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## **Crisis/Wellness Care Drop-off Center Phase 1 Master Plan**

Lake County, Illinois

September 2019



## **ACKNOWLEDGEMENTS**

Wold Architects and Engineers is pleased to submit to Lake County the following Phase 1 Master Plan for consideration of a Crisis/Wellness Care Drop-off Center facility.

We wish to thank Lake County Facilities & Construction staff and the members of the Core Planning Group for their time in providing the resources and information necessary to thoroughly complete this study in a timely manner.

Wold is prepared to aid the County with any additional analysis and services required to advance the recommendations of this study to the next phase and beyond. Thank you for your consideration.

A handwritten signature in black ink, appearing to read "Matt Bickel".

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Matt Bickel | AIA, LEED AP  
Partner-in-Charge



## **CORE PLANNING GROUP MEMBERS**

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- Anthony Vega, Chief of Staff – Lake County Sheriff's Department
- Sergeant Keith Kaiser – Lake County Sheriff's Department
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- Mark Pfister – Executive Director
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- Dakisha (DK) Wesley – Assistant County Administrator
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- Mike Nerheim – Lake County State's Attorney

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## **BACKGROUND**

Lake County is a diverse area of over 700,000 residents (2010 U.S. Census) who are largely concentrated within urban and suburban population centers. There is wide diversity in economic, racial, and ethnic backgrounds within the County. From 2011-2015, it has been reported that approximately 10-percent of the all residents were living at or below the poverty level (2016 U.S. Census).

In a 2014 behavioral health assessment, 17-percent of Lake County responding adults reported mental illness in the preceding year; while more than 4-percent of adults aged 18-24 reported experiencing serious mental illness. In 2017, Lake County Health Department received 3,616 crisis calls from persons seeking mental health assistance, conducted 778 in-person crisis sessions, and provided mental health services to 11,657 unduplicated clients.

### **Current Mental Health Crisis Response**

In service to its population, Lake County Government, via the operations of the Lake County Health Department, oversees the Crisis Care Program (CCP) from a facility located at 3002 Grand Avenue in Waukegan, Illinois. This facility is sited on the primary health department campus, and is supported by behavioral health services housed in the adjacent Lake County Health Department facility. In addition to the Crisis Care Program, the facility at 3002 Grand Avenue is also home to the County's Addictions Treatment Program (ATP) – which provides both substance use disorder rehabilitation and detoxification services – as well as the Williams Consent Decree Assertive Community Treatment center for case management and peer support.

The Crisis Care Program is a voluntary, non-acute residential care facility. Persons in mental health crisis, and in need of time to rest and recuperate in a peaceful environment, are offered 24-hour crisis intervention and respite care. Mental health crises can include, but are not limited to, overwhelming depression, thoughts of suicide, poor concentration, disturbing thoughts, or feeling out of control. The program is limited to adult Lake County residents who are medically stable, and whom exhibit an increase in (or potential for) psychiatric symptoms; and whom are not actively suicidal/homicidal, a registered sex offender, aggressive and/or combative, under the influence of alcohol, drugs, or mood-altering substances, elopement risk, or only seeking shelter. Persons admitted to the program attend daily groups on effective ways to cope with symptoms or situations and how to recover from crisis. Clients may also be seen by a psychiatrist and treated with medication, if appropriate. There are a total of eight (8) beds available for crisis respite. The average length of stay for persons admitted to the crisis residential program is 6.2 days.

The adjoining Addictions Treatment Program has a current capacity of six (6) substance abuse detoxification beds and 16 substance abuse rehabilitation beds. The facility shares core services, including medical and food service/dining. Currently, the facility operates with a common entrance. Upon intake, persons are evaluated for potential admission to one of the three programs.

Since 2018, Lake County's behavioral health staff has met with the County's law enforcement agencies to promote the available services related to crisis intervention and stabilization, with a focus toward offering an alternative to the legal system – either as option to citation and/or jail. To date, there has been limited success in achieving law enforcement diversion to the Crisis Care Program due to restrictions on admission and lack of law enforcement utilization.



## **Project Charter**

Based on County's desire to understand and respond to the increasing prevalence of mental illness, and to provide its population with services for mental health assessment and referral to treatment – and in the interest of providing a crisis/wellness drop-off resource that will allow law enforcement personnel to efficiently escort persons experiencing mental health crisis to a well-equipped facility and then return to patrol duties in a timely manner – Lake County is embarking to establish options and recommendations for expansion of its current programs to create a crisis/wellness care drop-off center capable of accommodating all 41 of its law enforcement agencies.

Specifically, it is the charge of this study to consider the impacts of the County's overall law enforcement community utilization of a voluntary, 24-hour, 7-days-a-week, crisis/wellness care drop-off program. That includes confirmation of the anticipated increases to the current number of respite beds needed to accommodate expanded access to services, as well as the introduction of 23-hour crisis stabilization chairs to accommodate the law enforcement drop-off and intake/assessment process. In planning for an increase in current utilization, implementation of best practices and exploration of the relationships between other service programs (SUD detoxification and SUD rehabilitation) shall be explored. Furthermore, opportunities for addressing the broader continuum of mental health and wellness services should be considered for creating a hub for community-based organizations to provide social services assessments, screenings, and service referrals to wraparound services.

In addition to commissioning this study, the Lake County Board has engaged in an extensive effort to bring the issues of mental health services and law enforcement crisis intervention preparedness to the forefront of public discussion. As part of that effort, a grant was provided to Lake County by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the John D. and Catherine T. MacArnold Foundation. Amongst other activities, a portion of that grant supported the facilitation of a workshop and report by Policy Research Associates/Policy Research, Inc. which mapped the existing services provided across Lake County as they related to meeting the objectives of Sequential Intercept Model Intercept 0-1.

The workshop was held in April 2019 and was attended by more than 70 stakeholders; representing the various interests and concerns of Lake County, its member communities, its law enforcement and public safety agencies, its health systems, and its not-for-profit and human services organizations. The workshop identified a consensus in support of a "23-hour crisis stabilization unit that can serve as a hub which connects a community's crisis care continuum between front-end responses on one side and higher levels of care on the other (e.g., crisis residential programs, psychiatric inpatient settings)." Apart from the various types and levels of care, the following questions were developed by the group:



- How can the crisis service serve as an integrated hub for other crisis care components in Lake County?
- What mental health and substance use crisis care gaps exist in Lake County that a crisis service could help ameliorate?
- Where can a crisis service be located so that it is positioned for equitable access to all Lake County residents?
- What are the pathways into the crisis center? Can people be diverted from the emergency department to the crisis center?
- How can the crisis center assist individuals? Become connected with treatment? Access support services and housing? Obtain health coverage and entitlements?

Participants were also asked to establish action plans for guiding future work on a crisis diversion center moving forward. The following potential tasks and workgroups were identified:

1. Programming
2. Target Population
3. Community Engagement
4. Data
5. Pathways for the Adult Population
6. Legislative Advocacy

A copy of the complete Policy Research report is included as an appendix.

Since the workshop, work by the County Administrator's Office to advance the identified actions plans has continued in earnest. In addition to the above listed items, a number of likely next steps are identified in "Appendix A" of "Lake County's 2019 New Program Request -LCHD/CHC Crisis Care and Respite Bed Expansion" which is included in the Appendix of this report.

While a number of the ongoing efforts are beyond the scope of this study; the consideration, development, and refinement of these will be critical in providing a coordinated solution.



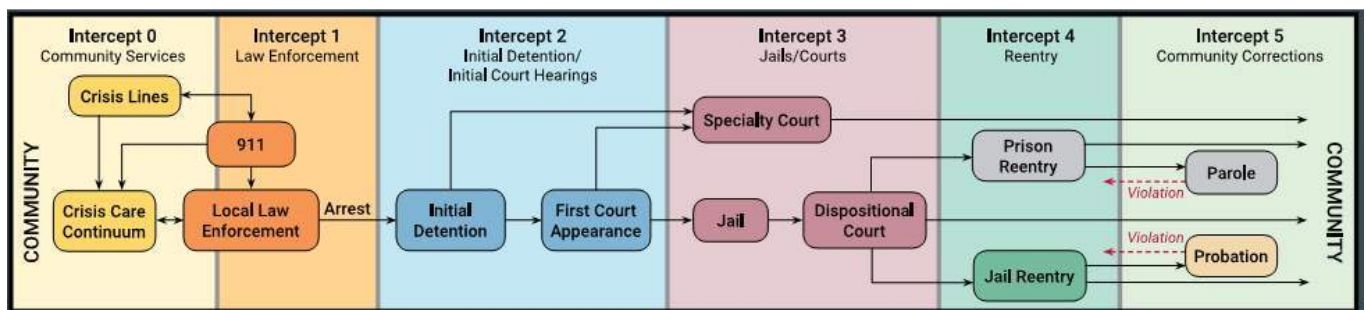
## **EXECUTIVE SUMMARY**

### **Introduction**

Lake County commissioned Wold Architects and Engineers to complete a capacity assessment and programmatic study on the potential development of a Crisis Triage Center in Lake County. The project's intent is to develop and evaluate options which provide law enforcement a mechanism to deflect persons from jail and emergency departments who are charged with low level and nuisance offenses. The material result of the status quo practice is the annual expenditure of thousands of man-hours by Lake County's 41 law enforcement agencies transporting these offenders to jails and emergency departments who in turn spend thousands of hours handling these cases. The repetitive nature of the same offenses by the same offenders point to a cyclical relationship, and suggests that these individuals may be better served by routing them through various levels of counseling, clinical oversight and behavioral health treatment. If a Crisis Triage Center was developed which was capable of achieving positive, more permanent outcomes, this could be of great benefit to the offenders, law enforcement agencies, and taxpayers of Lake County.

### **Scope of Investigation and Study Logic**

This Phase 1 Master Plan study was chartered with the intent of identifying the operational and programmatic needs of Lake County to achieve the objectives of Sequential Intercept Model Intercept 1, deflection of eligible individuals from jails and emergency departments. Achieving this objective requires a thorough understanding of current mental health care system capabilities and limitations. This includes: an investigation into existing crisis triage services, proposed crisis services, existing service infrastructure, and recipient trend forecasts. Once these facets were understood, a gap analysis was performed to evaluate any discrepancy between delivery of the existing services and delivery of the proposed services. Conceptual scenarios were developed in support of achieving the proposed service profile.



### **Core Planning Group (CPG) & Charter**

The project team consisted of representatives from several agencies which contribute directly to the response to and care of persons in mental health crisis: County and municipal law enforcement; County and 3<sup>rd</sup> party healthcare providers; and County government administration. In addition, Wold contributed its experience gained during the design of other mental health and medical facilities; as well as the experience of a nationally recognized behavioral health consultant.

Analysis of requirements for a proposed Crisis/Wellness Care Drop-off facility began by working with the Core Planning Group to identify objectives for meeting the needs of the mentally ill from the time of initial encounter through their final stage of treatment or services in Lake County. Discussion centered on current programs and services – provided by the County as well as other agencies – and the interrelationship of those efforts.



From that dialog, emerged a charter on how best to meet the needs of those individual through an effective and comprehensive continuum of behavioral health services.

The Core Planning Group concluded that in order to facilitate Sequential Intercept Model Intercept 1 within the current framework of services provided in the County (both County and privately operated), a Crisis Triage and Stabilization Center needs to be introduced into the system of resources. The Crisis Triage and Stabilization Center is intended to provide an intake point for assessing and stabilizing individuals experiencing mental health crisis and, as appropriate, referring them to the appropriate programs and services for addressing their primary acute needs. The desired diversion objectives will affect the mission and operations of these agencies through realization of the following:

- Increased efficiency of law enforcement responding to mental health crises and ability to return to patrolling faster
- Enhanced capacity of Lake County Health Department to provide mental health and substance use disorder services
- Ambassadors for lawmaking and policy change in support of broader response and funding support of mental health and substance use disorder services
- Financial partnership, co-managed services, and shared facilities

At the same time, the Core Planning Group was resolute in their beliefs that the introduction of a Crisis Triage and Stabilization Center was not, in and of itself, a complete and adequate response for comprehensively addressing the needs of Lake County's population relative to providing mental health services. Currently, the Lake County Health Department has sufficient bed counts to satisfy crisis respite and SUD detox programs with the only real pinch point being in SUD rehabilitation. That said, analysis of the current operations and historical utilization data suggests that – even without implementation of an Intercept 0-1 diversion initiative – their estimated bed count needs may exceed their current capacity within the next 10 years. With the introduction of a County-operated Crisis Triage & Stabilization Center, it is projected that the growth of each of the current programs will exceed the trend projection for their current operations, thus resulting in higher utilization and increased space demands.

## **Existing Services & Infrastructure**

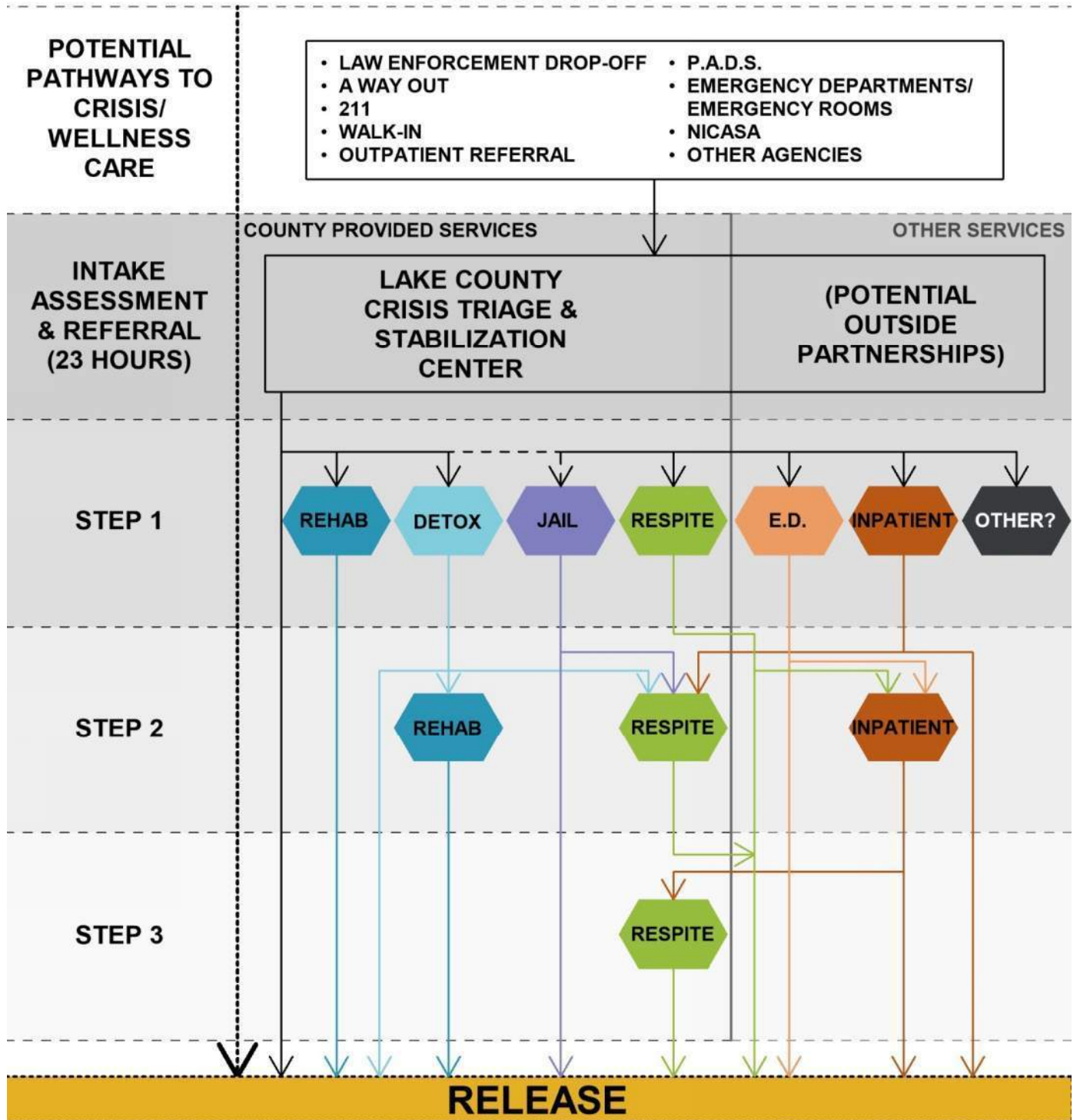
### Service Profile

The County's existing behavioral health service capabilities are provided by a composite of Private Health Care Providers, Non-for-Profit Providers, and Public Health Care Providers. An understanding of both the operational and physical infrastructure of major providers was essential in the development of this study. The Core Planning Group primarily focused on the operation of Non-for Profit and Public providers, as these institutions participated in the study process. Patients generally enter the health care system via the below diagram.





## COMMUNITY





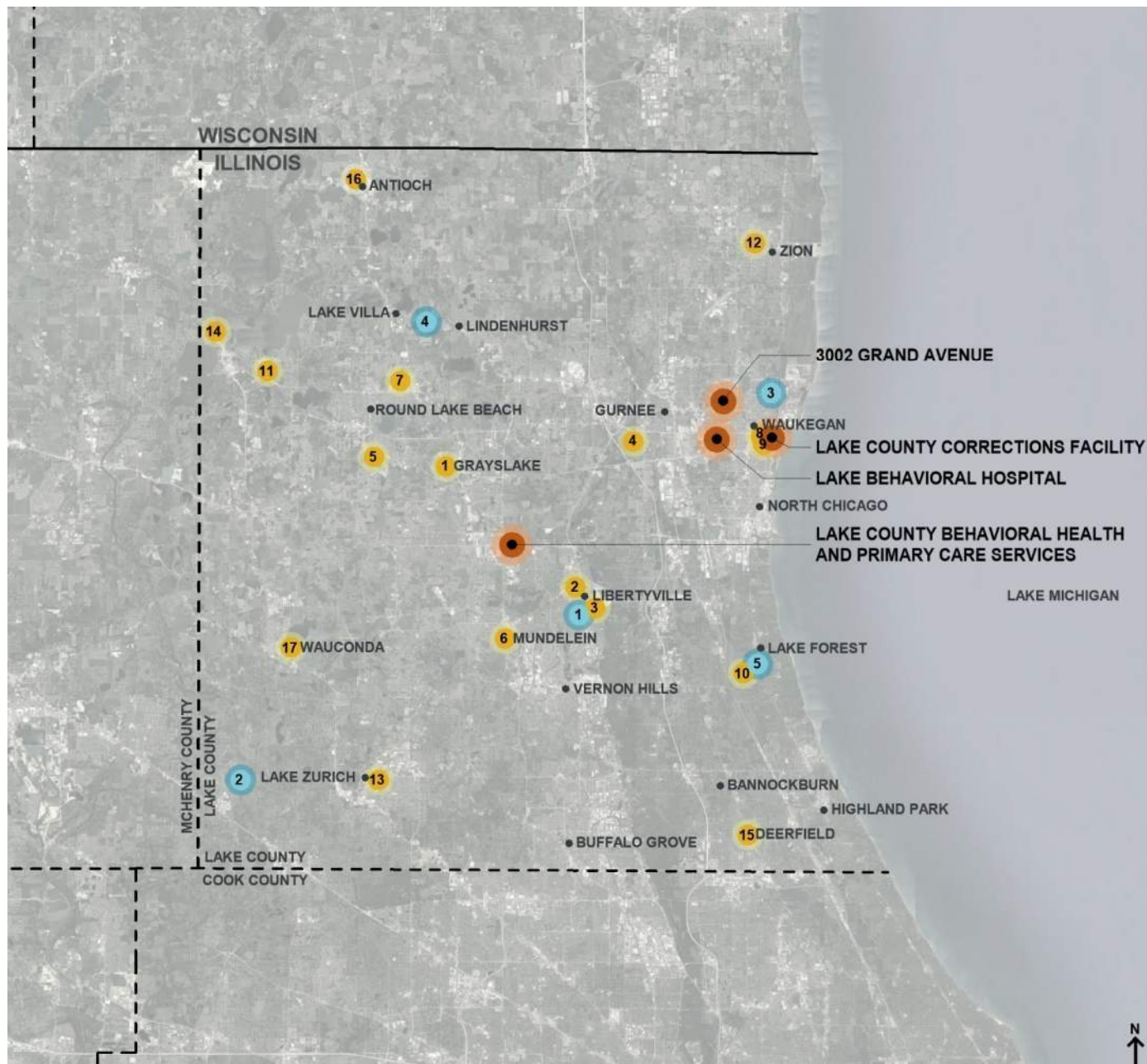


The Lake County Health Department provides comprehensive substance abuse and mental health services via its Crisis Care Program (CCP) which provides residential respite services (8 beds) and its Substance Abuse Disorder (SUD) program which provides residential Detoxification (6 beds) and Rehabilitation (16 beds) services. The Lake County Health Department typical patient profile is low income and/or uninsured, and thus it functions as the provider of last resort for many of the patients who utilize its programs. Non-for Profit institutions such as Nicasa and Gateway, as well as for-profit institutions such as Lake Behavioral Hospital, generally focus on subsets or specialty aspects of the treatment profile. Thus, the relationship of these institutions to each other is most accurately thought as a "continuum of care" or "treatment train", as compared to competitive businesses institutions. It is also safe to assume that the implementation of a Crisis Triage and Stabilization Center could directly add to the total mental health care system usage by supplying a pipeline of individuals who are currently circumventing the treatment train (by being incarcerated in jails and housed in emergency departments). It is reasonable to assume this influx will most directly impact the public and non-for-profit care providers.

#### Infrastructure Profile

Initially, a number of different Health Department and 3rd Party Provider Facilities were discussed as being possible locations for providing the physical space to meet the charter of this initiative. These included the Health Department's Women's Residential Services in Vernon Hills, the Belvidere Medical Building in Waukegan, and Lake Behavioral Hospital. As the Core Planning Group developed their collective understanding of the services to be provided, guiding principles emerged which pointed toward the proposed options as being "most feasible". These principles included: adjacency to continuum of care services, public transportation, site capacity, future expansion/scalability, and influence over outcome.

The Lake County Health Department provides behavioral health services out of two facilities; they also have remote capability via their Assertive Community Treatment (ACT) and case management teams. The 3002 Grand Avenue Waukegan is approximately 23,900 gross square feet, and currently houses the County's Crisis Care Program (CCP) and Addiction Treatment Program (ATP); as well as the Williams Consent Decree Program. The facility appears to be in serviceable condition, with recent upgrades to the mechanical and electrical plant. These services are supported by County-provided services delivered from other facilities co-located on the Grand Avenue campus, including: outpatient mental health, dental health, counseling, substance abuse prevention and treatment; and child and adolescent behavioral health services. The campus is surrounded by a mature urban environment which limits opportunities for expansion beyond the boundaries of the existing property; however, there is an area adjacent to the northwest portion of the existing structure that appears suitable for building expansion. The Libertyville Behavioral Health and Primary Care Services Campus is located off Peterson Road in Libertyville and is co-located with the Health Department's Animal Control Facility. This behavioral health facility provides the same primary care and outpatient services identified at 3002 Grand Avenue via an outpatient setting. The campus is confined by private property to the east and west, a railroad to the north, roadway to the south. The facility appears to be in serviceable condition. Expansion of services onsite is limited by site usage constraints, as well as the availability of water and sewer systems.



 COUNTY POINTS OF INTEREST

 MEDICAL CENTERS

1. ADVOCATE CONDELL MEDICAL CENTER, LIBERTYVILLE
2. ADVOCATE GOOD SHEPHERD HOSPITAL, BARRINGTON
3. VISTA MEDICAL CENTER - EAST, WAUKEGAN
4. VISTA MEDICAL CENTER - LINDENHURST, LINDENHURST
5. NORTHWESTERN MEDICINE LAKE FOREST HOSPITAL, LAKE FOREST

 A WAY OUT

1. GRAYSLAKE POLICE DEPARTMENT
2. LAKE COUNTY SHERIFF'S OFFICE HIGHWAY PATROL
3. LIBERTYVILLE POLICE DEPARTMENT
4. GURNEE POLICE DEPARTMENT
5. ROUND LAKE POLICE DEPARTMENT
6. MUNDELEIN POLICE DEPARTMENT
7. ROUND LAKE BEACH POLICE DEPARTMENT
8. WAUKEGAN POLICE DEPARTMENT
9. LAKE COUNTY SHERIFF'S OFFICE
10. LAKE FOREST POLICE DEPARTMENT
11. FOX LAKE POLICE DEPARTMENT
12. ZION POLICE DEPARTMENT
13. LAKE ZURICH POLICE DEPARTMENT
14. LAKE COUNTY SHERIFF'S OFFICE MARINE UNIT
15. DEERFIELD POLICE DEPARTMENT
16. ANTIOCH POLICE DEPARTMENT
17. WAUCONDA POLICE DEPARTMENT



## Trend Analysis & Forecast

The total annual volume of incoming admittances to the Lake County Health Department CCP and SUD declined from 2009 to 2018 in all categories, except respite care. Conclusions about overall trends must be tempered in light of system changes relative to admissions criteria, allowed length of stay, treatment techniques and capacity. During this same period, the average length of stay and occupancy rate increased in rehabilitation, modification of clinical treatment technique utilized in detoxification procedures from 2016 to present. Long term forecasting of bed capacity needs for this study was challenged by available data limitations. Data that is normally used for estimating and projecting facility bed capacity needs (jails, prisons, hospitals, etc.) was not fully available for this work. However, the consistent effort by Lake County project staff to provide data useful to this work is greatly appreciated and ultimately allowed for the development of three analysis models that yielded reasonably reliable bed capacity estimates.

## Summary of Bed Need Estimates

In response to the Core Planning Group's recommendations for adding a Crisis Triage and Stabilization Center and addressing projected long term growth for current system services, this study intends to inform and guide Lake County in determining the number total of beds (Crisis Respite, SUD Detox, and SUD Rehabilitation) and Crisis Triage/Stabilization chairs that would be required if and when their Sequential Intercept I Jail Diversion vision is realized.

Three models were used to calculate jail diversion bed need estimates. The three models produced five bed need estimate ranges. Model 1 used LCHD historical data and allowed for estimating respite, detox and rehab beds. Detox and rehab bed estimates were not possible for Models 2 and 3 because no data existed within the available data sets to calculate those bed estimates. The table below summarizes bed need estimates, by service, for each model and sub-model. The models should be considered independent yet related, and are not specifically altogether cumulative.

**Bed Needs Estimate Summary Table**

Bed Capacity Estimate Models	Bed Capacity Needs Estimates			
	Respite	Detox	Rehab	Total
<b>Current bed counts</b>	8	6	16	30
<b>MODEL 1. LCHD Historical Capacity Utilization 2009-2018 - 2016-2028 Linear Model</b>	3.4 to 8.3	3.5 to 5.3	9 to 39.5	15.8 to 53
<b>MODEL 2A. Jail Mental Health Screenings Data Snapshot - Intake Mental Health Stability</b>	7.2 to 16	NA	NA	7.2 to 16
<b>2B. Jail Mental Health Screenings Data Snapshot - Intake Mental Health Urgency &amp; Risk Diversion Table with CCP 2018 ADP</b>	23.7 to 54.2	NA	NA	23.7 to 54.2
<b>MODEL 3A. 2019 Law Enforcement Survey Mental Health Call Transports</b>	22.1 to 86	NA	NA	22.1 to 86
<b>3B. 2019 Law Enforcement Survey Anticipated LE Agency Use of Diversion Facility</b>	22.1 to 63.4	NA	NA	22.1 to 63.4



### Crisis Respite Beds

Bed estimate ranges shown are the product of data availability limitations, estimate modeling methodologies, variability in data trends, and current and potential diversion policies and practices. It is also important for policy makers to remain mindful that all estimates are based on average daily bed needs and do not account for peak day when admissions are higher than on average. Local officials are encouraged to consider bed capacity needs toward the higher end of the ranges shown.

Again, maintaining status quo services (Model 1) is likely to produce limited, if any, demand for additional respite beds. Model 2 and Model 3 suggest that the introduction of jail diversion strategies is likely to result in a bed count estimate ranging from 22.1 – 86 respite beds. As outlined later in the report, it should not be assumed that all reported mental health instances at the jail would be eligible for diversion. A reasonable assumption is that 20% of instances may result in diversion; therefore, the estimated number would be in the range of 4.4 to 17.2 beds.

Based on Model 1 (status quo growth projections) and Models 2 and 3, it could be anticipated that Lake County may need as few as 7.8, or as many as 25.5, total respite beds to accommodate future needs. To reasonably ensure that current CCP needs and potential jail diversion needs are consistently available and that access is timely and reliable, a maximum capacity of 30 respite beds could be required.

For the purposes of scenario development, a moderate estimate of 16 respite beds (twice as many as are currently available in the system) is recommended based on the maximum allowable size of a behavioral unit based on Medicaid reimbursement licensing laws.

### Crisis Stabilization Chairs

In addition to the recommended 16 respite beds, the recommended Crisis Triage and Stabilization should anticipate needing an estimated 10 and 15 crisis stabilization chairs. Crisis stabilization chairs are used to facilitate very short-term crisis stabilization services, usually between 4 to 6 hours. Patients requiring more than 6 hours of crisis stabilization should be admitted to Respite bed-care.

This stabilization chair estimate is based on conversations with LCHD leaders and an examination of respite admission rates. We estimate that approximately 50-60% of crisis evaluations will result in residential admission to the facility. This leaves 40-50% of evaluations that will not be admitted. Some of the persons evaluated, especially those who are experiencing a crisis event, can be effectively treated using short-term therapeutics requiring from one to 6 hours of facility service. There is no magic statistic for estimating stabilization chair needs; the estimate provided is based on professional judgement and clinical experience, and discussions with LCHD leadership.

For the above reasons, the co-location of respite beds (currently CCP services) should be strongly considered for efficiency of referral and transport from the Crisis Triage and Stabilization Center to likely longer-term respite services.



### Detox and Rehab Beds

Only Model 1 data allowed for estimating detox and rehab bed needs. None of the available data used for Models 2 and 3 involved information regarding substance abuse. Any attempt to estimate those bed needs using those two models would be fruitless and unreliable. The detox and rehab bed estimates in Model 1 are based on projections of actual admissions and lengths of stay. County officials are encouraged to consider using bed estimates on the higher side of Detox and Rehab estimates, especially considering the increasing Rehab utilization trends.

Based on Model 1, it is recommended that current bed capacity for SUD rehab be expanded from 16 beds to 32 beds. No increase in service capacity for SUD detox is recommended.

### **Jail Diversion Program Implementation Options**

Lake County has three basic options for determining final bed needs for launching this jail diversion program:

1. Lake County owns and operates all Crises Wellness chairs and beds (respite, detox, and rehab)
2. Lake County community health care facilities provide all needed bed capacity and service.
3. Lake County and community health care facilities partner and share bed capacity and operations according to specific areas of facility specialty, capacity, and availability.

### **Existing County-based Services and Capacity**

The Lake County behavioral health treatment community consists of 10 facilities with a current capacity of 982.25 total adult and youth respite, detox, and rehabilitation beds. Three facilities, Lake Forest Hospital, Good Shepard, and Condell facilities reported no behavioral health bed capacity. North Shore treatment facility expects to add 15 and Lake Behavioral Hospital expects to add 100 additional youth and adolescent mental health beds by 2021, increasing total community capacity to 1,097.25 beds.

Lake County's current community behavioral health capacity may be able to accommodate some or all Jail bed needs estimates, depending on available and services provided. Lake County is encouraged to consider community behavioral health bed capacities when making a final decision to implement its Jail diversion plan. The table below shows behavior health bed capacities in Lake County.





**Current and Anticipated Behavioral Health Bed Capacity Services in Lake County**

INPATIENT BEDS	Inpatient/ Law Enforcement Capacity			Crisis/ Wellness Capacity		
	Adult beds	Youth / Adolescent beds	Additional beds proposed <sup>1</sup>	Rehab Beds	Respite Beds	Detox Beds
1. LCHD Mental Health					8	
LCHD Substance Abuse <sup>3</sup>				16		6
2. Vista						
3. North Shore (+15 Youth Beds by 2021)		12	15			5.25
4. Condell						
5. Lake Forest Hospital						
6. Good Shepherd						
7. Lake Behavioral Hospital (+100 Beds by 2020)	46		100			
8. Lake County Jail <sup>2</sup>	740					25
9. Gateway	114					
10. One Hope United <sup>3</sup>		10				
<b>Totals:</b>	<b>900</b>	<b>22</b>	<b>115</b>	<b>16</b>	<b>8</b>	<b>36.25</b>
			<b>922</b>			<b>60.25</b>

<sup>1</sup>Additional beds proposed included in Year 2021 bed count

<sup>2</sup> LCJ Detox Beds 20-25

<sup>3</sup> ALOS - LCHD=Varies, One Hope = Approx. 17 Mos.

<b>Current Total Bed Capacity<sup>1</sup></b>	<b>982.25</b>
<b>Beds by Year 2021</b>	<b>1,097.25</b>

## Scenario Development

In response to the option whereby Lake County owns and operates all Crisis Wellness chairs and beds, Wold and the Core Planning Group explored several variations of possible facilities scenarios. Operational and programmatic requirements for addressing the primary Sequential Intercept Model Intercept 0-1 charge of the project were examined. The in-system affects and the out-of-system resources associated with the identified impacts of a concerted effort to divert individuals from unnecessary admission into the criminal justice or emergency healthcare pipeline were also considered. In the end, five scenarios were developed as potential approaches for creating a Crisis Triage & Stabilization Center, as follows:



Scenario #

**#1 Law Enforcement Drop-off (standalone facility)**

Additional proposed beds: 0 Beds

**#2 Law Enforcement Drop-off (3002 Grand Avenue) + Renovate/Expand to forecast Health Department Service Trend<sup>1</sup> (3002 Grand Avenue)**

Additional proposed beds: 16 Rehab Beds, 0 Detox Beds and 8 Crisis Respite Beds

**#3 Law Enforcement Drop-off (standalone facility) + Renovate/Expand Rehab (3002 Grand Avenue)**

Additional proposed beds: 16 Rehab Beds, 0 Detox Beds and 8 Crisis Respite Beds

**#4 Law Enforcement Drop-off and Respite Care (standalone facility) + Renovate/Expand to forecast Health Department Service Trend (3002 Grand Avenue)**

Additional proposed beds: 16 Rehab Beds, 0 Detox Beds and 8 Crisis Respite Beds

**#5 Law Enforcement Drop-off + Expand to forecast Health Department Service Trend (standalone facility)**

Proposed new beds: 32 Rehab Beds, 6 Detox Beds and 16 Crisis Respite Beds

The costs for developing the identified facilities scenarios are estimated as follows:

	<b><u>SCENARIO 1</u></b>	<b><u>SCENARIO 2</u></b>	<b><u>SCENARIO 3</u></b>	<b><u>SCENARIO 4</u></b>	<b><u>SCENARIO 5</u></b>
New Construction	\$4,542,841	\$0	\$4,542,841	\$11,916,552	\$21,541,826
Addition and/or Renovation	\$0	\$11,978,004	\$0	\$0	\$0
Recommended Improvements to Existing Lake County Services	\$0	\$0	\$10,278,927	\$2,955,100	\$0
<b>Estimated Total Project Cost</b>	<b>\$4,542,841</b>	<b>\$11,978,004</b>	<b>\$14,821,769</b>	<b>\$14,871,652</b>	<b>\$21,541,826</b>

1. New Construction costs exclude Land Acquisition and related utility and storm water improvements
2. Other exclusions: temporary relocations, moving costs, legal fees, financing
3. Construction costs are escalated to estimate Year 2020 dollars.
4. All scenarios will include additional staffing requirements

<sup>1</sup> "Expand to forecast Health Department Service Trend" includes detox, rehab and respite care volumes projected through 2030





## **Basic Argument for a Crisis Triage and Stabilization Center in Lake County**

Shifting and increasing resources and funding from institutionalized care and/or jail custody for people suffering with mental illness to community-based care has shown promise for behavioral health parity in health crisis circumstances and yet, it has been underfunded, and sorely underused to prevent and limit adult criminal justice system involvement. One of the unfortunate trends of deinstitutionalization of behavioral health services and the consequential over-use of jails for mental health care in general has been a persistent gap in emergency crisis services. This gap in services leaves those in a behavioral health crisis to receive treatment in the hospital emergency departments and/or jails culminating in an astounding increase in overall public and private healthcare expenditures.

Providing behavioral health crisis assessment and treatment in busy emergency departments that produce long waits for care can be a challenging environment for those in need of immediate treatment for psychological needs. Providing timely and adequate mental health care in jails has proven ineffective for mentally ill inmates overall and exposes local authorities to serious risk of Constitutional liability and enormous financial consequences.

Crisis Triage and Stabilization Centers are effective at providing suicide prevention services, addressing behavioral health treatment, diverting individuals from entering a higher level of clinical care or incarceration and addressing the distress experienced by individuals in a behavioral health crisis. Studies also show that Crisis Triage and Stabilization Centers have significantly lower operational costs than psychiatric inpatient units, provide greater satisfaction among clients; and effectively reduce jail admissions and inmate lengths of stay when incarcerated.

Expanding Lake County's options for addressing mental health crisis care from incarceration and community-based behavioral health outpatient/inpatient care to various community alternatives benefits the individuals in crisis, its criminal justice system, and its community.

## **Conclusion**

There is consensus among the Core Planning Group that a new Crisis Triage and Stabilization Center will benefit Lake County, its law enforcement agencies, and its overall population. With proper management, stakeholder buy-in and public awareness; a significant impact can be realized in reducing incidents of persons in mental health crisis needlessly ending up in an emergency room or at the jail. There is also an awareness that, with adequate services and facilities, so much more can be accomplished in term of providing meaningful treatment and support to persons dealing with mental health issue to ensure best possible outcomes and reduced recurrence of access to services.

The proposed Crisis Triage and Stabilization Center will offer up to 24-hours of care and support, in a safe and welcoming environment, for individuals in a state of mental health crisis. During this period, those individuals will be allowed to relax comfortably in a living room setting (rather than a hospital bed or jail cell), and will be provided evaluation, counseling, and referral to the appropriate level of care. It is anticipated that staff would also be provided to assist with insurance/ Medicaid enrollment, as well as with coordination of transportation.



## **Next Steps**

Additional analysis and consideration of the identified scenarios is required to understand the operational impacts associated with the respective levels of additional staffing and resources. Similarly, further discussions with potential outside partners is recommended to determine opportunities for cost and/or resource sharing.

In order to provide a more complete picture of services and costs that could be associated with this initiative, the Lake County Health Department developed a conceptual pro forma for a standalone Crisis Triage and Stabilization Center, as well as a 16 bed expansion of their existing SUD rehab services. For modeling purposes these concepts were used as plugs for all Crisis Triage and Stabilization and 16 bed service expansion concepts. The annual staffing cost is estimated to be between \$2-4M and between 18-21 FTE's, but this would vary based upon the scenario selected. Further development of the services provided, reimbursement opportunities, and staffing models will be required prior to advancing this project to a design development level of drawings. A copy of the pro forma is included in the Appendix.

Additional next steps were identified as a part of 2019 Lake County New Program Request that chartered this study. These next steps remain valid and are as follows:

- Develop updated respite bed admission criteria
- Develop procedures for custodial transfer through a collaborative process
- Meet with site location municipality to address "not in my community" fears
- Develop a process for how law enforcement can have expedited access to professional staff during custodial transfer
- Develop performance measures and method to track, store, and share utilization information
- Develop a brief on-page form for officers to communicate the essential information that professional staff receiving the individual need to provide appropriate services and complete the custodial transfer.
- Determine if a formal agreement, such as a Memorandum of Agreement (MOA) between the LCHD and law enforcement agencies is needed for procedures to support the program implementation
- Train law enforcement and LCHD staff on the agreed procedures
- Revisit the procedure routinely to assess what is working well and what is not, and jointly make modifications to continuously improve the process

A complete list of next steps identified in the New Program request can be found in the Appendix.



## **DATA ANALYSIS AND TRENDING**

To assist in collecting, analyzing and assessing data provided by Lake County, Wold partnered with Dr. Kenneth Ray of RJS Justice Services, LLC.

Dr. Ray has served for more than 40 years in local law enforcement, corrections, clinical mental health and professional consulting. His local government employment service of 29 years includes as a law enforcement officer, police supervisor, Undersheriff, 911 communications supervisor and administrator, emergency management director, law enforcement, corrections instructor and criminal justice academy instructor and director, director of county security police, jail administrator and director of corrections for medium, large, and mega jail systems at the county level in Texas and Washington states. Dr. Ray's clinical mental health and consulting experience includes clinical practice involving all populations, including offender populations, diagnosis and treatment of mental illnesses, individual and group, pediatric, inpatient and out-patient care delivery, and involuntary commitment evaluations and placements.

Since 2001, Dr. Ray has provided various consulting services to numerous jurisdictions in 14 states and the US Virgin Islands that involve correctional litigation and risk management; CRIPA settlements, use of force; system assessments; medical, mental health, and suicide assessments, staffing, inmate classification, life and fire safety; environmental conditions; electronic health records; security technology; leadership and staff development; human resource management; budget and fiscal management; RFP development and project management; training; population management and alternatives to confinement; segregation and solitary confinement, new facility design and renovation.



## Estimating Crisis Center Bed Capacity Needs

Three models were used to calculate crisis center and jail diversion bed need estimates. Descriptive analyses of three primary data sets were used to estimate capacity needs for Sequential I Jail diversion. Two models used objective historical data regarding 1) LCHD Historical Capacity Utilization 2009-2018, and 2) Jail Mental Health Screenings data snapshot for 2019. The third model used subjective data taken from the 2019 Law Enforcement Agency Survey to estimate bed capacity needs based on 2018 crisis call activity and the opinions of agency officials.

### MODEL 1. CCP Historical Capacity Utilization 2009-2018

The Lake County, IL Health Department operates a well-designed and operated 30-bed integrated behavioral health care center. The Center provides outpatient and residential care for persons experiencing mental health problems and crises, substance abuse detoxification, and substance abuse rehabilitation. Facility bed capacity consists of 8 mental health crisis beds as part of the Crisis Care Program (CCP); and 6 substance abuse detox beds and 16 substance abuse rehabilitation beds as a part of the Addictions Treatment Program (ATP).

### Evaluations and Admissions

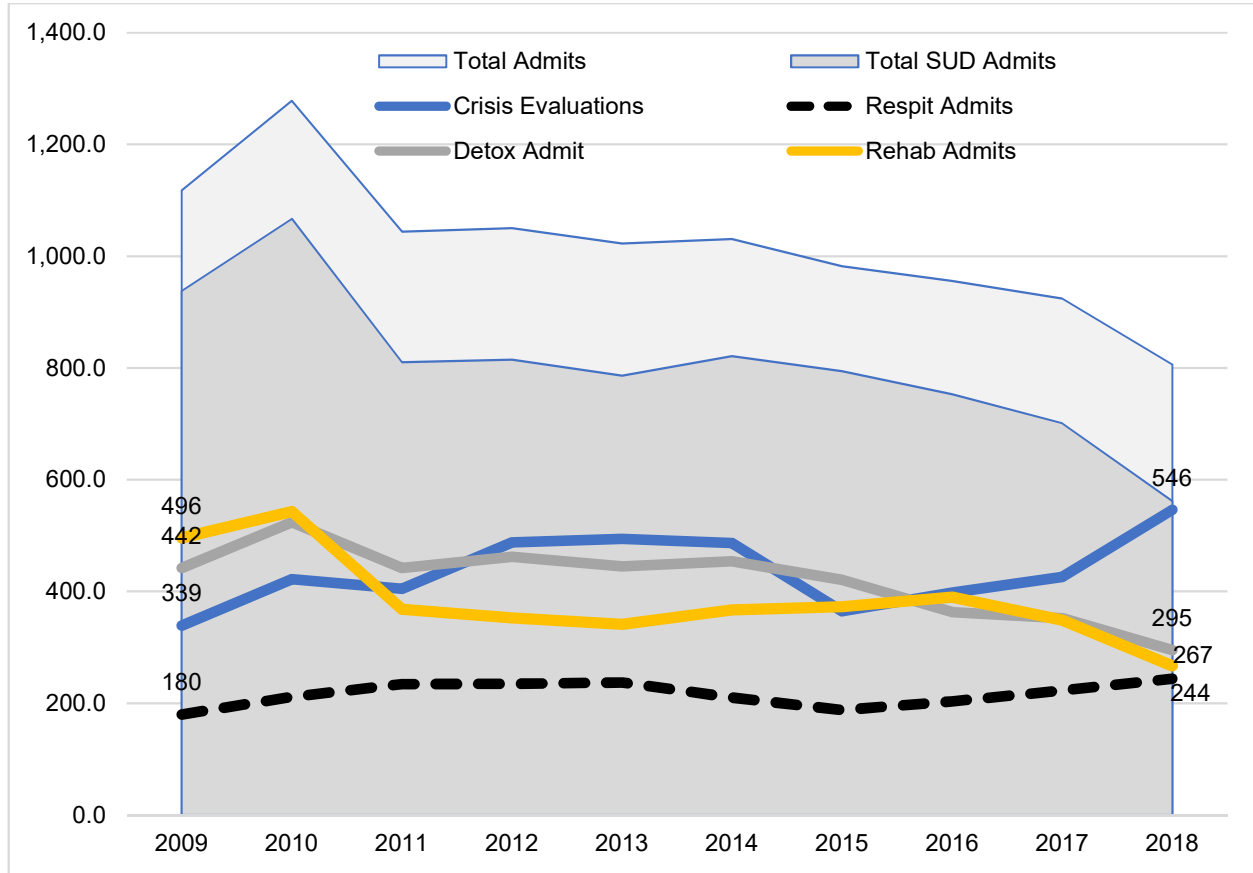
Center crisis evaluations and respite (mental health) admissions increased while detox and rehabilitation admissions decreased from 2009 through 2018. Crisis evaluations increase 61.1% (+207) from 339 in 2009 to 546 in 2018 while respite admissions increased 35.6% (+64) from 180 to 244. Detox admissions decreased 33.3% (-147) from 442 to 295 while rehab admissions decreased 46.2% (-229). Total SUDS admissions (both detox and rehab) decreased 79.4% (-312) from 938 to 562 during the same reporting period. Total admissions (respite, detox, and rehab) decreased 27.9% (-312) from 1,118 to 806. The table and figure below show Center evaluation and admission utilization trends report for 2009 through 2018.

**Center Evaluations & Admissions Utilization 2009 - 2018**

Year	Crisis Evaluations	Respite Admits	Detox Admit	Rehab Admits	Total Admits	Total SUD Admits
2009	339	180	442	496	1,118.0	938
2010	422	211	524	543	1,278.0	1067
2011	405	234	442	368	1,044.0	810
2012	488	235	462	353	1,050.0	815
2013	494	237	445	341	1,023.0	786
2014	487	210	454	367	1,031.0	821
2015	365	188	421	373	982.0	794
2016	398	203	363	390	956.0	753
2017	426	223	352	349	924.0	701
2018	546	244	295	267	806.0	562
N +/-	207	64	-147	-229	-312	-376
% +/-	61.1%	35.6%	-33.3%	-46.2%	-27.9%	-79.4%
Avg.	437	216.5	420.0	384.7	1021.2	804.7



**Center Evaluations & Admissions Utilization 2009 – 2018**



Comparing center evaluation and admission trends to Lake County population census trends can be informative for understanding center capacity needs. US Census Bureau population data<sup>1</sup> and center evaluation and admission activity were used to calculate per 100,000 population center activity.

According to the US Census Bureau, the Lake County total population decreased less than one-half of one percent (0.48%, -3,360) from 704,192 in 2010 to an estimated 700,832 in 2018. Per 100,000 population Center activity analysis found from 2010 through 2018:

- ✓ CCP evaluations increased 26.7% (+12.6per 100K) from 48.1 to 60.8
- ✓ Respite admissions increased 24.5% (+6.3 per 100K) from 25.6 to 31.8
- ✓ Detox admissions decreased 19.9% (-12.5 per 100K) from 62.8 to 50.2
- ✓ Rehab admissions decreased 29.3% (-20.6 per 100K) from 70.4 to 49.8
- ✓ Total CCP/ATP admissions decreased 16.9% (-26.9 per 100K) from 158.8 to 131.8
- ✓ Total SUDS (ATP) admissions decreased 24.9% (-33.2 per 100K) from 133.2 to 100.

