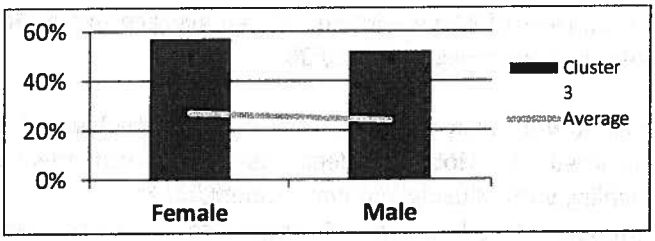
➔ Functioning Dimension

The Moderate Needs cluster had no one assessing at "crisis" levels with respect to the Functioning dimension.



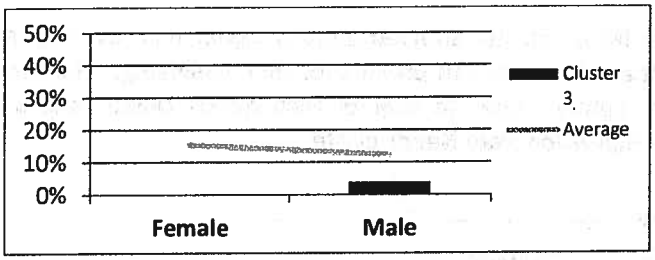
➔ Housing Dimension

The Moderate Needs cluster demonstrated the second highest percentage of individuals in need of housing, just behind Cluster 1. This might make The Moderate Needs cluster slightly more costly to serve, initially, because some level of transitional housing may be necessary. However, because their level of functioning is higher, they may be able to function with less supports once stable and their employment or benefit situation changes.



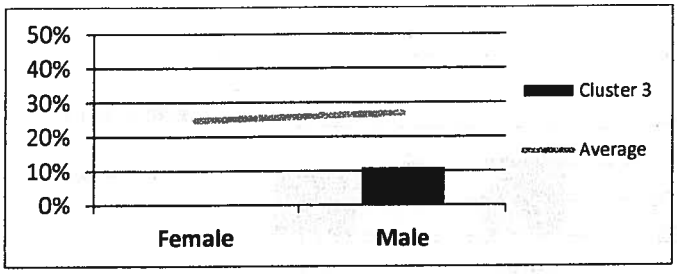
➔ Psychiatric Hospitalizations Dimension

The Moderate Needs cluster showed very few individuals with recent hospitalizations.



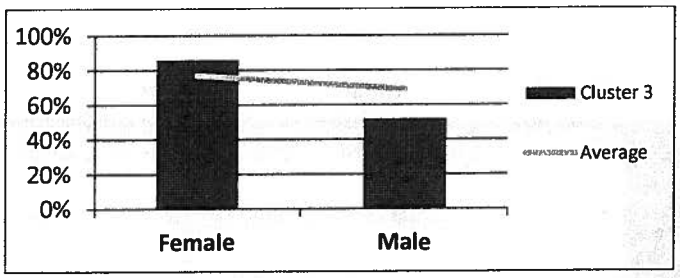
➔ Risk of Harm Dimension

The Moderate Needs cluster also demonstrated a low average of individuals assessing in the higher scoring with respect to the Risk of Harm dimension.



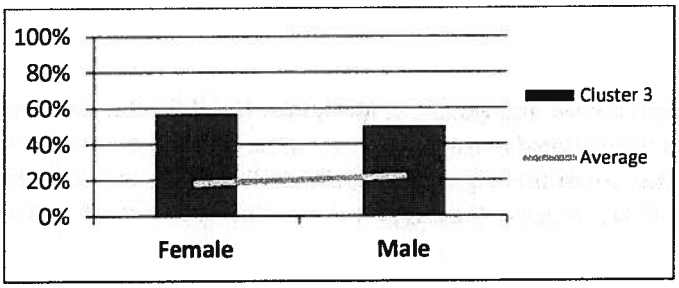
➔ Substance Abuse Dimension

Because all of the individuals in the entire cohort rated from three to five on the Co-Occurring Substance Use dimension, the average of individuals considered in crisis is higher. However, like The High Needs cluster, The Moderate Needs cluster has a distinctly higher percentage of individuals assessing in the higher risk areas of this dimension.