The chart and figure below show per 100K Center evaluation and admissions activity from 2010 through 2018.

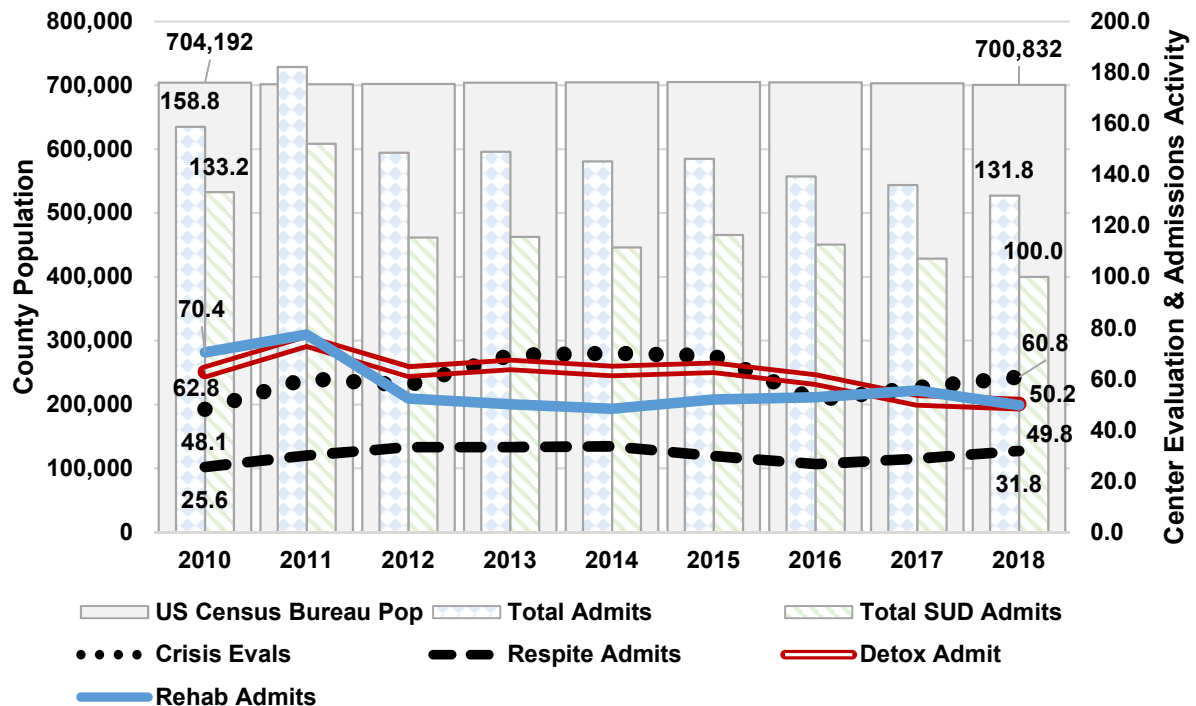
<sup>1</sup> <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>



**Center Evaluation and Admissions Per 100K Population**

Year	US Census Bureau Pop	Crisis Evals	Respite Admits	Detox Admit	Rehab Admits	Total Admits	Total SUD Admits
2010	704,192	48.1	25.6	62.8	70.4	158.8	133.2
2011	701,647	60.1	30.1	74.7	77.4	182.1	152.1
2012	702,213	57.7	33.3	62.9	52.4	148.7	115.3
2013	704,462	69.3	33.4	65.6	50.1	149.0	115.7
2014	704,618	70.1	33.6	63.2	48.4	145.2	111.5
2015	704,995	69.1	29.8	64.4	52.1	146.2	116.5
2016	704,644	51.8	26.7	59.7	52.9	139.4	112.7
2017	703,006	56.6	28.9	51.6	55.5	136.0	107.1
2018	700,832	60.8	31.8	50.2	49.8	131.8	100.0
N +/-	-3,360	12.6	6.3	-12.5	-20.6	-26.9	-33.2
% +/-	-0.48%	26.27%	24.48%	-19.98%	-29.30%	-16.96%	-24.91%

**Center Evaluation and Admissions Per 100K Population**





**Center Bed Days, Occupancy Rates, Average Length of Stay (ALOS), and Average Daily Population (ADP):**

CCP and ATP bed days, occupancy rates, ALOS, and ADP were found to be somewhat inconsistent with admissions trends discussed previously.

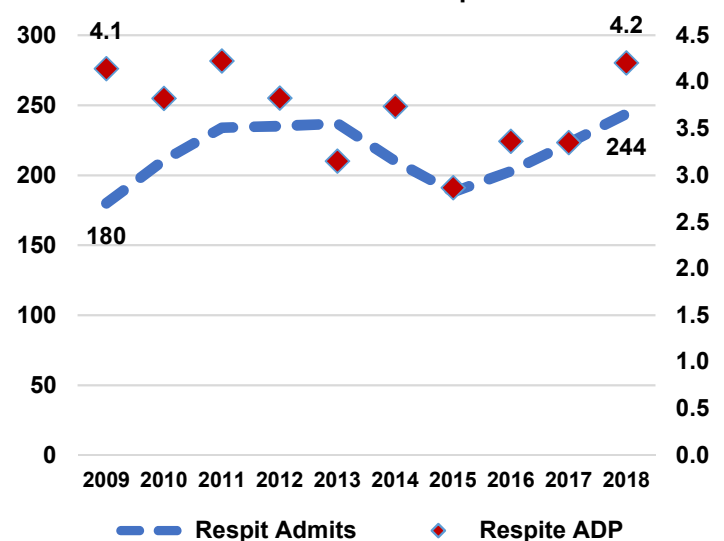
- As respite admissions increased 35.6% from 2009 to 2018, total bed days increased only 1.5% (+23 days) from 1,512 to 1,535, and occupancy increased 1.9% from 52% of total respite capacity to 53%. Respite average length of stay (ALOS) decreased 25.1% (-2.1 days) from 8.4 to 6.3 but the average daily respite population (ADP) increased 9.9% (.38) from 4.1 to 4.2 patients per day. The ADP increase is due the increase in respite admissions and bed days. The chart and figure below show these Respite utilization trend comparisons.

**Center Respite Capacity Utilization 2009 – 2018**

**Utilization Comparisons**

Year	Respite Admits	Respite Bed Days	Respite % Occupancy	Respite ALOS	Respite ADP
2009	180	1,512	52.0%	8.4	4.1
2010	211	1,396	48.0%	6.6	3.8
2011	234	1,543	53.0%	6.6	4.2
2012	235	1,397	48.0%	5.9	3.8
2013	237	1,151	40.0%	4.9	3.2
2014	210	1,365	47.0%	6.5	3.7
2015	188	1,047	36.0%	5.6	2.9
2016	203	1,229	42.0%	6.1	3.4
2017	223	1,224	42.0%	5.5	3.4
2018	244	1,535	53.0%	6.3	4.2
N +/-	64	23.0	0.01	-2.1	0.38
% +/-	35.6%	1.5%	1.9%	-25.1%	9.9%
Avg.	216.5	1339.9	0.5	6.2	3.7

**Admissions & ADP Compared**







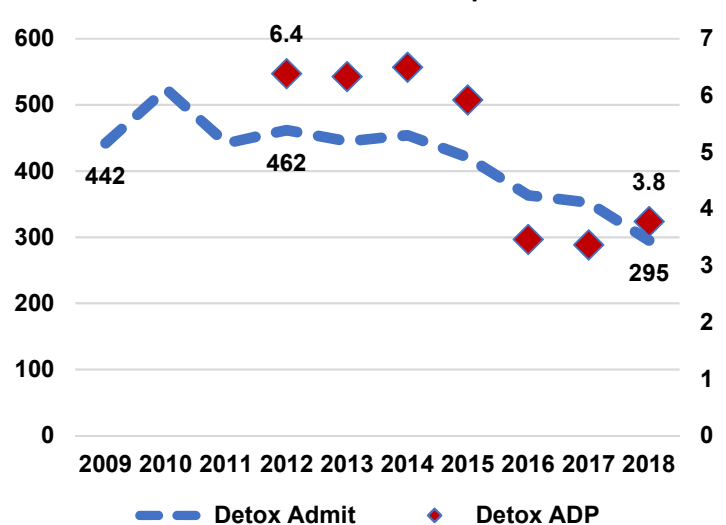
- 2) Detox admissions decreased 33.3% from 2012 to 2018 (available data period) while total bed days decreased 40.8% (-951days) from 2,329 to 1,378. Similarly, detox occupancy decreased 40.6% from 106% of total detox capacity to 63% during those 7-years. Detox average length of ALOS, however, decreased slightly at 7.3% (-0.4 days) from 5 to 4.7 days but detox ADP decreased 40.8% (-2.61 days) from 6.4 to 3.8 patients per day.

### Center Detox Capacity Utilization 2012 – 2018

#### Utilization Comparisons

Year	Detox Admit	Detox Bed Days	Detox % Occupancy	Detox ALOS	Detox ADP
2009	442				
2010	524				
2011	442				
2012	462	2,329	106.0%	5.0	6.4
2013	445	2,310	105.0%	5.2	6.3
2014	454	2,370	108.0%	5.2	6.5
2015	421	2,160	99.0%	5.1	5.9
2016	363	1,263	58.0%	3.5	3.5
2017	352	1,227	56.0%	3.5	3.4
2018	295	1,378	63.0%	4.7	3.8
N +/-	-147	-951.0	-0.43	-0.4	-2.6
% +/-	-33.3%	-40.8%	-40.6%	-7.3%	-40.8%
Avg.	420.0	1862.4	85.0%	4.6	5.1

#### Admissions & ADP Compared



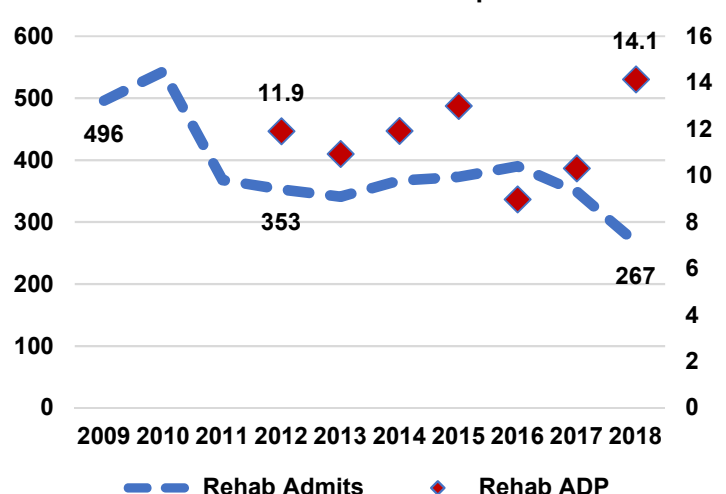
- 3) Finally, rehab admissions decreased 46.2% from 2012 to 2018 (available data period) while total bed days increased 18.8% (+816 days) from 4,342 to 5,158 days. Rehab occupancy 18.9% from 74% to 88% of total capacity. However, ALOS increased 57.1% (+ 7 days per admission) from 12.3 to 19.3 days, which caused rehab ADP to increase 18.8% (+2.24) from 11.9 to 14.1 patients per day.

### Center Rehab Capacity Utilization 2012 – 2018

#### Utilization Comparisons

Year	Rehab Admits	Rehab Bed Days	Rehab % Occupancy	Rehab ALOS	Respite ADP
2009	496				
2010	543				
2011	368				
2012	353	4,342	74.0%	12.3	11.9
2013	341	3,987	68.0%	11.7	10.9
2014	367	4,348	74.0%	11.8	11.9
2015	373	4,741	81.0%	12.7	13.0
2016	390	3,274	56.0%	8.4	9.0
2017	349	3,759	64.0%	10.8	10.3
2018	267	5,158	88.0%	19.3	14.1
N +/-	-229	816.0	0.14	7.0	2.2
% +/-	-46.2%	18.8%	18.9%	57.1%	18.8%
Avg.	384.7	4229.9	72.1%	12.4	11.6

#### Admissions & ADP Compared



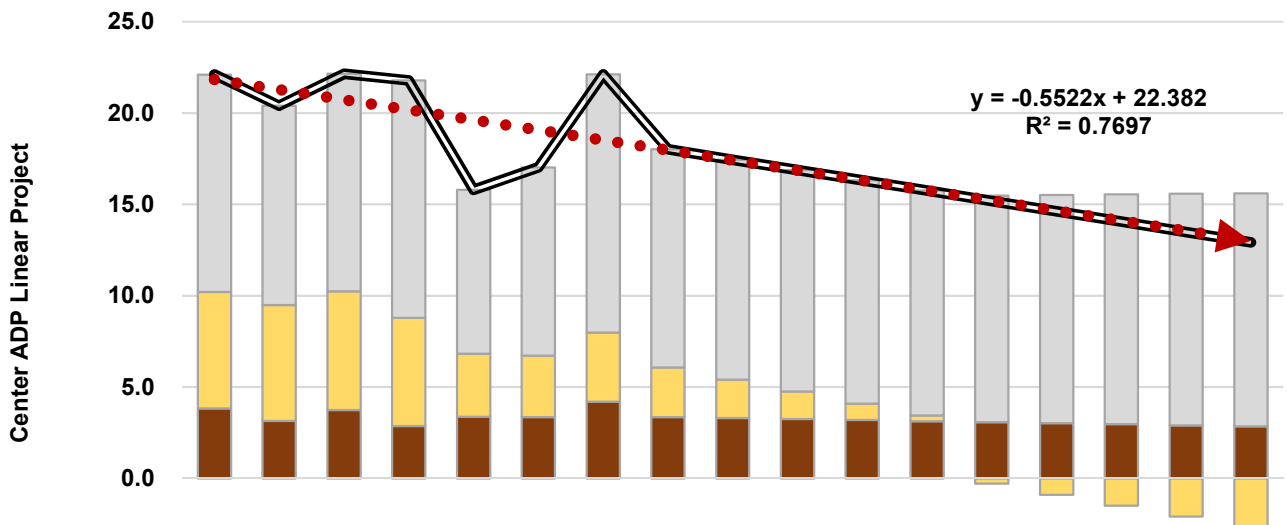


## Bed Need Projection Estimates

Analyses of Center historical; evaluation, admissions, and capacity utilization activity does not reliably inform bed-need projection estimates. Data trend in-stability does not allow for reasonably accurate projections using standard linear regression models nor does testing various ratio models to detect data-set relationships for ratio analysis that identify real or potentially realistic projections estimates. Additionally, annual peak population data were not available for respite, detox, or rehab programs. Annual peak population is highest number of patients in each of the three in-patient programs for all years reported. Average daily population (ADP) only tells us the average number of patients occupying beds per day.

ADP data provided for 2009 through 2018 would suggest little, if any, increase in bed utilization over the next 10 years (2018-2028). In fact, a projection using linear regression modeling of 2012-2018 data sets (period with data for all three programs) erroneously indicates that respite and detox ADP will decrease while rehab ADP would slightly increase over the next 10-years (2028) as shown in the table and figure below.

**2012-2028 Center ADP Linear Projection Model**



(5.0)

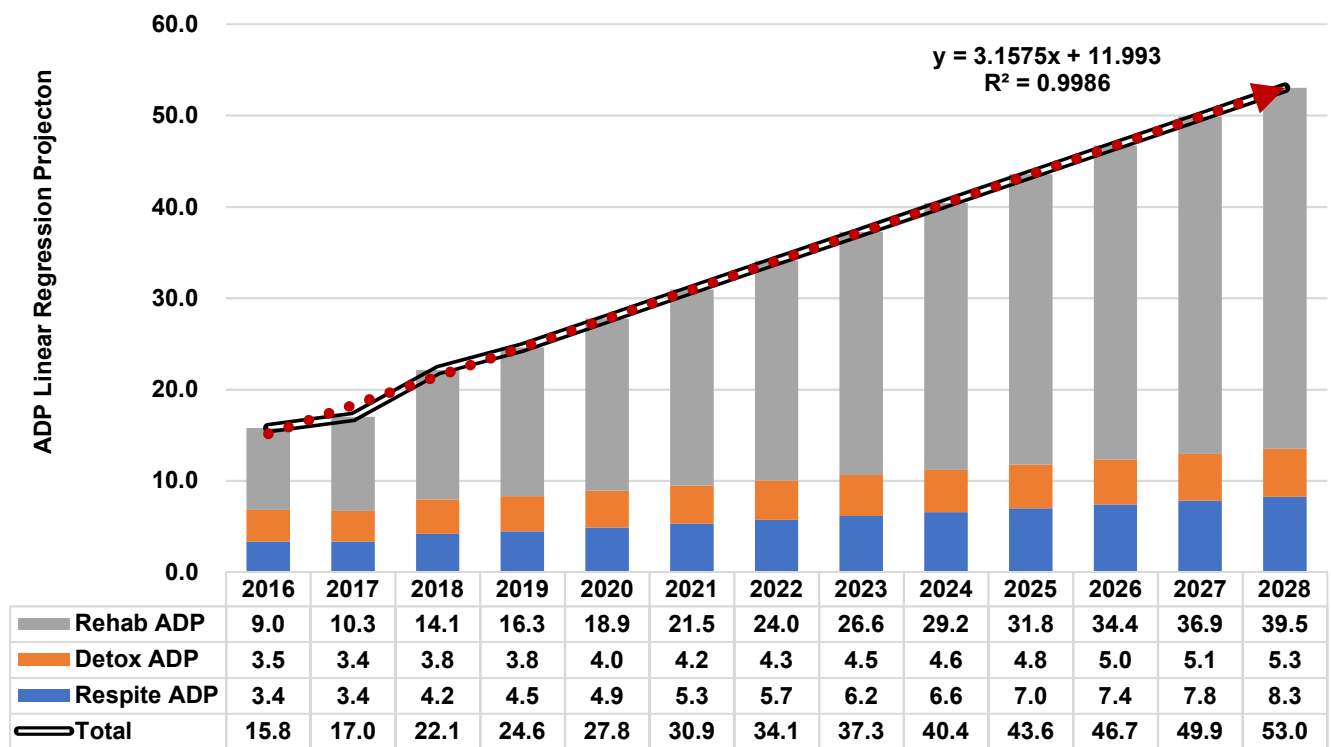
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rehab ADP	11.9	10.9	11.9	13.0	9.0	10.3	14.1	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8
Detox ADP	6.4	6.3	6.5	5.9	3.5	3.4	3.8	2.7	2.1	1.5	0.9	0.3	-0.3	-0.9	-1.5	-2.1	-2.7
Respite ADP	3.8	3.2	3.7	2.9	3.4	3.4	4.2	3.4	3.3	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9
Total	22.1	20.4	22.1	21.8	15.8	17.0	22.1	18.0	17.4	16.9	16.3	15.7	15.2	14.6	14.1	13.5	12.9



Experimentation with different annual data set clusters found one model that yielded increasing bed use for all three programs through year 2028. This model applied a linear regression to 2016 through 2018 ADP data sets with the following results:

1. Respite ADP increased 145% (+4.9 ADP) from 3.4 ADP in 2016 to 8.3 ADP in 2028.
2. Detox ADP increased 52% (+1.8 ADP) from 3.5 ADP in 2016 to 5.3 ADP in 2028.
3. Rehab ADP increased 341% (+30.6 ADP) from 9 ADP in 2016 to 39.5 ADP in 2028
4. Total ADP increased 236% (+37.2) from 15.8 ADP in 2016 to 53 ADP.

**2016-2020 Center ADP Linear Projection Model**



This model seems more realistic than the previous model because it is unlikely that Center ADP will decrease through 2028. Nonetheless, neither model should be used to definitively estimate Center bed needs. Despite these data analytics challenges, the use of known ALOS can be applied for reasonably reliable estimated bed needs in the following data-set models.



## MODEL 2. Jail Mental Health Screenings Data Snapshot

This bed needs estimate model analyses 78 days of Jail intake mental health screening data from February 14 through May 3, 2019. The data provided included 14 days for February, 31 days for March, 30 days for April, and 3 days for May. There were 576 Jail inmate mental health screens reported for this 78-day period.

The intake mental health screening process is designed to detect and identify detainee mental health needs and risks. Identified needs and risk determine the timeliness and level of mental health care as well house housing placement. Two specific determinations were used to estimate crisis bed needs:

1. The number of Jail intakes determining active and unstable mental health symptomology
2. The number if Jail intakes determining immediate, high, and moderate mental health risk

### Active and Unstable Jail Mental Health Intakes

Approximately 20.3% (117 / 576) of total persons booked during the 78-day period assessed presented (self-reported and/or observed) with active and unstable mental health symptoms. This included 30 (26.1%) in February, 36 (17.9%) in March, 49 (20.1%) in April, and 2 (12.5%) in May. Note that February included only 14 days of data and May included only 3 days of data.

There were 2.1 intakes per day that presented with active and unstable mental health conditions for February, 1.2 for March, 1.6 for April, and 0.7 for May. Total per day inmates presenting with active and unstable conditions was 1.5. The tables below show total and monthly active unstable inmate mental health screens by month and day of week.

**Total Active Unstable Intake Mental Health Screens**

Intake MH Screen Determinations	Total Days			
	78			
	Active Unstable SX	Non Active Stable SX	Total Screened	% Active Unstable SX
Day of Week				
Sun	16	37	53	30.2%
Mon	17	85	102	16.7%
Tue	21	61	82	25.6%
Wed	17	74	91	18.7%
Thu	19	71	90	21.1%
Fri	12	73	85	14.1%
Sat	15	58	73	20.5%
<b>Total</b>	<b>117</b>	<b>459</b>	<b>576</b>	<b>20.3%</b>
<b>Avg. Per Day</b>	<b>1.5</b>	<b>5.9</b>	<b>7.4</b>	
<b>Percent</b>	<b>20.3%</b>	<b>79.7%</b>		



### Monthly Active Unstable Intake Mental Health Screens

Month	Feb			Mar			Apr			May		
Num Days of Data	14			31			30			3		
Intake MH Screen Determinations	Active UnstableSX	Non Active Stable SX	Total Screened	Active UnstableSX	Non Active Stable SX	Total Screened	Active UnstableSX	Non Active Stable SX	Total Screened	Active Unstable SX	Non Active Stable SX	Total Screened
Sun	3	5	8	9	16	25	4	16	20			
Mon	2	9	11	6	20	26	8	50	58	1	6	7
Tue	5	11	16	4	23	27	12	27	39			
Wed	7	12	19	4	26	30	6	36	42			
Thu	7	19	26	1	29	30	11	23	34			
Fri	4	18	22	6	33	39	2	18	20		4	4
Sat	2	11	13	6	18	24	6	25	31	1	4	5
Total	30	85	115	36	165	201	49	195	244	2	14	16
Avg. Per Day	2.1	6.1	8.2	1.2	5.3	6.5	1.6	6.5	8.1	0.7	4.7	5.3
Percent	26.1%	73.9%		17.9%	82.1%		20.1%	79.9%		12.5%	87.5%	

The tables below show total the percentage of active unstable intake mental health screens by gender.

### Total Active Unstable Intake Mental Health Screens by Gender

Mental Health Intake Screens - February 14 May 3, 2019	BH SX						Condition					
	Non Active			Active			Stable			Not Stable		
	Male	Female	Ttl	Male	Female	Ttl	Male	Female	Ttl	Male	Female	Ttl
Immediate Risk - Urgent				26	7	33				26	7	33
High Risk Urgent				67	17	84				67	17	84
Moderate Risk	213	96	309				213	96	309			
Low Risk	129	21	150				129	21	150			

### Percentages Active Unstable Intake Mental Health Screens by Gender

Mental Health Intake Screens - February 14 May 3, 2019	BH SX						Condition					
	Non Active			Active			Stable			Not Stable		
	Male	Female	Ttl	Male	Female	Ttl	Male	Female	Ttl	Male	Female	Ttl
Immediate Risk Urgent				78.8%	21.2%	100.0%				78.8%	21.2%	100.0%
High Risk Urgent				79.8%	20.2%	100.0%				79.8%	20.2%	100.0%
Moderate Risk	68.9%	31.1%	100.0%				68.9%	31.1%	100.0%			
Low Risk	86.0%	14.0%	100.0%				86.0%	14.0%	100.0%			



Estimating crisis bed needs using active intake unstable mental health screens and Respite 6.2 days per admission average length of stay (ALOS).

For best accuracy, only March and April data were used because mental health screens were provided for all days in those months. There were 36 total active unstable bookings in March, or 1.2 per day on average, and 49 in April or 1.6 per day on average. March and April totaled 85 active unstable bookings, or 1.4 per day on average. The peak number of active unstable bookings for March was 9 and 16 for April. The table below shows total, peak, and average per day bookings per month.

**Active Unstable Mental Health Bookings**

Month	March	April	Total
Num Days of Data	31	30	61
Intake MH Screen Determinations	Active UnstableSX	Active UnstableSX	Active Unstable SX
Sun	9	4	13
Mon	6	8	14
Tue	4	12	16
Wed	4	6	10
Thu	1	11	12
Fri	6	2	8
Sat	6	6	12
Total	36	49	85
Avg. Per Day	1.2	1.6	1.4

Total bookings are multiplied by the Respite ALOS of 6.2 to estimate total bed crisis bed days.

Month	March	April	Total
Total Monthly Admits	36.0	49.0	85.0
Total Monthly Bed Days (Respite ALOS 6.2 x total admits)	223.20	303.80	527.00

Total monthly bed days are divided by the number of days in the month and total days for March and April to estimate the average number of beds needed per day if all of these bookings were diverted as shown below.

**Average Crisis Beds Needed Per Day**

Month	March	April	Total
Total Monthly Admits	36.0	49.0	85.0
Total Monthly Bed Days (Respite ALOS 6.2 x total admits)	223.20	303.80	527.00
Avg. Per Day Beds Needed	7.2	10.1	8.6



More beds are required, however, when monthly and total peak bookings are considered. March peak bookings would require at least 9 beds, April would require at least 12 beds, and as many as 16 bed could be required if monthly lengths of stay cross over in to the next month. The table below shows peak bookings of detainees with unstable mental health screenings.

<b>Peak Unstable Mental Health Bookings</b>			
<b>Month</b>	<b>March</b>	<b>April</b>	<b>Total</b>
<b>Total Monthly Admits</b>	<b>36.0</b>	<b>49.0</b>	<b>85.0</b>
<b>Total Monthly Bed Days (Respite ALOS 6.2 x total admits)</b>	<b>223.20</b>	<b>303.80</b>	<b>527.00</b>
<b>Avg. Per Day Beds Needed</b>	<b>7.2</b>	<b>10.1</b>	<b>8.6</b>
<b>Peak Beds Needed</b>	<b>9</b>	<b>12</b>	<b>16</b>

This model for estimating bed needs assumes that all unstable mental health bookings would be diverted to the crisis center rather than admitted to the jail. The model leaves no room for the reality that only a percentage of bookings would be eligible for diversion and it fails to inform policy makers about the severity of a detainee's mental health instability. Analysis of the severity levels mental health instability determine at booking and applying diversion percentages to that analysis is more informative to policy makers.

In addition to determining the mental health stability of a person booking at the jail, the mental health screening process determines the severity and urgency of detainees' mental health need and risk. Urgency and risk are determined as either an immediate urgent risk, high urgent risk, moderate risk, or low risk. In most instances, detainees determine as immediate urgent risk and high urgent risk are also presenting with active mental illness and are unstable (as discussed in the previous model). Detainees with moderate risk are, however, considered in need of further mental health evaluation, as could be some low risk detainees if they report a history of mental illness but are stable at the time of booking. March and April mental health screening data are used for this bed need estimate analysis for the same reason they were used in the previous analysis.

There were 201 total intake mental health screens performed in March and 244 in April. In March, there were 13 immediate urgent risk determinations, 23 high urgent risk determinations, 111 moderate risk determinations, and 54 low risk determinations. Immediate, high, and moderate risks total 147 (73.1%) of the bookings or 4.7 per day. In April, there were 12 immediate urgent risk determinations, 37 high urgent risk determinations, 120 moderate risk determinations, and 75 low risk determinations. Immediate, high, and moderate risks totaled 147 (69.3%) of the bookings or 5.6 per day. Combined, there were 445 total mental health screenings during the 61-day period that included 25 (5.6%) immediate mental health determinations, 60 (13.5%) high risk determinations, 231 (51.9%) moderate risk determinations, and 129 (29%) low risk determinations. Immediate, high, and moderate risks totaled 316 (69.3%) of the 445 bookings or 5.5 per day. The table below shows the number of bookings by mental health urgency and risk.





### Intake Mental Health Urgency and Risk Determinations

Month	Mar		Apr		Total		
Num Days Reported	31		30		61		
MH Stability at Intake	Total	Avg. Daily	Total	Avg. Daily	Total	Avg. Daily	% Total
Immediate Risk Urgent	13	0.4	12	0.4	25	0.4	5.6%
High Risk Urgent	23	0.7	37	1.2	60	1.1	13.5%
Moderate Risk	111	3.6	120	4.0	231	4.0	51.9%
Low Risk	54	1.7	75	2.5	129	1.9	29.0%
Total	201	6.5	244		445		
Total Immediate to Moderate Mental Health Stability Risk	147	4.7	169	5.6	316	5.5	71.0%
Percent	73.1%		69.3%		71.0%		

Total bookings are multiplied by the Respite ALOS of 6.2 to estimate total bed crisis bed days.

Month	Mar		Apr		Total	
Num Days Reported	31		30		61	
MH Stability at Intake	Total	Avg. Daily	Total	Avg. Daily	Total	Avg. Daily
Total Immediate to Moderate Mental Health Stability Risk Admits	147	4.7	169	5.6	316	5.5
Total Monthly Bed Days (Respite ALOS 6.2 x total admits)	911.4		1047.8		1959.2	

Total monthly bed days are divided by the number of days in the month and total days for March and April to estimate the average number of beds needed per day if all of these bookings were diverted as shown below.

Month	Mar		Apr		Total	
Num Days Reported	31		30		61	
MH Stability at Intake	Total	Avg. Daily	Total	Avg. Daily	Total	Avg. Daily
Total Immediate to Moderate Mental Health Stability Risk Admits	147	4.7	169	5.6	316	5.5
Total Monthly Bed Days (Respite ALOS 6.2 x total admits)	911.4		1047.8		1959.2	
Avg. Per Day Beds Needed	29.4		34.9		32.1	

It is not practical to assume that 100% of detainees assessment at jail intake with immediate to moderate mental health stability risks would be eligible for sequential I diversion (pre-booking diversion). Local judicial non-financial release policy and practices and the seriousness of criminal charges on which the detainee is booked at the jail will determine diversion edibility. Some jurisdictions have implemented very contemporary non-financial release policies that have significantly reduced jail admissions and populations while increasing the number of arrestees who are eligible for diversion. Examples of these jurisdictions include Harris County, TX, Davidson County, TN, and Bernalillo County, NM.



To accommodate current judicial release practices in Lake County, and to make room for changes in those practices to increase diversion eligibility, the Jail Intake Diversion Table is provided below for this intake group. The Jail Intake Diversion Table allows for Lake County officials to estimate the percentage of intakes that are eligible for diversion and set goals for increasing diversion edibility. For example, if current release practices allow diversion for 20% of these intakes, an estimated additional 6.4 to 7 crisis beds are needed. However, it is important to reiterate that this estimate is based on an average daily population (ADP) and does not account for peaks as previously discussed.

The Jail Intake Diversion Rate Table is shown below for consideration.

**Jail Intake Diversion Rate Table**

Jail Intake Diversion Rate	Est. Crisis Beds Needed Per Day by Diversion Rate		
	Mar	Apr	Total
5.0%	1.5	1.7	1.6
10.0%	2.9	3.5	3.2
15.0%	4.4	5.2	4.8
20.0%	5.9	7.0	6.4
25.0%	7.4	8.7	8.0
30.0%	8.8	10.5	9.6
35.0%	10.3	12.2	11.2
40.0%	11.8	14.0	12.8
50.0%	14.7	17.5	16.1
60.0%	17.6	21.0	19.3
70.0%	20.6	24.4	22.5
80.0%	23.5	27.9	25.7
90.0%	26.5	31.4	28.9
100.0%	29.4	34.9	32.1

Finally, 2018 center ADP is added to the diversion table to estimate total center beds needed. In 2018, center total ADP was approximately 22.1. This included 4.2 respite ADP, 3.8 detox ADP, and 14.1 rehab ADP. These ADP numbers are added to the diversion table below to show total center bed need estimates.



**Jail Diversion Rate Table with 2018 CCP ADP**

Percent of Immediate to Moderate Mental Health Risk	Est. Crisis Beds Needed Per Day by Diversion Rate			Center 2018 ADP			2018 Respite ADP + Jail Diversion Bed Est.	Total Jail Diversion + 2018 CCP ADP
	Mar	Apr	Total	Respite	Detox	Rehab	Total Bed Est.	Total Bed Est.
5.0%	1.5	1.7	1.6	4.2	3.8	14.1	5.8	23.71
10.0%	2.9	3.5	3.2	4.2	3.8	14.1	7.4	25.31
15.0%	4.4	5.2	4.8	4.2	3.8	14.1	9.0	26.92
20.0%	5.9	7.0	6.4	4.2	3.8	14.1	10.6	28.52
25.0%	7.4	8.7	8.0	4.2	3.8	14.1	12.2	30.13
30.0%	8.8	10.5	9.6	4.2	3.8	14.1	13.8	31.74
35.0%	10.3	12.2	11.2	4.2	3.8	14.1	15.4	33.34
40.0%	11.8	14.0	12.8	4.2	3.8	14.1	17.0	34.95
50.0%	14.7	17.5	16.1	4.2	3.8	14.1	20.3	38.16
60.0%	17.6	21.0	19.3	4.2	3.8	14.1	23.5	41.37
70.0%	20.6	24.4	22.5	4.2	3.8	14.1	26.7	44.58
80.0%	23.5	27.9	25.7	4.2	3.8	14.1	29.9	47.79
90.0%	26.5	31.4	28.9	4.2	3.8	14.1	33.1	51.01
100.0%	29.4	34.9	32.1	4.2	3.8	14.1	36.3	54.22



### **MODEL 3. 2019 Lake County, IL Crisis Care Law Enforcement Survey**

A survey was given to several Lake County, IL law enforcement agencies in June 2019 to estimate the potential need for and utilization of a crisis care facility by those jurisdictions. The survey asked the agencies to examine their respective 2018 mental health calls and respond to the following eight questions and to provide any relevant comments:

1. (Optional) What is your Law Enforcement agency name?
  2. What is the population of your jurisdiction?
  3. In the 2018 calendar year, how many mental health calls did your agency respond to?
    - 3.1 How many of those mental health calls from question 3 resulted in a non-custodial arrest (citation and release)?
    - 3.2 How many of those mental health calls from question 3 resulted in a custodial arrest?
    - 3.3 Of those arrested in question 3.2, how many were MISDEMEANOR charges?
    - 3.4 Of those arrested from question 3.2, how many were FELONY charges?
  4. In 2018, how many calls of someone struggling with substance abuse (alcohol or drugs) did your officers respond to?
    - 4.1 How many of those calls from question 4 resulted in a non-custodial arrest (citation and release)?
    - 4.2 How many of those calls from question 4 resulted in a custodial arrest?
    - 4.3 Of those arrested from question 4.2, what is the number of MISDEMEANOR charges?
    - 4.4 Of those arrested from question 4.2, what is the number of FELONY charges?
  5. In 2018, how many calls involving homeless people did your officers respond to?
  6. In 2018, how many times were your officers on calls in which people were transported to the hospital due to mental health or substance abuse related calls?
    - 6.1 How many people from question 6 were transported VOLUNTARILY?
    - 6.2 How many people from question 6 were transported INVOLUNTARILY?
  7. If a Crisis Care Drop Off Center was established in Lake County, how many times would your agency have used it in 2018?
  8. What services would your agency like to see in a Lake County Crisis Care Center?
- If you have any general comments relating to a Crisis Drop Off Center in Lake County, please provide them below:

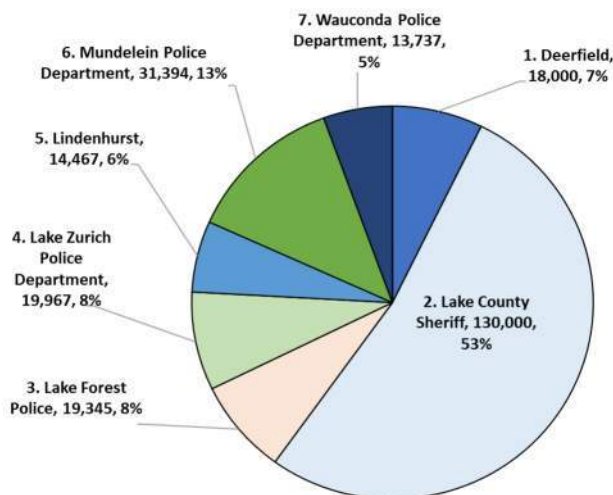


Seven Lake County law enforcement agencies with populations representing 246,910 citizens, or approximately 35% of Lake County's total population of approximately 703,462<sup>2</sup>. The table and figures below show agencies responding to the survey, their reported jurisdiction population, jurisdiction population percent of all agencies reporting (N=246,910), and agency populations to total Lake County population (N=703,000).

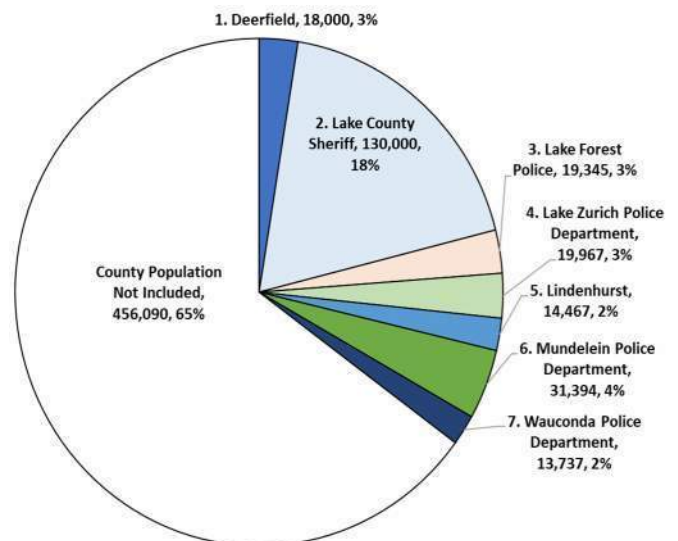
### Agencies Responding to Survey

Agency Reporting	Jurisdiction Population	Percent Total Reporting Population	Percent Total County Population (703,462)
1. Deerfield	18,000	7.3%	2.6%
2. Lake County Sheriff	130,000	52.7%	18.5%
3. Lake Forest Police	19,345	7.8%	2.7%
4. Lake Zurich Police Department	19,967	8.1%	2.8%
5. Lindenhurst	14,467	5.9%	2.1%
6. Mundelein Police Department	31,394	12.7%	4.5%
7. Wauconda Police Department	13,737	5.6%	2.0%
Totals Reporting Population	246,910	100.0%	35.1%
Total County Population	703,462	35.1%	
County Population Not Included	456,552		64.9%

### Responding Agency Populations



### Responding Agency Population / Total County Population



<sup>2</sup> US Census Bureau at [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml?src=bkmk](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk)



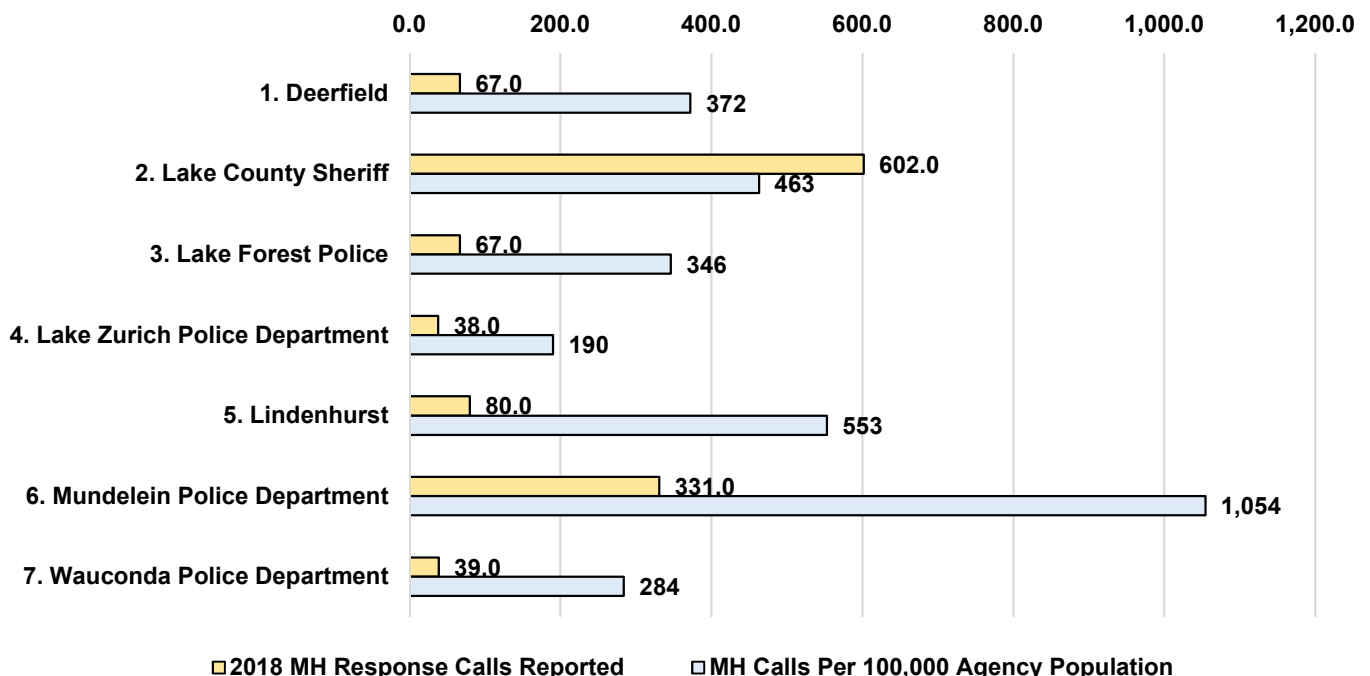
### Calendar Year 2018 Reported Mental Health Response Calls by Agency

Law enforcement agencies surveyed reported 1,224 total mental health response calls for 2018. The combined populations for the Lake County Sheriff and Mundelein Police Department of 161,394 is approximately 65% of the total reported population (246,910) and approximately 23% of the County's total population (703,465). It is interesting that two agencies reported approximately 76% of total mental health response calls (LCSO, 49.2%; MPD, 27%). Response call descriptive statistics are shown below for all responding agencies.

#### MH Response Call Descriptive Statistics – All Responding Agencies

Agency Reporting	Jurisdiction Population	2018 MH Response Calls Reported	MH Calls Per 100,000 Agency Population	Percent Total Reported Calls	Agency Percent of Reported Population (N=246,910)
1. Deerfield	18,000.0	67.0	372	5.5%	7.3%
2. Lake County Sheriff	130,000.0	602.0	463	49.2%	52.7%
3. Lake Forest Police	19,345.0	67.0	346	5.5%	7.8%
4. Lake Zurich Police Department	19,967.0	38.0	190	3.1%	8.1%
5. Lindenhurst	14,467.0	80.0	553	6.5%	5.9%
6. Mundelein Police Department	31,394.0	331.0	1,054	27.0%	12.7%
7. Wauconda Police Department	13,737.0	39.0	284	3.2%	5.6%
<b>Total</b>	<b>246,910.0</b>	<b>1,224</b>	<b>496</b>	<b>100.0%</b>	<b>100.0%</b>

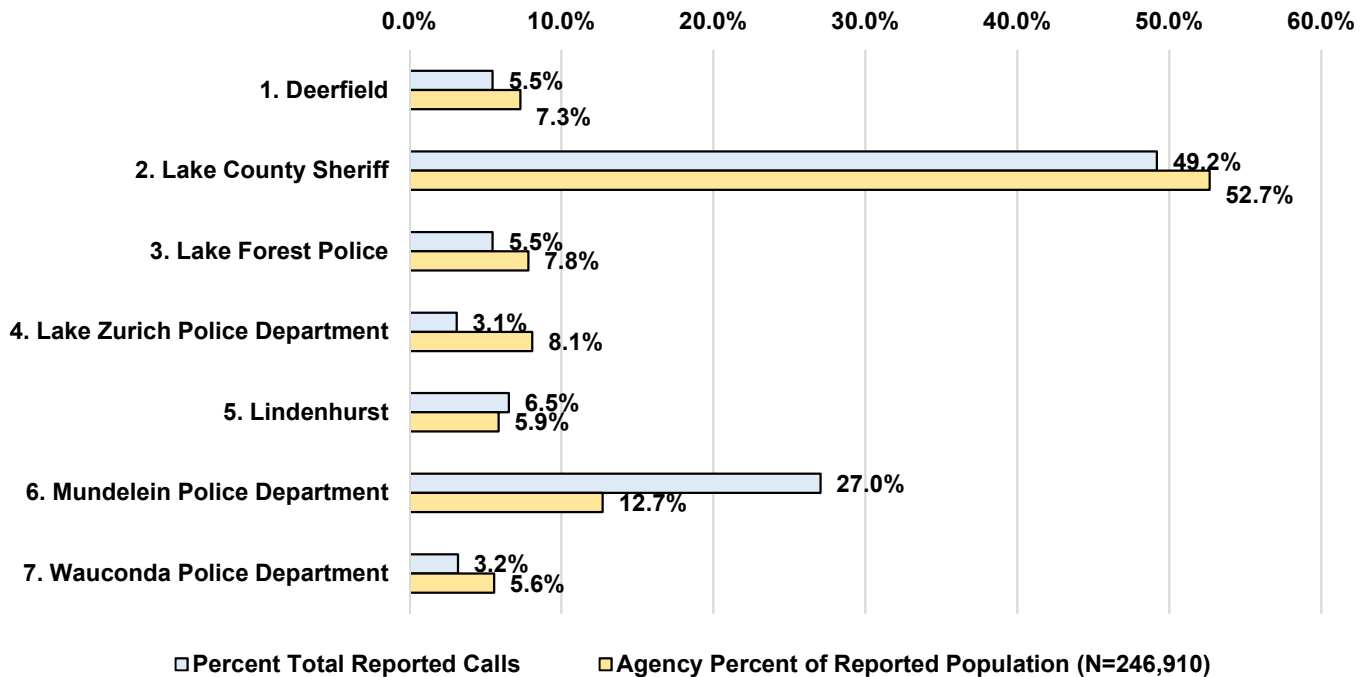
#### MH Response Calls & MH Calls Per 100,000 Jurisdiction Population







### Percentage of Total Response Calls & Agency % Total Reported Population



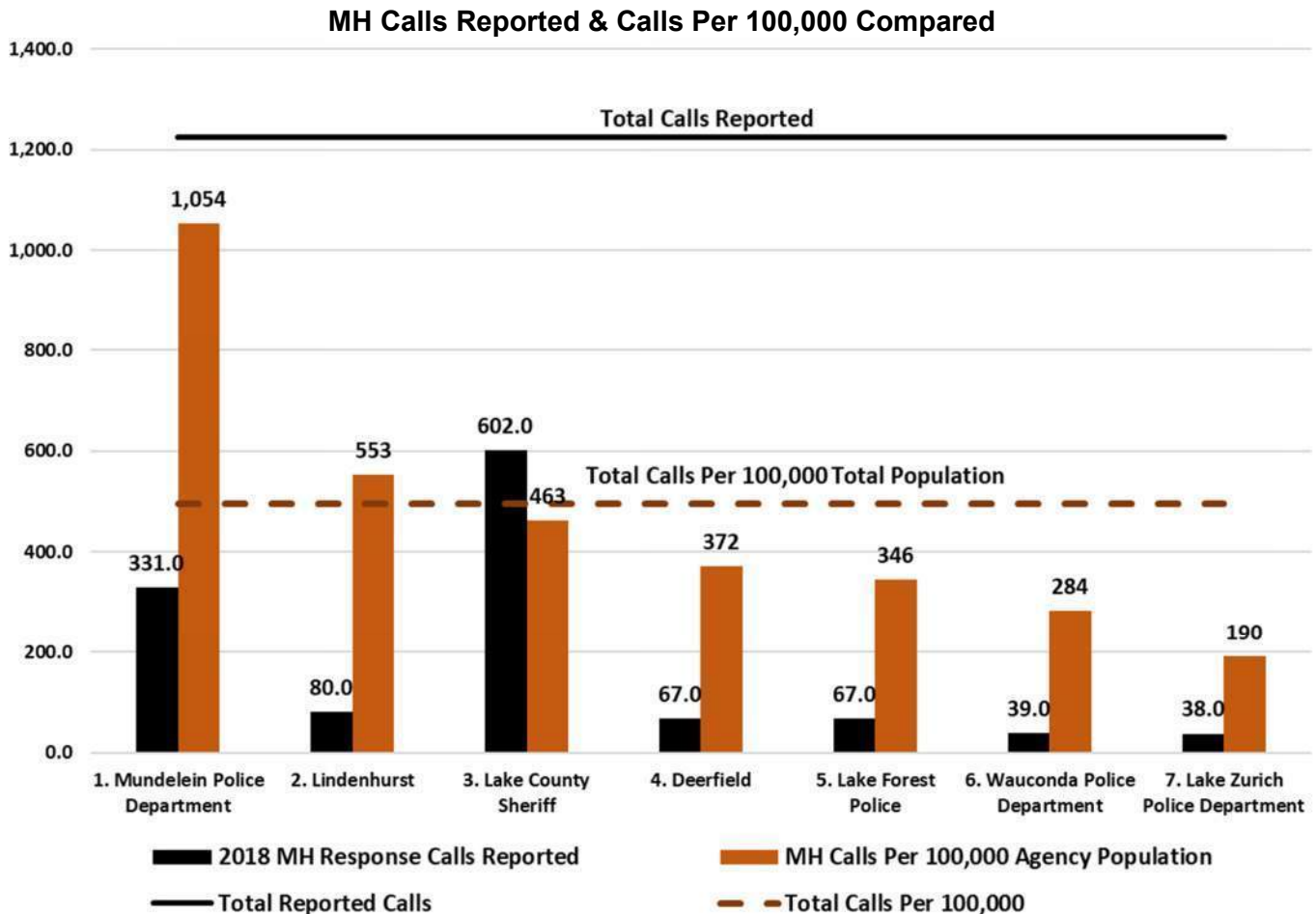
The 1,224 MH response calls for the total population reported of 246,910 produces a calls per 100,000 population of 497.7 (total calls / total population x 100,000). The top three agencies with the most mental health calls per 100,000 population include Mundelein PD at 1,054, Lindenhurst at 553, and the Lake County Sheriff at 463. The percentage of total response calls is lower than their response percentage of their respective jurisdiction populations. Percentages of total response calls for Mundelein and Lindenhurst Police Departments were higher than their respective jurisdiction populations. The chart below calls per capita findings with calls and population percentages.

### Per Capita MH Response Calls, Call & Population Percentages

Agency Reporting	2018 MH Response Calls Reported	MH Calls Per 100,000 Agency Population	Percent Total Reported Calls	Agency Percent of Reported Population
1. Mundelein Police Department	331.0	1,054	27.0%	12.7%
2. Lindenhurst	80.0	553	6.5%	5.9%
3. Lake County Sheriff	602.0	463	49.2%	52.7%
4. Deerfield	67.0	372	5.5%	7.3%
5. Lake Forest Police	67.0	346	5.5%	7.8%
6. Wauconda Police Department	39.0	284	3.2%	5.6%
7. Lake Zurich Police Department	38.0	190	3.1%	8.1%
<b>Total Calls</b>	<b>1,224.0</b>	<b>495.7</b>	<b>100.0%</b>	<b>100.0%</b>



The figure below compares reported calls and per capita findings to total reported calls and total calls per 100,000 population.



### Estimating Crisis Bed Needs from the Survey

Data from three Law Enforcement Crisis Survey questions seemed relevant for informing and guiding crisis bed need estimates. These questions include:

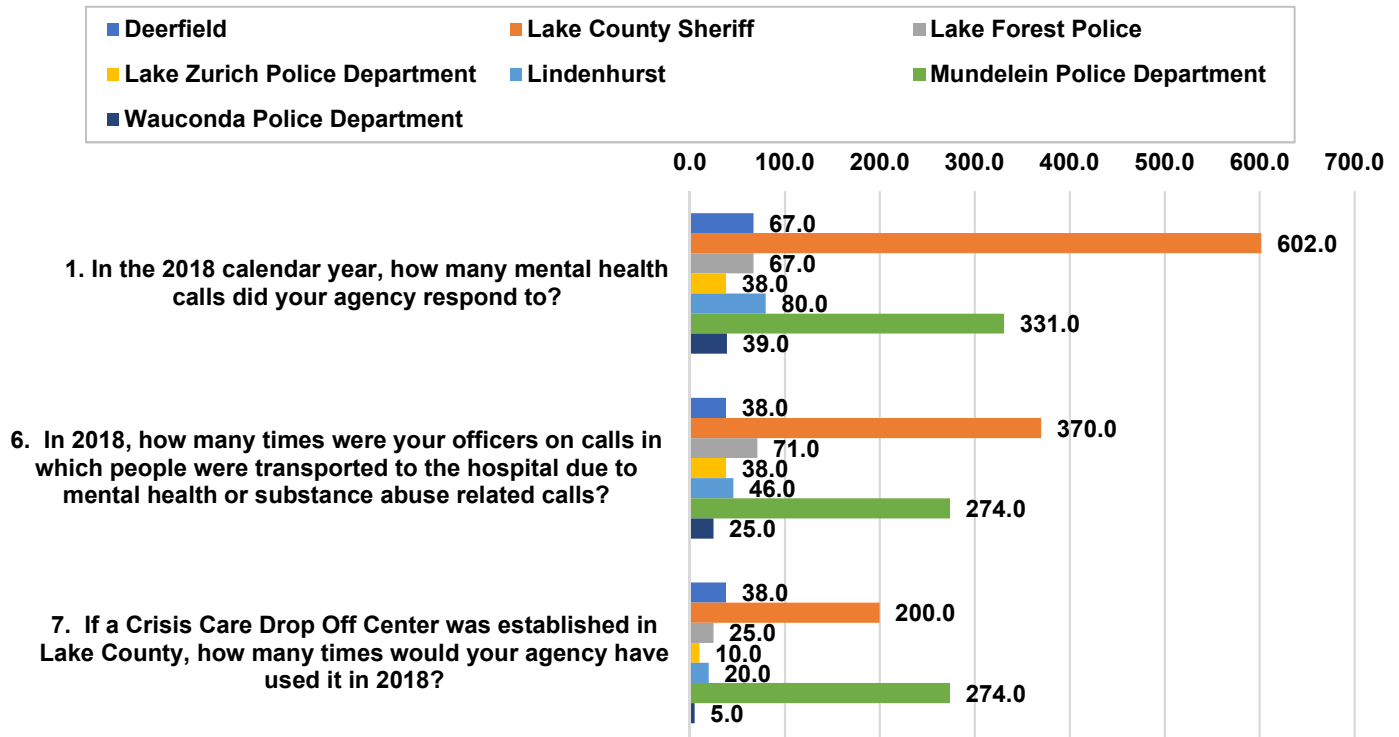
- 1) Question 1. In the 2018 calendar year, how many mental health calls did your agency respond to? (1,224 calls reported).
- 2) Question 6. In 2018, how many times were your officers on calls in which people were transported to the hospital due to mental health or substance abuse related calls? (862 transports reported).
- 3) Question 7. If a Crisis Care Drop-off Center was established in Lake County, how many times would your agency have used it in 2018? (572 times reported).



These questions are particularly relevant because they provide information regarding actual volume of crisis call activity (1,224 calls in 2018), the volume of calls resulting in a person begin transported for mental health/substance abuse services (862 transports), and potential bed utilization as indicated by responding law enforcement agencies (agencies reported they would have used a crisis facility 572 times in 2018 if available). The chart and figures below show agency responses to these three questions.

### Law Enforcement Agency Responses to Survey Questions 1, 6, & 7

Law Enforcement Crisis Calls Survey - Crisis Bed Needs Estimated	Deerfield	Lake County Sheriff	Lake Forest Police	Lake Zurich Police Department	Lindenhurst	Mundelein Police Department	Wauconda Police Department	Totals
1. In the 2018 calendar year, how many mental health calls did your agency respond to?	67.0	602.0	67.0	38.0	80.0	331.0	39.0	1,224.0
6. In 2018, how many times were your officers on calls in which people were transported to the hospital due to mental health or substance abuse related calls?	38.0	370.0	71.0	38.0	46.0	274.0	25.0	862.0
7. If a Crisis Care Drop Off Center was established in Lake County, how many times would your agency have used it in 2018?	38.0	200.0	25.0	10.0	20.0	274.0	5.0	572.0

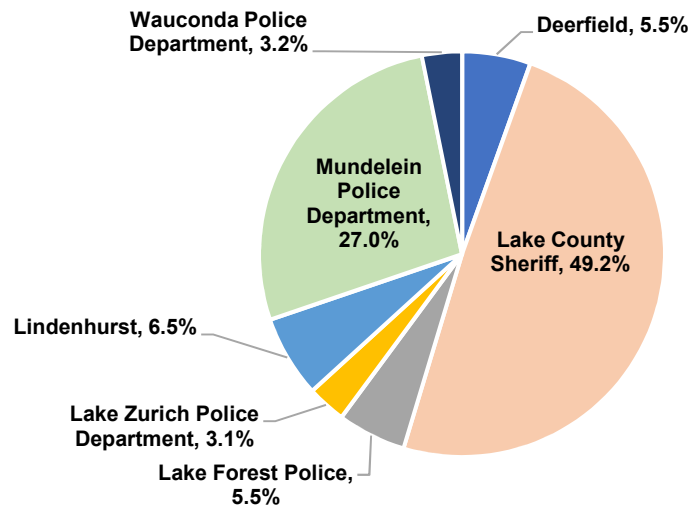




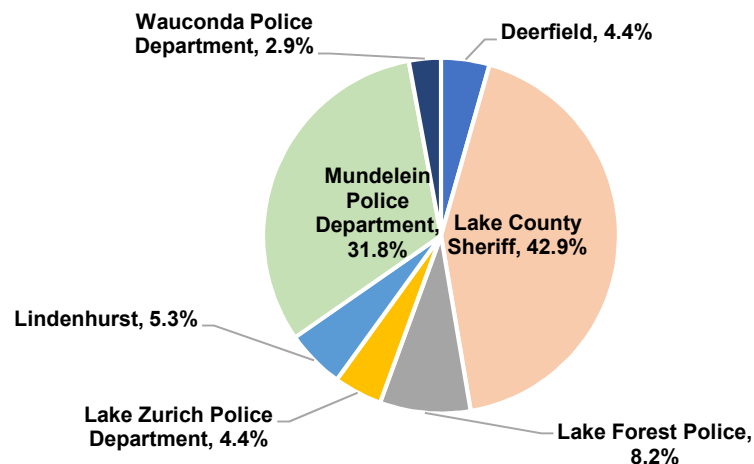
**Law Enforcement Agency Percentage of Responses to Survey Questions 1, 6, & 7**

Agencies and Survey Response Percentages	Agency % Total Calls (Q1)	Agency % Total Transports (Q6)	Agency % Total Times Would Use (Q7)	Transports Per Call	Times would Use per Call
1. Deerfield	5.5%	4.4%	6.6%	56.7%	56.7%
2. Lake County Sheriff	49.2%	42.9%	35.0%	61.5%	33.2%
3. Lake Forest Police	5.5%	8.2%	4.4%	100.0%	37.3%
4. Lake Zurich Police Department	3.1%	4.4%	1.7%	100.0%	26.3%
5. Lindenhurst	6.5%	5.3%	3.5%	57.5%	25.0%
6. Mundelein Police Department	27.0%	31.8%	47.9%	82.8%	82.8%
7. Wauconda Police Department	3.2%	2.9%	0.9%	64.1%	12.8%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>70.4%</b>	<b>46.7%</b>

**Agency Percent of Total MH Response Calls (Q1)**

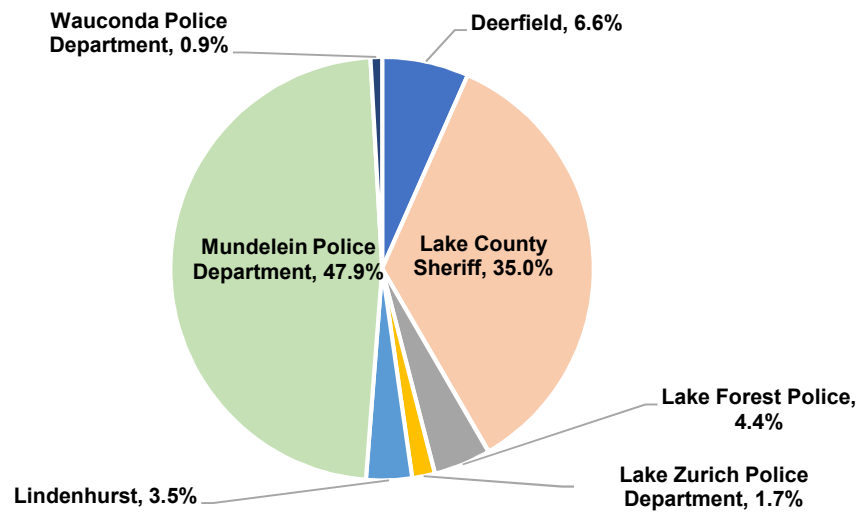


**Agency Percent of Total MH Call Transports (Q6)**





**Agency Percent of Total Times Would Use if Available (7)**





## Estimating Total Crisis Facility Bed Needs

Agency responses to Law Enforcement Survey questions 6 and 7 are used to estimate mental health and substance abuse drop-off beds.

For question 6, the responding agencies, with a combined jurisdiction population of 246,910, reported that the 1,224 total mental health calls in 2018 involved 862 total transports to hospitals due to mental health or substance abuse issues, or 2.4 transports per day. Assuming that the proposed drop-off center accepted these 2.4 per-day transports, 21.8 beds would have been required using the facility's 2018 total ALOS of 9.25 days per admission ( $2.4 \times 9.25 = 21.8$ ). Total behavioral health beds needed for 2018 is estimated at 44.0 when those 21.8 beds are added to the 22.11 non-diversion beds discussed previously. Similarly, 84.4 total beds are estimated when question 6 data are extrapolated for the County's 703,465 total census.

For question 7, the responding agencies reported that they would have used a crisis drop-off center a total of 572 times, or 1.6 times per day, in 2018 if it were available. Multiplying 1.6 times used by facilities 2018 ALOS of 9.25 yields 14.5 beds, or 36.6 beds when the facilities 2018 ADP of 22.11 is added to the 14.5 beds. Similarly, 63.4 total beds are estimated when question 7 data are extrapolated for the County's 703,465 total census.

The table below shows agency responses to questions 1, 6 and 7, and bed estimate calculations discussed above.

**Total Behavioral Health Bed Estimates**

Estimating Total Behavioral Health & Rehab Beds				246,910 Survey Ttl Population Estimated Total Beds				703,462 Ttl County Population Estimated Total Beds			
Law Enforcement Crisis Calls Survey - Crisis Bed Needs Estimated	Question Response Total	Per 100,000 Total Responding Population (N=246,910)	Est. Total At Total County Population Est. (N=703,462)	Annual Per Day Est. (246,910 Pop)	Est Beds = Per Day Est. X 9.25 Day ALOS	2018 Non-Diversion Total ADP	Total Diversion + Non-Diversion Bed Est.	Annual Per Day Est. (703,462 Pop)	Est Beds = Per Day Est. X 9.25 Day ALOS	2018 Non-Diversion Total ADP	Total Diversion + Non-Diversion Bed Est.
1. In the 2018 calendar year, how many mental health calls did your agency respond to?	1,224.0	495.7	3,487.3	3.4	31.0			9.6	88.4		
6. In 2018, how many times were your officers on calls in which people were transported to the hospital due to mental health or substance abuse related calls?	862.0	349.1	2,455.9	2.4	21.8	22.11	44.0	6.7	62.2	22.11	84.4
7. If a Crisis Care Drop Off Center was established in Lake County, how many times would your agency have used it in 2018?	572.0	231.7	1,629.7	1.6	14.5	22.11	36.6	4.5	41.3	22.11	63.4





## **FACILITIES SCENARIOS**

To determine suitable locations for a Crisis Triage & Stabilization Center, a geographical analysis was conducted on Lake County. Elements analyzed in the geographical analysis include:

- Driving proximity to Lake County Adult Corrections Facility
- Highest municipality population centers
- Municipality centers identified in the law enforcement survey
- Existing Lake County sites
- Third party sites

From the geographical analysis, feasible locations for the Crisis Center were determined. A site forces diagram was developed for each site to graphically represent any existing limitations such as local zoning codes, on-site utilities, sun paths and wind patterns. The associated diagrams for the geographical analysis can be found in the Appendix.

Several design iterations were explored and reviewed by the Core Planning Group. From the feedback provided by the Core Planning Group, Wold developed a variety of different scenarios which could be categorized under one of the following overall concepts:

1. Standalone Law Enforcement Crisis Drop-off (Triage & Stabilization) Facility
2. Combined Law Enforcement Crisis Drop-off (Triage & Stabilization) and Crisis Respite Facility
3. Combined Law Enforcement Crisis Drop-off (Triage & Stabilization) and SUD Detox and SUD Rehab Facility
4. Combined Law Enforcement Crisis Drop-off (Triage & Stabilization), Crisis Respite, and SUD Detox and SUD Rehab Facility

The Core Planning Group completed a SWOT (strengths, weaknesses, opportunities, and threats) analysis for each scenario to determine which would meet the needs of the County. Common strengths, weaknesses, opportunities, and threats were clearly identifiable and provided insight into which scenarios would be optimal choices to further develop. This process also isolated key considerations for creating a Crisis Triage & Stabilization Center, as follows:

- Facility location
- Existing client retention
- Third party partnerships
- Existing relationships of County provided services
- Meeting the bed count needs of the County

These considerations along with the SWOT analysis established the five scenarios which represent potential approaches for creating a Crisis Triage & Stabilization Center.

The following program summaries, estimated cost summaries, and block diagrams for each of the five scenarios exemplify a range of possible outcomes for a Crisis Triage & Stabilization Center. The range of minimum build to maximum build analyzes the programmatic, financial and spatial feasibility of each scenario to provide the reader with a comprehensive understanding of the possibilities for the Crisis Triage & Stabilization Center.



### Summary of Conceptual Construction Costs

	<u>SCENARIO 1</u>	<u>SCENARIO 2</u>	<u>SCENARIO 3</u>	<u>SCENARIO 4</u>	<u>SCENARIO 5</u>
New Construction	\$4,542,841	\$0	\$4,542,841	\$11,916,552	\$21,541,826
Addition and/or Renovation	\$0	\$11,978,004	\$0	\$0	\$0
Recommended Improvements to Existing Lake County Services	\$0	\$0	\$10,278,927	\$2,955,100	\$0
<b>Estimated Total Project Cost</b>	<b>\$4,542,841</b>	<b>\$11,978,004</b>	<b>\$14,821,769</b>	<b>\$14,871,652</b>	<b>\$21,541,826</b>

1. New Construction costs exclude Land Acquisition and related utility and storm water improvements
2. Other exclusions: temporary relocations, moving costs, legal fees, financing
3. Construction costs are escalated to estimate Year 2020 dollars.
4. All scenarios will include additional staffing requirements

### Conceptual Annual Operating Expense

	<u>SCENARIO 1</u>	<u>SCENARIO 2</u>	<u>SCENARIO 3</u>	<u>SCENARIO 4</u>	<u>SCENARIO 5</u>
<b>Estimated Total Project Cost</b>	<b>\$2,812,206</b>	<b>\$3,760,363</b>	<b>\$4,227,234</b>	<b>\$4,164,054</b>	<b>\$4,430,979</b>



## SCENARIO 1

### Description

Scenario 1 calls for the construction of a standalone Law Enforcement Crisis Drop-off (Triage and Stabilization) facility located centrally within the County. This scenario does not include any improvements to the Lake County Health Department services.

### Conceptual Space Program Summary<sup>1</sup>:

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Existing Lake County Resources</b> (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Total Areas</b>						
Crisis Stabilization/Drop-off Center			3,600	<b>NO RECOMMENDED IMPROVEMENTS</b>		
Crisis Care Program (CCP)			-			
Addictions Treatment Program (ATP)			-			
Williams Consent Decree			-			
Support/Shared Spaces			2,010			
Other Support Programming			1,905			
Total Gross Square Footage			7,515			
Building Grossing Factor			1.10			
<b>Total Building Square Footage</b>			<b>8,267</b>			<b>0</b>

### Conceptual Cost Estimate<sup>1</sup>:

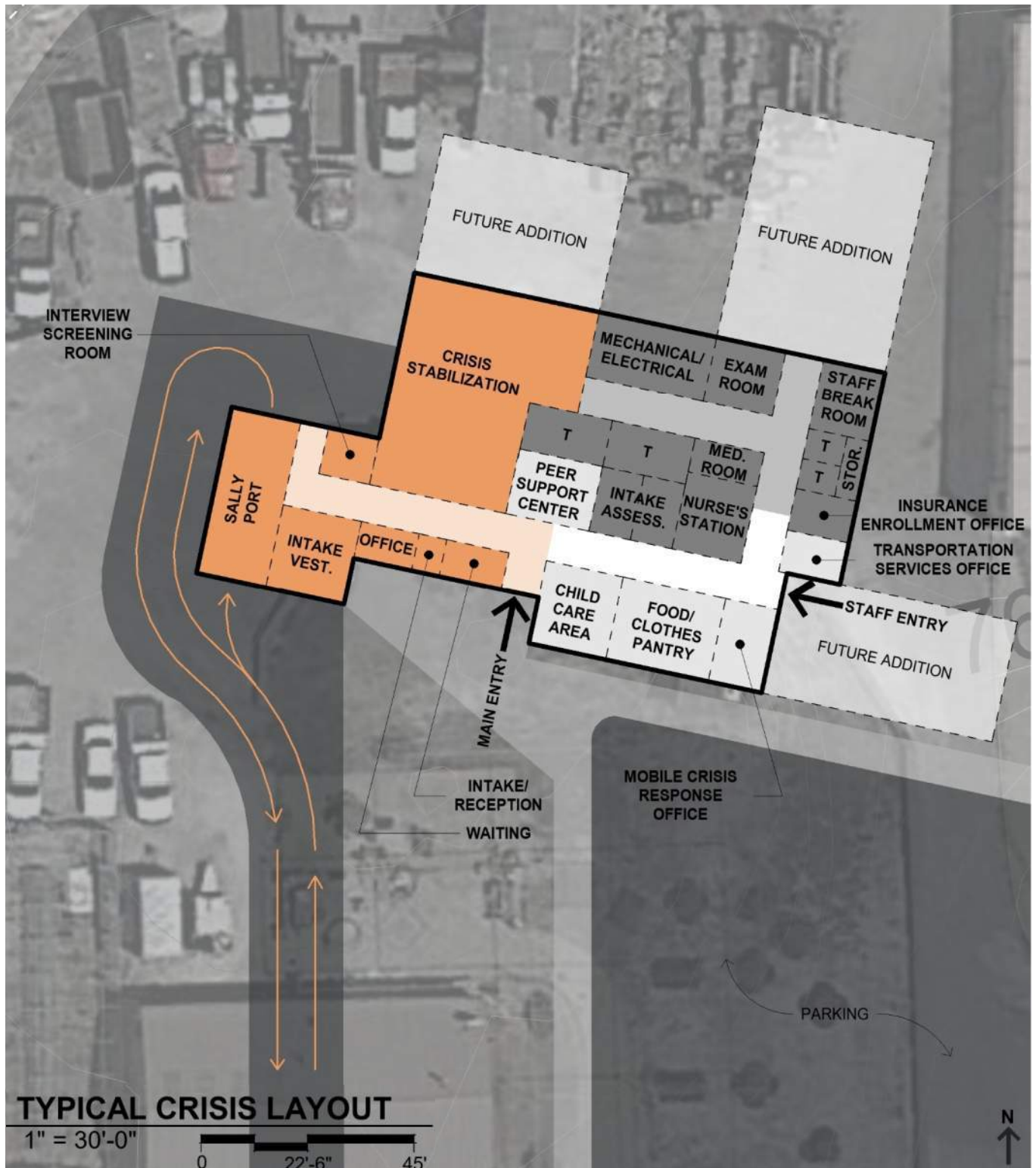
<b>Estimated Project Costs</b>			
Total Construction Cost Estimate		\$3,523,959	<b>NO RECOMMENDED IMPROVEMENTS</b>
Total Soft Costs Estimate		\$367,655	
Total FF & E Estimate		\$298,832	
Total Owner's Contingency		\$352,396	
<u>Other Costs</u>			
Land Acquisition		TBD	
Temporary Relocations		\$0	
Legal Fees		TBD	
Financing		TBD	
Moving		TBD	
<b>Estimated Project Cost</b>		<b>\$4,542,841</b>	<b>\$0</b>

<b>TOTAL ESTIMATED COST</b>	<b>\$4,542,841</b>
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<sup>1</sup> Refer to the Appendix for complete Conceptual Space Program and Conceptual Cost Estimate information.



**Conceptual Crisis Center Interior Layout<sup>1</sup>**

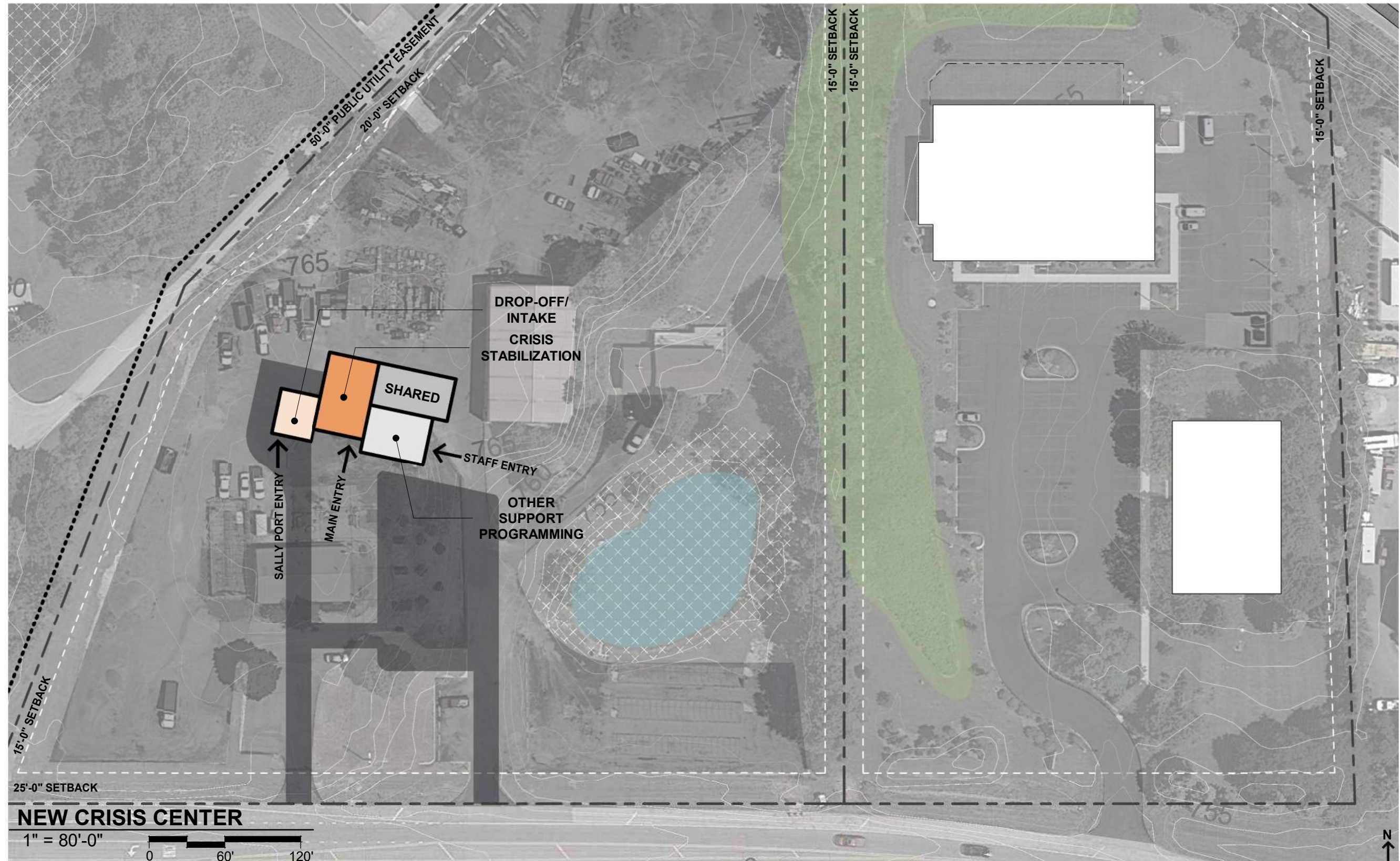


<sup>1</sup> Crisis stabilization and sally port layout applicable to all scenarios. Other support programming, shared spaces and future additions may vary based on program scenario and site.





SCENARIO 1





## SCENARIO 2

### Description

Scenario 2 calls for the renovation of 3002 Grand Avenue to create a new Law Enforcement Crisis Drop-off (Triage and Stabilization Center), and expansion/ renovation to accommodate forecasted Lake County Health Department service trends related to Crisis Respite, SUD Detox and SUD Rehab.

### Conceptual Space Program Summary<sup>1</sup>:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds).

**Expansion/Renovation of Lake County Resources \*\***  
(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Total Areas</b>			
Crisis Stabilization/Drop-off Center			3,600
Crisis Care Program (CCP)			8,955
Addictions Treatment Program (ATP)			14,108
Williams Consent Decree			4,350
Support/Shared Spaces			5,205
Other Support Programming			4,230
Total Gross Square Footage			40,447
Building Grossing Factor			1.10
<b>Total Building Square Footage</b>			<b>44,492</b>

### Conceptual Cost Estimate<sup>1</sup>:

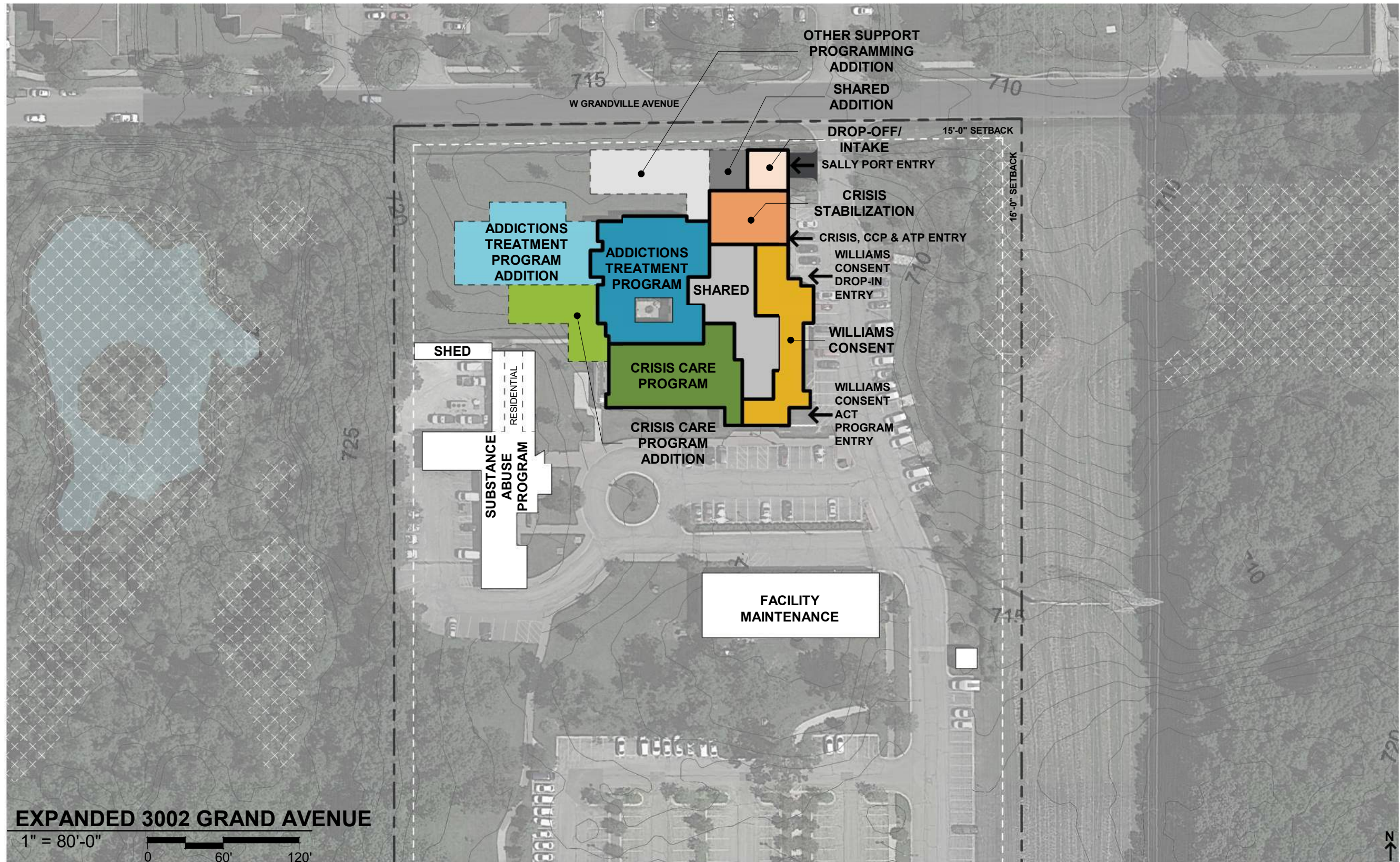
<b>Estimated Project Costs</b>	
Total Construction Cost Estimate	\$9,314,081
Total Soft Costs Estimate	\$942,681
Total FF & E Estimate	\$789,834
Total Owner's Contingency	\$931,408
<b>Other Costs</b>	
Land Acquisition	\$0
Temporary Relocations	TBD
Legal Fees	TBD
Financing	TBD
Moving	TBD
<b>Estimated Total Project Cost</b>	<b>\$11,978,004</b>
<b>TOTAL ESTIMATED COST</b>	<b>\$11,978,004</b>

<sup>1</sup> Refer to the Appendix for complete Conceptual Space Program and Conceptual Cost Estimate information.





SCENARIO 2







## SCENARIO 3

### Description

Scenario 3 calls for the construction of a standalone Law Enforcement Crisis Drop-off located centrally within the County. This scenario also recommends expansion of existing Lake County Health Department Crisis Respite, SUD Detox and SUD Rehab services.

### Conceptual Space Program Summary<sup>1</sup>:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds).

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Expansion/ Renovation of Lake County Resources **</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Total Areas</b>						
Crisis Stabilization/Drop-off Center			3,600			-
Crisis Care Program (CCP)			-			8,955
Addictions Treatment Program (ATP)			-			14,168
Williams Consent Decree			-			4,350
Support/Shared Spaces			2,010			6,120
Other Support Programming			1,905			2,805
Total Gross Square Footage			7,515			36,398
Building Grossing Factor			1.10			1.15
<b>Total Building Square Footage</b>			<b>8,267</b>			<b>41,857</b>

### Conceptual Cost Estimate<sup>1</sup>:

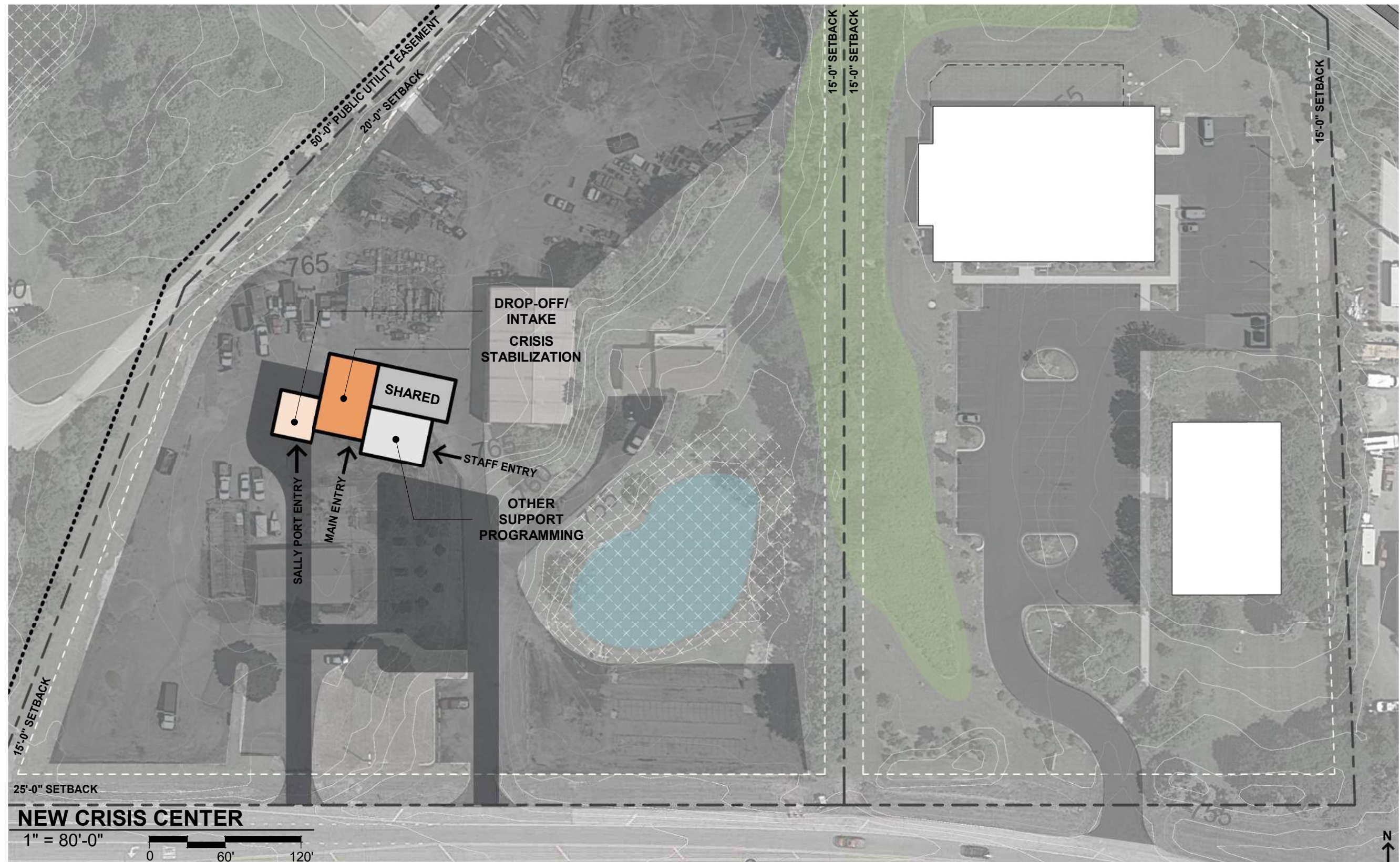
<b>Estimated Project Costs</b>			
Total Construction Cost Estimate	\$3,523,959		\$7,985,951
Total Soft Costs Estimate	\$367,655		\$817,172
Total FF & E Estimate	\$298,832		\$677,209
Total Owner's Contingency	\$352,396		\$798,595
<u>Other Costs</u>			
Land Acquisition	TBD		\$0
Temporary Relocations	\$0		TBD
Legal Fees	TBD		TBD
Financing	TBD		TBD
Moving	TBD		TBD
<b>Estimated Total Project Cost</b>	<b>\$4,542,841</b>		<b>\$10,278,927</b>

<b>TOTAL ESTIMATED COST</b>	<b>\$14,821,769</b>
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<sup>1</sup> Refer to the Appendix for complete Conceptual Space Program and Conceptual Cost Estimate information.



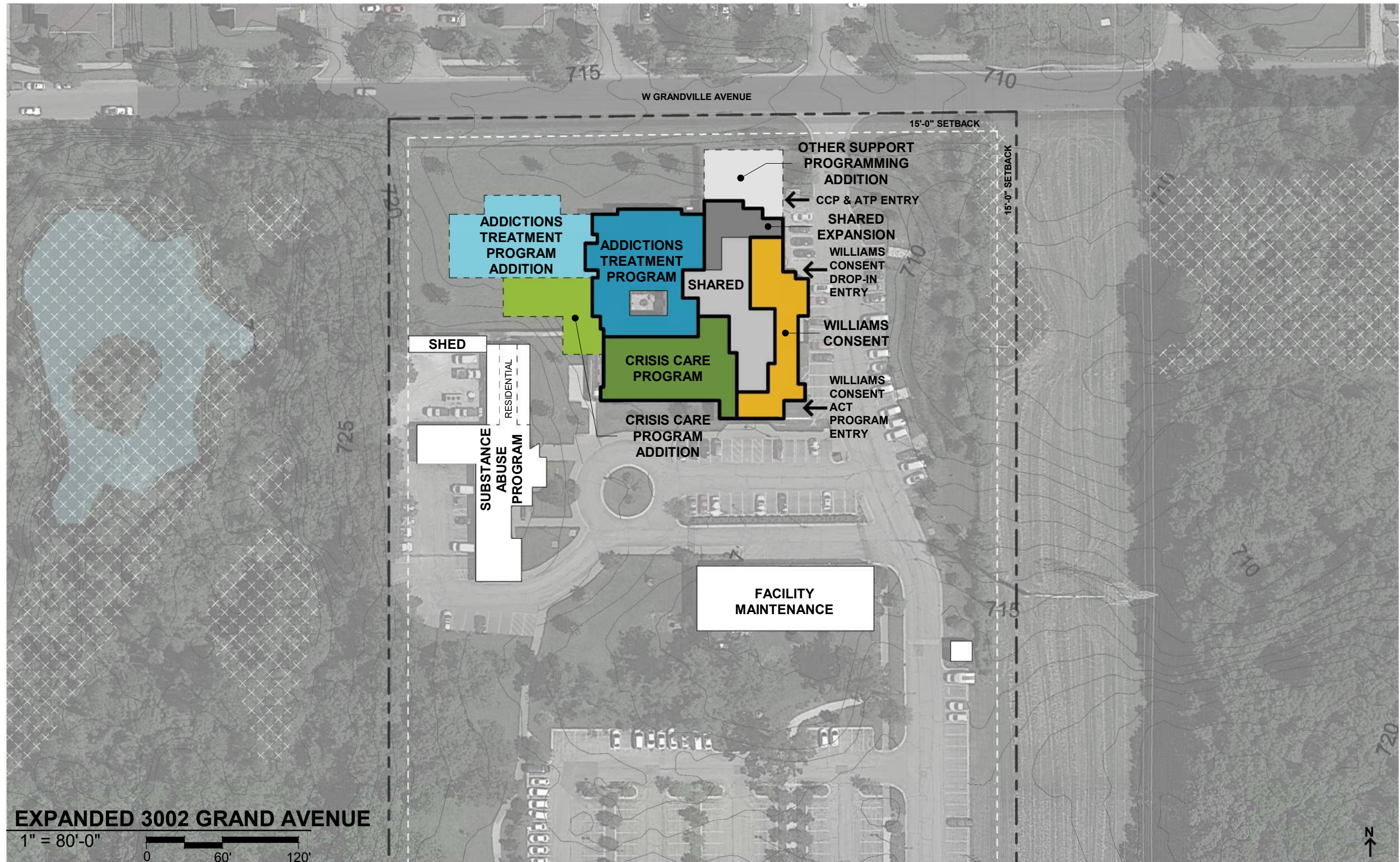
SCENARIO 3







SCENARIO 3







## SCENARIO 4

### Description

Scenario 4 calls for the construction of a new combined Law Enforcement Crisis Drop-off and Crisis Respite facility located centrally within the County. This scenario also recommends expansion of existing Lake County Health Department SUD Detox and SUD Rehab services currently provided at 3002 Grand Avenue in Waukegan to accommodate forecasted services trends.

### Conceptual Space Program Summary<sup>1</sup>:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	New Crisis Center (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Total Areas</b>						
Crisis Stabilization/Drop-off Center			3,600			-
Crisis Care Program (CCP)			8,955			-
Addictions Treatment Program (ATP)			-			12,572
Williams Consent Decree			-			4,350
Support/Shared Spaces			3,360			5,061
Other Support Programming			4,005			-
Total Gross Square Footage			19,920			21,983
Building Grossing Factor			1.10			1.10
<b>Total Building Square Footage</b>			<b>21,912</b>			<b>24,181</b>

### Conceptual Cost Estimate<sup>1</sup>:

<b>Estimated Project Costs</b>		
Total Construction Cost Estimate	\$9,340,388	\$2,207,460
Total Soft Costs Estimate	\$850,061	\$246,105
Total FF & E Estimate	\$792,065	\$280,789
Total Owner's Contingency	\$934,039	\$220,746
<b>Other Costs</b>		
Land Acquisition	TBD	\$0
Temporary Relocations	\$0	TBD
Legal Fees	TBD	TBD
Financing	TBD	TBD
Moving	TBD	TBD
<b>Estimated Total Project Cost</b>	<b>\$11,916,552</b>	<b>\$2,955,100</b>
<b>TOTAL ESTIMATED COST</b>	<b>\$14,871,652</b>	

<sup>1</sup> Refer to the Appendix for complete Conceptual Space Program and Conceptual Cost Estimate information.



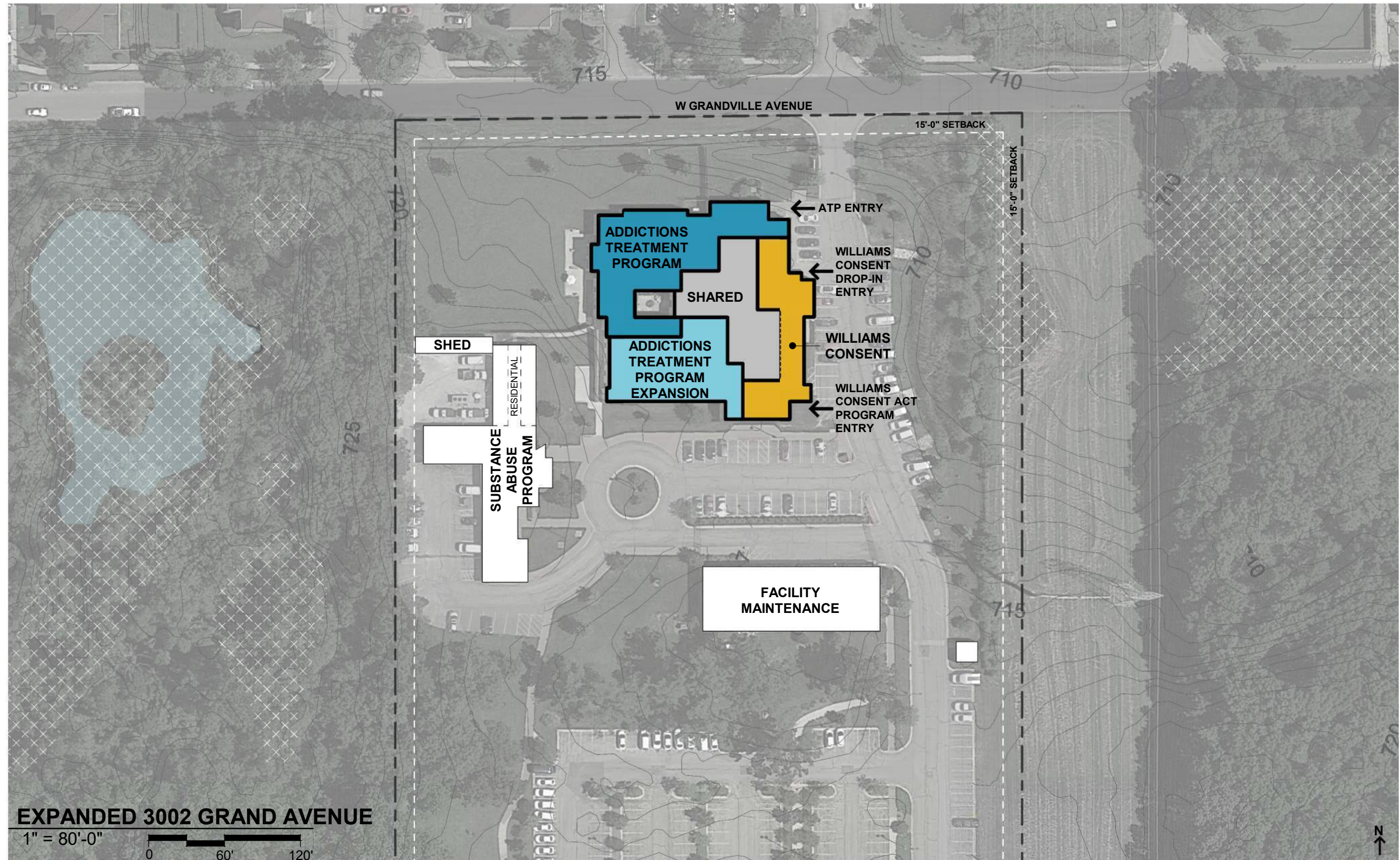
SCENARIO 4







SCENARIO 4







## SCENARIO 5

### Description

Scenario 5 calls for the construction of a new standalone Law Enforcement Crisis Drop-off, Crisis Respite, SUD Detox and SUD Rehab facility located centrally within the County.