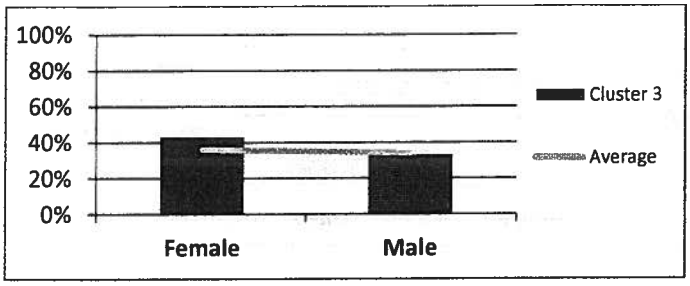
➔ Support Dimension

Because The Moderate Needs cluster was developed as a result of high risk with respect to Support, it is expected that there would be a higher than average percent of this group in "crisis". More than half of both female and male clients in this dimension assessed at a four or five.



➔ Overall TRAG

When considering the aggregate totals in each of the dimensions and the percentage indicating crisis, overall 43% - females and 33% - males of The Moderate Needs cluster assessed in crisis range. This is somewhat consistent with the average of the entire cohort of 652 across all seven dimensions. Female clients were only slightly higher than the average of the entire cohort, however, that is likely related to the smaller number of females in this group (7).



➔ Community Providers

Community providers for The Moderate Needs cluster, as indicated by the Travis County Jail data are outlined on the following page.

Community Provider	Female	Male	Total	Percentage
General Family Physician	0	1	1	2%
ATC/IC	5	27	32	52%
No Community Provider	2	13	15	25%
Other	0	2	2	3%
Other - Corrections	0	3	3	5%
Private Psychiatrist	0	4	4	7%
VA	0	2	2	3%
Unknown	0	2	2	3%

The highest percentage of The Moderate Needs cluster (52%) report being served in the community by ATC/IC. One quarter report no community provider.

Summing up The Moderate Needs: Individuals in **Moderate Need Cluster**; may require a higher level of support initially, to include transitional housing, however once stable the support level may be reduced. Future consideration for any programming targeting clients like those in The Moderate Needs could be assessment driven where TRAG scores in the Support dimension indicates a high level of need at a four or five.

Low Needs Cluster

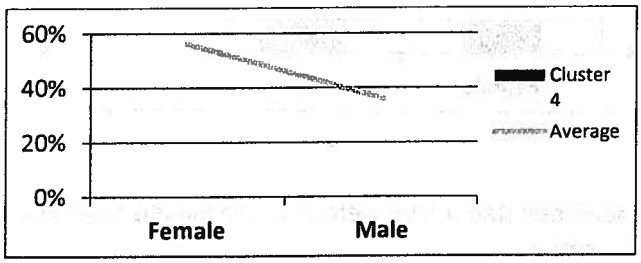
The Low Needs cluster is identified as "Low Need". This cluster was developed as a result of low need or risk indicated in the Employment, Functioning and Housing dimensions. This cluster consists of **151 individuals** with an **average age of 36** (***32 females with an average age of 35 and 119 males with an average age of 36***).

The Low Needs cluster is different from any of the other clusters evaluated in that the assessment indicates little risk/crisis as opposed to high. It is believed that services such as a day treatment center or someplace to "check in" when they are struggling would be adequate to help this group garner the supports necessary to avoid contact with the criminal justice system.

The following examines The Low Needs cluster with respect to each of the seven TRAG dimensions evaluated, and compares the percentage of individuals assessed in "crisis" in each of the dimensions for this cluster to the average of the overall cohort of 652. While selection for this group is based on only three of the seven dimensions indicating low risk, the other four dimension scores fall below the average of the whole cohort with respect to crisis/risk.