### Conceptual Space Program Summary<sup>1</sup>:

	New Crisis Center (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)		
	Qty	Size	Total SF
Total Areas			
Crisis Stabilization/Drop-off Center			3,600
Crisis Care Program (CCP)			8,955
Addictions Treatment Program (ATP)			14,108
Williams Consent Decree			-
Support/Shared Spaces			5,205
Other Support Programming			4,230
Total Gross Square Footage			36,098
Building Grossing Factor			1.10
Total Building Square Footage			39,707

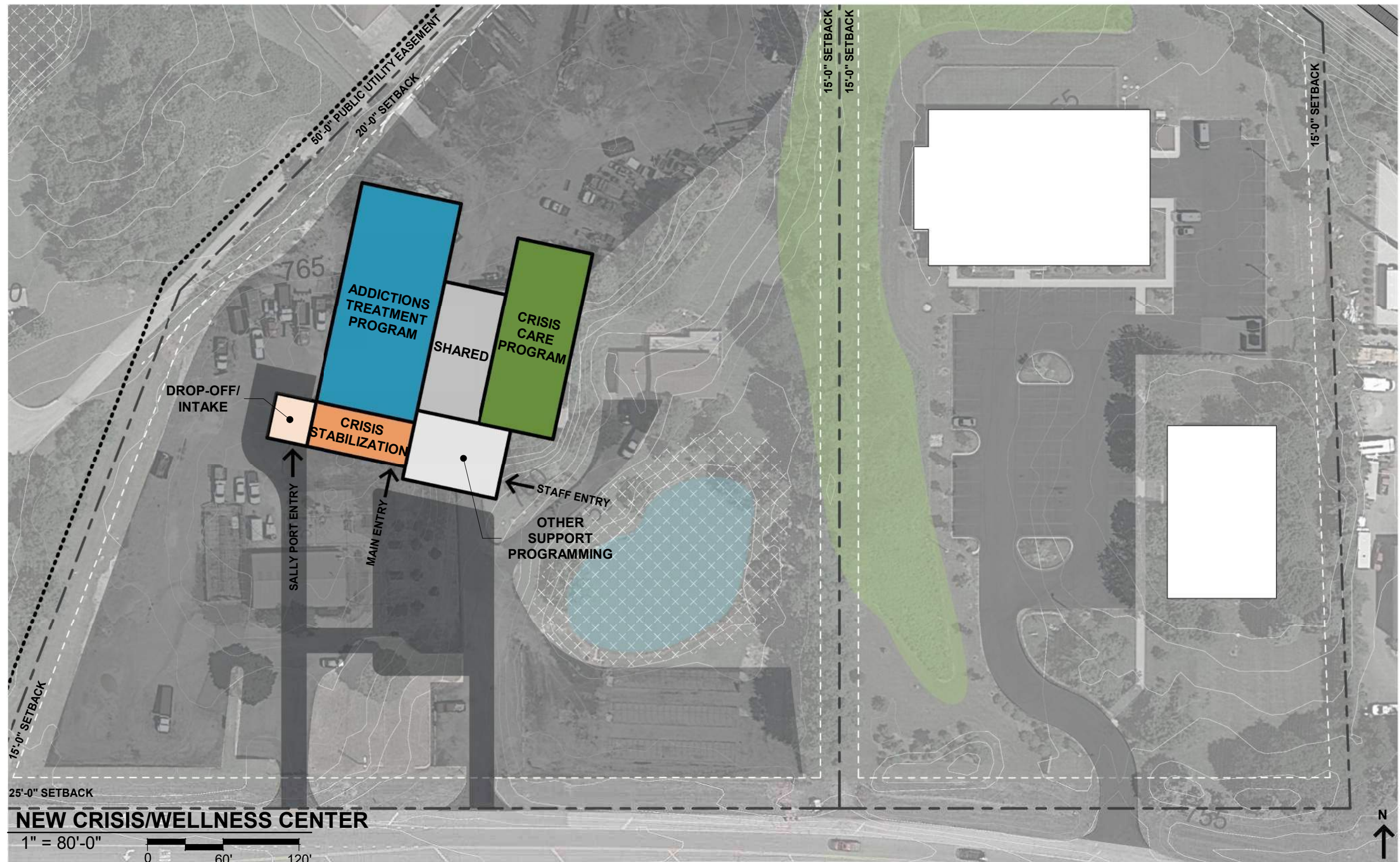
### Conceptual Cost Estimate<sup>1</sup>:

<b>Estimated Project Costs</b>	
Total Construction Cost Estimate	\$16,925,830
Total Soft Costs Estimate	\$1,488,103
Total FF & E Estimate	\$1,435,310
Total Owner's Contingency	\$1,692,583
<u>Other Costs</u>	
Land Acquisition	TBD
Temporary Relocations	\$0
Legal Fees	TBD
Financing	TBD
Moving	TBD
<b>Estimated Total Project Cost</b>	<b>\$21,541,826</b>
<b>TOTAL ESTIMATED COST</b>	<b>\$21,541,826</b>

<sup>1</sup> Refer to the Appendix for complete Conceptual Space Program and Conceptual Cost Estimate information.



SCENARIO 5







## **CRISIS CENTER THERAPEUTIC DESIGN CONCEPTS**

### **Facility Design Considerations**

The Lake County, IL Board and justice partners are committed to continually improving community justice, public safety, and community wellness processes and outcomes. This partnership has a demonstrated acumen effectively responding to priorities voiced by the community by implementing and operating effective evidence-based best practices. In keeping with this tradition, Lake County officials and justice partners are deeply committed to and actively engaged in reducing jail incarceration of mentally ill persons while ensuring effective public safety outcomes. County leaders and partners envision expansion of community mental health crisis and stabilization facilities to divert mentally ill persons from jail admission. This section of the report discusses therapeutic designed concepts.

Community mental health crisis centers are a necessary and essential component of a community's integrated public health care delivery system. These facilities critically support the needs of a community's mentally ill citizens and their families in many ways. Timely access to mental health services and care significantly reduces personal suffering by persons afflicted with mental illness. For example, it is well known that reducing the time between a first schizophrenic psychotic episode and adequate treatment can shorten the duration of the episode and reduce adverse changes in the brain caused by the episode. Short-term residential mental health care can significantly shorten the duration of acute mental health episodes and provide positive stabilization before the patient reenters the community and into other community support agencies. Additionally, mental health crisis centers are empirically demonstrated as an effective and safe alternative to incarceration for certain offender populations and other persons before a serious crime is committed; from this perspective, these facilities have become a popular partner in social justice and public safety. Finally, mental health crisis centers have also proven to be effective in reducing excessive and costly utilization of hospital emergency departments. Studies on this effect have shown that crisis centers can provide quicker access to needed psychiatric acute care while significantly reducing health care costs in the community.

Effective community mental health crisis centers are designed to facilitate evidence-based therapeutic outcomes and sized with sufficient bed capacity to meet the existing and future needs of the community it services. There are several data markers that are important to evaluate this component of facility programming, design, and construction. Target bed-count models should be based on populations that have used or are likely to use the facility. Population health data from the local public health authority, hospital emergency departments, local jails, law enforcement and 911 departments, community mental health advocates such as Mental Health America and NAMI are a few examples of where to begin understanding potential scope and services of an envisioned crisis facility.

### **Behavioral Health Design Research Back Drop<sup>1</sup>**

Over the last 20 years, there has been a transition from creating visually plain environments (so as not to overstimulate patients) to richer, more complex spaces and increased access to the outdoors (Cochran, 1978). According to Levin (2007), the primary trends in contemporary psychiatric facility design address environments that support recovery, induce shorter stays, and allow the patient to participate in his or her treatment. Environments that support recovery likely involve access to natural light and the outdoors and artwork involving nature. Sense of control is a critical factor contributing to the healing of a variety of mental illnesses. Providing environmental flexibility (acoustics, lighting, and furniture options) may be helpful in supporting this goal. Spaces that support participation in treatment are those that provide environments that are sufficiently flexible

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<sup>1</sup> Research discussed in this report were retrieved from Design Research and Behavioral Health Facilities at [https://www.healthdesign.org/system/files/chd428\\_researchreport\\_behavioralhealth\\_1013-\\_final\\_0.pdf](https://www.healthdesign.org/system/files/chd428_researchreport_behavioralhealth_1013-_final_0.pdf)



in configuration as to allow for a variety of activities. Other trends include the increased need to provide environments that address program spaces for drug and alcohol addiction and the more common use of single-patient rooms.

## **Evidence-Based Guidelines for Behavioral Health Facility Design**

### General

1. Provide a flexible and deinstitutionalized and homelike environment (Carr, 2011; Devlin, 1992; Grosenick & Hatmaker, 2000; Priebe & Broker, 1999; Potthoff, 1995; Shepley, Frohman, & Wilson, 1999; Tapak, 2012; Ulrich, et al., 2012; Wilson, Soth, & Robak, 1992; Whitehead, Polsky, Crookshand, & Fik, 1984).
2. The ward environment should support patient autonomy and spontaneity (Sorlie, Parniakov, Rezvy, & Ponomarev, 2010; Middelboe, Schjodt, Byrstring, & Gjerris, 2001; Cleary, Hunt, & Walter, 2009).
3. Order and organization are recommended in a ward environment (Schjødtt, Middelboe, Mortensen, & Gjerris, 2003; Eklund & Hansson, 2001).
4. Provide higher quality maintenance, furniture, and landscaping (Potthoff, 1995; Holahan & Saegert, 1973; Grosenick & Hatmaker, 2000; Christenfeld, Wagner, Pastva, & Acrish, 1989).
5. Choose furnishings that resist damage and are easily replaced and repaired (Davis, Glick, & Rosow, 1979; Carr, 2011; Shepley, et al., 1999).

### Patient Bedrooms

1. Accentuate functional uses and humanistic values through color and graphics (Whitehead, Polsky, Crookshand, & Fik, 1984).
2. Include open closet arrangements (Watts, Young-Xu, Mills, DeRosier, et al., 2012).
3. Use art that is realistic and displays social engagement (Nanda, Eisen, Zadeh, & Owen, 2010).
4. Provide spaces with clear territorial designations (Shepley, Frohman, & Wilson, 1999).
5. Provide entrance that is visible from staff locations in the interior of the building (Shepley, et al., 1999).
6. Provide high-quality air filtration systems in psychiatric wards (Salerno, Forcella, Di Fabio, Figà Talamanca, & Boscolo, 2012).
7. Ambiguity in design should be avoided (Izumi, 1968).
8. Evacuation routes must allow egress from each area to an area of refuge (Jeffers, 1991).
9. Provide good temperature control (Devlin, 1992).
10. Provide small ward for patients to have wide freedom of choice on various activities and large ward for patients to have isolated passive behavior (Ittleson, Proshansky, & Rivlin, 1970).



11. Play music selected by the ward therapist (Hunter & Love, 1996).
12. Create a welcoming reception area (Gutkowski & Guttman, 1992).
13. Define different function units with clear boundary (Gutkowski & Guttman, 1992).
14. Clearly separate public and private areas (Gutkowski & Guttman, 1992).
15. Facilitate closer contact between hospital and its neighborhood (Gutkowski, Ginath, & Guttman, 1992; Geddes, 1999).
16. Provide acoustic privacy when needed (Carr, 2011).

#### Day Rooms

1. Provide dayrooms and common areas that encourage social interaction and promote sense of community (Turlington, 2004; Sidman & Moos, 1973; Holahan & Saegert, 1973; Gutkowski, Ginath, & Guttman, 1992; Devlin, 1992; Davis, et al., 1979).
2. Facilitate the staff observation of the day room and spaces used by patients from the nursing station (Whitehead, et al., 1984; Turlington, 2004; Shepley, et al., 1999; Christenfeld, et al., 1989; Chou, et al., 2002; Carr, 2011; Ulrich, et al., 2012).
3. Locate a mix of seating arrangements that support social interaction between different groups of patients (Priebe & Broker, 1999; Minde, Haynes, & Rogenburg, 1990; Baldwin, 1985).
4. Provide smoking areas (if allowed) (Tyson, et al., 2002; Salerno, Forcella, Di Fabio, Figà Talamanca, & Boscolo, 2012; Shepley, et al., 1999).

#### Staff Spaces

1. Provide areas suitable for private one-to one interaction between staff and patients (Tyson, et al., 2002; Perkins, Prosser, Riley, & Whittington, 2011; McGuire, et al., 1977; Gutkowski, Ginath, & Guttman, 1992).
2. Include spaces for staff mental health consultation and therapy (Salerno, et al., 2012; Chen, Huang, Hwang, & Chen, 2010).
1. Provide direct orientation of seating for more affiliative behavior; provide greater distance between seating to decrease social pressure (Mehrabian & Diamond, 1971).
2. Smaller activity space creates stronger sense of community (Townley, Kloos, & Wright, 2009).
1. Provide an office for the psychiatric physician to be present and visible during daytime hours (Wilson, Soth, & Robak, 1992).
2. Provide an office for the interns (Wilson, et al., 1992).
3. Minimize staff walking distances (Carr, 2011).



4. Make nursing station and doctors' office readily accessible to patients (Gutkowski & Guttman, 1992).
5. Staff rooms should be designed to lower authoritarianism (Anderson, Good, & Hurtig, 1976).

#### Safety

1. Enhance staff safety and security (Forster, Cavness, & Phelps, 1999; Lynch, Plant, & Ryan, 2005; Martin, 1995; Salerno, et al., 2012).
2. Avoid anchor points in the bathroom such as shower heads and breakaway towel hooks and architectural elements that can be used as weapons (Watts, Young-Xu, Mills, DeRosier, et al., 2012; Jeffers, 1991; Geddes, 1999; Carr, 2011).

#### **Patient Satisfaction**

Patient satisfaction with treatment encourages patients' participation in care (Vuori, 1991). Acceptance of treatment by patients with schizophrenia can positively influence results of the patient treatment (Broker, Rohricht, & Priebe, 1995; Priebe & Broker, 1999). However, satisfaction with care can vary depending on the patient diagnosis. For example, lower satisfaction with care is found in patients diagnosed with depression (Koivumaa-Honkanen, et al., 1996).

Nijman, et al. (2011) suggested that improved living conditions, leading to patient satisfaction with physical or social environment, may reduce rates of patient absconding (unauthorized absence). Nijman and colleagues found a 30% decrease in absconding among acutely mentally disordered patients when the ward doors were locked during the entire shift. They found a positive correlation between patient unauthorized absence and the following: poor ward environment quality, unqualified staff, conflict behaviors, alcohol and drug use, verbal aggression, and self-harm. However, the authors argue that door-locking is far from a final solution.

Multiple occupant evaluations have addressed satisfaction. Corey, et al. (1986) found that even superficial changes such as furniture and finishes had a positive impact on staff and patients. Anderson et al. (1976) performed an evaluation of a new facility using 12 open-ended interview questions. Patients answered positively regarding the external facility, interior spaces, and general environment. However, the residential units provoked more negative responses. The researchers suggest the negative response to the residential units may have resulted from the change from open to locked connections between units. In a study comparing two wards, Müller, Schlosser, Kapp-Stein, Schanz, and Benkert (2002) found that satisfaction with pharmacotherapy was significantly higher in patients in the open ward compared to the patients in the closed ward for similar patient populations.

Potthoff (1991) conducted a study on adolescent satisfaction with the interior environment at three facilities: a renovated dormitory (previously for priests), a renovated college dormitory, and a facility designed specifically for adolescent inpatient drug treatment. Questionnaires were distributed to the adolescents and medical records were examined. The dormitory environments were institutional-appearing with mismatched furniture, while the environment designed for adolescent drug rehabilitation had carpeting, artwork, and high-quality furnishings and was more highly rated.





In an associated study, Potthoff (1995) also examined the impact of a rehabilitation facility located in a renovated club, hospital wing, and facility built for drug and alcohol treatment. Using questionnaires and records, the researcher found that satisfaction declined with all three facilities progressively during the 4-week treatment period due to absence of familiar features such as posters, paints photographs, and collectibles. The patients indicated they missed their beds, chairs, and pets from home. Spaciousness, views to the outside, and privacy were the most positively received elements of the new space. Least-liked were lack of carpeting, color scheme, lack of comfort, and particularly the quality of the bed. Lack of recreational equipment was also mentioned as problematic.

Gutkowski, Ginath, and Guttman (1992) found that the addition of entrances in a mental health center resulted in better accessibility, greater sense of freedom, and improved unit identity. In the same article, they reported that the therapeutic atmosphere of a day hospital was reinforced by modifying the lighting, opening a stairway, and defining separate living and dining spaces. Regarding a day hospital, the designers also added bright colors and enhanced lighting and a separate entrance from the rehabilitation ward (Gutkowski and Guttman, 1992).

Townley, Kloos, and Wright (2009) conducted interviews, solicited drawings, and used a global positioning system (GPS) to determine the relationship between activity zones and satisfaction, sense of community, and attitudes toward recovery in patients living in supportive housing in the community versus traditional residential facilities. Individuals whose activity territories were larger (up to 37.40 square miles [96.9 square kilometers]) had higher life satisfaction, more positive attitudes toward recovery, and decreased sense of community than those with more limited activity ranges (as small as .06 square miles (.16 square kilometers)).

### **Staff Behavior**

As with studies involving the social behavior of patients, occupancy evaluation researchers have been interested in staff behavior. Dorr, Honea, & Ponzer, (1980) found a positive correlation between psychiatric nurse job satisfaction and higher scores on Moos' Ward Atmosphere Scale (WAS) (Moos & Houts, 1968; Moos, 1989). Tyson et al., (2002) evaluated staff in old and new psychiatric units by examining burnout rates and analyzing job satisfaction surveys. The results indicated that staff in the new ward experienced less emotional exhaustion and increased sense of personal accomplishment. However, staff burnout rose due to increased engagement with patients, and there was no change in job satisfaction. Tuvevsson, Eklund and Wann-Hansson (2011) used the WAS and found that involvement and psychosocial work environment were indicators of perceived stress.

Setting-Response Inventory (SRI) is another tool used to obtain staff input regarding various settings in psychiatric wards on a 7-point scale. Moos and Daniels (1968) asked staff members to describe eight different ward settings, including individual therapy, group therapy, community meetings, staff rehash, alone, with a patient, with a nurse, and lunch. They were asked to rate the settings in terms of attentive-inattentive, friendly-hostile, outgoing-shy, sure-unsure, trusting-suspicious, and relaxed-tense.

Their study showed that different ward settings can elicit different reactions from staff members. In their study, staff felt more secure, trusting, extroverted, and sociable in individual therapy than in group therapy. They also found that among different staff members, senior staff felt more secure, trusting, extroverted, and sociable in any therapy session. They concluded that different staff members function best in different ward settings depending on their expertise, seniority, and personality.



Other organizational or social factors may also influence staff job satisfaction and quality of life. Chen, Huang, Hwang, and Chen (2010) studied the correlation between health-related quality of life and workplace physical violence (WPV) among the nurses in a psychiatric hospital in Taipei. They found a negative correlation between number of WPVs and years of employment; a 40% reduction was observed in number of WPVs reported among the staff that was employed over 5 years. Their findings also demonstrated a positive correlation between staff feelings of worry at work and number of WPVs reported.

### **Physical Environment and Social Behavior**

The appropriate number of patients per bedroom has been a significant topic of discussion regarding social behavior. In one of the first environment and behavior studies in a psychiatric facility, Ittelson, Proshansky, and Rivlin (1970) examined the impact of bedroom size (based on number of occupants) on adult patient behavior. Comparing patient rooms ranging from singles to 12-bed dormitories, they concluded that the higher the number of occupants, the higher the percentage of isolated passive behaviors. Wolfe (1975) suggests that a 2-bed room forces a social intimacy that may be intimidating and detrimental to interaction. While these researchers provide support for the hypothesis that private rooms may be appropriate for some patients, other researchers/practitioners contend that shared rooms support patient safety (as the presence of a roommate might prevent a potential suicide), and that private rooms have the negative impact of encouraging withdrawal from therapeutic group interaction.

Several studies suggest a relationship between furniture location and arrangement and frequency of social interaction. These studies indicated that sociopetal arrangements (seats facing one another or seats perpendicular to one another) are often preferred to sociofugal arrangements (seats parallel to one another).

### **Pre- and Post-Occupancy Evaluations**

One of the most extensive post occupancy evaluations in a BH facility was conducted by Rivlin and Wolfe (1979). Apart from a critique of the effectiveness of the facility spaces relative to the design intentions, the authors noted that regardless of certain environmental changes, programs are likely to fall back on institutional models of treatment delivery. Multiple occupant evaluations have addressed satisfaction. Corey et al. (1986) found that even superficial changes such as furniture and finishes had a positive impact on staff and patients. Dorr, Honea, & Pozner (1980) found a positive correlation between psychiatric nurse job satisfaction and higher scores on Moos' Ward Atmosphere Scale (Moos & Daniels, 1967).



## **Design Supports Operations, Therapeutic Processes and Outcomes**

Some of the important key considerations for planning crisis center expansion or new construction include:

- Who will the facility serve – male, female, certain offender populations, adults only, families, children, patient supports, etc.?
- What services will the facility provide – short-term residential, outpatient, full behavioral health (mental health, substance abuse, pharmaceuticals, co-occurring, comorbid medical conditions, community education, re-entry, jail step-down treatment, individual and group psychotherapy, other psychiatric services, etc.?
- What roles will the facility play as a community partner – crisis/acute mental health stabilization only, contribute to larger justice/public safety outcomes, etc.?
- What programs are intended – general mental health services, medical services, activities of daily living support, housing and transportation support, etc.?
- Who will work in the facility – clinical and administrative support staff only, other health care professionals, food service, security, etc.?
- Will the facility be based on an integrated behavioral and patient-centered model, will the facility serve as a medical home model in the delivery of community mental health care?

Additionally, design and the environmental milieu:

- Design supports intended services and programming
- Internal and external spaces and designs intentionally support therapeutic and clinical outcomes, safety and security
- Design supports the population the facility will serve – gender, age, special needs, ADA, etc.
- Staff spaces are adequately designed, sized, and equipped to fully support staff work and social needs
- Treatment spaces should be adequately designed, sized, and equipped to support a variety of evidence-based best practice treatment modalities for individual and group therapeutics
- Design, access points, and treatment areas should provide for reasonable measures of privacy and confidentiality
- All areas to be ligature safe design

## **Intake Evaluation and Clinical Assessment**

Intake and evaluation spaces are designed for particular needs for the population being served and related processes. The interior design should use colors and materials that put clients at ease and reduce stress in order to facilitate complete or comprehensive therapeutic interviews and evaluation of patient needs. Natural wood and cool colors such as blue and light pastels work to that end. Furniture and seating are comfortable for staffing and clients, especially to support evaluations that require up to two hours to complete. Furnishings need to be selected carefully to avoid sharp edges and loose parts that could be used aggressively. Equipment and miscellaneous items should have a place behind lockable cabinet doors or drawers. Soft lighting also helps to reduce stress and can facilitate normalizing the clinical experience.

Evaluation space should be reasonably private to support client confidentiality and to reduce and minimize patient feelings of embarrassment or shame when discussing their symptoms, history of mentally illness and other sensitive personal topics. Concomitantly, group counseling and activity spaces should be designed to support open treatment-related discussions. Such spaces should be designed to eliminate or greatly minimize contra-therapeutic distractions, such as non-clinical staff interruptions and outside noise, for example.

## Day Rooms

Design accommodates evidence-based best practices for sustainable therapeutic processes and outcomes. Patient/resident areas are adequately sized, furnished, and designed to optimize patient well-being, access to and participating in therapeutic activities and encounters, authorized movement throughout the facility, provision of basic human needs, personal respect and dignity. Ergonomic design that leverages best effects of environmental conditions can improve patient care and recovery outcomes, staff wellness and effectiveness. The living rooms may want more than one type of space within it. There may need to be larger social areas that can be used for group events and also some smaller spaces off to the side to allow for those who need a little space by can be a tangential part of the group. Each of these may have a different look and feel.

Furniture will need to be durable and heavy enough to be difficult to be thrown. The furniture must also be comfortable. TV's and other such pieces of equipment must be protected. An abundance of natural light is important for this area. Lighting will have some of the same criteria as the bedrooms, but we may be able to rely on more commercial can lights for a more subtle look. Reducing stress through the use of natural wood and the appropriate colors will be a part of the design discussion. The other aspect of stress reduction will center around acoustics and the ability to absorb sound to minimize the reverberation that creates a chaotic environment. Visibility into all parts of this area is an important element of the design.





## Patient Bed Rooms

Design must adequately ensure short and longer-term privacy and confidentiality needs, as well as support the amelioration of acute psychiatric episodes and symptomology. Spaces are designed for a wide array of therapeutic treatment modalities and activities. Design should intentionally down-play and minimize the facilities clinical purposes to the extent doing so will maximize patient care and recovery.

The bedrooms should feel as close to a normal bedroom as possible with painted wall (but reinforced), a flat painted ceiling and lighting that can give a more residential look and feel. Abuse proof lighting does not give the look and light quality of a residential environment so some thought and discussion will be in order. The furniture and fixtures will be specified to help prevent suicide with the elimination of loose part, ligature proof design and rounded safety edges. Window size and level of security glazing for secure and semi-secure facilities.







### **Support Spaces**



Design should be supportive as much for staff as for the residents. The support spaces need to be designed to make the staff's job as efficient and comfortable as possible to help the staff to avoid unneeded trips to fetch items. This reduces staff fatigue and burnout allowing them more quality time to work with residents. For example, placing staff break rooms so that they have views outside and no sound distractions will assist in relieving stress.

Support Spaces include:

- Laundry
- Pantry
- Storage
- Staff Break
- Lockers



## **Nursing Stations**

Nursing stations consistently accommodate clinical workflow, patient and staff needs. Therapeutic “feel” is very important. Nurse stations located in common areas are designed and located to maintain consistent visual and sound monitoring of patients and patient areas appurtenance to the nurse station. Design maximize staff and patient safety and security while ensuring adequate access and provision of care and treatment.

Generally, open nurse staffing that provide adequate security barriers and workspace are best. However, they should not be centrally located in such a manner that allows/requires 360-degree patient monitoring. Patients should remain in front of, not behind nursing stations. Adequate storage is provided and equipped with mechanical and/or security technology to control access to clinical and/or operational equipment and supplies requiring limited access.

Nurse stations must be comfortable for staff and designed to reduce/minimize staff stress. Physical design, appearance, and location supports a positive and therapeutic organizational culture.





## Outdoor Recreation / Treatment Spaces



Patient stabilization and recovery is supported by well designed, safe and secure outside recreational areas. These areas designed to maximize staff and patient safety and security while facilitation an array of structure and unstructured recreational activities. Spaces are ergonomically and aesthetically designed to motivate patient participation in a variety of therapeutic play and treatment activities. Spaces are designed to support individual and group activities and treatment objectives. Gardens, waterscapes, and other natural landscaping promotes healing and can reduce symptomatic episodes.



All recreational areas must accommodate patients' needs and individual treatment plans. Access and use of recreation areas accommodate patient medical, physical, and mental health needs.

## Professional and Treatment Meeting / Program Rooms

Meeting and program rooms should be large enough to give the patients/ residents some personal space. Lighting and interior design should be calming and non-institutional. A second door on the opposite side of the room would be a good idea for egress. Lighting will need to be abuse proof but inconspicuous in nature. These spaces should be designed to accommodate a variety of professional purposes and equipment:

- Group meetings
- Training
- Community / family meetings
- Out-patient services, if provided
- Audio-visual equipment
- Cabinets for materials and equipment storage

## Security

Design should accommodate best-practices for personal safety and security. Internal and external visibility is maximized and unencumbered by physical structures and barriers as much as possible while optimizing therapeutic processes and outcomes. The use of contemporary security and safety technology is optimized to maximize internal and external observation and audibility, access and exit control, and patient monitoring. Furniture, fixtures, and equipment are of security-grade where needed and fixed to resist tampering, destruction, and clandestine movement and use. Portable and fixed communication devices and equipment ensure for timely, reliable, and clear internal and external communications personal protection from harm is prioritized above and supports the therapeutic milieu. Safety and security through strategic and designed outcome-oriented environmental design is essential.





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## **CLINICAL BEST PRACTICES FOR CRISIS CENTERS**

This section of the report provides a brief review of clinical best-practices for crisis center treatment programming. It is important to note our discussions with CCP clinical staff and our environmental observations indicate that best-practices are in place. It is clear that CCP treatment programming is based on evidence based best practices.

The following are considered core evidence-based therapeutic modalities for crisis center treatment programming

Core evidence-based therapeutic modalities in programmatic planning and program implementation:

1. Integrated Behavioral Health
2. Cognitive Behavioral Therapy (CBT)
3. Illness Recovery / Psycho-Social Rehabilitation
4. Motivational Therapies (a CBT method)
5. Pharmacologic / Medication-Assisted Treatment (MAT)

### **Integrated Behavioral Health**

Integrated Behavioral Health (IBH) treatment involves the systematic coordination and delivery of primary and behavioral healthcare and custody services. It involves ongoing collaboration among mental health, substance abuse, primary care, and custody (security) services to produce the best care, safety, and security outcomes.

A 2008 report by Funk and Ivbijaro cited seven reasons for integrating mental health into primary care. Each must be considered in any effort to design or implement a collaborative approach, partial integration, or a fully integrated model.<sup>1</sup>

1. *The burden of mental disorders is great.* Mental disorders are prevalent in all societies and create a substantial personal burden for affected individuals and their families. They produce significant economic and social hardships that affect society as a whole.
2. *Mental and physical health problems are interwoven.* Many people suffer from both physical and mental health problems. Integrated primary care helps to ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.
3. *The treatment gap for mental disorders is enormous.* In all countries, there is a significant gap between the prevalence of mental disorders and the number of people receiving treatment and care. Coordinating primary care and mental health helps close this divide.
4. *Primary care settings for mental health services enhance access.* When mental health is integrated into primary care, people can access mental health services closer to their homes, thus keeping families together and allowing them to maintain daily activities. Integration also facilitates community outreach and mental health promotion, as well as long-term monitoring and management of affected individuals.

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<sup>1</sup> <http://www.milbank.org/publications/milbank-reports/32-reports-evolving-models-of-behavioral-health-integration-in-primary-care#intro>



5. *Delivering mental health services in primary care settings reduces stigma and discrimination.*
6. *Treating common mental disorders in primary care settings is cost-effective.*
7. *The majority of people with mental disorders treated in collaborative primary care have good outcomes, particularly when linked to a network of services at a specialty care level and in the community.*

Figure 1 below illustrates a standard integrated behavioral health care model generally applied in community care settings.<sup>2</sup> However, participant interviews and program documents expand and deepen integration of patient care using cross discipline collaboration that balances patient health care needs with facility safety and security.

<b>Community IBH Model (see Figure 1)</b>	<b>Crisis Program IBH Model</b>
Systematic Screening	Systematic screening at intake that includes medical, substance abuse, mental health, security risk and needs components.
Integrating Providers <ul style="list-style-type: none"><li>• Co-location</li><li>• Systematic Communications methods</li><li>• Shared medical records</li><li>• Shared decision making</li></ul>	Adds: Co-location of administration, staff, patients according to needs and risks. Shared health care records/information/data Decision making includes clinical and risks and needs
Identification & Awareness of mental health problems. Comfort treating mentally ill, coordinating services with MH providers for complex patients, adherence to evidence-based (health care) guidelines.	Adds: Identification and awareness of medical, psychosocial, substance abuse, and security problems and risks. Medical, mental health, substance abuse, and support staff are comfortable treating and managing patients, adhere to evidence-based health care and practice guidelines.
Integrated care/proactive follow-up <ul style="list-style-type: none"><li>• New services offered</li><li>• Standardized follow-up</li><li>• Formal adherence and clinical monitoring and feedback</li><li>• Education</li></ul>	Adds: <ul style="list-style-type: none"><li>• New services but are currently proven effective in the Lake County community delivery systems.</li><li>• Standardized follow-up discharge to community resources and supports</li><li>• Formal adherence includes clinical, programmatic monitoring and feedback.</li><li>• Education includes patients and program providers and support staff</li></ul>

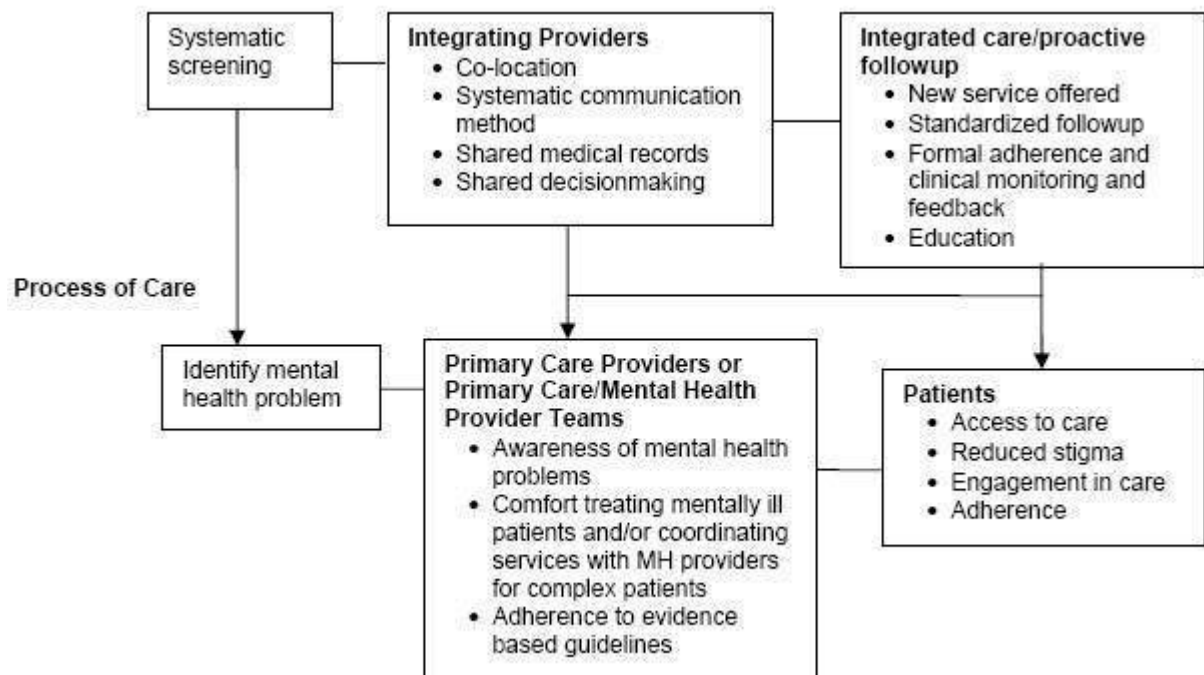
<sup>2</sup> <http://www.ncbi.nlm.nih.gov/books/NBK38636/?report=printable>





<b>Patients</b> <ul style="list-style-type: none"><li>• Access to Care</li><li>• Reduce Stigma</li><li>• Engagement in Care</li><li>• Adherence (to treatment)</li></ul>	<b>Adds:</b> <ul style="list-style-type: none"><li>• Engagement in care motivated by integrated provider relationships and supportive interaction with those providers and support staff.</li><li>• Adherence to treatment is motivated by positive communication with program and support staff, clarity in behavioral expectations, rewards.</li></ul>
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Figure 1 – Community-Based Integrated Care Delivery Model





## **Cognitive Behavioral Therapy (CBT) Concept**

Cognitive Behavioral Therapy (CBT) is the “standard” evidence-based treatment used in behavioral health for the treatment of mentally illness and behavioral problems. In-fact, CBT is one of very few treatment modalities that stands on its own for Medicaid / Medicare mental health treatment reimbursement.

Cognitive behavioral therapy (CBT) is a form of treatment that focuses on examining the relationships between thoughts, feelings and behaviors. By exploring patterns of thinking that lead to self-destructive actions and the beliefs that direct these thoughts, people with mental illness can modify their patterns of thinking to improve coping. CBT is a type of psychotherapy that is different from traditional psychodynamic psychotherapy in that the therapist and the patient will actively work together to help the patient recover from their mental illness. People who seek CBT can expect their therapist to be problem-focused, and goal-directed in addressing the challenging symptoms of mental illnesses. Because CBT is an active intervention, one can also expect to do homework or practice outside of sessions.

CBT has been proven as a best practice in treating severe and chronic mental illness, mood and anxiety disorders, substance abuse disorders, and is often applied in the field of education as a method for helping learners improve their understanding of topic information, synthesize; evaluation; and apply information and concepts being learned.<sup>3</sup>

CBT has been proven effective with various mentally ill populations and has shown to improve symptomology, improve adherence to programming and rules, reduce incidents of violence, improve community discharge outcomes, and reduce relapse.<sup>4</sup>

## **Illness Recovery / Psycho-Social Rehabilitation**

Proposed programs incorporate Illness Recovery/Psycho-Social Rehabilitation Models as core concepts. Both models are well-affirmed in the literature as evidence-based best practices in treating medical, mental health, substance abuse, and psycho-social problems.

**Illness Recovery Concept:** The fundamental components of Recovery include:

- Hope
- Medication/Treatment
- Empowerment
- Support
- Education/Knowledge
- Self Help/Self Efficacy

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<sup>3</sup> <http://www.nimh.nih.gov/health/topics/psychotherapies/index.shtml>

<sup>4</sup> <http://static.nicic.gov/Library/021657.pdf>



Crisis Center-Based illness recovery treatment intends to improve patient quality of life upon release in the following areas:

- Stable, safe, and decent housing
- Family and social relationships
- Integration into one's community
- Physical and psychological health and safety
- Spiritual beliefs and religious practices
- Talents and interests - leisure activities

The literature endorses the Illness Recovery Model as proposed by the Departments for medical, mental health, substance abuse, and psycho-social treatment. People suffering from severe and persistent mental illness (Schizophrenia, Bi-Polar Disorder, and Major Depression), Richard Warner, Clinical Professor of Psychiatry, Colorado Addiction Recovery Center editorialized his literature review on the effectiveness of the Recovery Model:

*"The recovery model refers both to subjective experiences of optimism, empowerment and interpersonal support, and to the creation of positive, recovery-oriented services. Optimism about outcome from schizophrenia is supported by the research data. One of the most robust findings in schizophrenia research is that a substantial proportion of those with the illness will recover completely and many more will regain good social functioning. Much recent research suggests that working helps people recover from schizophrenia and advances in vocational rehabilitation have made this more feasible. A growing body of research supports the concept that empowerment is an important component of the recovery process and that user-driven services and a focus on reducing internalized stigma are valuable in empowering the person with schizophrenia and improving the outcome from illness. Further controlled studies of empowerment-oriented interventions are required to demonstrate convincingly that a focus on this factor will yield better outcomes in psychosis."<sup>5</sup>*

The Recovery Model, with or without a Psycho-Social Rehabilitation concept, is affirmed in the literature as an evidence-based best practice. Proposed programs are likely to produce desired treatment outcomes by including the Recovery Model as a core component of care.

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<sup>5</sup> Does the scientific evidence support the recovery model? *The Psychiatrist Online* January 2010 34:3-5; doi:10.1192/pb.bp.109.025643, at <http://pb.rcpsych.org/content/34/1/3.full>



## **Rehabilitation (Psycho-Social) Concept**

The Psycho-Social Rehabilitation treatment is well known in the behavioral health and long-term care industries as an effective mental health treatment. The literature indicates that this model can yield the following outcomes in the treatment of behavioral health disorders when properly applied:

The scientific literature examining clinical, social and cost benefits of psychiatric rehabilitation services carried by the Commonwealth of Pennsylvania, Department of Public Welfare 1999, analyzed fifteen articles published between 1984 and 1998 that described and evaluated psychosocial programs. Their overall conclusion was that participation in the programs improved 'functioning' of the participants. The most commonly reported areas of improved functioning with psychosocial rehabilitation were: improved Global Functioning (5 of 6 studies), increased Employment (10 of 12 studies), increased Independent Living (7 of 10 studies), Social/Community Adjustment (4 of 7 studies), decreased Use of Community Resources (2 of 2 studies), decreased Hospital Admission Rates (7 of 9 studies), decreased Time in the Hospital (11 of 13 studies), and decreased Mental Health or Societal Costs (9 of 9 studies).<sup>6</sup>

The literature also indicates that this treatment model can be effective with the various populations that would enter the crisis facility.

- Geriatric
- People from cultural and linguistically diverse backgrounds
- Gender differences
- Psychological trauma survivors

Finally, this treatment model positively supports previously discussed proposed program core concepts for crisis center-based treatment.<sup>7</sup>

## **Motivational Interviewing (MI) Concept**

Motivational Interviewing began as a client-centered, goal-focused approach to psychotherapy and counseling in the 1990s. Its primary object to increase a person's intrinsic motivation for behavior change by exploring and resolving ambivalence about change. Primary aims of MI focus on increasing a person's desire to change (for the better) and to strengthen their commitment to positive change.

Since its development, MI has proven effective in various settings and with various clientele:

- Health Care – improves medical outcomes
- Mental Health – improves mental health / psychiatric outcomes
- Education – improves learning outcomes / improves teacher effectiveness
- Organizations – improves leadership and staff performance
- Other

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<sup>6</sup> <http://www.slideshare.net/snigdhasamantray/seminar-on-psychosocial-rehabilitation-of-psychiatric-patients>

<sup>7</sup> Best Practice in Mental Health. Summer2005, Vol. 1 Issue 2, p100-132. 33p. at <http://essential.metapress.com/content/uk5446h1092t1578/>





MI should be considered as a “tool” to be used in the process of target patient assessment, care and treatment planning, treatment, custody management, education, and reentry preparedness. It is not a treatment “therapy” per se. MI is an evidence-based best practices for maximizing the effectiveness of all proposed programs, their intended individual and collective outcomes.<sup>8</sup>

### **Pharmacologic / Medication Assisted Treatment (MAT)**

MAT is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance-use disorders, a combination of medication and behavioral therapies is most successful. Medication assisted treatment (MAT) is clinically driven with a focus on individualized patient care.<sup>9</sup>

The integrated programs being proposed also recognize the importance in expanding MAT applications to the non-co-occurring mentally ill MHSU target population. Despite the fact the psychotropic medication is a standard treatment in treated mental illness, MAT provides an added framework from which to integrate mental health and substance abuse treatment services by adopting a “medication assisted recovery” philosophy.<sup>10 11</sup>

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<sup>8</sup> <https://s3.amazonaws.com/static.nicic.gov/Library/025556.pdf>

<sup>9</sup> <http://www.dpt.samhsa.gov/patients/mat.aspx>

<sup>10</sup> <http://www.dpt.samhsa.gov/comor/Co-occurring.aspx>

<sup>11</sup> <http://www.rsat-tta.com/Files/Trainings/FinalMAT>



**APPENDIX A: Conceptual Scenario Space Programs**



## SCENARIO 1

### Conceptual Space Program:

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Existing Lake County Resources</b> (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Crisis Stabilization/Drop-off Center</b>						
<u>Drop-off/Intake:</u>						
Crisis Stabilization Living Room	1	1,500	1,500			
Pantry	1	100	100			
Intake Vestibule	1	60	60			
Sally Port	1	400	400			
Intake Desk/Reception	1	80	80			
Interview/Screening Room	1	100	100			
Security Office	1	120	120			
Waiting Area	1	40	40			
Crisis Stabilization Net Area Total			2,400			
Net to Gross Factor			1.50			
<b>Crisis Stabilization Total Gross Square Footage</b>			<b>3,600</b>			<b>0</b>

**CRISIS DROP-OFF  
LOCATED AT OFF-SITE  
LOCATION**



## SCENARIO 1

### Conceptual Space Program:

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Existing Lake County Resources</b> (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Crisis Care Program (CCP)</b>						
<u>Administration:</u>						
Program Coordinator Office				1	180	180
Admin Staff Office				1	151	151
Psych Office				1	95	95
Respite Office/ 24-HR Hotline (Shared)				1	135	135
Crisis Office/ 24-HR Hotline (Shared)				1	133	133
Interview Room				1	131	131
Conference Room				1	201	201
Mail Room				1	140	140
CCP File Storage				2	90	180
Storage				1	63	63
<b>CRISIS CARE PROGRAM LOCATED AT 3002 GRAND AVENUE</b>						
<u>CCP Group:</u>						
Group Room				1	1,016	1,016
TV Lounge				1	352	352
<u>Living Spaces:</u>						
Respite Bedroom				8	80	640
Toilet Room w/ Shower				2	130	260
Laundry				1	107	107
CCP Areas Net Area Total						3,784
Net to Gross Factor						1.50
<b>CCP Total Gross Square Footage</b>			<b>0</b>			<b>5,676</b>





## SCENARIO 1

### Conceptual Space Program:

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Existing Lake County Resources (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Addictions Treatment Program (ATP)</b>						
<u>Administration:</u>						
Reception				1	61	61
Program Coordinator Office				1	121	121
Utilization Manager Office				1	94	94
Senior Program Assistant Office				1	94	94
Assistant Clinical Coordinator Office				1	101	101
Nursing Coordinator Office				1	121	121
Staff Office				1	142	142
BAS Aide Office				1	213	213
ATP Counselor Office				1	93	93
Counselor Office				1	142	142
Intern/Flex Office				1	131	131
Conference Room				-	225	-
<u>ATP Group:</u>						
Rehab Day Room				1	263	263
Rehab Quiet Area/TV Room				1	338	338
Detox Quiet Area/TV Room				1	327	327
Detox Day Room/Meeting Room				1	276	276
<u>Living Spaces:</u>						
Shared Rehab Bedroom				10	131	1,310
Detox Bedroom w/ Toilet room				2	137	274
Detox Bedroom				2	203	406
Toilet Room w/ Shower				2	145	290
Toilet Room				2	207	414
Laundry				2	104	208
ATP Net Area Total						5,419
Net to Gross Factor						1.50
<b>ATP Total Gross Square Footage</b>			<b>0</b>			<b>8,129</b>



## SCENARIO 1

### Conceptual Space Program:

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Existing Lake County Resources (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>William Consent Decree (Peer Support)</b>						
<u>Administration:</u>						
ACT Reception						
Williams ACT						
MSN Office						
Office						
ACT Team Leader Office						
Williams Quality Admin Office						
Center Coordinator's Office						
Kitchen/Prep						
Medication Room						
IT						
Storage						
Storage						
Staff Toilet						
Maintenance						
 <u>WC Group:</u>						
Group Room						
Drop in Center						
Computer						
Toilet Room						
Peer Support Net Area Total						
Net to Gross Factor						
<b>Peer Support Total Gross Square Footage</b>			<b>0</b>			<b>4,350</b>



## SCENARIO 1

### Conceptual Space Program:

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Existing Lake County Resources</b> (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Shared Spaces</b>						
<u>Administration:</u>						
Staff Break Room	1	200	200	1	350	350
Staff Toilet Room	2	80	160	2	100	200
Insurance Enrollment Office	1	120	120	-	120	-
<u>Medical:</u>						
Nurses' Station	1	250	250	1	202	202
Intake Nursing Assessment	2	120	240	1	85	85
Exam Room	1	140	140	1	137	137
Medication Room	1	100	100	1	46	46
Blood Draw/ Lab	-	100	-	-	100	-
Storage	1	50	50	1	73	73
Nurses' Toilet Room	1	80	80	1	36	36
<u>Food Service:</u>						
Kitchen	-	280	-	1	269	269
Dining Room	-	1,200	-	1	1,165	1,165
Shared Net Area Total			1,340			2,563
Net to Gross Factor			1.50			1.50
<b>Shared Spaces Gross Square Footage</b>			<b>2,010</b>			<b>3,845</b>



## SCENARIO 1

### Conceptual Space Program:

	<b>New Crisis Center</b> (23-hour Crisis Triage & Stabilization)			<b>Existing Lake County Resources</b> (8 Respite Beds, 16 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Other Support Programming</b>						
Mobile Response Crisis Office (3 person)	1	200	200	-	200	-
Peer-to-Peer Support Center	1	250	250	-	250	-
Transportation Services Office	1	120	120	-	120	-
Food Pantry	1	200	200	-	200	-
Clothes Pantry	1	200	200	-	200	-
Classroom/Training Center	-	1,200	-	-	1,200	-
Child Care Area	1	300	300	-	300	-
Computer Lab/Resource Library	-	400	-	-	400	-
A Way Out Office	-	150	-	-	150	-
Other Net Area Total			1,270			-
Net to Gross Factor			1.50			1.50
<b>Other Total Gross Square Footage</b>			<b>1,905</b>			<b>0</b>

<b>Total Areas</b>			
Crisis Stabilization/Drop-off Center	3,600		<b>NO RECOMMENDED IMPROVEMENTS</b>
Crisis Care Program (CCP)	-		
Addictions Treatment Program (ATP)	-		
Williams Consent Decree	-		
Support/Shared Spaces	2,010		
Other Support Programming	1,905		
Total Gross Square Footage	7,515		
Building Grossing Factor	1.10		
<b>Total Building Square Footage</b>	<b>8,267</b>		<b>0</b>



## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds.