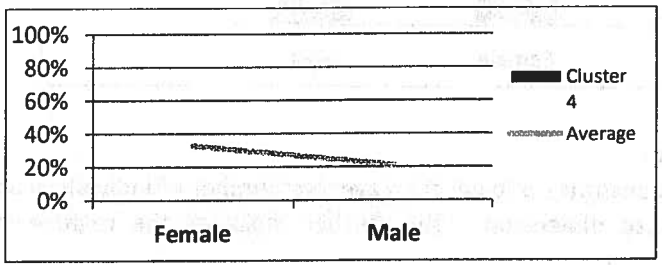
➔ Employment Dimension

None of the individuals in the Low Needs cluster assessed in the crisis/high risk range in the Employment dimension.



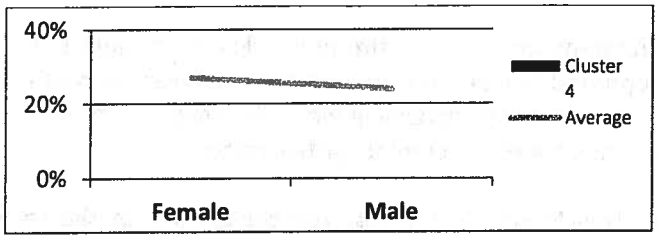
➔ Functioning Dimension

Individuals in The Low Needs cluster also had no one assessing at "crisis" levels with respect to the Functioning dimension.



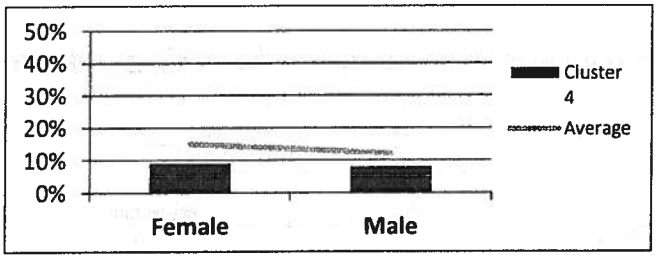
➔ Housing Dimension

The Low Needs cluster showed no one assessing in the four and five range in the Housing dimension.



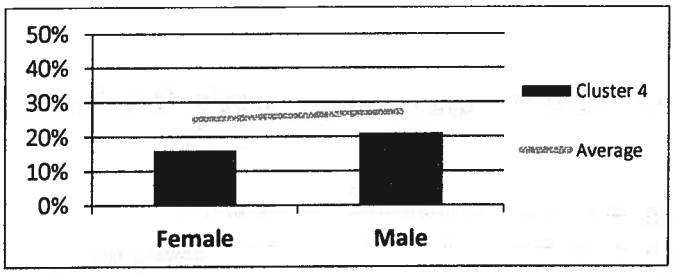
➔ Psychiatric Hospitalizations Dimension

The Low Needs cluster showed a low percentage of individuals with recent hospitalizations. The percentage within the higher risk spectrum of this dimension is lower than the average of the whole 652 cohort.



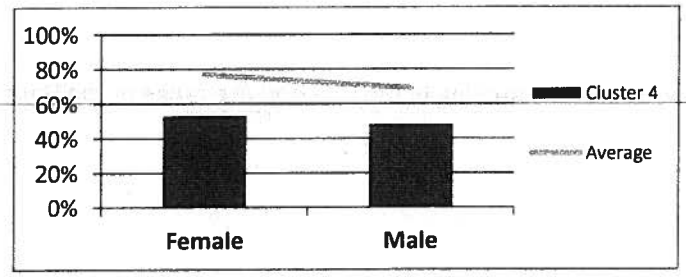
➔ Risk of Harm Dimension

The Low Needs cluster also demonstrated a low average of individuals assessing at higher scores with respect to the Risk of Harm dimension.



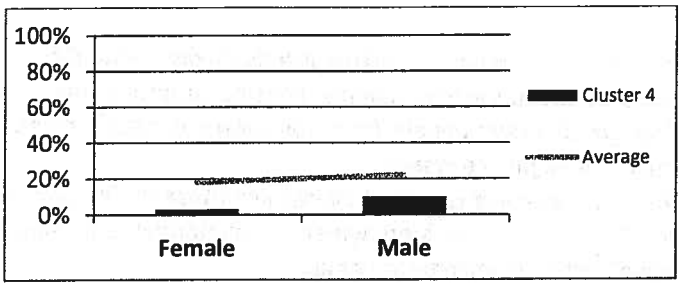
➔ Substance Abuse Dimension

The Low Needs cluster demonstrates a lower than average number of individuals assessing at a four or five in the Substance Abuse dimension. This further indicates the relative stability and higher functioning of this cluster.



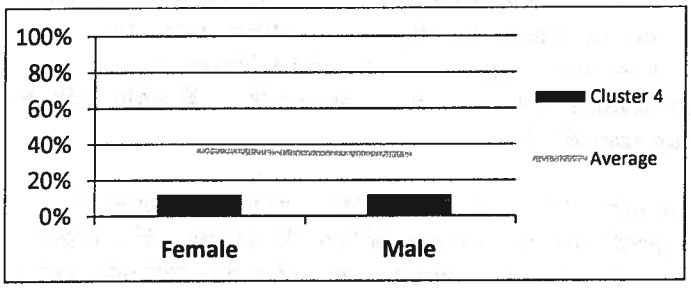
➔ Support Dimension

As with all of the other dimensions, The Low Needs cluster demonstrates a low level of need in the Support Dimension.



➔ Overall TRAG

When considering the aggregate totals in each of the dimensions and the percentage indicating crisis, overall 12% if the females and 12% of the males of The Low Needs cluster assessed in crisis range. This is below the average of the entire cohort of 652 across all seven dimensions. .



➔ Community Providers

Community providers for The Low Needs cluster, as indicated by the Travis County Jail data are outlined below.

Community Provider	Female	Male	Total	Percentage
General Family Physician	6	6	12	8%
ATC/IC	12	54	66	44%
No Community Provider	5	33	38	25%
Other	2	3	5	3%
Other - Corrections	1	4	5	3%
Private Psychiatrist	5	13	18	12%
VA	1	3	4	3%
Unknown	0	3	3	2%

The highest percentage of the Low Needs cluster (44%) report being served in the community by ATC/IC. The Low Needs cluster has the highest percentage of individuals receiving care from private psychiatrists and family physicians.

Summing up The Low Needs cluster: Individuals in **Low Needs Cluster;** would require the lowest level of support. Because they have stable employment/means, housing, supports and are functioning at higher levels. It is believed that this group would benefit from someplace to check in as the need arises to help them avoid contact with the criminal justice system.
Future consideration for any programming targeting clients like those in The Low Needs cluster could be assessment driven where TRAG scores in employment, functioning and housing are reported as somewhat stable. Yet criminal justice involvement persists.

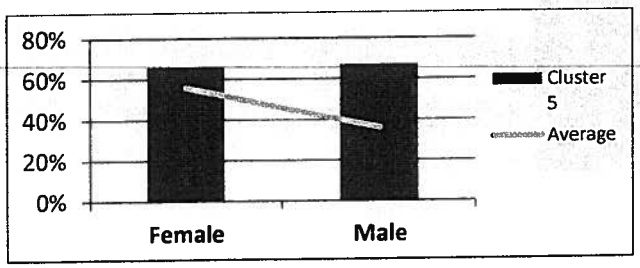
All Others/Not Clustered

The All Others cluster was developed as a result of those not yet clustered by need. Their functioning, housing and supports are mostly stable making them outliers from the other clusters, yet they demonstrate a high level of need with respect to employment/means and co-occurring substance use. This cluster consists of **120 individuals** with an **average age of 38** (***32 females with an average age of 38 and 88 males with an average age of 37***).

The All Others cluster is different from any of the other clusters evaluated in that the assessment indicates little risk/crisis in most areas yet emerge as high risk in two. This group, like The Low Needs cluster would benefit from substance abuse treatment and a day resource center or "check-in" for periods when they are struggling. They have relatively high functioning and low support needs, but may require some assistance with respect to housing and will likely require support related to employment or benefits.