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Crisis Stabilization/Drop-off Center</b>			
<u>Drop-off/Intake:</u>			
Crisis Stabilization Living Room	1	1,500	1,500
Pantry	1	100	100
Intake Vestibule	1	60	60
Sally Port	1	400	400
Intake Desk/Reception	1	80	80
Interview/Screening Room	1	100	100
Security Office	1	120	120
Waiting Area	1	40	40
Crisis Stabilization Net Area Total			2,400
Net to Gross Factor			1.50
<b>Crisis Stabilization Total Gross Square Footage</b>			<b>3,600</b>





## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds.

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Crisis Care Program (CCP)</b>			
<u>Administration:</u>			
Program Coordinator Office	1	180	180
Admin Staff Office	1	120	120
Psych Office	2	120	240
Respite Office/ 24-HR Hotline (Shared)	1	180	180
Crisis Office/ 24-HR Hotline (Shared)	1	180	180
Interview Room	2	120	240
Conference Room	2	225	450
Mail Room	1	140	140
CCP File Storage	1	200	200
Storage	1	100	100
<u>CCP Group:</u>			
Group Room	1	1,200	1,200
TV Lounge	1	400	400
<u>Living Spaces:</u>			
Respite Bedroom	16	90	1,440
Toilet Room w/ Shower	6	100	600
Laundry	2	150	300
CCP Areas Net Area Total			5,970
Net to Gross Factor			1.50
<b>CCP Total Gross Square Footage</b>			<b>8,955</b>



## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds.

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Addictions Treatment Program (ATP)</b>			
<u>Administration:</u>			
Reception	1	80	80
Program Coordinator Office	1	180	180
Utilization Manager Office	1	120	120
Senior Program Assistant Office	1	120	120
Assistant Clinical Coordinator Office	1	120	120
Nursing Coordinator Office	2	120	240
Staff Office	1	120	120
BAS Aide Office	2	200	400
ATP Counselor Office	2	100	200
Counselor Office	2	100	200
Intern/Flex Office	2	120	240
Conference Room	2	225	450
<u>ATP Group:</u>			
Rehab Day Room	2	275	550
Rehab Quiet Area/TV Room	2	350	700
Detox Quiet Area/TV Room	1	350	350
Detox Day Room/Meeting Room	1	275	275
<u>Living Spaces:</u>			
Shared Rehab Bedroom	16	150	2,400
Detox Bedroom w/ Toilet room	2	180	360
Detox Bedroom	4	150	600
Toilet Room w/ Shower	8	100	800
Toilet Room	2	225	450
Laundry	3	150	450
ATP Net Area Total			9,405
Net to Gross Factor			1.50
<b>ATP Total Gross Square Footage</b>			<b>14,108</b>



## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds.

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

Qty	Size	Total SF
-----	------	----------

#### William Consent Decree (Peer Support)

##### Administration:

ACT Reception  
Williams ACT  
MSN Office  
Office  
ACT Team Leader Office  
Williams Quality Admin Office  
Center Coordinator's Office  
Kitchen/Prep  
Medication Room  
IT  
Storage  
Storage  
Staff Toilet  
Maintenance

**EXISTING PROGRAM  
SPACES TO REMAIN AT  
3002 GRAND AVENUE**

##### WC Group:

Group Room  
Drop in Center  
Computer  
Toilet Room

Peer Support Net Area Total  
Net to Gross Factor

**Peer Support Total Gross Square Footage**

**4,350**



## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds.

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Shared Spaces</b>			
<u>Administration:</u>			
Staff Break Room	1	200	200
Staff Toilet Room	2	80	160
Insurance Enrollment Office	1	120	120
<u>Medical:</u>			
Nurses' Station	1	800	800
Intake Nursing Assessment	2	120	240
Exam Room	1	140	140
Medication Room	1	100	100
Blood Draw/ Lab	1	100	100
Storage	1	50	50
Nurses' Toilet Room	1	80	80
<u>Food Service:</u>			
Kitchen	1	280	280
Dining Room	1	1,200	1,200
Shared Net Area Total			3,470
Net to Gross Factor			1.50
<b>Shared Spaces Gross Square Footage</b>			<b>5,205</b>



## SCENARIO 2

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite Beds, 16 Rehab Beds and 6 Detox Beds).

#### Expansion/Renovation of Lake County Resources \*\*

(16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)

	Qty	Size	Total SF
<b>Other Support Programming</b>			
Mobile Response Crisis Office (3 person)	1	200	200
Peer-to-Peer Support Center	1	250	250
Transportation Services Office	1	120	120
Food Pantry	1	200	200
Clothes Pantry	1	200	200
Classroom/Training Center	1	1,200	1,200
Child Care Area	1	300	300
Computer Lab/Resource Library	1	200	200
A Way Out Office	1	150	150
Other Net Area Total			2,820
Net to Gross Factor			1.50
<b>Other Total Gross Square Footage</b>			<b>4,230</b>

<b>Total Areas</b>	
Crisis Stabilization/Drop-off Center	3,600
Crisis Care Program (CCP)	8,955
Addictions Treatment Program (ATP)	14,108
Williams Consent Decree	4,350
Support/Shared Spaces	5,205
Other Support Programming	4,230
<b>Total Gross Square Footage</b>	<b>40,447</b>
Building Grossing Factor	1.10
<b>Total Building Square Footage</b>	<b>44,492</b>





### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds).

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Crisis Stabilization/Drop-off Center</b>						
<u>Drop-off/Intake:</u>						
Crisis Stabilization Living Room	1	1,500	1,500			
Pantry	1	100	100			
Intake Vestibule	1	60	60			
Sally Port	1	400	400			
Intake Desk/Reception	1	80	80			
Interview/Screening Room	1	100	100			
Security Office	1	120	120			
Waiting Area	1	40	40			
Crisis Stabilization Net Area Total			2,400			
Net to Gross Factor			1.50			
<b>Crisis Stabilization Total Gross Square Footage</b>			<b>3,600</b>			<b>0</b>

**CRISIS DROP-OFF  
LOCATED AT OFF-SITE  
LOCATION**



### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds.

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Crisis Care Program (CCP)</b>						
<u>Administration:</u>						
Program Coordinator Office				1	180	180
Admin Staff Office				1	120	120
Psych Office				2	120	240
Respite Office/ 24-HR Hotline (Shared)				1	180	180
Crisis Office/ 24-HR Hotline (Shared)				1	180	180
Interview Room				2	120	240
Conference Room				2	225	450
Mail Room				1	140	140
CCP File Storage				1	200	200
Storage				1	100	100
			<b>CRISIS CARE PROGRAM LOCATED AT 3002 GRAND AVENUE</b>			
<u>CCP Group:</u>						
Group Room				1	1,200	1,200
TV Lounge				1	400	400
<u>Living Spaces:</u>						
Respite Bedroom				16	90	1,440
Toilet Room w/ Shower				6	100	600
Laundry				2	150	300
CCP Areas Net Area Total						5,970
Net to Gross Factor						1.50
<b>CCP Total Gross Square Footage</b>			<b>0</b>			<b>8,955</b>



### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds).

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Addictions Treatment Program (ATP)</b>						
<u>Administration:</u>						
Reception				1	80	80
Program Coordinator Office				1	180	180
Utilization Manager Office				1	120	120
Senior Program Assistant Office				1	120	120
Assistant Clinical Coordinator Office				1	120	120
Nursing Coordinator Office				2	120	240
Staff Office				1	120	120
BAS Aide Office				2	200	400
ATP Counselor Office				2	100	200
Counselor Office				2	120	240
Intern/Flex Office				2	120	240
Conference Room				2	225	450
<u>ATP Group:</u>						
Rehab Day Room				2	275	550
Rehab Quiet Area/TV Room				2	350	700
Detox Quiet Area/TV Room				1	350	350
Detox Day Room/Meeting Room				1	275	275
<u>Living Spaces:</u>						
Shared Rehab Bedroom				16	150	2,400
Detox Bedroom w/ Toilet room				2	180	360
Detox Bedroom				4	150	600
Toilet Room w/ Shower				8	100	800
Toilet Room				2	225	450
Laundry				3	150	450
ATP Net Area Total						9,445
Net to Gross Factor						1.50
<b>ATP Total Gross Square Footage</b>			<b>0</b>			<b>14,168</b>

**ADDICTIONS TREATMENT  
PROGRAM LOCATED AT  
3002 GRAND AVENUE**



### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds.

	New Crisis Center (23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>William Consent Decree (Peer Support)</b>						
<u>Administration:</u> ACT Reception Williams ACT MSN Office Office ACT Team Leader Office Williams Quality Admin Office Center Coordinator's Office Kitchen/Prep Medication Room IT Storage Storage Staff Toilet Maintenance  <u>WC Group:</u> Group Room Drop in Center Computer Toilet Room	<b>WILLIAMS CONSENT DECREE PROGRAM LOCATED AT 3002 GRAND AVENUE</b>			<b>EXISTING PROGRAM SPACES TO REMAIN AT 3002 GRAND AVENUE</b>		
Peer Support Net Area Total						
Net to Gross Factor						
<b>Peer Support Total Gross Square Footage</b>			<b>0</b>			<b>4,350</b>



### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds.

	<b>New Crisis Center (23-hour Crisis Triage &amp; Stabilization)</b>			<b>Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)</b>		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Shared Spaces</b>						
<u>Administration:</u>						
Staff Break Room	1	200	200	1	400	400
Staff Toilet Room	2	80	160	2	150	300
Insurance Enrollment Office	1	120	120	1	120	120
<u>Medical:</u>						
Nurses' Station	1	250	250	1	800	800
Intake Nursing Assessment	2	120	240	2	120	240
Exam Room	1	140	140	2	140	280
Medication Room	1	100	100	1	100	100
Blood Draw/ Lab	-	100	-	1	100	100
Storage	1	50	50	1	100	100
Nurses' Toilet Room	1	80	80	2	80	160
<u>Food Service:</u>						
Kitchen	-	280	-	1	280	280
Dining Room	-	1,200	-	1	1,200	1,200
Shared Net Area Total			1,340			4,080
Net to Gross Factor			1.50			1.50
<b>Shared Spaces Gross Square Footage</b>			<b>2,010</b>			<b>6,120</b>





### SCENARIO 3

#### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (8 Respite beds, 16 Rehab Beds and 6 Detox Beds).

	<b>New Crisis Center (23-hour Crisis Triage &amp; Stabilization)</b>			<b>Expansion/ Renovation of Lake County Resources ** (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds)</b>		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Other Support Programming</b>						
Mobile Response Crisis Office (3 person)	1	200	200	-	200	-
Peer-to-Peer Support Center	1	250	250	-	250	-
Transportation Services Office	1	120	120	1	120	120
Food Pantry	1	200	200	-	200	-
Clothes Pantry	1	200	200	-	200	-
Classroom/Training Center	-	1,200	-	1	1,200	1,200
Child Care Area	1	300	300	-	300	-
Computer Lab/Resource Library	-	400	-	1	400	400
A Way Out Office	-	150	-	1	150	150
Other Net Area Total			1,270			1,870
Net to Gross Factor			1.50			1.50
<b>Other Total Gross Square Footage</b>			<b>1,905</b>			<b>2,805</b>

<b>Total Areas</b>		
Crisis Stabilization/Drop-off Center	3,600	-
Crisis Care Program (CCP)	-	8,955
Addictions Treatment Program (ATP)	-	14,168
Williams Consent Decree	-	4,350
Support/Shared Spaces	2,010	6,120
Other Support Programming	1,905	2,805
Total Gross Square Footage	7,515	36,398
Building Grossing Factor	1.10	1.15
<b>Total Building Square Footage</b>	<b>8,267</b>	<b>41,857</b>



## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	<b>New Crisis Center</b> (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			<b>Expansion/ Renovation of Lake County Resources **</b> (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Crisis Stabilization/Drop-off Center</b>						
<u>Drop-off/Intake:</u>						
Crisis Stabilization Living Room	1	1,500	1,500			
Pantry	1	100	100			
Intake Vestibule	1	60	60			
Sally Port	1	400	400			
Intake Desk/Reception	1	80	80			
Interview/Screening Room	1	100	100			
Security Office	1	120	120			
Waiting Area	1	40	40			
Crisis Stabilization Net Area Total			2,400			
Net to Gross Factor			1.50			
<b>Crisis Stabilization Total Gross Square Footage</b>			<b>3,600</b>			<b>0</b>

**CRISIS DROP-OFF  
LOCATED AT OFF-SITE  
LOCATION**



## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

**Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).	New Crisis Center (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
Crisis Care Program (CCP)						
Administration:				CRISIS CARE PROGRAM LOCARED WITH NEW CRISIS CENTER AT OFF-SITE LOCATION		
Program Coordinator Office	1	180	180			
Admin Staff Office	1	120	120			
Psych Office	2	120	240			
Respite Office/ 24-HR Hotline (Shared)	1	180	180			
Crisis Office/ 24-HR Hotline (Shared)	1	180	180			
Interview Room	2	120	240			
Conference Room	2	225	450			
Mail Room	1	140	140			
CCP File Storage	1	200	200			
Storage	1	100	100			
CCP Group:						
Group Room	1	1,200	1,200			
TV Lounge	1	400	400			
Living Spaces:						
Respite Bedroom	16	90	1,440			
Toilet Room w/ Shower	6	100	600			
Laundry	2	150	300			
CCP Areas Net Area Total	5,970					
Net to Gross Factor	1.50					
CCP Total Gross Square Footage	8,955			0		



## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	New Crisis Center (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Addictions Treatment Program (ATP)</b>						
<u>Administration:</u>						
Reception				1	80	80
Program Coordinator Office				1	180	180
Utilization Manager Office				1	120	120
Senior Program Assistant Office				1	120	120
Assistant Clinical Coordinator Office				1	120	120
Nursing Coordinator Office				2	120	240
Staff Office				1	120	120
BAS Aide Office				2	200	400
ATP Counselor Office				2	100	200
Counselor Office				1	120	120
Intern/Flex Office				1	120	120
Conference Room				2	225	450
<u>ATP Group:</u>						
Rehab Day Room				2	250	500
Rehab Quiet Area/TV Room				2	350	700
Detox Quiet Area/TV Room				1	350	350
Detox Day Room/Meeting Room				1	250	250
<u>Living Spaces:</u>						
Shared Rehab Bedroom				16	150	2,400
Detox Bedroom w/ Toilet room				2	180	360
Detox Bedroom				4	150	600
Toilet Room w/ Shower				8	100	800
Toilet Room				2	225	450
Laundry				2	150	300
ATP Net Area Total						8,980
Net to Gross Factor						1.40
<b>ATP Total Gross Square Footage</b>			<b>0</b>			<b>12,572</b>



## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	New Crisis Center (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			Expansion/ Renovation of Lake County Resources ** (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>William Consent Decree (Peer Support)</b>						
<u>Administration:</u> ACT Reception Williams ACT MSN Office Office ACT Team Leader Office Williams Quality Admin Office Center Coordinator's Office Kitchen/Prep Medication Room IT Storage Storage Staff Toilet Maintenance  <u>WC Group:</u> Group Room Drop in Center Computer Toilet Room	<b>WILLIAMS CONSENT DECREE PROGRAM LOCATED AT 3002 GRAND AVENUE</b>			<b>EXISTING PROGRAM SPACES TO REMAIN AT 3002 GRAND AVENUE</b>		
Peer Support Net Area Total						
Net to Gross Factor						
<b>Peer Support Total Gross Square Footage</b>			<b>0</b>			<b>4,350</b>





## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	<b>New Crisis Center</b> (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			<b>Expansion/ Renovation of Lake County Resources **</b> (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Shared Spaces</b>						
<u>Administration:</u>						
Staff Break Room	1	200	200	1	350	350
Staff Toilet Room	2	80	160	2	80	160
Insurance Enrollment Office	1	120	120	1	100	100
<u>Medical:</u>						
Nurses' Station	1	250	250	1	600	600
Intake Nursing Assessment	2	120	240	2	100	200
Exam Room	1	140	140	2	140	280
Medication Room	1	100	100	1	100	100
Blood Draw/ Lab	1	100	100	1	85	85
Storage	1	50	50	1	100	100
Nurses' Toilet Room	1	80	80	2	80	160
<u>Food Service:</u>						
Kitchen	1	200	200	1	280	280
Dining Room	1	600	600	1	1,200	1,200
Shared Net Area Total			2,240			3,615
Net to Gross Factor			1.50			1.40
<b>Shared Spaces Gross Square Footage</b>			<b>3,360</b>			<b>5,061</b>



## SCENARIO 4

### Conceptual Space Program:

\*\*Program includes existing bed count currently at 3002 Grand Avenue (16 Rehab Beds and 6 Detox Beds).

	<b>New Crisis Center</b> (16 Respite Beds and 23-hour Crisis Triage & Stabilization)			<b>Expansion/ Renovation of Lake County Resources **</b> (32 Rehab Beds and 6 Detox Beds)		
	Qty	Size	Total SF	Qty	Size	Total SF
<b>Other Support Programming</b>						
Mobile Response Crisis Office (3 person)	1	200	200	-	200	-
Peer-to-Peer Support Center	1	250	250	-	250	-
Transportation Services Office	1	120	120	-	120	-
Food Pantry	1	200	200	-	200	-
Clothes Pantry	1	200	200	-	200	-
Classroom/Training Center	1	1,200	1,200	-	1,200	-
Child Care Area	1	300	300	-	300	-
Computer Lab/Resource Library	1	200	200	-	400	-
A Way Out Office	-	150	-	-	150	-
Other Net Area Total			2,670			-
Net to Gross Factor			1.50			1.40
<b>Other Total Gross Square Footage</b>			<b>4,005</b>			-

<b>Total Areas</b>		
Crisis Stabilization/Drop-off Center	3,600	-
Crisis Care Program (CCP)	8,955	-
Addictions Treatment Program (ATP)	-	12,572
Williams Consent Decree	-	4,350
Support/Shared Spaces	3,360	5,061
Other Support Programming	4,005	-
Total Gross Square Footage	19,920	21,983
Building Grossing Factor	1.10	1.10
<b>Total Building Square Footage</b>	<b>21,912</b>	<b>24,181</b>



## SCENARIO 5

### Conceptual Space Program:

<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)			
	Qty	Size	Total SF
<b>Crisis Stabilization/Drop-off Center</b>			
<u>Drop-off/Intake:</u>			
Crisis Stabilization Living Room	1	1,500	1,500
Pantry	1	100	100
Intake Vestibule	1	60	60
Sally Port	1	400	400
Intake Desk/Reception	1	80	80
Interview/Screening Room	1	100	100
Security Office	1	120	120
Waiting Area	1	40	40
Crisis Stabilization Net Area Total			2,400
Net to Gross Factor			1.50
<b>Crisis Stabilization Total Gross Square Footage</b>			<b>3,600</b>



## SCENARIO 5

### Conceptual Space Program:

	<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)		
	Qty	Size	Total SF
<b>Crisis Care Program (CCP)</b>			
<u>Administration:</u>			
Program Coordinator Office	1	180	180
Admin Staff Office	1	120	120
Psych Office	2	120	240
Respite Office/ 24hr Hotline (Shared)	1	180	180
Crisis Office/ 24hr Hotline (Shared)	1	180	180
Interview Room	2	120	240
Conference Room	2	225	450
Mail Room	1	140	140
CCP File Storage	1	200	200
Storage	1	100	100
<u>CCP Group:</u>			
Group Room	1	1,200	1,200
TV Lounge	1	400	400
<u>Living Spaces:</u>			
Respite Bedroom	16	90	1,440
Toilet Room w/ Shower	6	100	600
Laundry	2	150	300
CCP Areas Net Area Total			5,970
Net to Gross Factor			1.50
<b>CCP Total Gross Square Footage</b>			<b>8,955</b>



## SCENARIO 5

### Conceptual Space Program:

	<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)		
	Qty	Size	Total SF
<b>Addictions Treatment Program (ATP)</b>			
<u>Administration:</u>			
Reception	1	80	80
Program Coordinator Office	1	180	180
Utilization Manager Office	1	120	120
Senior Program Assistant Office	1	120	120
Assistant Clinical Coordinator Office	1	120	120
Nursing Coordinator Office	2	120	240
Staff Office	1	120	120
BAS Aide Office	2	200	400
ATP Counselor Office	2	100	200
Counselor Office	2	100	200
Intern/Flex Office	2	120	240
Conference Room	2	225	450
<u>ATP Group:</u>			
Rehab Day Room	2	275	550
Rehab Quiet Area/TV Room	2	350	700
Detox Quiet Area/TV Room	1	350	350
Detox Day Room/Meeting Room	1	275	275
<u>Living Spaces:</u>			
Shared Rehab Bedroom	16	150	2,400
Detox Bedroom w/ Toilet room	2	180	360
Detox Bedroom	4	150	600
Toilet Room w/ Shower	8	100	800
Toilet Room	2	225	450
Laundry	3	150	450
ATP Net Area Total			9,405
Net to Gross Factor			1.50
<b>ATP Total Gross Square Footage</b>			<b>14,108</b>





## SCENARIO 5

### Conceptual Space Program:

<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)	
	<div>Qty</div> <div>Size</div> <div>Total SF</div>
<b>William Consent Decree (Peer Support)</b>	
<u>Administration:</u> ACT Reception Williams ACT MSN Office Office ACT Team Leader Office Williams Quality Admin Office Center Coordinator's Office Kitchen/Prep Medication Room IT Storage Storage Staff Toilet Maintenance  <u>WC Group:</u> Group Room Drop in Center Computer Toilet Room	<b>EXISTING PROGRAM SPACES TO REMAIN AT 3002 GRAND AVENUE</b>
Peer Support Net Area Total	
Net to Gross Factor	
<b>Peer Support Total Gross Square Footage</b>	<b>0</b>



## SCENARIO 5

### Conceptual Space Program:

<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)			
	Qty	Size	Total SF
<b>Shared Spaces</b>			
<u>Administration:</u>			
Staff Break Room	1	200	200
Staff Toilet Room	2	80	160
Insurance Enrollment Office	1	120	120
<u>Medical:</u>			
Nurses' Station	1	800	800
Intake Nursing Assessment	2	120	240
Exam Room	1	140	140
Medication Room	1	100	100
Blood Draw/ Lab	1	100	100
Storage	1	50	50
Nurses' Toilet Room	1	80	80
<u>Food Service:</u>			
Kitchen	1	280	280
Dining Room	1	1,200	1,200
Shared Net Area Total			3,470
Net to Gross Factor			1.50
<b>Shared Spaces Gross Square Footage</b>			<b>5,205</b>



## SCENARIO 5

### Conceptual Space Program:

<b>New Crisis Center</b> (16 Respite Beds, 32 Rehab Beds, 6 Detox Beds, 23-hour Crisis Triage & Stabilization)			
	Qty	Size	Total SF
<b>Other Support Programming</b>			
Mobile Response Crisis Office (3 person)	1	200	200
Peer-to-Peer Support Center	1	250	250
Transportation Services Office	1	120	120
Food Pantry	1	200	200
Clothes Pantry	1	200	200
Classroom/Training Center	1	1,200	1,200
Child Care Area	1	300	300
Computer Lab/Resource Library	1	200	200
A Way Out Office	1	150	150
Other Net Area Total			2,820
Net to Gross Factor			1.50
<b>Other Total Gross Square Footage</b>			<b>4,230</b>

<b>Total Areas</b>	
Crisis Stabilization/Drop-off Center	3,600
Crisis Care Program (CCP)	8,955
Addictions Treatment Program (ATP)	14,108
Williams Consent Decree	-
Support/Shared Spaces	5,205
Other Support Programming	4,230
Total Gross Square Footage	36,098
Building Grossing Factor	1.10
<b>Total Building Square Footage</b>	<b>39,707</b>



**APPENDIX B: Conceptual Scenario Cost Estimates**



## SCENARIO 1

### Conceptual cost estimate:

#### NEW CRISIS CENTER

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - New	8,267	SF	\$350	\$2,893,450	
Site Work - General				incl	
Site Work - Utilities & Storm Water				NA	To be determined
Construction Cost Sub-total				\$2,893,450	
Subcontractor Bonds (1%)				\$28,935	
Design and Estimating Contingency (5%)				\$146,119	
Construction Contingency (5%)				\$153,425	
Builders Risk (0.25%)				\$8,055	
General Liability Insurance (1%)				\$32,300	
Performance & Payment Bonds (1%)				\$32,623	
Contractor Fee (3%)				\$98,847	
Escalation (4.5% for 1 year)				\$130,205	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$3,523,959</b>	
Total Construction Cost per SF (8,267 SF)				\$426.27	
<b>SOFT COSTS</b>					
AE Fees (approx. 6.0% of estimated construction cost)				\$211,438	
Reimbursable Expenses				\$15,858	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$10,000	
Environmental Phase 1 / Wetland Delineation				\$10,000	
Plan Review / Permitting				\$52,859	
Municipal Fees				\$20,000	
Construction Testing / Special Inspections				\$20,000	
Commissioning				\$15,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$367,655</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$281,917	Budget 8% of estimated construction cost
Furniture Design Fees				\$16,915	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$298,832</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$352,396	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$352,396</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$4,542,841</b>	
Project Cost per SF (8,267 SF)				\$549.52	
<b>Other Costs</b>					
Land Acquisition				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	





## SCENARIO 2

### Conceptual cost estimate:

#### ADDITION / RENOVATION AT 3002 GRAND AVENUE

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - Addition	20,492	SF	\$300	\$6,147,600	
Construction - Renovation	12,000	SF	\$125	\$1,500,000	Assume 50% of existing area to be renovated
Site Work - General				incl	
Construction Cost Sub-total				\$7,647,600	
Subcontractor Bonds (1%)				\$76,476	
Design and Estimating Contingency (5%)				\$386,204	
Construction Contingency (5%)				\$405,514	
Builders Risk (0.25%)				\$21,289	
General Liability Insurance (1%)				\$85,371	
Performance & Payment Bonds (1%)				\$86,225	
Contractor Fee (3%)				\$261,260	
Escalation (4.5% for 1 year)				\$344,142	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$9,314,081</b>	
Total Construction Cost per SF (32,492 SF)				\$286.66	
<b>SOFT COSTS</b>					
AE Fees (approx. 7.5% of estimated construction cost)				\$698,556	
Reimbursable Expenses				\$41,913	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$5,000	
Environmental Phase 1 / Wetland Delineation				\$0	
Plan Review / Permitting				\$139,711	
Municipal Fees				\$0	
Construction Testing / Special Inspections				\$20,000	
Commissioning				\$25,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$942,681</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$745,126	Budget 8% of estimated construction cost
Furniture Design Fees				\$44,708	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$789,834</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$931,408	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$931,408</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$11,978,004</b>	
Project Cost per SF (32,492 SF)				\$368.64	
<b>Other Costs</b>					
Temporary Relocations				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	



## SCENARIO 3

### Conceptual cost estimate:

#### NEW CRISIS CENTER

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - New	8,267	SF	\$350	\$2,893,450	
Site Work - General				incl	
Site Work - Utilities & Storm Water				NA	To be determined
Construction Cost Sub-total				\$2,893,450	
Subcontractor Bonds (1%)				\$28,935	
Design and Estimating Contingency (5%)				\$146,119	
Construction Contingency (5%)				\$153,425	
Builders Risk (0.25%)				\$8,055	
General Liability Insurance (1%)				\$32,300	
Performance & Payment Bonds (1%)				\$32,623	
Contractor Fee (3%)				\$98,847	
Escalation (4.5% for 1 year)				\$130,205	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$3,523,959</b>	
Total Construction Cost per SF (8,267 SF)				\$426.27	
<b>SOFT COSTS</b>					
AE Fees (approx. 6.0% of estimated construction cost)				\$211,438	
Reimbursable Expenses				\$15,858	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$10,000	
Environmental Phase 1 / Wetland Delineation				\$10,000	
Plan Review / Permitting				\$52,859	
Municipal Fees				\$20,000	
Construction Testing / Special Inspections				\$20,000	
Commissioning				\$15,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$367,655</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$281,917	Budget 8% of estimated construction cost
Furniture Design Fees				\$16,915	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$298,832</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$352,396	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$352,396</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$4,542,841</b>	
Project Cost per SF (8,267 SF)				\$549.52	
<b>Other Costs</b>					
Land Acquisition				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	



## SCENARIO 3

### Conceptual cost estimate:

#### ADDITION / RENOVATION AT 3002 GRAND AVENUE

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - Addition	17,857	SF	\$300	\$5,357,100	
Construction - Renovation	9,600	SF	\$125	\$1,200,000	Assume 40% of existing area to be renovated
Site Work - General				incl	
Construction Cost Sub-total				\$6,557,100	
Subcontractor Bonds (1%)				\$65,571	
Design and Estimating Contingency (5%)				\$331,134	
Construction Contingency (5%)				\$347,690	
Builders Risk (0.25%)				\$18,254	
General Liability Insurance (1%)				\$73,197	
Performance & Payment Bonds (1%)				\$73,929	
Contractor Fee (3%)				\$224,006	
Escalation (4.5% for 1 year)				\$295,070	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$7,985,951</b>	
Total Construction Cost per SF (27,457 SF)				\$290.85	
<b>SOFT COSTS</b>					
AE Fees (approx. 7.5% of estimated construction cost)				\$598,946	
Reimbursable Expenses				\$35,937	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$5,000	
Environmental Phase 1 / Wetland Delineation				\$0	
Plan Review / Permitting				\$119,789	
Municipal Fees				\$0	
Construction Testing / Special Inspections				\$20,000	
Commissioning				\$25,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$817,172</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$638,876	Budget 8% of estimated construction cost
Furniture Design Fees				\$38,333	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$677,209</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$798,595	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$798,595</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$10,278,927</b>	
Project Cost per SF (27,457 SF)				\$374.36	
<b>Other Costs</b>					
Temporary Relocations				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	



## SCENARIO 4

### Conceptual cost estimate:

#### NEW CRISIS CENTER

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - New	21,912	SF	\$350	\$7,669,200	
Site Work - General				incl	
Site Work - Utilities & Storm Water	1	EA	\$50,000	NA	To be determined
Construction Cost Sub-total				\$7,669,200	
Subcontractor Bonds (1%)				\$76,692	
Design and Estimating Contingency (5%)				\$387,295	
Construction Contingency (5%)				\$406,659	
Builders Risk (0.25%)				\$21,350	
General Liability Insurance (1%)				\$85,612	
Performance & Payment Bonds (1%)				\$86,468	
Contractor Fee (3%)				\$261,998	
Escalation (4.5% for 1 year)				\$345,114	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$9,340,388</b>	
Total Construction Cost per SF (21,192 SF)				\$426.27	
<b>SOFT COSTS</b>					
AE Fees (approx. 6.0% of estimated construction cost)				\$560,423	
Reimbursable Expenses				\$42,032	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$10,000	
Environmental Phase 1 / Wetland Delineation				\$10,000	
Plan Review / Permitting				\$140,106	
Municipal Fees				\$20,000	
Construction Testing / Special Inspections				\$25,000	
Commissioning				\$30,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$850,061</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$747,231	Budget 8% of estimated construction cost
Furniture Design Fees				\$44,834	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$792,065</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$934,039	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$934,039</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$11,916,552</b>	
Project Cost per SF (21,912 SF)				\$543.84	
<b>Other Costs</b>					
Land Acquisition				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	



## SCENARIO 4

### Conceptual cost estimate:

#### RENOVATION AT 3002 GRAND AVENUE

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - Renovation	7,700	SF	\$125	\$962,500	Renovation of vacated
Construction - Renovation	6,800	SF	\$125	\$850,000	Assume renovation of 33% of remaining space
Site Work - General				incl	
Construction Cost Sub-total				\$1,812,500	
Subcontractor Bonds (1%)				\$18,125	
Design and Estimating Contingency (5%)				\$91,531	
Construction Contingency (5%)				\$96,108	
Builders Risk (0.25%)				\$5,046	
General Liability Insurance (1%)				\$20,233	
Performance & Payment Bonds (1%)				\$20,435	
Contractor Fee (3%)				\$61,919	
Escalation (4.5% for 1 year)				\$81,563	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$2,207,460</b>	
Total Construction Cost per SF (14,500 SF)				\$152.24	
<b>SOFT COSTS</b>					
AE Fees (approx. 7.5% of estimated construction cost)				\$165,560	
Reimbursable Expenses				\$9,934	
Soil Borings & Geotechnical Report				\$0	
Topographical Survey				\$0	
Environmental Phase 1 / Wetland Delineation				\$0	
Plan Review / Permitting				\$33,112	
Municipal Fees				\$0	
Construction Testing / Special Inspections				\$10,000	
Commissioning				\$25,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$246,105</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$264,895	Budget 12% of estimated construction cost
Furniture Design Fees				\$15,894	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$280,789</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$220,746	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$220,746</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$2,955,100</b>	
Project Cost per SF (14,500 SF)				\$203.80	
<b>Other Costs</b>					
Temporary Relocations				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	





## SCENARIO 5

### Conceptual cost estimate:

#### NEW CRISIS CENTER

CONSTRUCTION COSTS	Qty	Unit	Cost	Extension	Remarks
Construction - New	39,707	SF	\$350	\$13,897,450	
Site Work - General				incl	
Site Work - Utilities & Storm Water				NA	To be determined
Construction Cost Sub-total				\$13,897,450	
Subcontractor Bonds (1%)				\$138,975	
Design and Estimating Contingency (5%)				\$701,821	
Construction Contingency (5%)				\$736,912	
Builders Risk (0.25%)				\$38,688	
General Liability Insurance (1%)				\$155,138	
Performance & Payment Bonds (1%)				\$156,690	
Contractor Fee (3%)				\$474,770	
Escalation (4.5% for 1 year)				\$625,385	
<b>TOTAL CONSTRUCTION COST ESTIMATE</b>				<b>\$16,925,830</b>	
Total Construction Cost per SF (39,707 SF)				\$426.27	
<b>SOFT COSTS</b>					
AE Fees (approx. 6.0% of estimated construction cost)				\$1,015,550	
Reimbursable Expenses				\$76,166	
Soil Borings & Geotechnical Report				\$10,000	
Topographical Survey				\$10,000	
Environmental Phase 1 / Wetland Delineation				\$10,000	
Plan Review / Permitting				\$253,887	
Municipal Fees				\$20,000	
Construction Testing / Special Inspections				\$40,000	
Commissioning				\$50,000	
Bid Advertisement/Printing				\$2,500	
<b>TOTAL SOFT COSTS ESTIMATE</b>				<b>\$1,488,103</b>	
<b>FF &amp; E</b>					
Furniture, technology, audio-visual systems, etc.				\$1,354,066	Budget 8% of estimated construction cost
Furniture Design Fees				\$81,244	
<b>TOTAL FF &amp; E ESTIMATE</b>				<b>\$1,435,310</b>	
<b>OWNER'S CONTINGENCY</b>					
Construction Contingency				\$1,692,583	
<b>TOTAL OWNER'S CONTINGENCY</b>				<b>\$1,692,583</b>	Budget 10% of estimated construction cost
<b>ESTIMATED TOTAL PROJECT COST</b>				<b>\$21,541,826</b>	
Project Cost per SF (39,707 SF)				\$542.52	
<b>Other Costs</b>					
Land Acquisition				TBD	
Legal Fees				TBD	
Financing				TBD	
Moving				TBD	






**APPENDIX C: Geographical Analysis**



## POINTS OF INTEREST



-  COUNTY POINTS OF INTEREST
-  MEDICAL CENTERS
- 1. ADVOCATE CONDELL MEDICAL CENTER, LIBERTYVILLE
- 2. ADVOCATE GOOD SHEPHERD HOSPITAL, BARRINGTON
- 3. VISTA MEDICAL CENTER - EAST, WAUKEGAN
- 4. VISTA MEDICAL CENTER - LINDENHURST, LINDENHURST
- 5. NORTHWESTERN MEDICINE LAKE FOREST HOSPITAL, LAKE FOREST

-  A WAY OUT
- 1. GRAYSLAKE POLICE DEPARTMENT
- 2. LAKE COUNTY SHERIFF'S OFFICE HIGHWAY PATROL
- 3. LIBERTYVILLE POLICE DEPARTMENT
- 4. GURNEE POLICE DEPARTMENT
- 5. ROUND LAKE POLICE DEPARTMENT
- 6. MUNDELEIN POLICE DEPARTMENT
- 7. ROUND LAKE BEACH POLICE DEPARTMENT
- 8. WAUKEGAN POLICE DEPARTMENT
- 9. LAKE COUNTY SHERIFF'S OFFICE
- 10. LAKE FOREST POLICE DEPARTMENT
- 11. FOX LAKE POLICE DEPARTMENT
- 12. ZION POLICE DEPARTMENT
- 13. LAKE ZURICH POLICE DEPARTMENT
- 14. LAKE COUNTY SHERIFF'S OFFICE MARINE UNIT
- 15. DEERFIELD POLICE DEPARTMENT
- 16. ANTIOCH POLICE DEPARTMENT
- 17. WAUCONDA POLICE DEPARTMENT



## DRIVING PROXIMITY TO LAKE COUNTY ADULT CORRECTIONS FACILITY FROM HIGHEST MUNICIPALITY POPULATION CENTERS



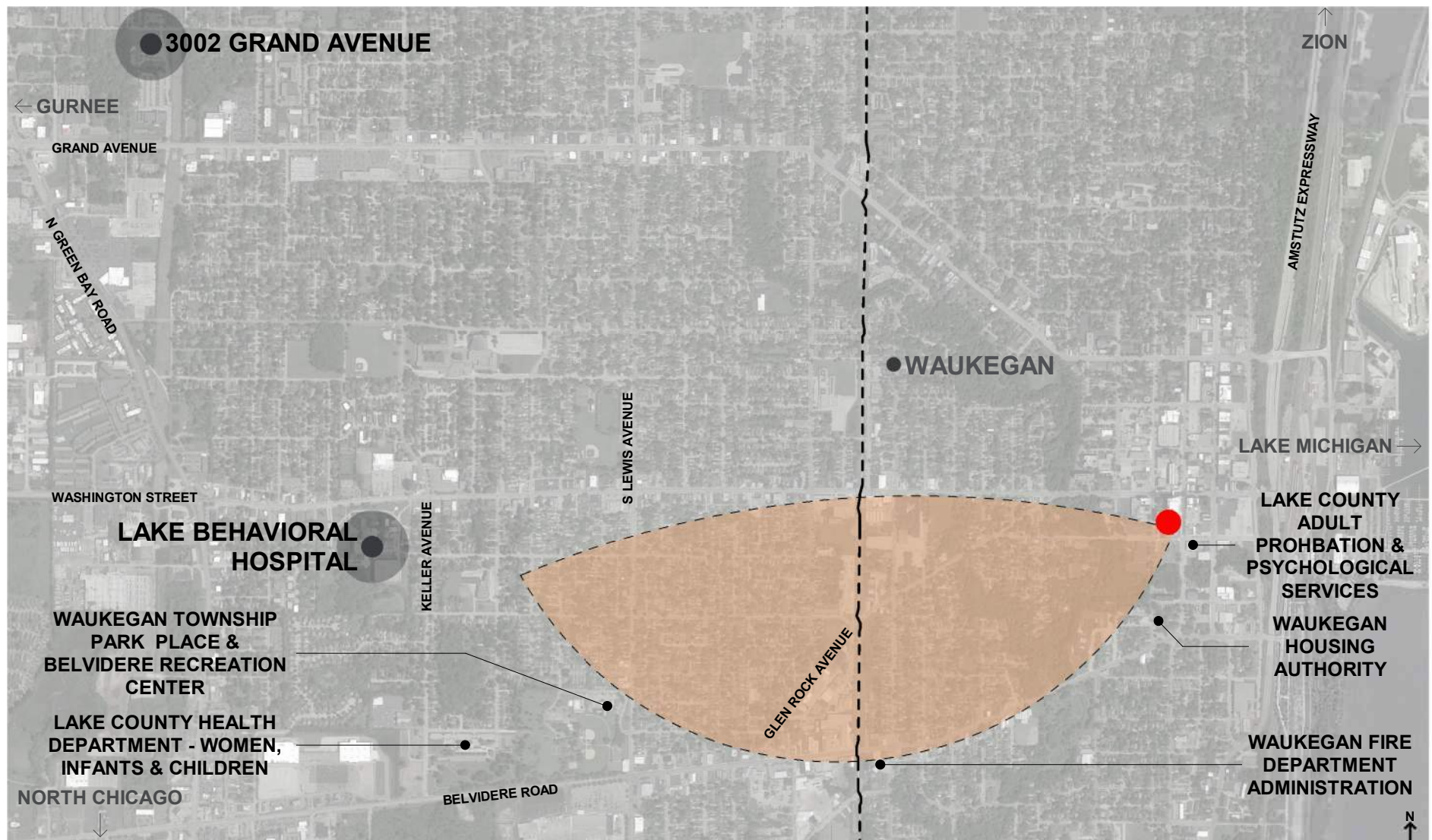
### POPULATION DENSITY





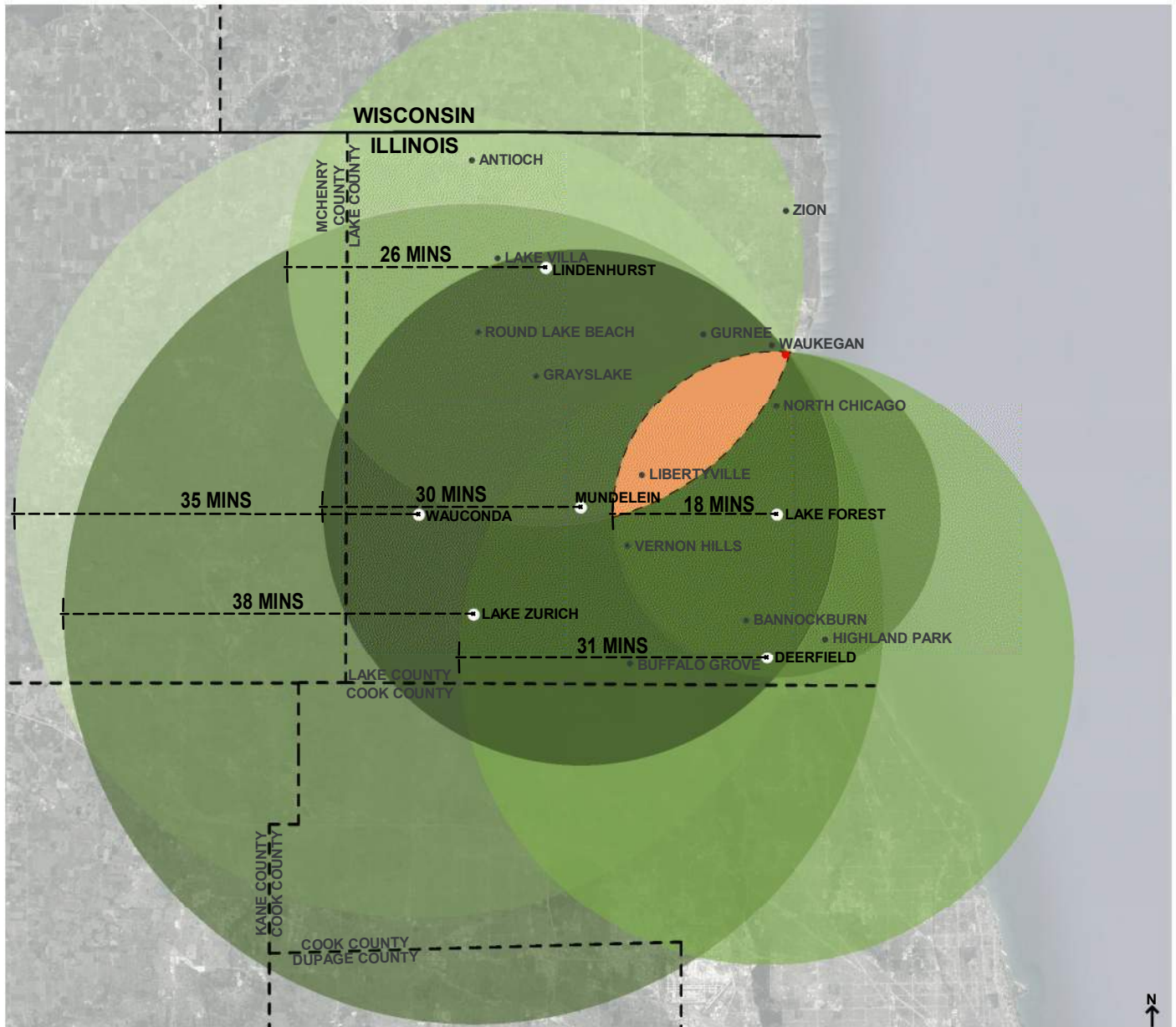


**OVERLAY ZONE: POINTS OF INTEREST NEAR OVERLAY ZONE FROM HIGHEST MUNICIPALITY POPULATION CENTERS**





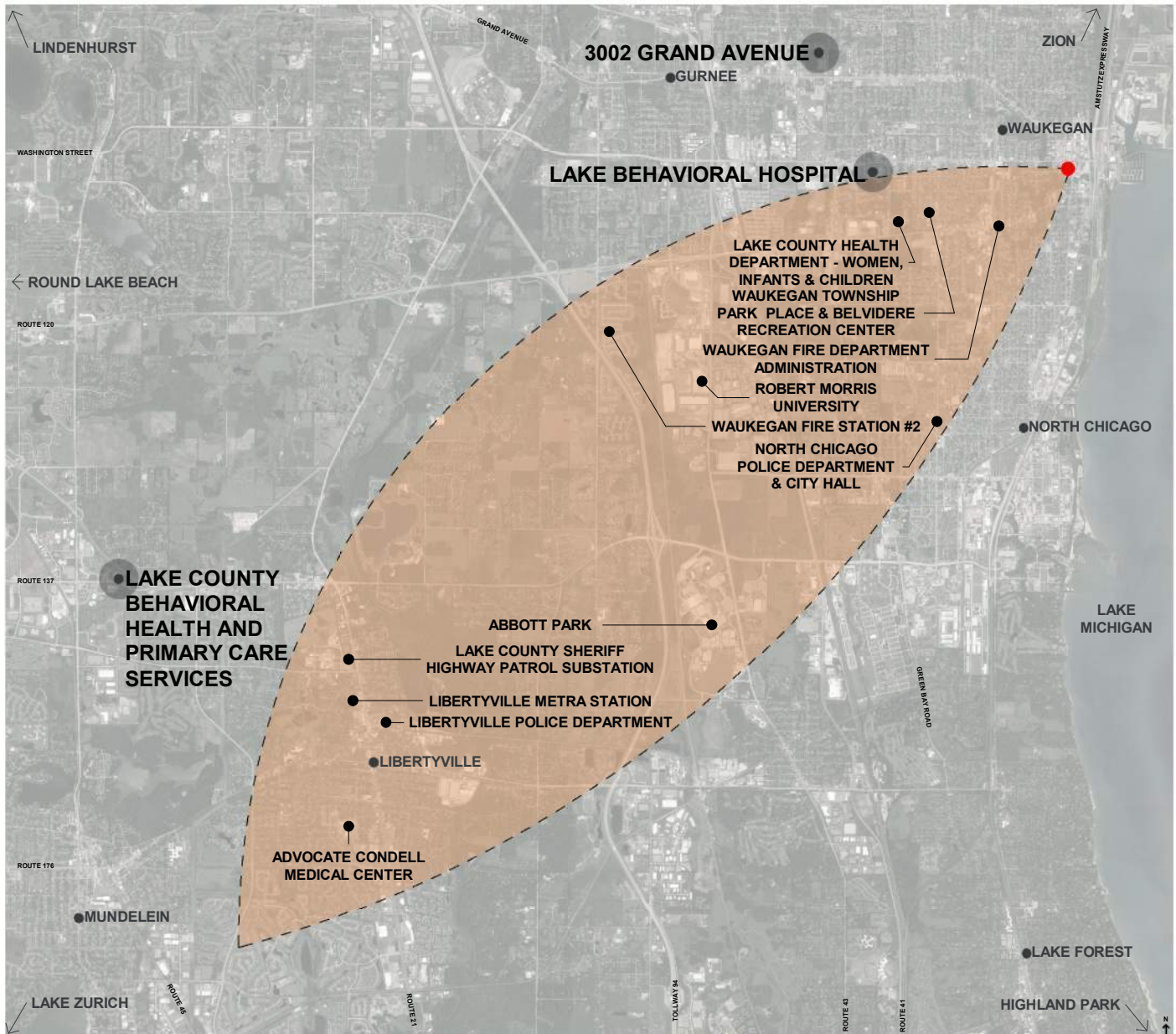
## DRIVING PROXIMITY TO LAKE COUNTY ADULT CORRECTIONS FACILITY FROM MUNICIPALITY CENTERS IDENTIFIED IN LAW ENFORCEMENT SURVEY DATA





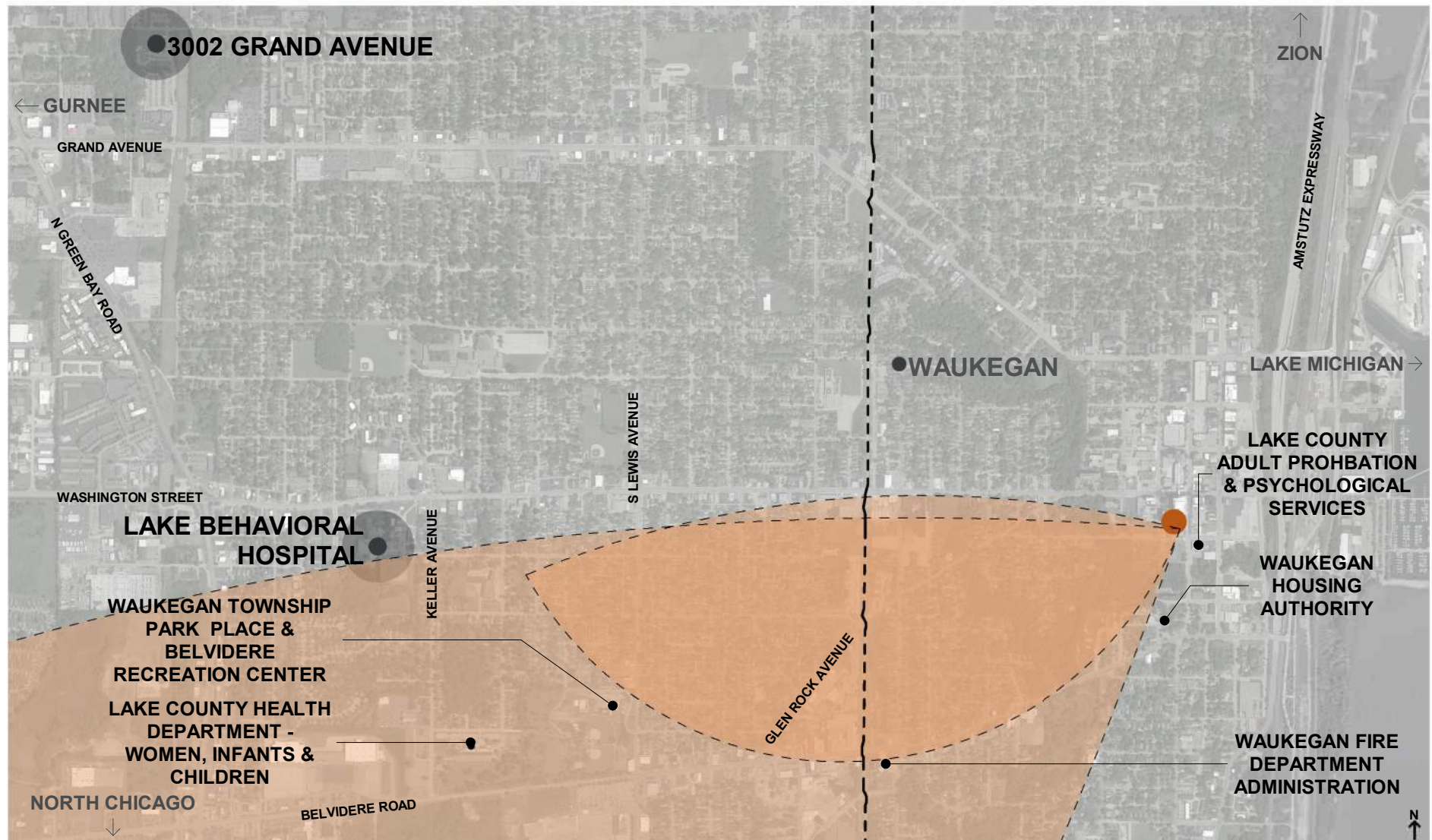


## OVERLAY ZONE: POINTS OF INTEREST NEAR OVERLAY ZONE FROM MUNICIPALITY CENTERS IDENTIFIED IN LAW ENFORCEMENT SURVEY DATA





## OVERLAY OF DATA SETS







## DRIVING PROXIMITY TO 3002 GRAND AVENUE FACILITY FROM HIGHEST MUNICIPALITY POPULATION CENTERS



### POPULATION DENSITY



HIGH

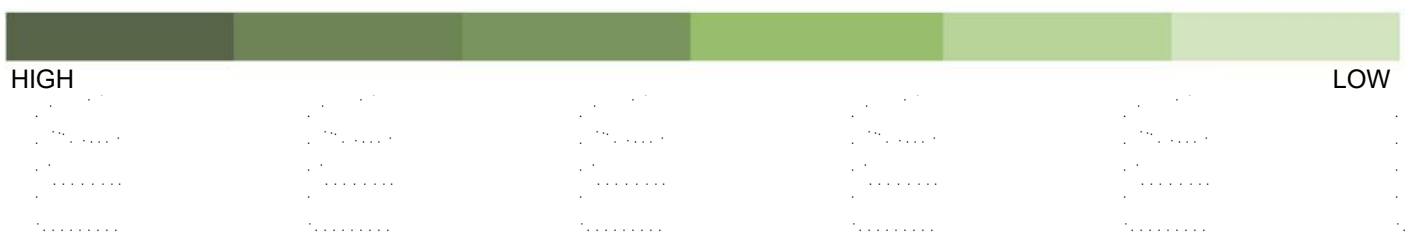
LOW



## DRIVING PROXIMITY TO LAKE COUNTY BEHAVIORAL HEALTH AND PRIMARY CARE FACILITY FROM HIGHEST MUNICIPALITY POPULATION CENTERS



### POPULATION DENSITY





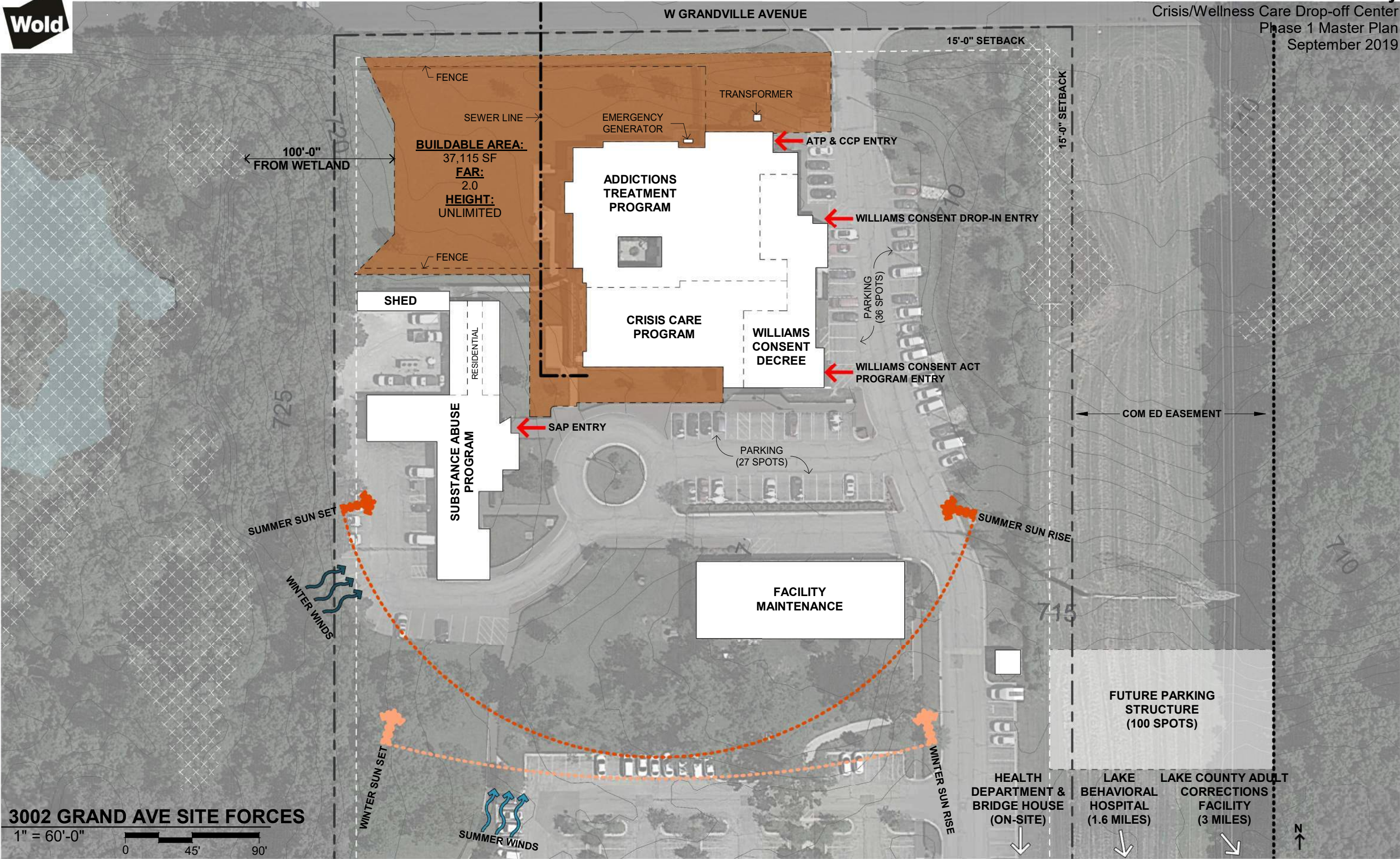
## DRIVING PROXIMITY TO LAKE BEHAVIORAL HOSPITAL FROM HIGHEST MUNICIPALITY POPULATION CENTERS



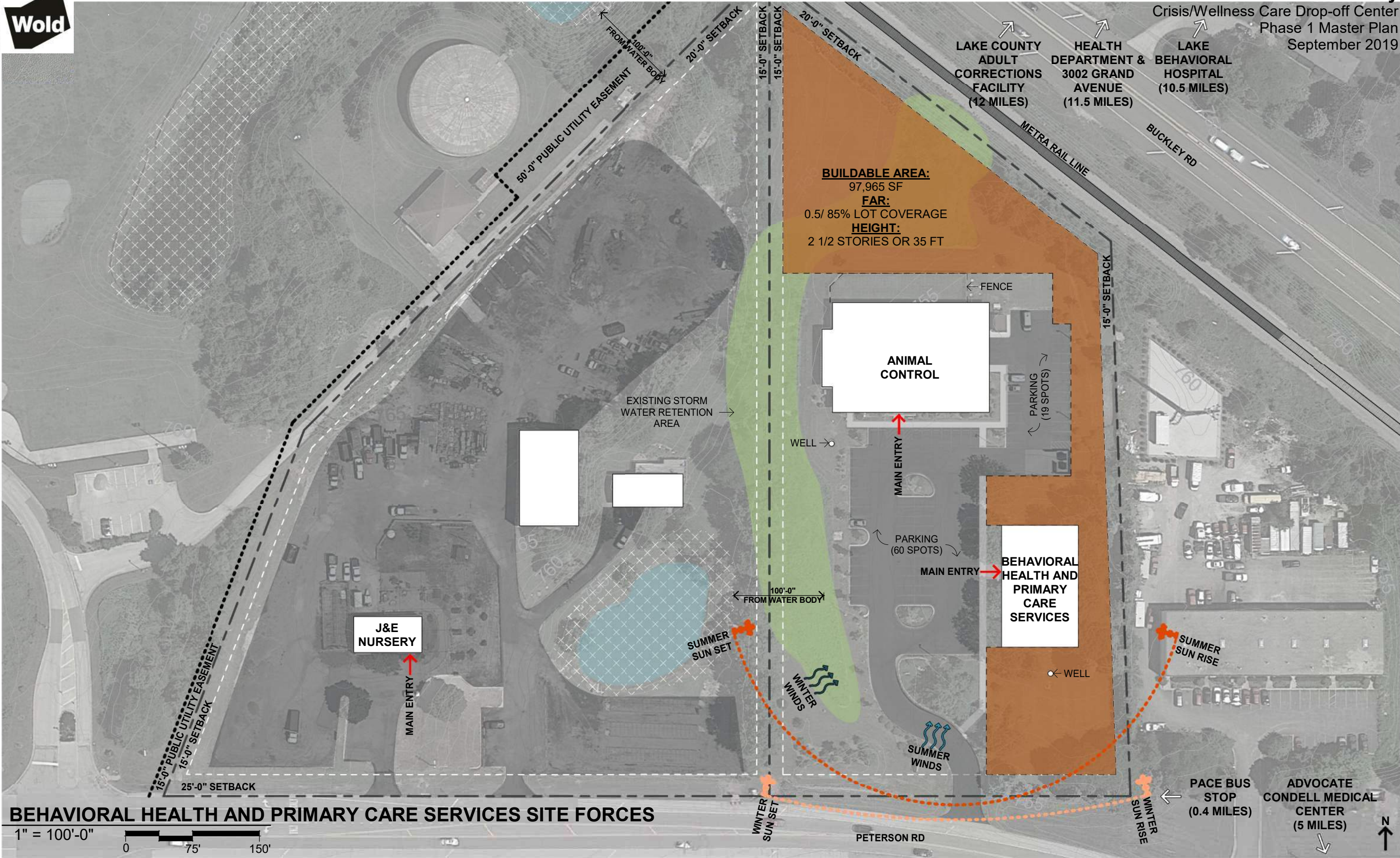
### POPULATION DENSITY











BEHAVIORAL HEALTH AND PRIMARY CARE SERVICES SITE FORCES

1" = 100'-0"  
0 75' 150'





**APPENDIX D: Pro forma**

DRAFT



**Crisis Triage Budget**

Account	Description	Total
<b>Revenue</b>		
	Patient Fees	\$0
<b>Total Revenue</b>		<b>\$0</b>
<b>Salaries</b>		
51110	Regular Salaries And Wages	\$1,376,257
51120	Permanent PT Salaries/Wages	\$81,562
51140	Overtime Salaries And Wages	\$55,949
51180	Special Pay	\$16,640
51200	Temporary PT Salaries/Wages	\$214,212
51240	Opt Out Premium	
<b>Total Salaries</b>		<b>\$1,744,620</b>
<b>Commodities</b>		
61010	Office Supplies	\$1,590
61020	Computer Supplies	\$0
61030	Books Manuals and Periodicals	\$400
61040	Operational Supplies	\$5,876
61060	Clothing and Uniform	\$0
61070	Craft & Recreational Supplies	\$270
61080	Food and Provisions	\$20,000
62010	Medical Supplies	\$3,920
62040	Drugs and Medicines	\$7,320
63030	Linen & Bedding	\$0
63040	Housekeeping	\$590
65180	Miscellaneous Commodities	\$0
<b>Total Commodities</b>		<b>\$39,966</b>



**Crisis Triage Budget**

<b>Account</b>	<b>Description</b>	<b>Total</b>
<b>Contractuals</b>		
71120	Interpreters	\$0
71150	Consultants	\$0
71220	Computer Services	\$970
71230	Software & Online Services	\$0
71310	Laboratory Fees	\$1,110
71330	Medical Fees	\$0
71450	Mileage Reimbursement	\$880
71500	Trips And Training	\$615
71610	Pest Control	\$0
71620	Laundry And Cleaning	\$3,250
71630	Garbage Disposal	\$0
71640	Bio Hazard Waste Disposal	\$0
71650	Security Services	\$0
71810	Dues And Subscriptions	\$0
71840	Publications & Legal Notices	\$0
71910	Gas For Heating	\$0
71920	Electricity	\$0
71930	Water And Sewer Charges	\$0
71940	Telephone	\$588
71950	Cellular Phones	\$763
71960	Data/Telecommunications	\$0
71970	Courier Services	\$0
72260	Office Equip Maintenance And Repairs	\$0
72280	Equipment Maintenance	\$0
72530	Equipment Rental	\$500
72540	Vehicle Leases	\$0
72560	All Other Rentals	\$0
72610	Transportation/Participants	\$0
72820	Postage	\$0
72830	Printing Services	\$610
72840	Temporary Employment Services	\$0
79940	Miscell Contractual Services	\$0
79950	All Other Miscellaneous	\$0
<b>Estimated Total Contractuals</b>		<b>\$9,286</b>





### Crisis Triage Budget

Account	Description	Total
<b>Fringe</b>		
74080	H/L/D Employee Benefits	\$264,849
74100	Retirement Benefits/FICA	\$133,463
74110	Retirement Benefits/IMRF	\$220,427
<b>Total Fringe</b>		<b>\$618,739</b>
<b>Capital</b>		
83010	Motor Vehicles	\$0
84020	Radios & Electronic Equipment	\$0
84030	Computer Equipment	\$0
84040	Computer System Software	\$0
84060	Furniture And Office Equipment	\$0
85070	All Other Capital Outlay	\$0
<b>Total Capital</b>		<b>\$0</b>
<b>Total Expense</b>		<b>\$2,412,611</b>
<b>Bottom Line</b>		<b>\$ (2,412,611)</b>

Assumptions:

1. Based on the 23-hr crisis triage model; people would move on to another level of care or return home within 23 hours.
2. Does not reflect any cost savings that might be recognized by co-locating with another program using shared staff.
3. Based on 6 police drop-offs per day; actual volume yet to be determined.
4. Salaries estimated at 10% of salary range.
5. No startup costs included (furniture, etc.).
6. Excludes cost estimates for utilities, security, transportation, building maintenance and operational costs.
7. No revenue projections are included because of unknowns re: billing model and volume, and short turnaround on pro forma request.



**Rehab Budget**

Account	Description	Total
<b>Revenue</b>		
	Patient Fees	\$760,000
<b>Total Revenue</b>		<b>\$760,000</b>
<b>Salaries</b>		
51110	Regular Salaries And Wages	\$878,604
51120	Permanent PT Salaries/Wages	\$28,785
51140	Overtime Salaries And Wages	\$7,402
51180	Special Pay	\$16,640
51200	Temporary PT Salaries/Wages	\$100,620
51240	Opt Out Premium	\$0
<b>Total Salaries</b>		<b>\$1,032,051</b>
<b>Commodities</b>		
61010	Office Supplies	\$1,590
61020	Computer Supplies	\$0
61030	Books Manuals and Periodicals	\$400
61040	Operational Supplies	\$5,876
61060	Clothing and Uniform	\$0
61070	Craft & Recreational Supplies	\$270
61080	Food and Provisions	\$80,410
62010	Medical Supplies	\$3,920
62040	Drugs and Medicines	\$7,320
63030	Linen & Bedding	\$750
63040	Housekeeping	\$590
65180	Miscellaneous Commodities	\$0
<b>Total Commodities</b>		<b>\$101,126</b>



**Rehab Budget**

Account	Description	Total
<b>Contractuals</b>		
71120	Interpreters	\$0
71150	Consultants	\$0
71220	Computer Services	\$970
71230	Software & Online Services	\$0
71310	Laboratory Fees	\$1,110
71330	Medical Fees	\$0
71450	Mileage Reimbursement	\$880
71500	Trips And Training	\$615
71610	Pest Control	\$0
71620	Laundry And Cleaning	\$3,250
71630	Garbage Disposal	\$0
71640	Bio Hazard Waste Disposal	\$0
71650	Security Services	\$0
71810	Dues And Subscriptions	\$0
71840	Publications & Legal Notices	\$0
71910	Gas For Heating	\$0
71920	Electricity	\$0
71930	Water And Sewer Charges	\$0
71940	Telephone	\$588
71950	Cellular Phones	\$763
71960	Data/Telecommunications	\$0
71970	Courier Services	\$0
72260	Office Equip Maintenance And Repairs	\$0
72280	Equipment Maintenance	\$180
72530	Equipment Rental	\$500
72540	Vehicle Leases	\$0
72560	All Other Rentals	\$0
72610	Transportation/Participants	\$0
72820	Postage	\$20
72830	Printing Services	\$610
72840	Temporary Employment Services	\$0
79940	Miscell Contractual Services	\$0
79950	All Other Miscellaneous	\$0
<b>Total Contractuals</b>		<b>\$9,486</b>



## Rehab Budget

Account	Description	Total
<b>Fringe</b>		
74080	H/L/D Employee Benefits	\$160,609
74100	Retirement Benefits/FICA	\$78,952
74110	Retirement Benefits/IMRF	\$142,558
<b>Total Fringe</b>		<b>\$382,119</b>
<b>Capital</b>		
83010	Motor Vehicles	\$0
84020	Radios & Electronic Equipment	\$0
84030	Computer Equipment	\$0
84040	Computer System Software	\$0
84060	Furniture And Office Equipment	\$0
85070	All Other Capital Outlay	\$0
<b>Total Capital</b>		<b>\$0</b>
<b>Total Expense</b>		<b>\$1,524,782</b>
<b>Bottom Line</b>		<b>\$ (764,782)</b>

### Assumptions:

1. Assumes 16 beds.
2. Does not reflect any cost savings that might be recognized by co-locating with another program using shared staff.
3. Salaries estimated at 10% of salary range.
4. No startup costs included (furniture, etc.).
5. Excludes cost estimates for utilities, security, transportation, building maintenance and operational costs.
6. Revenue projections based on similar existing program



## SCENARIO 1

### General Expenses:

	Qty	Unit	Rate	Total	Remarks
Crisis/Triage Operational Costs	1	LS	\$2,412,611	\$2,412,611	
Building Operational Expenses	8,267	SF	\$15	\$124,005	Utilities, Housekeeping, Maintenance, Landscaping
Security Estimate	8,760	Hr	\$21	\$182,821	1 security guard 24/7/365
Transportation Estimate	2,190	Trips	\$42	\$92,768	Uber 6 trips/day * Antioch to Highland Park * 365
<b>Total General Expenses</b>				<b>\$2,812,206</b>	

## SCENARIO 2<sup>1</sup>

### General Expenses:

	Qty	Unit	Rate	Total	Remarks
Crisis/Triage Operational Costs	1	LS	\$2,412,611	\$2,412,611	Net Operating Cost based on HD 9/17/19 proforma
Rehab Operating Costs	1	LS	\$764,782	\$764,782	Net Operating Cost based on HD 9/17/19 proforma
Building Operational Expenses	20,492	SF	\$15	\$307,380	Utilities, Housekeeping, Maintenance, Landscaping
Security Estimate	8,760	Hr	\$21	\$182,821	1 security guard 24/7/365
Transportation Estimate	2,190	Trips	\$42	\$92,768	Uber 6 trips/day * Antioch to Highland Park * 365
<b>Total General Expenses</b>				<b>\$3,760,363</b>	

## SCENARIO 3<sup>1</sup>

### General Expenses:

	Qty	Unit	Rate	Total	Remarks
Crisis/Triage Operational Costs	1	LS	\$2,412,611	\$2,412,611	Net Operating Cost based on HD 9/17/19 proforma
Rehab Operating Costs	1	LS	\$764,782	\$764,782	Net Operating Cost based on HD 9/17/19 proforma
Respite Operating Costs	1	LS	\$382,391	\$382,391	50% Respite Expansion 8 to 16 beds = 50% HD 9/17/1 Rehab proforma Cost)
Building Operational Expenses	8,267	SF	\$15	\$124,005	Utilities, Housekeeping, Maintenance, Landscaping
3002 Grand Avenue Operational Expenses	17,857	SF	\$15	\$267,855	
Security Estimate	8,760	Hr	\$21	\$182,821	1 security guard 24/7/365
Transportation Estimate	2,190	Trips	\$42	\$92,768	Uber 6 trips/day * Antioch to Highland Park * 365
<b>Total General Expenses</b>				<b>\$4,227,234</b>	

<sup>1</sup> Under these scenarios net difference is still rehab expansion





## SCENARIO 4<sup>1</sup>

### General Expenses:

	Qty	Unit	Rate	Total	Remarks
Crisis/Triage Operational Costs	1	LS	\$2,412,611	\$2,412,611	Net Operating Cost based on HD 9/17/19 proforma
Rehab Operating Costs	1	LS	\$764,782	\$764,782	Used rehab expansion number as cost to expand services at 3002 Grand, needs to be refined for services rendered
Respite Operating Costs	1	LS	\$382,391	\$382,391	50% Respite Expansion 8 to 16 beds = 50% HD 9/17/19 Rehab proforma Cost
Building Operational Expenses	21,912	SF	\$15	\$328,680	Utilities, Housekeeping, Maintenance, Landscaping
Security Estimate	8,760	Hr	\$21	\$182,821	1 security guard 24/7/365
Transportation Estimate	2,190	Trips	\$42	\$92,768	Uber 6 trips/day * Antioch to Highland Park * 365
<b>Total General Expenses</b>				<b>\$4,164,054</b>	

## SCENARIO 5<sup>1</sup>

### General Expenses:

	Qty	Unit	Rate	Total	Remarks
Crisis/Triage Operational Costs	1	LS	\$2,412,611	\$2,412,611	Net Operating Cost based on HD 9/17/19 proforma
Rehab Operating Costs	1	LS	\$764,782	\$764,782	Used rehab expansion number as cost to expand services at 3002 Grand, needs to be refined for services rendered
Respite Operating Costs	1	LS	\$382,391	\$382,391	50% Respite Expansion 8 to 16 beds = 50% HD 9/17/19 Rehab proforma Cost
Building Operational Expenses	39,707	SF	\$15	\$595,605	Utilities, Housekeeping, Maintenance, Landscaping
Security Estimate	8,760	Hr	\$21	\$182,821	1 security guard 24/7/365
Transportation Estimate	2,190	Trips	\$42	\$92,768	Uber 6 trips/day * Antioch to Highland Park * 365
<b>Total General Expenses</b>				<b>\$4,430,979</b>	

<sup>1</sup> Under these scenarios net difference is still rehab expansion



**APPENDIX E: 2019 New Program Request**

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# FY 2019 NEW OR EXPANDED PROGRAM/CAPITAL/PERSONNEL REQUEST FORM

*There are numerous financing alternatives that can be used to provide funding for a project. The County Administrator, subject to final approval by the County Board, may match a proposed project, program or personnel request with the financing alternative that best meets the needs of the County.*

---

Title: LCHD/CHC Crisis Care Respite Bed Expansion

Date: July 5, 2018

Requesting County Board Members: Member Carol Calabresa  
and Member Sandra Hart

## 1. Executive Summary

*The executive summary should provide a **high-level** description of the need, justification, staffing impacts, and how this relates to County goals and strategies. Please be sure to incorporate the sections below.*

### A. The Problem and Background

*What is the current issue or problem, if any, that is being addressed? Please provide any background information that has resulted in the problem or issue that this is meant to address.*

**Background:**

*Professional Services are needed to develop and evaluate options for LCHD Respite Bed Expansion related to providing law enforcement a jail diversion drop-off resource in Lake County. In addition to a respite bed, persons attend daily groups on effective ways to cope with symptoms or situation, recover from crisis, be seen by a psychiatrist, and treated with medication, if appropriate.*

- *1 in 5 adults in the U.S. experience mental health crisis. In 2017, Lake County Health Department/Community Health Center (LCHD) received 3,616 calls (847- 377-8088) from persons seeking mental health assistance, 778 face-to-face crisis sessions, and 11, 657 unduplicated clients received mental health services.*
- *Addressing the Mental Health crisis through collaboration is a regional leadership initiative of Lake County. Its commitment includes advancing sustainable community-level change through the Mental Health Coalition with efforts to address the gaps and develop a connected sustainable continuum of care for its vulnerable population.*
- *The LCHD Respite Bed Program located at 3002 Grand Avenue, Waukegan is currently a voluntary program including 8 beds with 5.5 days average length of stay and is limited to adult Lake County residents, who are medically stable, and exhibit an increase (or potential) in psychiatric symptoms who are not actively suicidal/homicidal, registered sex offender, aggressive and/or combative, under the*

*influence of alcohol, drugs, or mood-altering substances, elopement risk, or only seeking shelter.*

**The Problem:**

*Law enforcement has limited resources when encountering persons with potential mental health crisis suspected of low level criminal offenses. Officers from 41 police agencies across the county spend thousands of hours transporting persons to jail for low level offenses or attempting to have persons accepted into an emergency department.*



*With our recent investments in crisis intervention team training the county may now consider providing a deflection alternative to jail and/or emergency department visits through a 24 hour/7 day per week police crisis drop off resource, where the safe transport of an individual and efficient drop-off to a site provides law enforcement the ability to return to patrol duties in a timely manner. In addition, the individual will receive a mental health assessment and be able to be referred for treatment.*

*The LCHD has committed to analyze its respite bed utilization, meet with law enforcement to identify potential programmatic barriers with police utilization, and make recommendations on how to enhance and expand crisis services for low level justice involved persons experiencing a mental health crisis.*

*If all 41 police agencies were able to utilize this voluntary/alternate crisis drop off program, it is a reasonable expectation that utilization of the current number of respite beds would increase. In planning for an increase in current utilization, best practices include exploring options in expanding the number of available beds at the current location and alternate sites.*

## B. Proposed Options

*Summarize the available options to resolve this problem. Include costs and available data.*



1. Issue a Statement of Interest (SOI) to hire professional architectural/engineering services firm to support the physical facility review for expansion of respite beds for police drop off. The site location may include renovation/addition/new construction/lease options.

The professional services will include program verification, including interview appropriate staff and perform an analysis of space utilization; determine projected requirements for space needs, estimate the impact of trends related to their requirements, field verification of existing site conditions (all access drives, utilities and grading to be impacted during this project) and providing design documents (limited programmatic level) to adequately define the scope and estimate the high level cost of the project. The service firm will attend meetings with County representatives and others as required to properly communicate the design intent and illustrate sufficient adherence to program requirements, project schedule and budget; and additional tasks required for project completion.

## C. Recommendation

*Describe the proposed solution and rationale for the choice. Include statistics, population served, performance measures, and historical perspective to illustrate and support your request.*

Issue a Statement of Interest (SOI) to hire professional architectural services firm to support the physical facility review of up to three (3) Lake County spaces for the potential site of expanded respite beds for police drop off. A facility constraints assessment is needed to determine whether existing LCHD sites would be appropriate for renovation or an addition. Professional Services will assist in determining the right size and evaluate



potential LCHD locations such as 3002 Grand Avenue, 2400 Belvidere Rd, Waukegan, and Women's Residential Services located at 24647 N Milwaukee Ave, Vernon Hills, IL. Obtaining professional services will provide the necessary statistics, population served and performance measures to support the next step, implementation of a crisis care resource center.

**D. Program Priority \_\_1\_\_**

*If submitting multiple requests, please rank them in order of importance.*

Click here to enter text.

## **2. Strategic Alignment**

**A. County Goal/Target**

*Which, if any, of the County strategic goals does this address?*

*Addressing the Mental Health crisis through collaboration is a regional leadership initiative of Lake County. Its commitment includes advancing sustainable community-level change through the Mental Health Coalition with efforts to address the gaps and develop a connected sustainable continuum of care for its vulnerable population. In addition, Provide Public Safety and Advance an Integrated, Data-Driven Justice System, Strategy 4, evaluate and identify adult diversion programs that address mental, emotional, and behavioral health issues that lead to criminal behavior. Also, Build Healthy, Inclusive, and Resilient Communities, Strategy 2, increase access to behavioral health services in Lake County.*

**B. Departmental Objectives**

*Which departmental objective(s) does this address?*

*None identified.*

**C. Legal Mandates**

*Which County, State or Federal agency regulations, either as stipulated by legislation or by a citation issued?*

*None identified.*

**D. Intergovernmental/Shared Services Impact**

*What impact does this have on any other governmental units? Does this duplicate other public/private services?*

*None identified.*

**E. Rehabilitation/Asset Management**

*Will the project improve the health and/or safety of the employees and users of the facility?*

*None identified.*

*Does the physical condition of the existing asset dictate the need for immediate repair, either based on frequency of use or age of asset; what is the timing and extent of necessary repair in respect to current funding; is the replacement of this asset consistent with industry standards/sound engineering practices; is the existing asset compliant with current applicable codes?*

*None identified.*

*Does the project have a positive cost/benefit ratio?*

*None identified.*

## F. Operational Improvements

*What are the expected operational improvements of this proposal?*

*What budgetary impacts can be expected including budget reductions, revenue increase, and/or new sources of revenue?*

*None identified.*

## G. Risk Mitigation

*Does this project provide better management of (known) risks or liabilities to the County?*

*None identified.*

# 3. Financial Information

## A. Revenues and Expenses

*Please include a detailed account of all revenues and expenses associated with this request in Appendix A. If your request includes personnel, please also complete Appendix B. Please put the summary totals in the chart below and indicate the total amount of funding sought.*

Expense		Revenue	
Object Class	Amount	New Revenue Source	Amount
Personnel	Click here to enter text.	Click here to enter text.	Click here to enter text.
Commodities	Click here to enter text.	Click here to enter text.	Click here to enter text.
Contractuals	100,000	Click here to enter text.	Click here to enter text.
Capital Outlay	Click here to enter text.	Click here to enter text.	Click here to enter text.
<b>Total Expense</b>	100,000	<b>Total Revenue</b>	Click here to enter text.
<b>Total Funding Sought/Expense Less Revenue:</b> Click here to enter text.			

## B. Funding sources

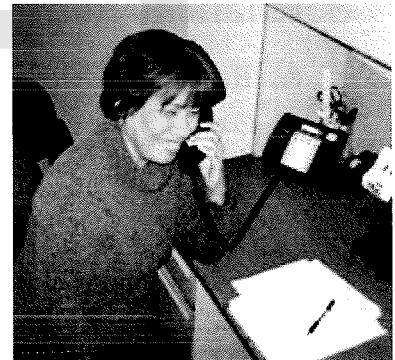
*What, if any, funding sources are available to offset the costs? This can include cost reductions (in the form of foregone expenses) in the case of efficiencies created by technology, for example.*  
*None identified.*

## 4. Assumptions

### A. Assumptions

*Include all assumptions that have been made in putting forth this request (e.g., the State will continue to share the 1% portion of sales tax with local governments, it is not possible to use the system that Department x uses because...).*

- The LCHD/CHC Respite Beds – Crisis Drop-Off by Law Enforcement Enhancements and Evaluation projected will be completed by March 2019.
- The use of LCHD existing resources that will coordinate with the expansion of respite beds.
- **Crisis Phone Counseling**  
Crisis Counselors are available 24 hours a day. The anonymous phone number is: 847- 377-8088.  
Guidance for getting through difficult times, manage stress, anxiety and depression, cope with longer-term difficulties and information and referrals to other Health Department programs are available.
- **Crisis Counseling at the LCHD Office**  
Crisis Counselors are also available to speak in person 24/7. Walk-ins are welcomed. Fees are based on level of income and number of dependents. A sliding-fee schedule based on national poverty levels is available for Lake County residents.
- Attached and made a part here to is Appendix A.



## 5. Alternatives Analysis

*List the alternatives and provide justification for why they were not recommended to solve this problem. Include costs and data to support this decision.*

Implementing a police drop-off center prior to competition of respite bed utilization analysis or before completing an existing facility constraints assessment is not recommended because of limited resources.

## 6. Performance Measures

### A. Goals

*What changes in outputs or outcomes can reasonably expected if this request is funded. For example, "payment processing time will decrease by 20%", "customer satisfaction will increase by 40%", "cost per unit will decrease by 25%". When can these new performance levels be expected?*

Increase in respite bed utilization by 100%

Reduction in respite bed denials for not meeting criteria by 20%

Decrease in jail population by 1%

### B. Current vs. Expected Output/Outcome

Performance Measure	Current Output/Outcome	Expected Output/Outcome
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

## APPENDIX A Detailed Financial Information

### Detailed Line Items

Identify the proposed line item(s) that would be required to implement this request. Include all personnel, commodities, contractual expenses, and capital items that would be required to implement the request. These include direct, indirect and recurring costs to provide a full picture. Indicate the grade, status (FT, PT, seasonal, etc.) and entry level salary of new employees.

Line Item	Description	Amount
XXX-XXXXXXXX-XXXX-XXX-XXX-XXXX		

### Ongoing Expenses

For FY2019, summarize the detailed line items above by category, in the chart below. Indicate ongoing expenses, providing a 5 year expense and revenue projection of the request. Subtract revenues from expenses in the last row to identify the total fiscal impact of the request.

Expense Type	FY2019	FY2020	FY2021	FY2022	FY2023	TOTAL
Personnel						
Commodities						
Contractuals	100,000					
Capital Outlay						
Total Expense						

Revenue Type	FY2019	FY2020	FY2021	FY2022	FY2023	TOTAL
Enter Source						
Enter Source						
Enter Source						
Total Revenues						

Fiscal Impact	FY2019	FY2020	FY2021	FY2022	FY2023	TOTAL
Expense less Revenue						



## FY 2019 New or Expanded Program/Capital/Personnel Request

### Useful Life

Estimate the lifespan that can be expected along with the estimated start and completion dates.  
Click here to enter text.

### Total Cost of Ownership

If your request has any technical component, please complete the following grid to ensure capturing all related expenses. Please consult your IT business liaison and/or budget analyst for assistance.

Total Cost of Ownership Considerations	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
<b>Software costs:</b>						
Application Software						
User licenses						
Additional licenses						
On-going vendor maintenance						
Security Applications						
<b>Hardware Costs</b>						
Additional Servers/ memory/ processing services						
Printers/ scanners/back-up devices						
On-going vendor maintenance						
<b>Network Costs</b>						
Cabling/LAN/ Racks/Routers/Modems						
Internet Access						
Disaster Recovery						
<b>Labor Costs</b>						
Labor & Overhead (Please use the hourly rate of \$68 to calculate the labor associated with implementation and maintenance needs)						
Department Labor Costs (Please include the cost of labor from your department associated with on-going maintenance)						
Total funding sought (The total from Section 5A Financial Information)						
<b>Subtotal:</b>						
<b>Total:</b>						

## FY 2019 New or Expanded Program/Capital/Personnel Request

If your request has a construction component, please complete the following grid to ensure capturing all related expenses. Please consult the FAS Construction Division for assistance.

Total Cost of Construction Considerations	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
<b>Project costs:</b>						
Feasibility Study/Programming (Preliminary Engineering/Design)	100,000					
Land/Building Acquisition						
Building Construction						
Site Construction (site preparation/utilities)						
Furniture						
Phone/Data						
Technology/Equipment/Shelving						
Permit/Utility/Testing Fees						
Moving/Relocation						
Consulting Fees (Design/Engineering)						
Contingency						
Other						
<b>Subtotal:</b>	100,000					
<b>Total: 100,000</b>						

## Appendix B Personnel Detailed Cost

*If you are requesting personnel or a change in staffing (increase in hours or a conversion from part-time to full-time) as part of your request, please complete the following information.*

FT/PT   # of Positions   Grade   Title   Annual Salary

**Total Positions** \_\_\_\_\_ **Total Salary Costs** \$ \_\_\_\_\_

FICA (7.65% of total earnings)	\$
IMRF (7.92% of total earnings)	\$
SLEP (22.57% of total earnings) (Sheriff only)	\$
Health/Life/Dental Insurance (Use \$17,496 per position)	\$
Life Insurance (Use \$0.075 per \$1,000 base salary per yr)	\$
Liability Insurance (Use \$469.08 per position)	\$
Unemployment Insurance (Use \$76.63 per position per year)	\$
Worker's Compensation (\$1,239.77 per position)	\$
<b>Total Fringe Benefits:</b>	\$
<b>Total Salary and Fringe Benefits:</b>	\$

## APPENDIX A

# Potential LCHD/CHC Crisis Care Respite Bed Expansion Next Steps

- Create a Crisis Care Task Force to develop the crisis care drop-off program as part of the LCHD infrastructure, fund the preliminary cost for renovation/addition/new construction/lease, staffing, infrastructure and operation costs.
- Develop updated respite bed admission criteria.
- Develop sustainable funding.
- Develop procedures for custodial transfer through a collaborative process.
- Meet with site location municipality to address “not in my community” fears.
- Develop a process for how law enforcement can have expedited access to professional staff during custodial transfer.
- Develop performance measures and method to track, store, and share utilization information.
- Develop a brief on-page form for officers to communicate the essential information that professional staff receiving the individual need to provide appropriate services and complete the custodial transfer.
- Determine if a formal agreement, such as a Memorandum of Agreement (MOA) between the LCHD and law enforcement agency is needed for procedures to support the program implementation.
- Train law enforcement and LCHD staff on the agreed procedures.
- Revisit the procedure routinely to assess what is working well and what is not, and jointly make modifications to continuously improve the process.



**APPENDIX F: Policy Research Report**

DRAFT



# Lake County Crisis Care Model Workshop: Report

Prepared by: Policy Research Associates/Policy  
Research, Inc.

Travis Parker, MS, LIMHP, CPC

Brian Case, MA

June 17, 2019

Delmar, NY



DRAFT

# Lake County Crisis Care Model Workshop

June 17, 2019

Travis Parker, MS, LIMHP, CPC

Brian Case, MA

Policy Research, Inc.



## ACKNOWLEDGEMENTS

This report was prepared by Travis Parker and Brian Case of Policy Research Associates/Policy Research, Inc. Policy Research wishes to thank the Lake County Administrator's Office for coordinating the workshop. Support for the workshop was provided to Lake County by the John D. and Catherine T. MacArthur Foundation through the Safety and Justice Challenge.

## RECOMMENDED CITATION

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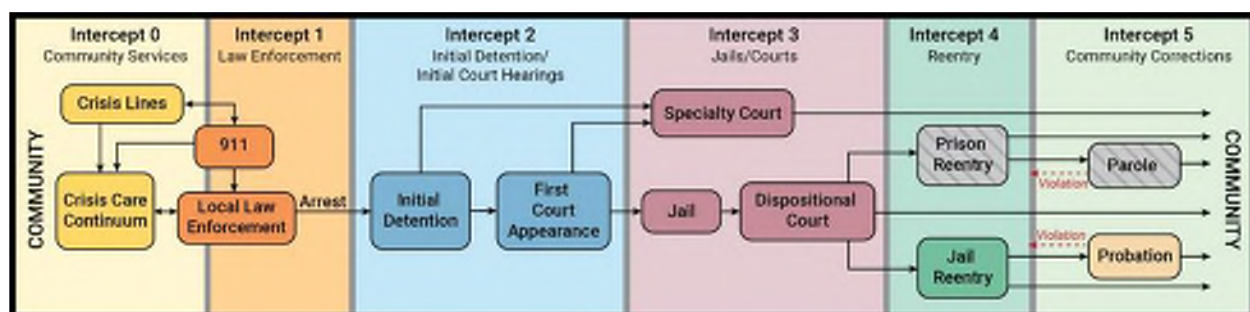


# INTRODUCTION

Mental health and substance use crisis services are an integral part of the health care continuum. Integral components of a responsive crisis care system include crisis call centers which are interoperable with 911 emergency communication systems, mobile crisis responses, short-term crisis programs (e.g., 23-hour crisis stabilization units, crisis residential programs), and strategies which integrate a behavioral health response with law enforcement and other first responders. Lake County has made significant progress in building a responsive crisis care system for its residents who experience mental health and substance use-related crises. However, a major element absent from Lake County is central crisis diversion center which can serve as a triage hub for other points in the crisis care system and provide 23-hour stabilization and observation for individuals experiencing a mental health crisis.

On April 23, 2019, Lake County Board Chair Sandy Hart convened the Lake County Crisis Care Workshop. The goal of the workshop was to work toward design of a crisis triage solution for the county. For lack of placement options, law enforcement officers in Lake County have two choices for an individual experiencing a mental health crisis: transport the person to jail or to a hospital emergency department. Seventy-four representatives from throughout the county participated in the workshop representing law enforcement, emergency medical services, county officials, judges, health care providers, hospitals, probation, veterans services organizations, and more. The representatives mapped the current crisis care system in Lake County, identifying resources and gaps, and engaged in action planning on key points to ensure the crisis diversion center that is developed will be responsive to community members in crisis.