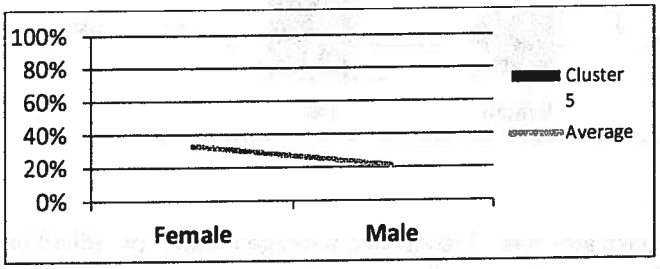
The following examines The All Others cluster with respect to each of the seven TRAG dimensions evaluated, and compares the percentage of individuals assessed in "crisis" in each of the dimensions for this cluster to the average of the overall cohort of 652.

➔ Employment Dimension
Individuals in The All Others cluster demonstrate a higher than average level of need in the Employment dimension. While not higher than The High Needs cluster or 3 this group demonstrates a slightly higher level of need than The High/Moderate Needs cluster in this dimension.



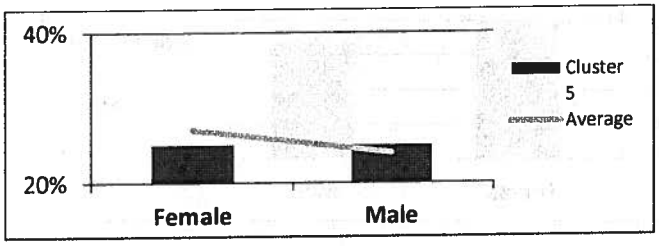
➔ Functioning Dimension

Individuals in The All Others cluster also had no one assessing at "crisis" levels with respect to the Functioning dimension.



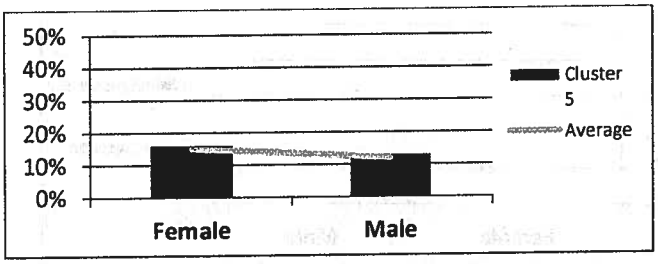
➔ Housing Dimension

The Low Needs cluster showed a slightly lower than average level of need in the Housing dimension.



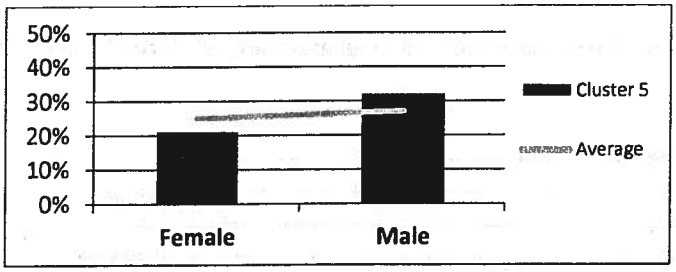
➔ Psychiatric Hospitalizations Dimension

The All Others cluster is on par with the percentage of individuals with recent hospitalizations, assessing at a four or five.



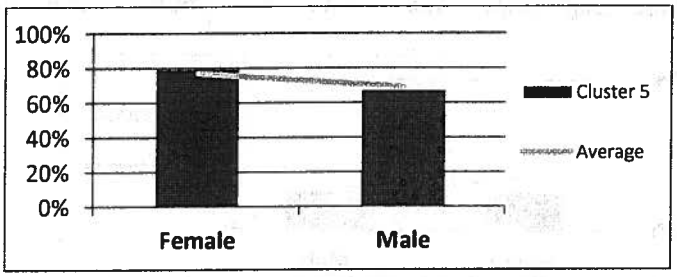
➔ Risk of Harm Dimension

The All Others cluster also demonstrated a consistent average of individuals assessing at higher scores with respect to the Risk of Harm dimension. Because of the higher number of individuals in "crisis" in the Substance Abuse dimension, it is reported that the indication of harm to self may be a little higher during the initial assessment because of the high intoxication levels.



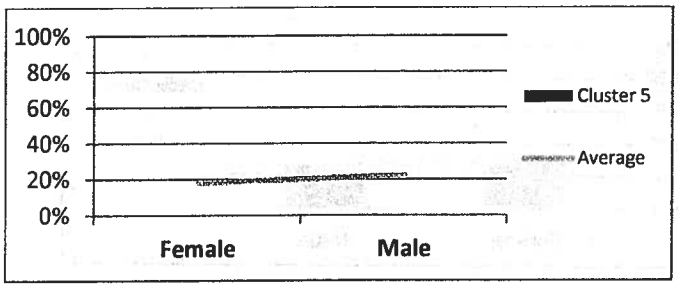
➔ Substance Abuse Dimension

The Low Needs cluster demonstrates has a higher than average number of individuals assessing at a four or five in the Substance Abuse dimension. The level of need indicated here is on par with those in Clusters 1 and 2, though the application of treatment for their substance abuse may be slightly different due to the higher level of functioning.



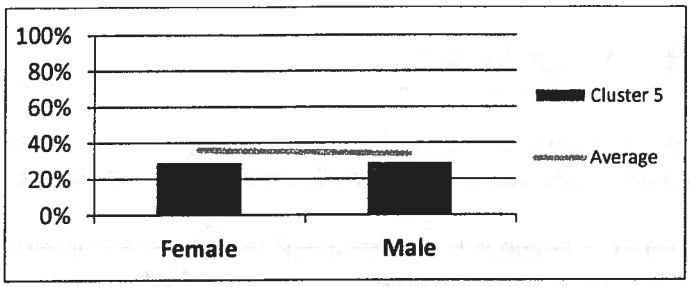
➔ Support Dimension

No one in The All Others cluster demonstrated a high level of risk with respect to Supports.



➔ Overall TRAG

When considering the aggregate totals in each of the dimensions and the percentage indicating crisis, overall 29% of the females and 29% of the males of The All Others cluster assessed in crisis range. This largely as a result of the high need in the Employment and Co-Occurring Substance Use dimensions and is below the average of the entire cohort of 652 across all seven dimensions.



➔ Community Providers

Community providers for The All Others cluster, as indicated by the Travis County Jail data are outlined below.

Community Provider	Female	Male	Total	Percentage
General Family Physician	2	2	4	3%
ATC/IC	18	43	61	51%
No Community Provider	6	28	34	28%
Other	0	2	2	2%
Other - Corrections	1	3	4	3%
Private Psychiatrist	2	4	6	5%
VA	0	1	1	1%
Unknown	3	5	8	7%

The highest percentage of The All Others cluster (51%) report being served in the community by ATC/IC, this is the second highest cluster served by ATC/IC, just behind The Moderate Needs cluster at 52%. Like The Low Needs cluster, The All Others cluster has a high percentage of individuals receiving care from private psychiatrists and family physicians.

Summing up The All Others cluster: Individuals in the **All Others** may require varying levels of support. Because they are functioning at higher levels and housing and supports appear stable, they may require mostly lower levels of support. However, this cluster indicates a high level of need in the area of employment/means which may initially require a more support. It is believed that this group would also benefit from a day treatment center and/or someplace to check in as the need arises.

Future considerations for any programming targeting clients like those in The All Others cluster may continue to be any individual that doesn't fit in any other cluster. While criteria in some of the other clusters may be expanded to capture most of the people in The All Others cluster, because of the different needs and service application for those who have a lower level of functioning, it is recommended that this cluster remain as one of its own. This would prevent skewing or diluting the needs identification and later performance indicators/results related to the higher level of need and lower functioning individuals in other clusters.

Additional Data by Cluster

Additional data considerations during this analysis were the frequency of arrest and jail bed day consumption by cluster, as well as data captured by the ICC on emergency room and hospital usage.

The data provided in this section is intended to provide a high level overview of each indicator discussed above. Time did not permit additional analysis related to these indicators, but it is suggested that in future iterations of this project specifics related to the following be compiled and analyzed by cluster;

- Charge types and level
- Costs associated with hospital and emergency room consumption, and
- Frequency of psychiatric emergency services

➔ Bookings and Jail Bed Day Consumption

The table below outlines each cluster by total bookings and jail bed days consumed across a three year period ending December 31, 2011.