Event video quick clip: <https://youtu.be/BR5HDw67OwQ>



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# AGENDA



## Workshop to Develop the Vision for a Lake County Crisis Care Model

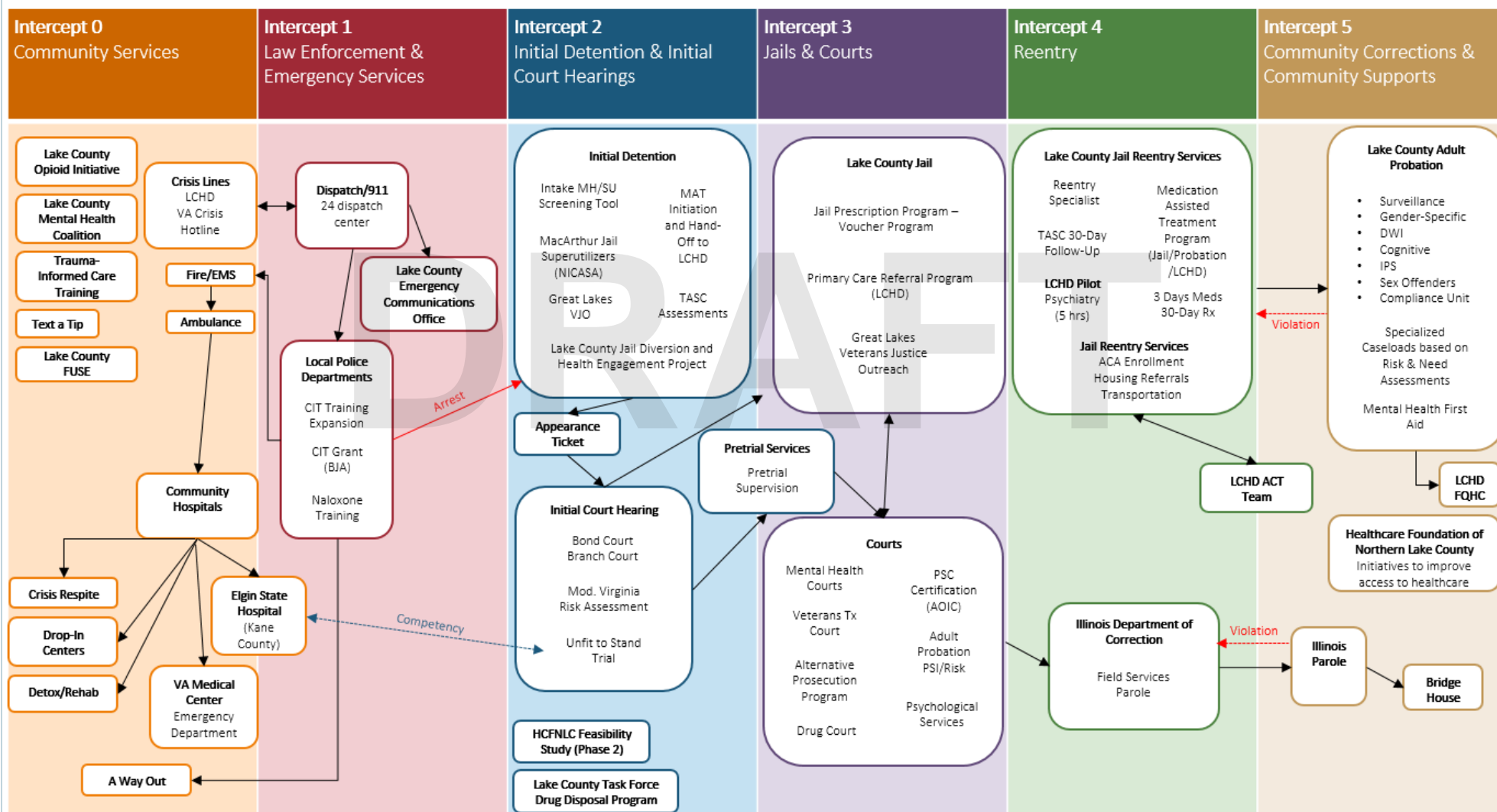
### Agenda

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- 8:00 Registration and Networking
- 8:30 Opening Remarks/Introductions
- 9:00 Presentation: SIM and Intercepts 0/1; Crisis Diversion Models
- 9:45 BREAK
- 10:00 Mapping Intercepts 0/1
- 12:00 LUNCH
- 12:30 Designing a Crisis Triage Diversion Service: What are the gaps and opportunities?
- 1:15 Action Planning on the Crisis Triage Diversion Service
- Goals and Desired Outcomes
  - Target Population
  - Programming
  - Community Engagement
  - Data Collection/Reporting
  - Resources/Budget
  - Location
- 4:00 Next Steps
- 4:15 Closing
- 4:30 Adjourn

Policy Research, Inc. facilitation is generously supported by the John D. and Catherine T. MacArthur Foundation.

# SEQUENTIAL INTERCEPT MODEL MAP FOR LAKE COUNTY, IL

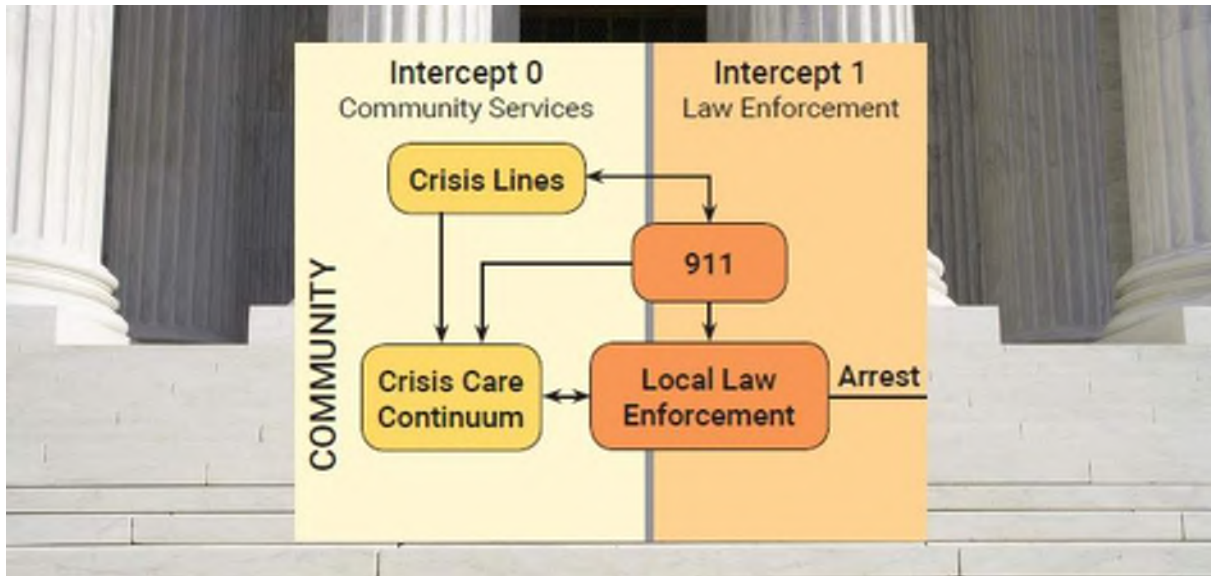




## RESOURCES AND GAPS AT EACH INTERCEPT

The centerpiece of the workshop is the development of a Sequential Intercept Model map. As part of the mapping activity, the facilitators work with the workshop participants to identify resources and gaps at each intercept. This process is important since the criminal justice system and behavioral health services are ever changing, and the resources and gaps provide contextual information for understanding the local map. Moreover, this catalog can be used by planners to establish greater opportunities for improving public safety and public health outcomes for people with mental and substance use disorders by addressing the gaps and building on existing resources.

Lake County focused its Crisis Care Workshop on Intercepts 0-1.



## INTERCEPT 0 AND INTERCEPT 1

### RESOURCES

#### Intercept 0

##### Crisis Lines

- Lake County Health Department Crisis Line: This crisis line handles calls for Lake County residents, the A Way Out program, and the National Suicide Prevention Hotline. The crisis line handles 550 calls per month and handles imminent risk determinations where law enforcement needs to be dispatched to the scene (under five percent of calls). Provides referrals to the Lake County Health Department Crisis Care Program and to area providers.
  - Phone: 847-377-8088
- A Safe Place: A domestic violence and victims services provider serving Lake County. A Safe Place operates a crisis line that offers counseling and support to survivors of domestic violence.
  - Phone: 847-249-4450
- Zacharias Sexual Abuse Center: Zacharias offers individual and group counseling for adults and children. The center operates a 24/7 support line.
  - Phone: 847-872-7799



- Veterans Crisis Line: The U.S. Department of Veterans Affairs operates a crisis line available to service members, veterans, and their family members. The service operates via a phone line, online chat, or through text messaging.
  - Phone: 800-273-8255
  - Text: 838255
- 211: United Way is in the process of implementing 211 in Lake County. The launch of the 211 service is being supported by Lake County and the localities. A soft roll-out is planned for June 2019 with full implementation planned for September 2019. In addition, United Way provides web-based resources for people at risk of suicide.
- Linking Efforts Against Drugs Text-A-Tip: Text-A-Tip is a 24/7 anonymous text crisis hotline offering emotional support for middle school and high school youth. A typical exchange is 5-6 messages. Text-A-Tip exchanged 9,117 text messages in 2017, with youth reaching out for reasons relating to depression, anxiety, and suicidal ideation.

### Crisis Services

- Lake County Health Department Respite Program: The crisis stabilization unit is an eight bed facility that serves clients in mental health crisis.
- Lake County Health Department Crisis Care Program: The Crisis Care Program is a 16 bed crisis residential treatment program. The average length of stay is seven days. The program serves 200-250 people on annual basis. In the past 12 months the Crisis Care Program has focused on improving law enforcement access to the program.
- Lake County Health Department Withdrawal Management and Rehabilitation: The Lake County Health Department operates six detoxification beds and sixteen rehabilitation beds.

### Peer Services

- Lake County Veterans and Family Services Foundation: The foundation has six veteran peer specialists, organizes 13-14 weekly events to bring in veterans and family members, has a free coffee shop, and operates a drop-in-center. The foundation receives 18,000 calls each year.

- Lake County Health Department Peer Drop-in Services: The Lake County Health Department operates two drop-in centers.

### Assertive Community Treatment

- Thresholds operates 3 Assertive Community Treatment teams with an operating capacity of 60 individuals per team.

### Substance Use Disorder Treatment

- Salvation Army operates an 80-bed rehabilitation program for substance use disorders in Lake County.
- Lake County Behavioral Health Hospital: Lake County Behavioral Health Hospital is opening a detoxification unit. The hospital delivers medication assisted treatment services through an intensive outpatient treatment program.
- Gateway Foundation offers residential substance use treatment and operates a warm hand-off program in three hospitals.
- NICASA Behavioral Health Services provides outpatient and residential substance use treatment services for adult men and women as well as to youth. The treatment array includes assessments, outpatient services, gender-specific services, and the Bridge House Program, a halfway house.

### Hospitals

- Lake County Behavioral Health Hospital: This private inpatient behavioral health hospital in Lake County has 46 beds and is expanding capacity to 146 beds.
- Advocate Condell Hospital: Condell Hospital has placed a social worker in the emergency department to work with individuals in mental health crises. Psychiatric boarding has been a problem for the Condell Hospital emergency department. Condell Hospital does not provide psychiatric inpatient services.
  - Gateway has staff embedded in the emergency department to provide a warm hand-off to services for individuals with opioid use disorders.

- NorthShore University Health Systems' Highland Park Hospital. Highland Park Hospital has crisis worked embedded in the emergency department on a 24/7/365 basis to provide assessment and triage to appropriate services. The hospital operates as 12-bed psychiatric inpatient unit for young adults from 12 to 24 years old.
- Northwestern Medicine: Northwestern Medicine has a small outpatient psychiatry program. The hospital operates an emergency department.
- Gateway provides warm hand-offs to services for individuals reporting to emergency departments with opioid use disorders at three hospitals: Advocate Condell, Advocate Good Shepherd, and Vista Medical Center East.

### Housing and Homelessness

- PADS Lake County: PADS Lake County is a homelessness service agency. PADS offers three emergency lines:
  - Main (phone): 847-689-4357
  - Shelter (phone): 847-689-0541
  - Risk of homelessness (phone): 847-616-2898
  - If you see someone in the street (phone): 847-616-5557
- Lake County Coalition for the Homeless: The Lake County Coalition for Homelessness is a consortium of individuals and community organizations that strives to ensure that the homeless have access to needed services. The coalition maintains the homeless management information system, Service Point, and has operated a coordinated entry/assessment system since 2011.
- Mary's Mission provides transitional housing services for adults.
- Lake County FUSE: Lake County has been receiving technical assistance from the Corporation for Supportive Housing to develop a FUSE project. The project has been in inception for five years and started as part of a SAMHSA treatment courts grant.

## Intercept 1

### 911/Emergency Services

- There are 14 dispatch centers in Lake County but this may change as the county undergoes a regional emergency communications consolidation process.
- Lake County Sheriff's Office 911: The Sheriff's Office has trained 16 of its 911 dispatchers in the Crisis Intervention Team model. Other dispatchers have received a one-day mental health training.
  - Mental health calls are sent to the local Fire/Rescue agency. A deputy is dispatched to the location as well.
  - Dispatchers know the list of Crisis Intervention Team-trained officers and can specifically dispatch those officers.
  - Responding officers can document specifics about the crisis situation through a set of consolidated codes: suicide attempt, suicide threat, mental health, Crisis Intervention Team, developmental disability, and drugs and alcohol.

### Law Enforcement

- Crisis Intervention Team
  - Crisis Intervention Team training is offered every three months by the Lake County Sheriff's Office for all law enforcement agencies in Lake County. Mental health training and de-escalation techniques have continued to be prevalent throughout the criminal justice system. At the end of 2018, 167 Lake County Sheriff's Office employees are members of the CIT that include 103 sworn personnel, 16 dispatchers, 32 correctional officers, 8 clerical staff, and 8 court security officers. This ongoing training is made possible through a United States' Department of Justice Grant that aims to train a total of 395 law enforcement, dispatchers and correctional officers throughout Lake County by Sept 2020.
  - Officers and Lake County Health Department mobile crisis response may follow up as a postvention on 911 mental health calls to encourage people to connect with services.
  - North Chicago Police Department has 20 officers trained in CIT as well as some dispatchers. However, dispatching services are being transferred to Mundelein Police Department.
  - Mundelein Police Department has trained 100 percent of officers in CIT. Half of the dispatching staff are trained in CIT.

- A typical response by a CIT-trained officer takes place after business hours. Fire/Rescue generally co-responds or officers call Fire/Rescue to the scene. The most common resolution is for the individual to be taken to the emergency department. Officers may recommend individuals contact PADS, community resources (such as Catholic Charities or Thresholds), and give people information for text-a-tip, crisis line numbers, and brochures.
- Crisis Outreach and Support Team
  - On October 2018 the Lake County Sheriff's Office (LCSO) began a collaborative pilot program to support Lake County residents with mental or behavioral illnesses who interact with its law enforcement division. The LCSO partnered with the Lake County Health Department for the pilot. The COAST consists of one deputy sheriff and one licensed mental health counselor. Within approximately three days of a law enforcement officer encountering a mental health interaction or an opioid overdose, COAST makes contact with the individual to check on their well-being and determine they have sought treatment or services. At that time, the deputy will provide a "warm hand-off" to the Health Department counselor who will conduct an assessment and refer the individual to the appropriate services.
  - Since its implementation, there have been 470 mental health interactions resulting in 341 transports to emergency rooms, 395 COAST contacts, and 54 referrals to the Lake County Health Department. COAST has maintained a contact rate of 84% since October 2018.
- A Way Out
  - A Way Out program is a Law Enforcement Assisted Diversion pilot program designed to fast-track those who need treatment for substance use disorders.
  - The program is available 24/7 through participating police departments (Lake County Sheriff's Office, Waukegan Police Department, Lake Forest Police Department, Gurnee Police Department, Libertyville Policy Department, Zion Police Department, Deerfield Police Department, Mundelein Police Department, Grayslake Police Department, Round Lake Police Department, Lake Zurich Police Department, and Fox Lake Police Department).
  - No criminal charges are sought for those in possession of narcotics or paraphernalia as long as assistance is sought by the program participant.

### Fire/EMS

- Fire/EMS respond to most mental health calls involving law enforcement. The majority of mental health calls result in transport to the emergency department. For the most part,



transports go the resource hospital unless there's been a determination with law enforcement that the person can go to Lake Behavioral Hospital.

## GAPS

### Cross-Intercept Gaps

#### Data

- Data-sharing was the focus of the Lake County Mental Health Coalition which sunset in November 2018. The coalition identified gaps related to programmatic/aggregate data-sharing for measuring program performance. Individual sharing of information on a program participant/patient was found to be less problematic than large-scale data sharing for the purposes of performance measurement. The Lake County Health Department/Community Health Center is engaging local hospitals to share Emergency Room data. Service Point was determined to be a stop-gap for obtaining some data points on the system and data-based planning.

#### Intercept 0

#### Crisis Lines

- Individuals, family members, and first responders have multiple crisis lines to call for assistance but the numbers are not well known.

### Behavioral Health Workforce

- Psychiatrists: There is a workforce shortage of psychiatrists in Lake County. This results in delays in access to a prescriber and medication management.

### Behavioral Health Services Gaps

- Reimbursement: Providers are hobbled by low Medicaid reimbursement rates as well as lack of reimbursement.
- Lack of Health Coverage/Underinsurance: Services are limited for people who are self-pay. Many people are under-insured and avoid seeking health care.

- Residential Treatment: Access to residential treatment for substance use services is in high demand. There is a service gap in residential treatment programs that serve adolescent females.
- Medication Management: There are inadequate resources dedicated to medication management and medication compliance supports for individuals with serious mental illnesses.

## Intercept 1

### 911/Emergency Services

- Triage: Not enough mental health calls are triaged over to crisis lines for those situations where first responders don't need to be dispatched to a location. The absence of a mobile crisis outreach team impedes this triage process since many behavioral health crisis lines also serve as the primary access point for mobile crisis services.
- Resources: Dispatcher centers vary in the resources available within each center.

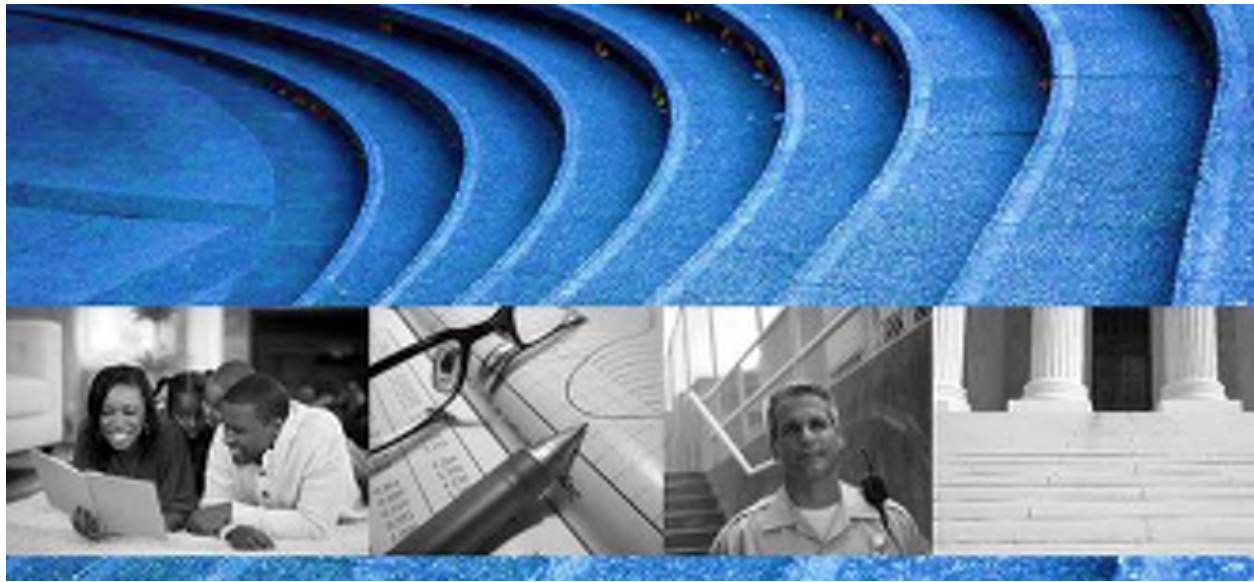
### Law Enforcement

- Multiple Contacts: Police departments are encountering people who frequently call for service but don't accept the resources that officers can connect people to and do not meet the threshold for involuntary.
- Law Enforcement Drop-Off: Officers lack access to a crisis service that can receive individuals in crisis on a 24/7 basis. For a crisis drop-off to be useful, officers need a crisis service that can provide:
  - 24/7 receiving with a dedicated law enforcement drop-off;
  - No wrong door policy for officers; and
  - Post-crisis follow-up services to reduce subsequent contacts.

### Fire/EMS

- Transport: In Lake County, Fire/EMS have taken the primary responsibility for transporting individuals in a mental health crisis. Law enforcement officers do not provide transport to the hospital emergency department. Fire/EMS defer to the hospital medical directors on transport. This poses a major obstacle for the development of a crisis triage service in Lake County since law enforcement and Fire/EMS will not be bringing people to the service.

DRAFT



## PRIORITIES FOR A CRISIS DIVERSION CENTER

**T**he development of a crisis diversion center in Lake County will provide individuals experiencing a mental health crisis with access to short-term stabilization and triage to other services to assist with engagement in the appropriate behavioral health services. Similar crisis services have been developed in northern Illinois, including two 23-hour crisis triage centers in Cook County, the Mulberry Center operated by Rosecrance in Winnebago County, and a unit in DuPage County.

Lake County has many of the elements of a comprehensive crisis service system, including the extensive adoption of the Crisis Intervention Team model, the A Way Out Program, the Crisis Care Program, a variety of peer drop-in services, and crisis hotlines. In-reach is provided into some of the hospitals to provide warm hand-offs into substance use treatment for individuals with opioid use disorders.

A 23-hour crisis stabilization unit can serve as the hub which connects a community's crisis care continuum between front-end responses on one side and higher levels of care on the other (e.g., crisis residential programs, psychiatric inpatient settings). Crisis stabilization units provide 23-hour observation and stabilization with an opportunity to triage, monitor, and refer individuals to a follow-up level of care. These units may be a standalone service or co-located with other services such as sobering units, crisis residential programs, or on hospital campuses. In Cook County, the Roseland Community Triage Center provides mental health and substance use assessments, brief case management, and referrals to treatment in addition to 23-hour crisis stabilization and observation. The Crisis Respite Center in Pima County (AZ) (1.0 million pop.) is limited to 23-hour crisis stabilization and observation, including involuntary admissions, with a dedicated police drop-off and colocation with a medical-surgical hospital. For Knox County (TN)

(436,000 pop.), the local mental health provider operates two crisis centers: a 16-bed 23-hour crisis stabilization combined with 72-hour residential unit for justice-involved individuals and a community-focused 16-bed 23-hour crisis stabilization unit attached to a residential substance use unit and medical detoxification.

The second half of the workshop focused on action planning activities that examined various aspects of an effective crisis diversion center: goals and desired outcomes, target population, programming, community engagement, data collection and reporting, resources/budget, location. Some of the major questions in designing a crisis service, apart from the various types of care and levels of care, are as follows:

- How can the crisis service serve as an integrated hub for other crisis care components in Lake County?
- What mental health and substance use crisis care gaps exist in Lake County that a crisis service could help ameliorate?
- Where can a crisis service be located so that it is positioned for equitable access to all Lake County residents?
- What are the pathways into the crisis center? Can people be diverted from the emergency department to the crisis center?
- How can the crisis center assist individuals? Become connected with treatment? Access support services and housing? Obtain health coverage and entitlements?

The workshop participants established six action plans for guiding work on the crisis diversion center going forward.

*Programming.* The workshop participants who examined the programming necessary for a crisis diversion center. They set forth a framework that included developing an implementation timeline, reviewing population-level data, and determining funding sources. The group identified potential staff positions and necessary support services.

*Target Population.* The workshop participants who examined the potential target populations for the crisis diversion center. In addition to mapping out a process for going forward, the group identified seven potential populations: frequent flyers, people in acute behavioral health crisis, jail diversion, emergency department diversion, walk-ins, problematic shelter user, and hospital step-downs.

*Community Engagement.* This group developed a strategy for engaging community members in the development of the crisis diversion center. The strategy involves engaging stakeholders, establishing a message, and identifying champions.

*Data.* This group established a framework for approaching data gathering and performance measurement. The framework is built on collecting countywide intake data (e.g., crisis hotline calls, self-presenters), countywide transfer data (e.g., EMS transports, provider referrals), treatment and intervention data (e.g., inpatient admissions, emergency

department presentations), and creating baseline data points and standards (e.g., location data, unique identifiers, and disposition).

*Pathways for the Adult Population.* The pathways workgroup examined the means by which individuals in crisis would be directed into the crisis diversion center. This workgroup examined the need to revise rules and legislation to facilitate transport to crisis centers instead of the emergency departments, making the service accessible to individuals, and continuity of care.

*Legislative Advocacy.* The legislative advocacy workgroup established objectives to address rules and statutory issues which potentially limit the utility of a crisis diversion center. These issues include restrictions on who transports individuals and crisis and where they are transported to, suspending Medicaid while someone is incarcerated in jail instead of Medicaid termination, and providing EMS the authority to conduct medical clearance (even in a limited fashion).

Moving forward, it is essential to design the crisis diversion center with the user in mind. A 2016 paper by mental health crisis professionals established the Crisis Reliability Indicators Supporting Emergency Services (CRISES) performance measurement framework for ensuring high-quality services responsive to the needs of people experiencing crises (Appendix A). The CRISES framework for excellence in crisis services set forth seven principles with the understanding that a person in crisis should receive services that are...



Based on the information gathered during the workshops, there are several challenges facing the development of an effective crisis diversion center in Lake County. These challenges do not appear to be specific to Lake County given these challenges are facing similar services in Illinois.



*Absence of state dollars to support crisis mental health services.* A backbone of mental health crisis care in many communities is the presence of a state continuum of care for crisis services. These continuum of care dollars are available to fund the care delivered by crisis stabilization units, crisis residential units, mobile crisis outreach teams, etc. Tennessee and Colorado are two states with robust continuums of care for crisis services. Without access to a continuum of care, funding will be difficult for the Lake County crisis diversion center.

*Pathways into the crisis diversion center.* In most communities with or without crisis services, law enforcement has the primary responsibility for transporting people in a mental health crisis to the emergency department or crisis center. For new crisis services, the question is not how to get law enforcement to transport to the crisis service *rather* it is a question of developing the proper protocols to reduce the burden on officers when dropping off people. In Lake County, mental health calls are co-responded by officers and Fire/Rescue. Officers defer to Fire/Rescue who in turn defer to hospital medical directors. This may result in a reduced rate of treatment in place compared with other communities and a higher likelihood that people are being inappropriately admitted to medical-surgical hospital emergency departments for behavioral health reasons. The inability of law enforcement to transport to the crisis diversion center will result in underutilization (e.g., in Pima County, 27% of admissions are transported by law enforcement) unless the transport issue can be resolved or a triage protocol is established with area hospitals to divert individuals in mental health crises from the emergency department.

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## ACTION PLANS PROGRAMMING

Objective	Action Step	Who	When
Need a timeline for implementation	<ul style="list-style-type: none"> <li>Volunteers to be on work groups</li> <li>Continue to have meetings</li> </ul>	Donna Jo	End date – implementation in 2 years
Need population level data	<ul style="list-style-type: none"> <li>Agencies come together to share data – intercept 0/1 organizations</li> <li>Get baseline data from L.E. on whether or not they would have utilized the crisis center with certain persons</li> </ul>	Jefferson	
Determine funding sources	<ul style="list-style-type: none"> <li>Determine what legislature cannot fund</li> <li>Funding for supportive housing</li> </ul>		
Determine who will utilize and direct people into the crisis center	<ul style="list-style-type: none"> <li>Look at who currently comes into the LCHD</li> <li>What agencies are serving this potential population right now</li> </ul>		
Move people physically from transport to crisis center to wait lists, treatment, etc.	<ul style="list-style-type: none"> <li>Interoperability – staff get appropriate info on person – judicial, medical, etc.</li> <li>How many go into appropriate level of treatment and are successful</li> <li>Look at pilot programs to run the data</li> </ul>		
Legislative change to broaden the scope of who can bring someone into the crisis center			

### Staff

- Peers/vet linkages
- RN
- MD/APN
- LCSW/LCPC
- CADC
- Case Manager
- Food Service/Laundry/Janitorial
- Pharmacy
- Security
- Billing/Admin
- Transport
- Dual License
- Data/Outcome Measurement
- Management/Leadership

### Services

- High Staff: Client Ratio
- Family Services
- I.D. Renewal
- Medicaid/Insurance Enrollment
- Immigration/Legalization
- Discharge Planning/Warm Hand-off
- Catering/Food Service
- Therapy Dogs

- Transportation
- Referral Partner meeting space
- Capacity – 16 bed?
- Activities/groups
- Childcare/linkages

### Program 23 hour Assessment

- Greeter/Basic Needs/Food/Clothing/Support Person/Family
- Peer
- Assessment: Clinical/Suicidal/Nurse/Physical Health/Substance/Strengths Based
- Funding/Financial/Bio/Psychosocial/Legal/Housing?
- Adolescent & Adult? Separate units
- Translation Services

### Services

- Psychiatric/Medical clearance
- STAT meds, Rx services/MAT/Case Management/Follow up
- Showers/Clothes/Food
- Relaxing Room
- Computer Terminals/Resources/Hope Room Library
- Trauma-informed Therapists
- Housing Specialist/Case Manager
- Legal Services

## TARGET POPULATION

Objective	Action Step	Who	When
Determine criteria for crisis center SRVC persons	<ul style="list-style-type: none"> <li>• Look at data to support need of center – jail, mental health</li> <li>• Involuntary/voluntary</li> <li>• ED step down</li> <li>• Acute mental health crisis</li> <li>• Shelter/homeless population</li> <li>• Diversion step down</li> <li>• Walk-in / drop-in center stabilization</li> <li>• Anyone who does not fit involuntary criteria</li> <li>• Adults</li> <li>• Victims of DV/HT</li> </ul>		

### Target Population

1. Frequent flyers chronic
2. Acute behavior mental health crisis
3. Divert from jail
4. Divert from ED
5. Walk-ins
6. Shelter problems
7. Step downs
8. Courts/probation

## COMMUNITY ENGAGEMENT

Objective	Action Step	Who	When
Why are we engaging?	<ul style="list-style-type: none"> <li>Define groups and what's important for building buy-in                             <ul style="list-style-type: none"> <li>Reduce skepticism, fear, opposition</li> </ul> </li> <li>Turn opponents to supporters/champions</li> </ul>	Donna Jo?	
Engage various stakeholders in Lake County	<ul style="list-style-type: none"> <li>Develop plan for engaging the following:                             <ul style="list-style-type: none"> <li>-Townships</li> <li>- (see notes)</li> </ul> </li> </ul>		
Determine the message	<ul style="list-style-type: none"> <li>Gather info from existing centers</li> <li>Identify from stakeholders what they need/want in terms of messaging</li> </ul>		
Leverage existing community events to co-op messaging			
Identify champions/anticipate opponents	<ul style="list-style-type: none"> <li>Enlist hospitals, MCO's for support (promotional/referral/financial)</li> <li>Blue cross/Blue shield</li> </ul>	Is there a central project manager resource that will be assigned?	

## Community Engagement

- Naming of facility.
- Branding
- Stigma of “crisis”, “triage”
- Transcending “mental health” stigma
- Emphasis on safety of facility relative to N.I.M.B.Y concerns
- Hire a communications firm; have a crisis communication plan
- Demonstrate success of the model in other locations
- Put a human face to the program
- Town Hall Meetings
- Places of worship
- Law enforcement
  - ILCPA (police chiefs assoc.)
  - IAFC (fire chief assoc.)

## What is the Message?

- Reach out to various groups to ask what will resonate with their clients

## Data/Statistics

- Solid Resources and Assistance Plan

- Benefits to Community
- Right thing to do
- Safer communities
- Cost savings
- Crafting audience-specific messaging

## Community Engagement and Education

- Events
- Mailings
- Media-social, commercials, print
- “Pushing out” – connecting with community at-large and with potential users
- Engaging medical community
- Associations and Groups
- Define the “Why” – this is important
- Demonstrate how diversion saves money
- How connecting persons to Mental Health services saves money
- Engage providers and referral sources
- Enlist townships as “Champions” for promoting
- Libraries
- Consumers



## DATA

Objective	Action Step	Who	When
Collect consistent countywide INTAKE data	<ul style="list-style-type: none"> <li>• 911 calls for mental health incident (build into NEW systems)</li> <li>• Crisis hotline calls</li> <li>• Self-presentation</li> <li>• Unique consumers vs. incidents</li> </ul>		
Collect consistent countywide TRANSFER data	<ul style="list-style-type: none"> <li>• EMS transports (link with intake and pursue follow-up from hospitals)</li> <li>• LE transports (link with intake and pursue follow-up from hospitals)</li> <li>• Referrals to providers</li> </ul>		
Collect consistent countywide TREATMENT data/INTERVENTION data	<ul style="list-style-type: none"> <li>• Inpatient admissions</li> <li>• ED presentation</li> <li>• Provider community</li> <li>• Large privacy/sharing concerns</li> <li>• Jail/court intake and treatment</li> </ul>		
Agree upon baseline data points and standards	<ul style="list-style-type: none"> <li>• Demographic</li> <li>• Location (home, incident)</li> <li>• Unique identifiers (master person management)</li> <li>• Disposition</li> </ul>		

## PATHWAYS FOR THE ADULT POPULATION

Objective	Action Step	Who	When
Broad community awareness	<ul style="list-style-type: none"> <li>• Marketing</li> <li>• Relationships with referral sources</li> </ul>		
Revise rules/legislation to facilitate transport (to bypass EDs) by 1 <sup>st</sup> responders	<ul style="list-style-type: none"> <li>• Local</li> <li>• Hospital</li> <li>• State</li> </ul>		
Accessible	<ul style="list-style-type: none"> <li>• Define scope of practice                             <ul style="list-style-type: none"> <li>○ Services (step up/step down)</li> <li>○ Reimbursements</li> <li>○ Ability to accept variety payer mix</li> </ul> </li> <li>• Where?</li> </ul>		
Transfer to another provider/home again	<ul style="list-style-type: none"> <li>• Vouchers → VA system</li> <li>• Use existing services? Community transports Foss Park model</li> </ul>		
Continuity of Care	<ul style="list-style-type: none"> <li>• Advance client care while using existing system</li> <li>• Cooperative, effective partnerships with community organizations → keep lanes open</li> </ul>		

## LEGISLATIVE ADVOCACY

Objective	Action Step	Who	When
Transportation (liability?)	<ul style="list-style-type: none"> <li>Do research about transportation restrictions</li> </ul>		Medicaid – now
Pass productive legislation	<ul style="list-style-type: none"> <li>Can we add additional language to any existing legislation?</li> </ul>		Fair Tax – now
Establish a singular drop –off	<ul style="list-style-type: none"> <li>Suspend Medicaid rather than cancel it when someone is in jail. Pass laws to fix this</li> <li>Give EMS ability to provide medical clearance</li> </ul>		

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## APPENDICES

- Appendix A Balfour, M.E., Tanner, K., Jurica, P.J., Rhoads, R., & Carson, C.A. (2016) Crisis Reliability Indicators Supporting Emergency Services (CRISES). A framework for developing performance measures for behavioral health crisis and psychiatric emergency programs. *Community Mental Health Journal*, 52, 1-9.
- Appendix B Balfour, M.E., Tanner, K., Jurica, P.J., Llewellyn, D., Williamson, R.G., Carson, C.A. (2017). Using LEAN to rapidly and sustainably transform a behavioral health crisis program: Impact on throughput and safety. *The Joint Commission Journal on Quality and Patient Safety*, 43, 275-283.
- Appendix C Bronsky, S., Giordano, K., & Johnson, R. (2016, Oct. 1). Mobile integrated healthcare program changing how EMS responds to behavioral health crises. *Journal of Emergency Medical Services*.
- Appendix D *Crisis Now System Self-Assessment Tool*
- Appendix E National Action Alliance for Suicide Prevention: Crisis Services Task Force. (2016). *Crisis now: Transforming services is within our reach*. Washington, DC: Education Development Center.

## APPENDIX A

DRAFT

# Crisis Reliability Indicators Supporting Emergency Services (CRISES): A Framework for Developing Performance Measures for Behavioral Health Crisis and Psychiatric Emergency Programs

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**Abstract** Crisis and emergency psychiatric services are an integral part of the healthcare system, yet there are no standardized measures for programs providing these services. We developed the Crisis Reliability Indicators Supporting Emergency Services (CRISES) framework to create measures that inform internal performance improvement initiatives and allow comparison across programs. The framework consists of two components—the CRISES domains (timely, safe, accessible, least-restrictive, effective, consumer/family centered, and partnership) and the measures supporting each domain. The CRISES framework provides a foundation for development of standardized measures for the crisis field. This will become increasingly important as pay-for-performance initiatives expand with healthcare reform.

**Keywords** Mental health services/standards · Outcome and process assessment · Quality improvement · Emergency psychiatry · Crisis services · Behavioral health

## Introduction

Crisis and emergency psychiatric services are an integral part of the behavioral health system of care, yet there are no standardized quality measures for programs providing these services (Glier et al. 2015; Substance Abuse and Mental Health Services Administration 2009). In an era increasingly focused on outcomes, healthcare organizations require standardized frameworks by which to measure the quality of the services they provide. Standardized measures are needed for comparisons and benchmarking between programs and to assist organizations in defining goals for internal quality improvement activities. This will become increasingly important as pay-for-performance initiatives expand with healthcare reform. In addition, standardized measures and terminology are needed to support research efforts in crisis operations and quality improvement. In response to these needs, we developed the Crisis Reliability Indicators Supporting Emergency Services (CRISES) framework to guide the creation of a standardized measure set for the programs providing emergency psychiatric and crisis care within our organization, which is the largest provider of facility-based emergency psychiatric care for adults and children in Arizona. We will describe the method used to develop the CRISES framework and the resulting measures. The CRISES framework is a method rather than a static measure set; thus some measures are designated provisional as we continue to evolve improved measures or respond to new customer needs. This framework provides a starting point for the development of standardized measures for the crisis field as a whole.

The term “crisis services” encompass a wide variety of programs and services. These include facility-based psychiatric emergency services, 23-h observation, crisis stabilization beds, crisis respite beds, mobile crisis outreach

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teams, crisis hotlines, warm lines, peer support, and others. In this work, we use the term “crisis program” to refer to facility-based psychiatric emergency services and 23-h observation. Such services may be delivered in a free-standing behavioral health facility or within a medical ED.

Crisis programs share features in common with emergency departments, urgent care clinics, inpatient psychiatric facilities, and outpatient mental health clinics, yet they are distinctly different. Standards and measures designed for these settings have been variably applied to crisis programs, but they are an imperfect fit. For example, in our own organization, two programs providing identical 23-h observation services have different licenses due to differences in their respective facilities’ physical plant specifications. One is licensed as an inpatient psychiatric unit and the other as an outpatient clinic. As a consequence, the two programs are held to different regulatory and quality standards, neither of which is the best fit for the services provided. This illustrates the need for an independent set of crisis measures that supports a common definition of quality crisis services and allows comparison between similar programs.

We endeavored to develop a measure set that remained under the sphere of influence of an individual crisis program while also reflecting the desired contribution of the crisis program to the functioning of the behavioral health system as a whole. Thus our measures focus on the experience of the individual from the time of arrival to discharge and the interface between the crisis program and its community partners. Such measures have a more narrowed scope than those of managed care organizations (MCOs) and state/local behavioral health authorities (BHAs). At the MCO/BHA level, measures are often designed to assess the functioning of the crisis system as a whole and may not be directly transferable to an individual service provider. For example, it is common for a behavioral health system to measure whether patients discharged from a crisis program are seen by their outpatient behavioral health provider within a certain timeframe, such as 7 days. This measure is designed to incentivize the MCO/BHA to influence the behavior of its contracted providers—both the crisis program and outpatient clinic—in order to meet this metric. While this is a worthwhile measure and all parties should collaborate to ensure that it is met, it is not feasible for a crisis program to be solely responsible. Rather, the crisis program and outpatient clinic should select internal process metrics that facilitate the attainment of this shared goal, such as ensuring that appointments are made and communication occurs between the crisis program and clinic. Then the MCO/BHA can focus on systemic issues that hinder attainment the larger goal.

## Methods

### CTQ Tree

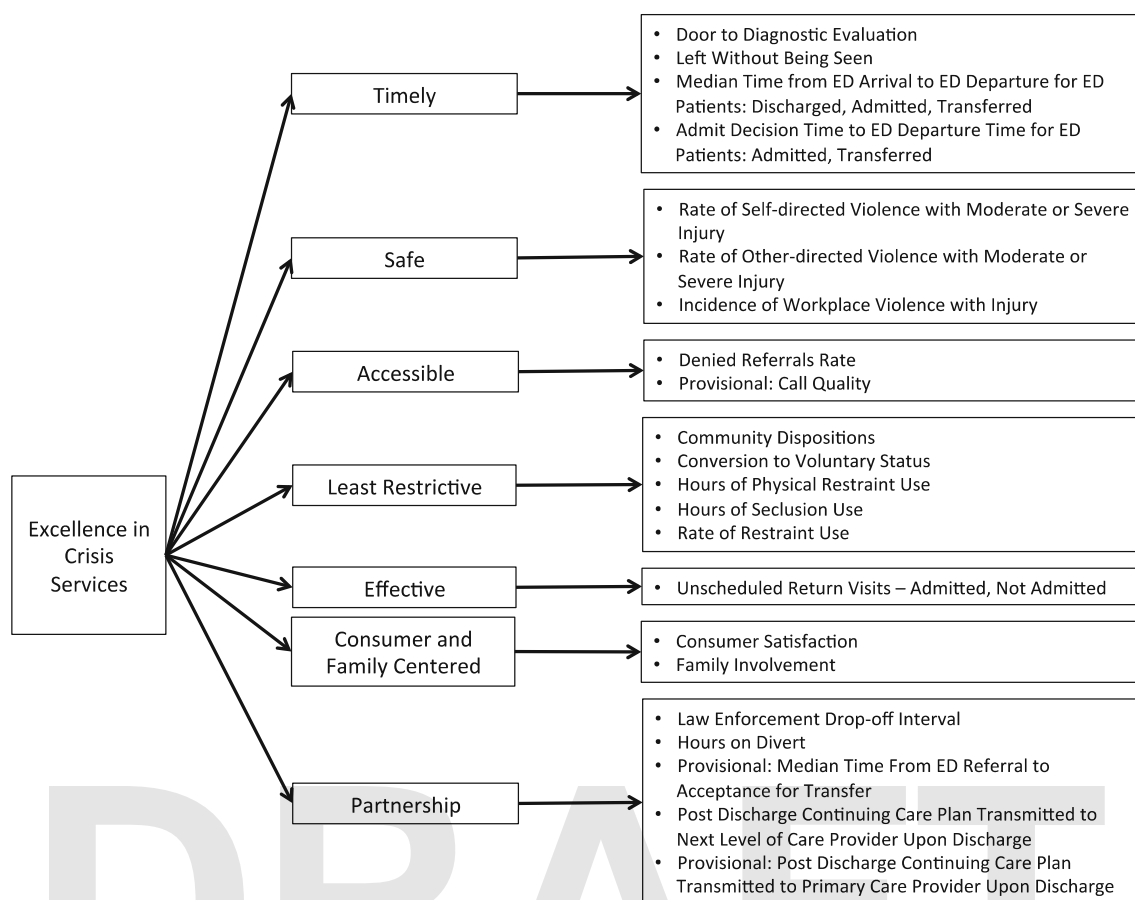
We began by employing a quality improvement tool called a Critical To Quality (CTQ) Tree. This tool is designed to help an organization translate its values into discrete measures (Lighter and Lighter 2013). When building a CTQ Tree, the first step is to define the value we are trying to accomplish, in this case “Excellence in Crisis Services.” The next step is to define the key attributes that comprise excellent crisis services, from the perspective of the customer. Because a crisis program plays such a vital role in the community, it has many customers and stakeholders. These include the individuals receiving care, law enforcement, emergency departments, other healthcare providers, staff, etc. We defined our key attributes as Timely, Safe, Accessible Least Restrictive, Effective, Consumer/Family Centered, and Partnership (see “Results” section for a detailed description of each). The CRISES domains are consistent with the Institute of Medicine’s six aims for quality healthcare: Safety, Effectiveness, Equity, Timeliness, Patient-centeredness, and Efficiency (Institute of Medicine 2001) while also focusing attention on goals unique to the crisis setting. The CTQ Tree and the resulting CRISES measures are depicted in Fig. 1.

### Measure Selection

Next, we selected discrete measures to reflect the key attributes defined above. Many frameworks exist to inform the selection of quality measures. We employed the criteria described by Hermann and Palmer (2002) which require that measures are meaningful, feasible, and actionable. Some key considerations regarding each of these requirements are outlined below.

#### *Meaningful*

Does the measure reflect a process that is clinically important? Is there evidence supporting the measure? Compared to other fields, there is a paucity of research on crisis quality measures, so we must rely on face validity or adapt measures for which there is evidence in other settings. The emergency medicine field has put forth much effort in defining standardized measures (Welch et al. 2011), many of which are applicable to crisis services. When possible, measures should be selected or adapted from measures that have been endorsed by organizations that set standards for quality measurement such as the National Quality Forum (NQF), Centers for Medicaid and



**Fig. 1** CRISES framework

Medicare Services (CMS), The Joint Commission (TJC), Agency for Healthcare Research and Quality (AHRQ) etc.

### *Feasible*

Is it possible to collect the data needed to provide the measure? If so, can this be done accurately, quickly, and easily? Data must be produced within a short timeframe in order to be actionable (see below). An organization's quality department staff should be able to spend most of its time addressing identified problems rather than performing time-consuming manual chart audits. With the advent of electronic health records (EHRs), it is now possible to design processes that support automated reporting, making it feasible to quickly obtain data that were previously too complex or labor intensive to collect via chart abstraction.

### *Actionable*

Do the measures provide direction for future quality improvement activities? Are the factors leading to suboptimal performance within the span of control of the

organization to address? A crisis program is in a position to identify problems in the community-wide system of care, and should collaborate with system partners to fix systemic issues. However, its own core measures must be within its sphere of influence to improve, otherwise there is the tendency to blame problems on external factors rather than focus on the problems it can address. Are there established benchmarks towards which to strive? There are few benchmarks for crisis services so we must often rely on internally developed goals, or attempt to benchmark against inpatient psychiatric services or emergency medicine.

## **Results**

### **Descriptive Data**

Descriptive data are needed for program and operational design, benchmarking between similar programs, and providing context for performance on quality measures. For example, the emergency medicine field stratifies

programs both by volume and by measures of acuity such as Emergency Severity Index (ESI) scores and Intensive Care Unit (ICU) admission rates. Table 1 contains suggested categories for describing the characteristics of crisis programs and the populations they serve.

### CRISES Domains and Measures

The individual measures and their definitions are listed in Table 2. A description of each domain and the rationale for selection of the corresponding measures are below.

#### Timely

Timeliness is especially critical in the crisis setting. CMS has developed measures to assess throughput in emergency

departments (Centers for Medicare and Medicaid Services 2015a, c) and performance on these measures is now publicly available on its Hospital Compare website <http://hospitalcompare.hhs.gov>. The CMS ED throughput measures are directly applicable to the crisis setting and we have adopted them with only minor modification.

#### Accessible

A crisis program must be accessible to the community at all times and welcome anyone in need of services. However, many crisis programs are not subject to the Emergency Medical Treatment and Active Labor Act (EMTALA), and some have created barriers to access such as overly rigorous exclusion criteria. Thus we include a measure of the percentage of referrals that are denied admission for any reason other than overcapacity. In addition, we are developing a “mystery caller” assessment tool (O’Neill et al. 2012) to assess our customer service and determine whether callers to the crisis program get their needs met in a welcoming, respectful, and timely manner.

#### Safe

A core function of crisis services is to address potential dangerousness to self or others. Regulatory reporting requirements for incidents of self-harm within the facility often include vague qualifiers such as “serious suicide attempt” that leave much to interpretation. The Centers for Disease Control (CDC) has proposed a classification system for self-directed violence (SDV) that allows for more precise descriptions of the behaviors and resulting injuries (Crosby and Melanson 2011). Using this system, we measure incidents of SDV (suicidal or non-suicidal) with moderate or severe injury. For episodes of violence towards other persons receiving care, we include other-directed violence with injury using the classification system for SDV described above. In addition to the need for patient safety, there has been increasing awareness of the high prevalence of workplace violence towards healthcare workers, especially in EDs and behavioral health facilities (Anderson and West 2011; Gacki-Smith et al. 2009). For violence towards staff, we include a measure based on the methodology outlined by the Occupational Safety and Health Administration (OSHA) for measuring the incidence of workplace violence with injury (Occupational Safety and Health Administration).