Cluster	*N* People	Total Bookings	Total Jail Bed Days Consumed	Average Length of Stay (Days)
High Needs	168	4,387	71,799	16.37
High/Moderate Needs	152	1,707	33,708	19.75
Moderate Needs	61	1,093	23,635	21.62
Low Needs	151	2,689	41,550	15.45
All Others	120	1,330	25,942	19.51

The High Needs group is the biggest consumers of total jail bed day consumption, but they have next to the lowest average length of stay. The Low Needs cluster has the shortest length of stay with the second highest consumption of jail bed days. The total jail bed day consumption for both of these groups is influenced by the frequency of bookings.

The Moderate Needs group has the highest average length of stay and the fewest bookings.

➔ Jail Costs

Total Daily Jail Costs and Operating or marginal costs for specialty populations have been identified by Travis County Justice and Public Safety, the Sheriff's Office and the Travis County Planning and Budget Office. There are two categories capturing persons with mental illness, they are Psychiatric and Psychiatric Special Needs. Both the fixed and marginal costs are identified below.

- Psychiatric - $91.97 per day fixed costs and $11.56 marginal/operating
- Psychiatric Special Needs - $142.00 per day fixed and $35.38 marginal/operating

For this target population, the High Needs and High/Moderate Needs clusters were calculated using the psychiatric special needs daily costs and the other three clusters were calculated using the lower daily

cost. This was done because the level of functioning of the High Needs and High/Moderate Needs clusters are consistent with the level of functioning typically requiring specialty housing, expedited psychiatric consultation and enhanced counselor follow-up, etc.

The table that follows demonstrates the cost related to the target population based on their jail bed day consumption.

Cluster	*N* People	Cost for Entire 3 Yr. Evaluation Period	Average Annual Cost	Average Annual Cost Per Person
High Needs cluster	168	$10,195,458	$3,398,486	$20,229
High/Moderate Needs	152	$4,786,536	$1,595,512	$10,496
Moderate Needs	61	$2,173,711	$724,570	$11,878
Low Needs	151	$3,821,354	$1,273,785	$8,436
All Others	120	$2,385,886	$795,295	$6,627
Total	**652**	**$23,362,944**	**$7,787,648**	**$11,944**

Because costs do not directly relate to savings, the marginal/operating cost was developed in order to identify quantifiable savings. The table below identifies the costs and *potential* for savings or cost avoidances related to the entire target population. These numbers are provided for informational purposes and may not be appropriate to use in their entirety for projected cost savings or cost avoidances related to diversion or community based programming. For instance, unless a program had the capacity to serve all 168 people in the High Needs Cluster, and projected to eliminate re-arrest and jail stays for all of the 168 people served, it would be unrealistic to demonstrate the average annual cost/savings demonstrated in the table.

Cluster	*N* People	Cost for Entire 3 Yr. Evaluation Period	Average Annual Cost	Average Annual Cost Per Person
High Needs cluster	168	$2,540,249	$846,749	$5,040
High/Moderate Needs	152	$1,192,589	$397,529	$2,615
Moderate Needs	61	$273,221	$91,074	$1,493
Low Needs	151	$480,318	$160,106	$1,060
All Others	120	$299,890	$99,963	$833
Total	652	$4,786,266	$1,595,422	$2,447

Projected programming should identify which cluster the program is targeting, their capacity to serve. Targets should be set to identify their intended impact, for example reduce arrests and jail bed days by 50%, and then calculate the potential for savings.

Assume that a program is developed to provide programming to the High Needs Cluster. They are the most costly group with the highest potential for cost savings or return on investment. The program has the capacity to serve 50 people per year and is anticipating a 50% reduction in jail bed days consumed. That programs projected savings would be $126,004. This average jail bed days consumed per person by the 168 individuals in the High Needs Cluster was 427.38/ 3 years = 142.46 per person per year. The program will serve 50 x 142.46 = 7,122.92 x 50% estimated reduction in jail bed days = 3,561.49 jail bed days estimated to be saved. This equals 9.76 people in the average daily jail population (3,561.49/365).

Because the High Needs cluster was identified as psychiatric special needs the daily rate of $35.38 is used. 9.76 people in the ADP savings x $35.38 = $345.22 per day projected savings x 365 days is a $126,004 projected annual savings. This savings is based on an average of the whole, actual savings may vary depending on the actual jail bed day consumption of the individuals served. Programs should evaluate annually the actual impact of the individuals served.

Appendix F: Integrated Care Collaboration (ICC) Data

Service Line	1	2	3	4	5	Total
Mental disorders	85.7%	93.1%	84.8%	88.9%	87.8%	88.0%
Factors influencing health status and contact with health service	62.9%	63.8%	54.3%	44.4%	51.0%	57.2%
Symptoms, signs, and ill-defined conditions	54.3%	55.2%	45.7%	51.9%	61.2%	54.0%
Injury and poisoning	48.6%	51.7%	45.7%	44.4%	55.1%	49.6%
Diseases of the musculoskeletal system	41.4%	39.7%	34.8%	40.7%	38.8%	39.2%
Unknown	31.4%	39.7%	23.9%	29.6%	32.7%	32.0%
Diseases of the circulatory system	32.9%	32.8%	28.3%	18.5%	32.7%	30.4%
Diseases of the nervous system and sense organs	30.0%	29.3%	32.6%	14.8%	28.6%	28.4%
Diseases of the digestive system	21.4%	36.2%	21.7%	25.9%	24.5%	26.0%
Endocrine, nutritional, and metabolic diseases and immunity disc	32.9%	20.7%	21.7%	14.8%	16.3%	22.8%
Diseases of the respiratory system	27.1%	24.1%	26.1%	18.5%	10.2%	22.0%
Diseases of the genitourinary system	22.9%	27.6%	15.2%	18.5%	10.2%	19.6%
Infectious and parasitic disease	22.9%	17.2%	15.2%	14.8%	14.3%	17.6%
Diseases of the skin and subcutaneous tissue	18.6%	20.7%	17.4%	3.7%	14.3%	16.4%
Diseases of blood and blood-forming organs	18.6%	10.3%	4.3%	0.0%	6.1%	9.6%
Neoplasms	4.3%	5.2%	4.3%	0.0%	2.0%	3.6%
Complications of pregnancy, childbirth, and the puerperium	0.0%	5.2%	2.2%	0.0%	0.0%	1.6%
Congenital anomalies	2.9%	0.0%	2.2%	0.0%	2.0%	1.6%

Patient Utilization	1	2	3	4	5	Total
Clinic	23.3%	28.0%	36.6%	35.0%	21.4%	27.7%
Emergency Room	91.7%	96.0%	85.4%	95.0%	97.6%	93.0%
Inpatient	20.0%	20.0%	19.5%	10.0%	9.5%	16.9%

NOTE: CY 2011 Patient Count, 74% Matched

Location	Patient Class Group	1		2		3		4		5		Total	Total
		% Patients	Encounter	% Patients	Encounter	% Patients	Encounter	% Patients	Encounter	% Patients	Encounter	% Patients	Encounter
Brackenridge Hospital	Emergency Room	55%	278	56%	77	49%	44	75%	37	67%	86	58%	522
	Inpatient	17%	18	10%	10	5%	4	10%	3	2%	3	9%	37
CommUnityCare	Clinic	18%	111	14%	41	22%	74	30%	29	17%	27	19%	282
Lone Star Circle Of Care	Clinic	3%	21	12%	25	12%	40	5%	1	7%	12	8%	99
People's Community Clinics	Clinic		0	2%	1	2%	1		0		0	1%	3
Seton Community Clinics	Clinic	2%	1	4%	8		0		0		0	1%	10
Seton Hospital Hays County	Emergency Room	3%	4	2%	1	2%	1	5%	1		0	2%	8
Seton Hospitals	Emergency Room	28%	125	34%	52	24%	45	10%	5	24%	27	26%	255
	Inpatient	7%	10		0	2%	1		0		0	2%	11
Shoal Creek Hospital	Inpatient		0		0	7%	5		0	2%	1	2%	7
St Davids Hospitals	Emergency Room	53%	197	72%	147	49%	53	45%	48	57%	75	57%	521
	Inpatient		0	12%	16	5%	3		0	5%	3	5%	22

NOTE: CY 2011 Patient Count, 74% Matched