#### Least Restrictive

A crisis program should strive to resolve the crisis in partnership with individuals and their supports such that the majority can continue their recovery in the least

**Table 1** Descriptive data

#### Population characteristics

Age

Gender

Race

Ethnicity

Referral source: police, walk-in, child protective custody, etc.

Payer

Legal status: voluntary, involuntary, assisted outpatient treatment, etc.

Housing status

Diagnosis

Co-occurring substance use disorders

Acute substance intoxication or withdrawal

Trauma history

Chronic medical disease (e.g. diabetes, congestive heart failure)

Primary language

#### Program characteristics

Volume: number of encounters annually

Age range served: child, adolescent, adult, geriatric

Law enforcement referral rate: percentage of visits arriving via law enforcement

Involuntary referral rate: percentage of visits arriving under involuntary legal status

Level of care: urgent care, emergency services, 23-h observation, sub-acute crisis stabilization, crisis residential, etc

Locked versus unlocked: Does the program contain a locked unit?

Accessibility: Does the program accept involuntary law-enforcement drop-offs? Does the program require medical clearance at an outside ED or via EMS before arrival?

Hospital setting: Is the program a freestanding behavioral health facility, a program within a medical ED, other?

Community setting: Urban, rural, etc.?

Teaching status: Does the program serve as a training site for residents and medical students?



**Table 2** CRISES measures definitions

Measure	Definition	Adapted from existing measure
<i>Timely</i>		
Door to Diagnostic Evaluation by a Qualified Behavioral Health Professional	Median time (in minutes) from ED arrival to provider contact	NQF-0498 (CMS OP-20)
Left Without Being Seen	Number of patients who leave the ED without being evaluated by qualified personnel divided by the total number of ED visits	NQF-0499 (CMS OP-22)
Median Time from ED Arrival to ED Departure for Admitted ED Patients	Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department	NQF-0496 (CMS ED-1)
Median Time from ED Arrival to ED Departure for Discharged ED Patients	Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department	NQF-0496 (CMS OP-18)
Median Time from ED Arrival to ED Departure for Transferred ED Patients	Time (in minutes) from ED arrival to ED departure for patients transferred to an outside facility from the emergency department	NQF-0496 (CMS OP-18)
Admit Decision Time to ED Departure Time for Admitted Patients	Median time (in minutes) from admit decision time to time of departure from the emergency department for patients admitted to the facility from the emergency department.	NQF-0495 (CMS ED-2)
Admit Decision Time to ED Departure Time for Transferred Patients	Median time (in minutes) from admit decision time to time of departure from the emergency department for patients transferred to an outside facility from the emergency department	NQF-0495 (CMS ED-2)
<i>Accessible</i>		
Denied Referrals Rate	Percent of referrals denied admission to the crisis program for any reason other than overcapacity	No
Provisional: Call Quality	Composite score on “mystery caller” assessment tool	No
<i>Safe</i>		
Rate of Self-directed Violence with Moderate or Severe Injury	Number of incidents of SDV with moderate or severe injury per 1000 visits	Uses CDC methodology
Rate Other-directed Violence with Moderate or Severe Injury	Number of incidents of violence to other persons receiving care with moderate or severe injury per 1000 visits	Uses CDC methodology
Incidence of Workplace Violence with Injury	Total number of incidents of workplace violence to staff resulting in injury divided by the total number of hours worked	Uses OSHA methodology
<i>Least-Restrictive</i>		
Community Dispositions	Percentage of visits resulting in discharge to community-based setting	No
Conversion to Voluntary Status	Percentage of involuntary arrivals requiring admission/transfer to inpatient care that are admitted/transferred under voluntary status	No
Hours of Physical Restraint Use	The total number of hours that all patients were maintained in physical restraint per 1000 patient hours	NQF-0640 (HBIPS-2)
Hours of Seclusion Use	The total number of hours that all patients were maintained in seclusion per 1000 patient hours	NQF-0641 (HBIPS-3)
Rate of Restraint Use	Total number of restraint episodes per 1000 visits	No
<i>Effective</i>		
Unscheduled Return Visits—Total	Percentage of discharges that resulted in an unscheduled return visit	No
Unscheduled Return Visits—Not Admitted	Percentage of discharges that resulted in an unscheduled return visit in which the return visit did not result in admission or transfer to an inpatient psychiatric facility	No
Unscheduled Return Visits—Admitted	Percentage of discharges that resulted in an unscheduled return visit in which the return visit resulted in admission or transfer to an inpatient psychiatric facility	No
<i>Consumer and Family Centered</i>		
Consumer Satisfaction	Likelihood to recommend	IHI Experience of Care

**Table 2** continued

Measure	Definition	Adapted from existing measure
Family Involvement	Percentage of individuals for whom there is either a documented attempt to contact family/other supports or documentation that the individual was asked and declined consent to contact family/other supports	No
<i>Partnership</i>		
Law Enforcement Drop-off Interval	Time (in minutes) from law enforcement arrival to law enforcement departure	EMS Offload Interval
Hours on Divert	Percentage of hours the crisis center was unable to accept transfers from medical EDs due to overcapacity	No
Provisional: Median Time from ED Referral to Acceptance for Transfer to the Crisis Program	Time (in minutes) from initial contact from the referring ED to notification that the patient has been accepted for transfer to the crisis program	No
Post Discharge Continuing Care Plan Transmitted to Next Level of Care Provider Upon Discharge	Percentage of discharges in which the continuing care plan was transmitted to the next level of care provider	NQF-0558 (HBIPS-7)
Provisional: Post Discharge Continuing Care Plan Transmitted to the Primary Care Provider Upon Discharge	Percentage of discharges in which the continuing care plan was transmitted to the primary care provider	NQF-0558 (HBIPS-7)

restrictive setting possible. Thus we measure the percentage of visits that result in discharge to a community setting and the percentage of involuntary arrivals requiring inpatient admission that are converted to voluntary status. Measures of restraint use are an important indicator of the use of less restrictive interventions within the facility. The Joint Commission Hospital Based Inpatient Psychiatric Services (HBIPS) measures (Joint Commission on Accreditation of Healthcare Organizations 2012a) include two items (HBIPS-2 and HBIPS-3) that reflect the duration of physical restraint and seclusion use expressed as hours of each per 1000 patient hours. State and national benchmarks for inpatient units are available at <http://qualitycheck.org> and CMS has incorporated the HBIPS measures into its Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program (Centers for Medicare and Medicaid Services 2015c). In contrast, there is no standard methodology for reporting the rate of restraint occurrences. We have defined an “event” as the single application of a restraint (e.g. physical hold, mechanical restraint, or seclusion) and an “episode” as the continuous restriction of a person’s freedom of movement via the use of one or more restraint events and express the rate as episodes per 1000 visits.

### *Effective*

Crisis services may be considered effective when the individual had his/her needs met and leaves with a plan that facilitates the continuation of recovery in the community setting. The most readily available proxy metric would then be unscheduled return visits (URV), based upon the

assumption that the need to return to the crisis program represents a failure of the discharge plan. We measure URV within 72 h, as this timeframe is becoming more common in the ED literature (Trivedy and Cooke 2015) and is consistent with the Joint Commission’s timeframe in which a hospital is held accountable for suicide post-discharge. There is emerging evidence suggesting that all URVs are not equal (Hu et al. 2012). One group is comprised of individuals who are discharged from an ED, return to the ED, and are then discharged again. For this group, the URV may represent opportunities for improvement within the crisis program but may also indicate problems with community services that it is unable to address without help from system partners. In contrast, individuals who are discharged from an ED, return to the ED, and are then admitted to an inpatient unit on their second visit may—but not necessarily—represent an error in decision-making. Thus we measure these two types of URV separately.

### *Consumer and Family Centered*

We have adapted surveys from psychiatric inpatient and medical ED settings to measure consumer satisfaction at our programs and use the anchor question “likelihood to recommend” to serve as a proxy for overall satisfaction with the healthcare service received (Stiefel and Nolan 2012). In addition, families often play a critical role in crisis resolution (Substance Abuse and Mental Health Services Administration 2009) and thus we assess whether there is documentation that our staff attempted to involve family or other supports in the care of the individual in crisis.

## Partnership

**Partnerships with Law Enforcement** Individuals with mental illness are disproportionately represented in the criminal justice system (James 2006), and we have worked very closely with law enforcement to divert individuals with behavioral health needs into more appropriate treatment settings. We have learned that in order to achieve this goal we must be as user friendly as possible to law enforcement; thus, we measure law enforcement drop-off time and strive for a target of 10 min. This measure is analogous to the ED process metric of EMS offload interval—arrival time to the time the patient is removed from the ambulance stretcher and care is assumed by the ED staff. Similarly, our goal is to transfer the individual from police custody to the care of the crisis center staff as quickly as possible.

**Partnerships with EDs** Boarding of psychiatric patients in medical EDs is an increasing problem for the healthcare system. Crisis programs are poised to help EDs mitigate the burden of psychiatric boarding (Little-Upah et al. 2013; Zeller et al. 2014) and should develop measures reflecting this value. The Joint Commission has recently required EDs to measure the time from decision-to-admit to the actual admission time (Joint Commission on Accreditation of Healthcare Organizations 2012c). Perhaps in the future it will be possible to use that data to construct a composite measure of a community's total psychiatric boarding. While such a measure could inform system planning, more feasible and actionable measures for a crisis program are those that reflect its accessibility to EDs. We currently measure the percentage of time the crisis program is unable to accept transfers from outside EDs due to overcapacity (i.e. diversion). We are also developing a measure assessing the time from ED request for transfer to the crisis program's communication that the patient has been accepted for transfer.

**Partnerships with Other Care Providers** We have adopted the HBIPS-7 measure regarding the transmittal of a post-discharge continuing care plan to the next level of care provider and are developing a similar measure reflecting transmittal of key information to the primary care provider.

## Discussion

We developed the CRISES framework in response to our own organizational needs and have used it to guide the creation of quality measures that inform internal performance improvement initiatives and facilitate comparison of performance across programs. The framework is comprised

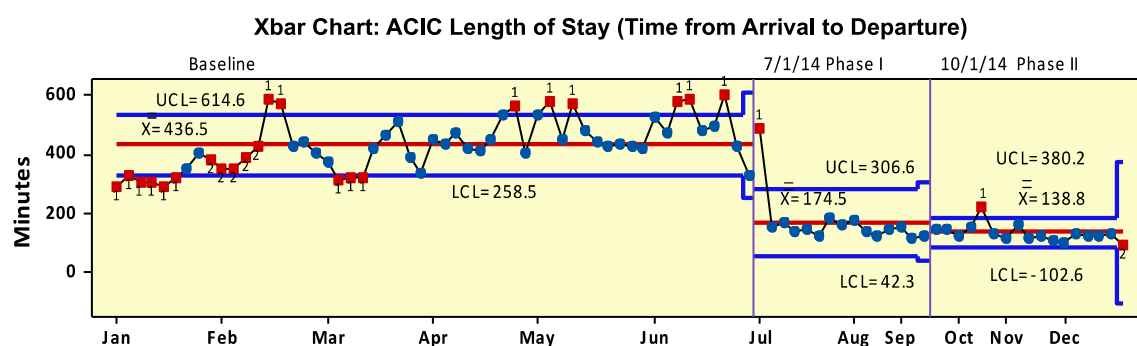
of two components—the CRISES domains and the measures supporting each domain. The CRISES domains are consistent with the IOM's six aims for quality healthcare while also focusing attention on goals unique to the crisis setting, such as least-restrictive care and community partnerships. We attempted to limit the number of measures to a manageable number and thus some potentially useful measures were excluded. In particular, we did not include measures that track whether or not a particular type of screening or assessment was performed. Rather, we prefer to evaluate the content of clinical assessments and perform qualitative reviews on a random sampling of charts and then provide individual feedback via our clinical supervision and peer review processes. Other limitations of this work are that these measures have not been endorsed for use in the crisis setting by professional or healthcare quality improvement organizations and they have only been tested within our own crisis programs.

## Implementation and Application

The CRISES measures form the foundation of the quality scorecards in use at our facilities. It took approximately 1 year to build our first scorecard due to challenges with EHR reporting capabilities that required repeated cycles of data validation via manual chart audits, changes to our documentation processes, and staff education. Having learned from this experience, we specified reporting capability for these measures as a contract deliverable with our EHR vendor as they transition another of our facilities to electronic charting.

We have hardwired ongoing assessment of the validity and utility of these measures into our routine quality and operational processes. For example, the scorecard is reviewed at monthly quality meetings. Specific measures such as URV are tracked and trended in monthly utilization management meetings; when indicated, individual cases are reviewed and referred for internal peer review or to the relevant outpatient clinic or system partner. Law enforcement drop-off time data is reviewed at monthly meetings with local law enforcement. Individual employee injuries and incidents of self/other directed violence are reviewed in daily operational huddles and tracked and trended in monthly restraint committee meetings.

We have successfully used CRISES measures as outcomes for process improvement initiatives within our organization. As an example, Fig. 2 depicts a control chart showing improvements in the Time from Arrival to Departure in one of our crisis urgent care clinics in response to two phases of process improvements. In addition, at that facility we have achieved a 78 % decrease in Door to Diagnostic Evaluation and a 60 % decrease in staff injuries (Balfour et al. 2014). The CRISES measures have



**Fig. 2** Improvement in time from arrival to departure. Change in time from arrival to departure in response to two phases of process improvements. ACIC, Adult Crisis Intervention Clinic; Xbar, sample mean; UCL, upper control limit; LCL, lower control limit

also proven useful in discussions with our payers regarding new state requirements for Pay for Performance contracting. Our work in this area has allowed us to proactively propose sensible metrics for which we already have established baseline performance.

### Future Directions

We anticipate that the individual CRISES measures will continuously evolve. Our work has highlighted the need for further research and consensus on certain definitions and assessment tools. As the crisis field advances and new customer needs are identified, new and improved measures will be developed and measures that are no longer useful will be retired. However, the CRISES domains will continue to be a guidepost to inform the development of additional measures. For example, after the creation of the CRISES framework, we recognized that the Partnership domain would be enhanced by the inclusion of a measure reflecting partnership with primary care providers, and now a new provisional measure is in development. Although we started with measures based on existing standards, we continue to develop improved standards. For example, in order to drive more proactive care coordination, we are exploring a measure requiring notification to the outpatient mental health provider within 1 h of arrival. Such a measure may eventually accompany or supplant the current HBIPS-7 measure. Similarly, we are exploring measures to drive more proactive efforts to identify those who need connection to a primary care provider.

The measures included here focus on the internal operations supporting the care of an individual receiving service at a facility-based psychiatric emergency program. While some of the CRISES measures may be generalizable across all crisis settings, different measures may be required for other levels of care and types of programs. Regardless of setting, future measure development should include emphasis on how crisis programs support the

community and fit within the larger system of care. Future measures may assess how well crisis programs accept continuing responsibility once the individual leaves its walls (e.g. measures assessing collaboration with outpatient providers for high utilizers, outreach during the gap between discharge and follow-up care, scheduled return visits for individuals unable to obtain timely follow-up appointments, etc.). Organizational assessments could provide more detailed measures of accessibility and capability such as exclusion criteria, pre-admission medical clearance requirements, detoxification protocols, staff competencies, etc.

Healthcare providers will be increasingly required to demonstrate their value as we continue to strive towards achieving the Triple Aim of improving patient experience, population health, and cost (Berwick et al. 2008; Glied et al. 2015). The CRISES framework provides a way for behavioral health crisis programs to select measures that demonstrate value to multiple customers using language and methods familiar to industry and quality leaders. Quality measures and pay for performance targets are not yet well defined for behavioral health, and even less so for crisis services. We in the crisis field have an exciting but time-limited opportunity to define our own standards for the unique services we provide.

### Compliance with Ethical Standards

**Conflicts of interest** Dr. Balfour and Dr. Rhoads are employed by Connections SouthernAZ and have non-compensated affiliations with the University of Arizona. Ms. Tanner and Dr. Jurica are employed by Connections SouthernAZ. Dr. Carson is owner and Chairman of the Board of ConnectionsAZ, Inc. and is also employed by Beacon Health Options.

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## APPENDIX B

DRAFT



## PERFORMANCE IMPROVEMENT

# Using Lean to Rapidly and Sustainably Transform a Behavioral Health Crisis Program: Impact on Throughput and Safety

Margaret E. Balfour, MD, PhD; Kathleen Tanner, MA, LSSBB; Paul J. Jurica, PhD; Dawn Llewellyn, BA; Robert G. Williamson, MD; Chris A. Carson, MD, MBA

**Background:** Lean has been increasingly applied in health care to reduce waste and improve quality, particularly in fast-paced and high-acuity clinical settings such as emergency departments. In addition, Lean's focus on engagement of frontline staff in problem solving can be a catalyst for organizational change. In this study, ConnectionsAZ demonstrates how they applied Lean principles to rapidly and sustainably transform clinical operations in a behavioral health crisis facility.

**Methods:** A multidisciplinary team of management and frontline staff defined values-based outcome measures, mapped the current and ideal processes, and developed new processes to achieve the ideal. Phase I was implemented within three months of assuming management of the facility and involved a redesign of flow, space utilization, and clinical protocols. Phase II was implemented three months later and improved the provider staffing model. Organizational changes such as the development of shift leads and daily huddles were implemented to sustain change and create an environment supportive of future improvements.

**Results:** Post-Phase I, there were significant decreases (pre vs. post and one-year post) in median door-to-door dwell time (343 min vs. 118 and 99), calls to security for behavioral emergencies (13.5 per month vs. 4.3 and 4.8), and staff injuries (3.3 per month vs. 1.2 and 1.2). Post-Phase II, there were decreases in median door-to-doctor time (8.2 hours vs. 1.6 and 1.4) and hours on diversion (90% vs. 17% and 34%).

**Conclusions:** Lean methods can positively affect safety and throughput and are complementary to patient-centered clinical goals in a behavioral health setting.

Lean is an organizational philosophy developed to translate the successes of the Toyota Production System to auto manufacturing in the United States and has since been adapted to a wide variety of industries.<sup>1</sup> Lean has been increasingly applied to health care settings to achieve quality goals.<sup>2,3</sup> An important focus of Lean is the reduction of waste, which is defined as anything that is “non-value added” to the customer, such as time spent waiting.<sup>4</sup> This is naturally appealing to fast-paced health care settings, and thus many implementations of Lean methods have been in emergency departments (EDs) and operating rooms.<sup>5</sup>

In addition to the impact on quality outcomes, Lean can be a catalyst for broader organizational culture change in health care organizations.<sup>6</sup> Fundamental principles of Lean include the challenge of continuous improvement and respect for the teams of people performing the work.<sup>7</sup> This leads to an approach different from that found in traditional top-down management structures; rather, frontline staff are empowered to engage in improvement of the processes in

which they work, with support from and collaboration with leadership.<sup>8</sup> In Lean organizations, management functions to support the staff in problem solving, and shifts from asking “Why *didn't* staff do their job?” to “Why *couldn't* staff do their job?”<sup>9</sup> Although Lean employs many tools for data analysis and outcome measurement, it differs from traditional research methods in that the focus is on continuous improvement rather than proving a hypothesis.<sup>10</sup> Improvement efforts are rapid and iterative, and methods change quickly and often as outcomes are continually monitored and new problems are identified and addressed.

The purpose of the study reported in this article is to (1) demonstrate how Lean principles can be applied to achieve rapid transformation of clinical operations, (2) describe strategies for sustaining change and promoting ongoing improvements, and (3) identify special considerations for behavioral health settings.

## METHODS

### Study Setting and Population

This work was performed at the Crisis Response Center (CRC), a freestanding behavioral health facility providing crisis services and emergency psychiatric care to adults and children in Pima County, Arizona. The CRC was created

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in 2011 to reduce the numbers of people with behavioral health needs booked into jail or boarding in hospital EDs. Management of the CRC was transferred to our organization (ConnectionsAZ) in April 2014 to address concerns related to long waits, poor patient experience, and repeated safety incidents. The CRC serves 11,000 adults and 2,200 children annually. This study includes the adult population served in the urgent care clinic and 23-hour observation unit. Approximately 45% are brought directly from the field by law enforcement, 10% are transferred from outside medical EDs, and the remainder arrive via walk-in. The CRC is staffed 24/7 by behavioral health medical professionals (BHMPs: psychiatrists, nurse practitioners, physician assistants), nurses, behavioral health technicians, crisis workers (social services staff with various credentials), and peer supports. (Peer supports are staff with their own lived experience with mental illness and/or substance use who have received training in how to use that experience to engage with patients in a manner different than that of traditional clinical staff.<sup>11</sup>) The CRC is located on the Banner—University Medical Center campus in Tucson and is a training site for residents and medical students at the University of Arizona. The Regional Behavioral Health Authority is the major source of funding supporting the operations of the CRC.

### Study Design

This retrospective, observational, pre-post interventional study compared outcome measures related to throughput and safety before and after the implementation of process improvements. Our organization assumed management of the facility and its staff on April 1, 2014. Phase I interventions were implemented on July 1, 2014, and Phase II interventions were implemented on October 1, 2014. We included all adults presenting for services during the study period of January 1, 2014, to December 31, 2015. The 2014 data were divided into pre- and postintervention intervals and compared. We then compared the preintervention interval to the following year (January 1, 2015, to December 31, 2015) to assess whether the improvements had been sustained.<sup>12</sup> We analyzed administrative data from our electronic health record (EHR) but not individual patient records. As a quality improvement effort, this project was exempt from Institutional Review Board review and did not require informed consent.

### Preintervention Activities (April–June 2014)

**Engagement, Information Gathering, and Values Development.** Executive leadership began by engaging managers, frontline staff, and patients via town-hall meetings, rounding, and working clinical shifts to gain firsthand knowledge of operations and stakeholder concerns. All agreed that the adult triage process was the highest priority, but there was disagreement on the desired outcomes of that process, stemming from a lack of consensus regarding the mission and values of the CRC. Leadership convened the management staff to define values and develop a new mission

statement: “To meet the immediate needs of people in behavioral health crisis in a safe and supportive environment in collaboration with community partners.” When there was unanimity among management, frontline staff could be engaged in improvement efforts with consistent support and guidance from their managers.

**Defining Values-Based Outcomes.** As described elsewhere,<sup>13</sup> we used a quality improvement tool called a Critical-to-Quality (CTQ) Tree<sup>14</sup> to translate our core values into outcome measures: Crisis Reliability Indicators Supporting Emergency Services (CRISES). We defined our values as Timely, Safe, Accessible, Least Restrictive, Effective, Consumer/Family Centered, and Partnership. These are consistent with the Institute of Medicine’s six aims for quality health care: Safety, Effectiveness, Equity, Timeliness, Patient-Centeredness, and Efficiency,<sup>15</sup> while also focusing attention on goals unique to the behavioral health crisis setting. This work informed the selection of the primary outcome measures for the process improvement initiatives described in the current study, specifically the following:

- Timely: door-to-door dwell times, door to assessment by a BHMP (door-to-doctor time)
- Safe: staff injuries
- Least Restrictive: calls to security to assist with behavioral emergencies
- Partnership: time on diversion

### Interventions

**Phase I Intervention: Reengineering the Triage Process (July–December 2014).** A multidisciplinary group composed of executive leadership, management, and frontline staff (including peer supports who had previously been patients at the CRC) mapped the baseline triage process, which was as follows: Each walk-in patient arrived via an unlocked waiting room (WR) where he or she was checked in and received a brief medical screen by a behavioral health technician. The patient was then called into 1 of 12 clinic assessment rooms where a behavioral health technician performed a safety search and inventoried the patient’s property, which was locked up for the duration of the visit. Then the patient met with a crisis worker for a screening assessment and waited in that room for further evaluation. Another crisis worker performed a more extensive assessment, then discussed the case with the BHMP, who may either perform his or her own assessment, direct the crisis worker to discharge the individual, order medication or a period of observation then have the individual wait for reassessment in a clinic assessment room, or write admission orders to the 23-hour observation unit. The observation unit is adjacent to the clinic and is comprised of an open area where patients are visualized at all times and, unlike the clinic, meets inpatient safety standards for anti-ligature design. Police and ambulance arrivals entered through a gated sally port (SP). The process for these patients was the same except they were

assessed for medical issues by a nurse in the SP then taken directly to an assessment room in the clinic.

The team identified opportunities for improvement in dwell times and staff injuries as well as processes that put patients and the organization at risk. For example, it was not clear which patients required assessment by the BHMP vs. social services staff only. Individuals with acute symptomatology were often held for hours or even overnight in clinic rooms that were not ligature-safe or amenable to constant visualization due to inconsistent criteria for admission to the observation unit or delays in finding a BHMP to write admission orders. Staff were spread out over a large area and often unable to proactively attend to the needs of acutely psychotic or intoxicated patients and prevent episodes of agitation or violence. Consequently, security was often called to assist. Other processes led to suboptimal patient experience, such as seclusion/restraint of high-acuity patients in close proximity to low-acuity patients and their families who were seeking outpatient urgent care services.

The team developed the following goals for the ideal process:

1. Treat patients in the least restrictive setting that can safely meet their needs.
2. Move the highest-risk patients to the safest location (observation unit).
3. Begin treatment as quickly as possible.
4. Reduce unnecessary or redundant tasks.
5. Use space more efficiently.
6. Create the experience we would want for our families or ourselves.

The team performed a gap analysis comparing the current process to the ideal, then developed new policies and procedures for clinical assessments, patient flow, and space utilization.

The new process was implemented July 1, 2014, and is as follows: WR arrivals are checked in and receive a brief medical screen as before. In addition, vital signs are performed in a designated area in the WR to facilitate early identification of acute medical issues. The WR is monitored by a behavioral health technician stationed there at all times, and peer supports have an increased presence. Patients are brought to one of two triage assessment rooms (TR) where the crisis worker performs a single streamlined assessment using a newly developed tool to triage patients into low/moderate/high risk categories based on dangerousness to self/others and symptom acuity (Appendix 1, available in online article). High-risk patients are automatically admitted to the observation unit via a standing order protocol, eliminating the need to wait for BHMP orders. A nurse and behavioral health technician are called to the assessment room to begin the admission process and move patients to the observation unit. Low- and moderate-risk patients are redirected to the WR and called back into the TR assessment room to meet with the BHMP or crisis worker as needed. They are not searched or separated from their belongings unless

there is a compelling reason to do so for a given individual. Patient flow is tracked using a visual management tool (Appendix 2, available in online article) comprised of a whiteboard with magnets and colors to indicate patient status. The process is the same for SP arrivals except that the nurse meets individuals in the SP, directs them to one of three designated assessment rooms, and determines the risk level based on the same triage tool described above. A value stream map<sup>16</sup> illustrating the old and new processes is shown in Appendix 3 (Appendix 3, available in online article).

**Phase II Intervention: Addition of a Behavioral Health Medical Provider in Triage (October–December 2014).** After the Phase I interventions, there continued to be long waits to BHMP assessment, and the facility was frequently on diversion. To address this, we added an additional 12-hour BHMP shift assigned to the clinic beginning October 1, 2014. The clinic BHMP focuses on newly arrived patients, whether discharged from the clinic or admitted to the observation unit. He or she typically starts the day assisting the observation unit with re-assessments and discharges, then focuses on the clinic when walk-in and SP patients begin arriving later in the day.

### Sustainability Interventions: Building a Lean Culture

Some staff were initially skeptical of improvement efforts because of a belief that things would not change. Others were fearful of being punished for breaking the rules or criticizing their superiors. Leadership made considerable efforts to change the culture to one of staff feeling supported in values-based decision making and problem solving in the moment. This was primarily achieved via frequent contact and modeling (for example, regular rounding, open-door accessibility, working clinical shifts on the floor, and inclusion of frontline staff in improvement efforts). In addition, we hardwired Lean concepts into our organizational structure in order to sustain improvements and continue developing the culture.

**Daily Huddles.** We implemented daily huddles<sup>17</sup> with key operational leaders, in which we ask “What do we need to do to support the frontline staff today?” The huddles were implemented shortly after assuming management of the facility in April 2014 and refined throughout the study period. The huddle centers around the shift report (Appendix 4, available in online article), which is prepared by frontline staff twice daily and contains key pieces of actionable data. For example, multiple patients waiting for their initial psychiatric evaluation may indicate a need to call in additional BHMPs, whereas high numbers of patients waiting for transfer to external inpatient facilities may indicate a need for the medical director to review the cases to ensure that they all do in fact meet medical necessity criteria for inpatient admission and a need for leadership to work with external stakeholders to address the backup. The huddle also highlights individual patients who may need specialized

intervention. For example, data indicated that patients with developmental disabilities were more likely to be restrained; now these individuals are flagged on the shift report, which triggers a review of the behavioral plan by the director of nursing. Some activities that once required a separate meeting (for example, review of safety events) have been incorporated into the daily huddle, which both ensures that these events are addressed as they occur and reduces time wasted on unnecessary meetings.

**Shift Leads.** We made the transition to a structure of discipline-specific leads for each 12-hour shift, analogous to Lean line managers,<sup>18</sup> which includes a charge nurse, lead crisis worker, lead behavioral health technician, and lead unit clerk. This transition occurred in the fourth quarter (Q4) of 2014 through Q1 2015 and replaced the previous structure in which a single house supervisor was responsible for the day-to-day operations on each shift, and management staff, often via retrospective chart review or monthly groups, performed clinical supervision. The shift leads are now empowered to solve problems in the moment affecting their specific discipline's responsibilities. More complex problems are addressed in the next daily huddle (or directed to the administrator on call if urgent). Clinical supervision is performed by the shift leads, as they can identify opportunities for improvement and provide correction and feedback in real time. This frees managers to use their time more efficiently, focusing only on individual staff needing more intensive intervention, so that they are free to engage in more strategic planning and complex improvement activities. A modified Lean curriculum was designed for the shift leads to give them the tools to lead future improvement projects.

## Outcome Analysis

**Data Extraction.** Existing data reports had been destroyed immediately prior to our assuming management of the facility. Thus, baseline data were reconstructed concurrently with the process improvement activities described in this study. The EHR was used to extract patient demographics, arrival and discharge times, and assessment times for all adults presenting for services. Calls to security were compiled from daily security logs. Nonemergent calls such as routine escorts were excluded. Staff injuries were compiled from incident reports. We did not have access to reliable data on staff injuries or door-to-doctor times that occurred prior to ConnectionsAZ assuming management of the CRC; thus pre-April 2014 data are not included. The percentage of hours on diversion (not accepting transfers from EDs because of overcapacity) was calculated from daily logs. Standardized criteria for diversion were developed in July 2014; thus pre-July data are not included.

**Statistical Analysis and Data Presentation.** Outcome data were analyzed using Minitab 17 (Minitab Inc., State College, Pennsylvania) and XLSTAT (Addinsoft, New York City). Wilcoxon rank-sum tests were used to compare non-

normally distributed data (door-to-door dwell times and door-to-doctor times); *t*-tests were used to compare all other measures. In addition, statistical process control charts were used to illustrate changes in throughput measures over time.

## RESULTS

### Population and Encounters

We analyzed 10,546 encounters from January 1, 2014, through December 31, 2014, and 10,353 encounters in the postimplementation year of January 1, 2015, through December 31, 2015. Demographic descriptors and monthly volumes did not significantly differ across the study periods. Some 61% of the population was male, and 20% were 18–24 years of age; 35%, 26–40; 42%, 41–64; 3%, 65–84; and 0.1%, 85 years of age or older. Some 53.2% were white-non-Hispanic, 26.8% Hispanic, 4.8% African American, 4.5% Native American, 1.4% biracial, 0.6% Asian, and the remainder classified as “other” or declined to answer.

### Interventions

**Phase I Interventions (July–December 2014).** Phase I outcomes are summarized in Table 1. There was a decrease of 225 minutes in the median door-to-door dwell time in the clinic (95% confidence interval [CI]: –224– –208;  $p < 0.0001$ ). The change over time is depicted as a control chart in Figure 1a. There was a decrease of 2 hours in the median door-to-door dwell time in the observation unit (CI: –3.7– –2.0;  $p < 0.0001$ ) despite the fact that 232 more patients per month were identified as high-risk and triaged to that unit (CI: 163–299;  $p < 0.0001$ ). The percentage of patients evaluated by a BHMP (as opposed by being seen by social services staff only) increased by 21 percentage points (CI: 19–23;  $p < 0.0001$ ). The mean number of emergent security calls per month decreased by 9.2 (CI: –16.3– –2.0;  $p = 0.017$ ), and staff injuries decreased by 2.1 (CI: –4.1– –0.02;  $p = 0.034$ ). Injuries sustained in the clinic were eliminated (Figure 2). These improvements were sustained during the following postimplementation year, as shown in Table 1.

**Phase II Interventions (October–December 2014).** Phase II outcomes are summarized in Table 2. (For the statistical analyses, the preimplementation comparison period for Phase II is July–September because the conditions that existed prior to Phase I do not provide a meaningful comparison condition because of the low percentage of patients receiving psychiatric evaluations by a BHMP and the lack of standardized criteria for diversion.) Observation unit median door-to-doctor time decreased by 6.6 hours (CI: –6.1– –5.1;  $p < 0.0001$ ). The change over time is depicted, as a control chart in Figure 1b. There was an increase following Phase I, as more patients were required to be evaluated by the BHMP, then a reduction after the implementation of Phase II interventions targeted at BHMP staffing. Hours on diversion decreased by 73 percentage points (CI: –125–



**Table 1. Comparison of Phase I Outcome Variables: Pre- vs. Postimplementation and Pre- vs. One Year Postimplementation**

	Pre (Jan–Jun 2014)	Post Phase I Implementation (Jul–Dec 2014)			One Year Postimplementation (Jan–Dec 2015)		
		Difference (vs. pre)	95% CI	P	Difference (vs. pre)	95% CI	P
Clinic Door-to-Door Dwell Time (median in minutes)	343	118	–225	<0.0001	99	–244	<0.0001
Observation Unit Door-to-Door Dwell Time (median in hours)	24.2	22.2	–2.0	<0.0001	23.5	–0.7	0.0086
Number of Patients Triaged to Observation Unit per Month (mean)	405	637	232	<0.0001	648	243	0.004
Patients Seen by BHMP (%)	57%	78%	21	<0.0001	84%	27	<0.0001
Emergent Calls to Security per Month (mean)	13.5	4.3	–9.2	0.017	4.8	–8.7	0.005
Staff Injuries per Month (mean)*	3.3	1.2	–2.1	0.034	1.2	–2.1	0.019

Wilcoxon rank-sum tests were used to compare door-to-door dwell times; t-tests were used to compare all other measures.

\*Reliable data on staff injuries from before April 2014 data were not available.

CI, confidence interval; BHMP, behavioral health medical professional.

–20;  $p < 0.0001$ ). These improvements were sustained over the following postimplementation year, as shown in Table 2.

**Redistribution of Space.** More efficient use of space (Figure 3) resulted in 1,046 square feet of unused space in the clinic (47% of the total clinic space). The clinic was remodeled to create an overflow observation unit in February 2015, increasing the observation unit capacity from 25 to 34 patients. The seclusion/restraint room in the clinic is no longer in use.

## DISCUSSION

This study describes the application of Lean methods to achieve a rapid and sustainable transformation of clinical operations in a behavioral health crisis program. This initiative began with an engagement and information-gathering phase, during which we developed value-based outcome measures. Then a multidisciplinary team composed of leaders and frontline staff designed and implemented two consecutive sets of interventions. Phase I was implemented within three months of our assuming management of the facility and involved a redesign of flow, space utilization, and clinical assessment and care protocols, resulting in improvements to clinic throughput and safety measures without additional staffing. Phase II involved improvements to the BHMP staffing model, resulting in a dramatic decrease in observation unit door-to-doctor time.

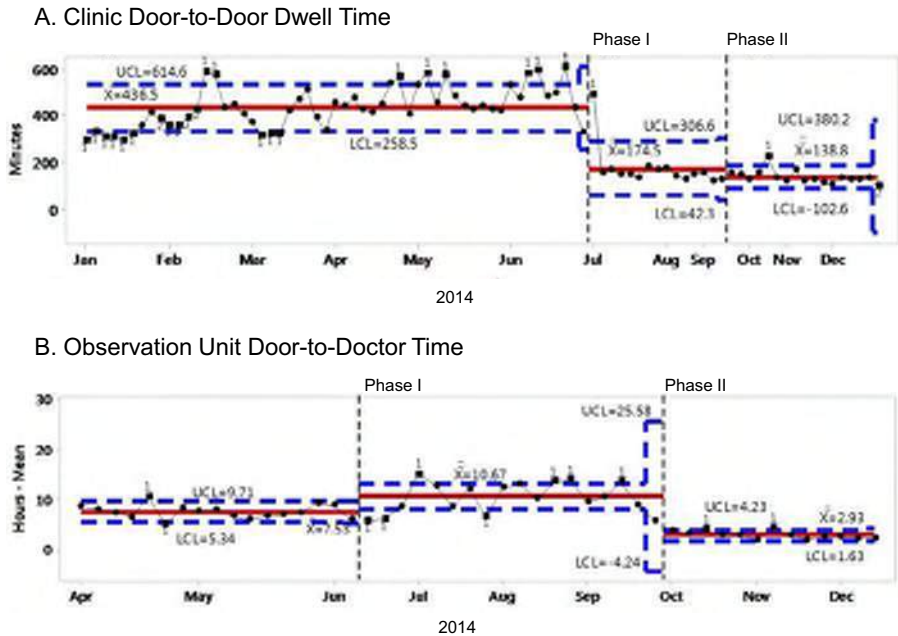
Most published studies of Lean applications in the emergency setting focus on process outcomes and do not include outcomes reflecting patient safety, quality, or effects on employees.<sup>19</sup> Our study demonstrates improvements in such measures, including staff injuries and calls to security to manage violent patients. Other measures, such as incidents of self-directed violence or restraint-related injuries to patients, were low at baseline and remained unchanged during the study period.

The improvements described in this study were sustained through the following year by incorporating Lean concepts into our organizational structure and culture. Rapid communication of information to people with the ability to problem-solve—a key component of sustainable Lean implementations<sup>20</sup>—is accomplished via the new system of shift leads, shift reports, and daily huddles. Shift leads solve problems in the moment, while the shift report and huddles ensure that more complex problems are communicated quickly to higher-level managers. In addition, shift leads received training in Lean methods to engage more of the workforce in future improvement activities.<sup>21</sup>

## Unique Considerations for Behavioral Health Services

Early assessment is associated with positive outcomes in the ED setting,<sup>22–25</sup> but to our knowledge this is the first study demonstrating this approach in a behavioral health crisis setting. Several key considerations unique to behavioral health

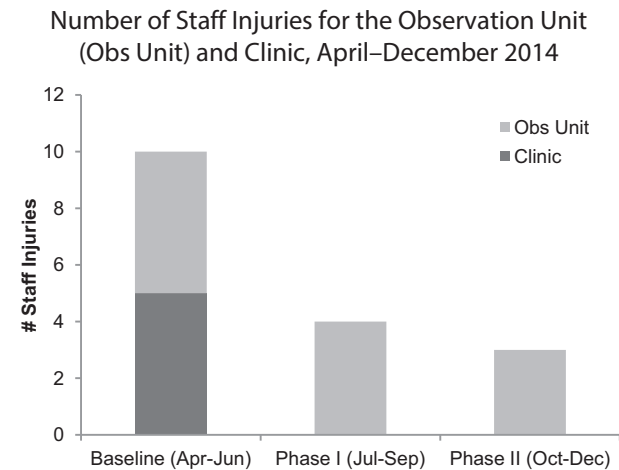
Improvement in Throughput, January–December 2014



**Figure 1:** These X-bar charts depict improvement in throughput measures. Each data point represents the mean of a random sample of up to 100. The center line (X-bar) represents the process mean. Upper control limits (UCL) and lower control limits (LCL) are set at three standard deviations above and below the mean, respectively. S-charts plotting the standard deviation verified that the processes were in control and are not displayed. Clinic door-to-door dwell time decreased following Phase I interventions, and this improvement was sustained during Phase II (Figure 1a). There was an increase in observation unit door-to-door time following Phase I, as more patients were required to be evaluated by the behavioral health medical professional (BHMP), then a reduction after the implementation of Phase II interventions targeted at BHMP staffing (Figure 1b). Figure 1a is reprinted with permission of Springer SBM US, from Balfour ME, et al. Crisis Reliability Indicators Supporting Emergency Services (CRISES): a framework for developing performance measures for behavioral health crisis and psychiatric emergency programs. Community Ment Health J. 2016;52:1–9.

were aligned with Lean concepts to improve both safety and experience for this specialized population (Figure 4). Continuous observation and proactive intervention are critical to address symptoms and diffuse behaviors that may

escalate quickly. It is equally important to engage with patients in crisis and treat them with respect in the least-restrictive environment possible.<sup>26</sup> The more efficient use of space resulted in the consolidation of staff onto the locked observation unit, where the highest staff-to-patient ratio is needed, and our new assessment process reduced the delay in moving high-risk patients to this unit. To ensure constant observation, peer supports stay with these patients during the time it takes to move them to the observation unit; thus, what was once non-value-added waiting time gained value via peer engagement. Similarly, the assignment of a peer and technician to the waiting room creates a more therapeutic milieu for patients and families waiting for the clinic process. Early segmentation of low- and moderate-risk patients allowed us to dispense with the one-size-fits-all approach of treating everyone as dangerous and subjecting them to searches and instead concentrate our highest level of precautions and safety procedures on the high-risk subpopulation. The reallocation of unused clinic space into a smaller overflow observation unit allowed us to further individualize care for high-risk patients. For example, patients with severe anxiety or psychological trauma often feel more comfortable on this smaller, quieter unit.



**Figure 2:** The number of staff injuries steadily decreased and were eliminated from the clinic setting altogether (see Table 1 for statistical analysis).



**Table 2. Comparison of Phase II Outcome Variables: Pre- vs. Postimplementation and Pre- vs. One Year Postimplementation**

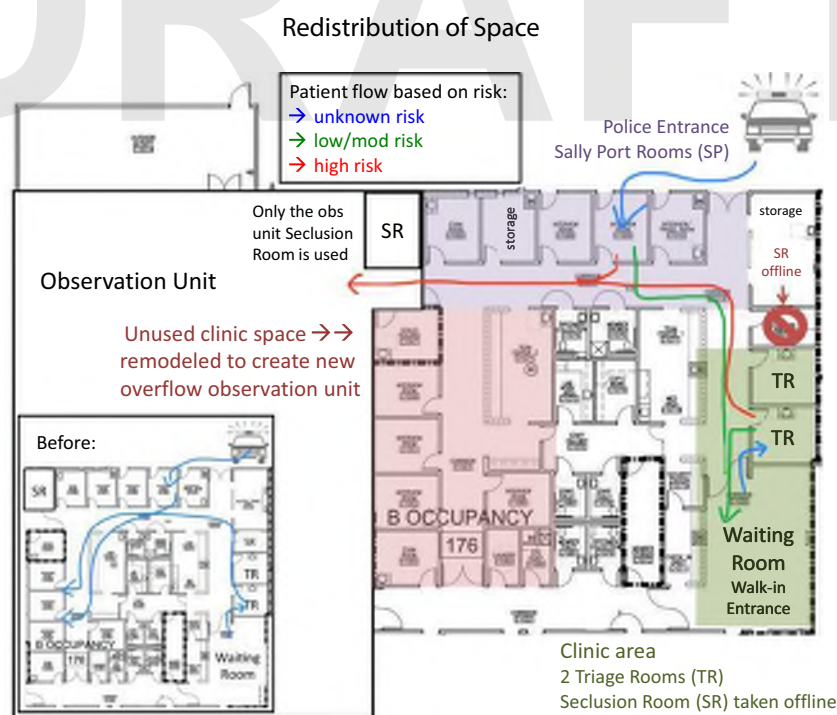
	Pre* (Jul–Sep 2014)	Post Phase II Implementation (Oct–Dec 2014)				One Year Postimplementation (Jan–Dec 2015)			
			Difference (vs. pre)	95% CI	p		Difference (vs. pre)	95% CI	p
Observation Unit Door-to-Doctor Time (median in hours)	8.2	1.6	–6.6	(–6.1, –5.1)	< 0.0001	1.4	–6.8	(–6.3, –5.5)	< 0.0001
Hours on Diversion (%)	90%	17%	–73	(–125, –20)	< 0.0001	34%	–56	(–100, –4)	< 0.0001

Wilcoxon rank-sum tests were used to compare door-to-doctor time; t-tests were used to compare hours on diversion.  
 \*The preimplementation comparison period for Phase II is July–September because the conditions that existed prior to Phase I do not provide a meaningful comparison condition due to the low percentage of patients receiving psychiatric evaluations by a behavioral health medical professional and the lack of standardized criteria for diversion.  
 CI, confidence interval.

### Challenges and Limitations

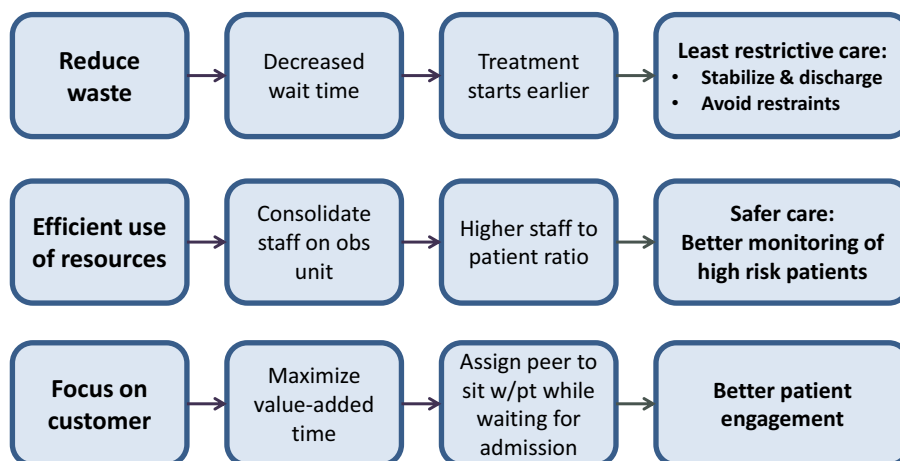
As stated, baseline data had been destroyed immediately prior to our assuming management of the facility. The severity of the safety concerns necessitated quick action; therefore, we were building reports, reconstructing baseline data, and creating a quality program concurrently with the work described in this study. As a result, some measures such as patient satisfaction

could not be compared, as they were either lost or not consistently measured prior to our interventions. The need to intervene quickly also affected the ability to conduct more extensive preintervention measurements. For example, although we currently administer the Hospital Survey on Patient Safety Culture<sup>27</sup> and analyze for trends in staff responses, we did not have the time or bandwidth to collect baseline data prior to



**Figure 3:** Before the Phase I interventions, staff were spread out over a large area, with mixing of patients with unclear risk profiles (blue arrows), who often slept overnight in unmonitored, non-ligature safe assessment rooms. After the new process, risk level is determined early. Green arrows show the flow of low- and moderate-risk patients, and red arrows show the flow of high-risk patients, who may arrive via the waiting room (walk-ins) or the gated sally port (law enforcement drops). Staff are consolidated with the high-risk patients on the observation unit. More efficient flow resulted in unused space that was converted to an overflow observation unit. The process improvement team developed the new flow using an enlarged laminated floor plan and dry erase markers; their final product looked much like this electronic version.

## Alignment of Lean Concepts with Behavioral Health Clinical Goals



**Figure 4:** Alignment of Lean concepts with behavioral health clinical goals improves both safety and experience for this specialized population. Obs unit, observation unit; pt, patient.

our interventions. Such a formal assessment of organizational culture change would have been a worthwhile endeavor.

## CONCLUSION

This work demonstrates how Lean methods can be applied to achieve rapid and sustained improvements in safety and throughput in a behavioral health crisis setting. Lean is complementary to behavioral health clinical goals, as the focus on customer experience and eliminating waste can result in processes that deliver care quickly and safely while also promoting engagement, individualized care, and respect.

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**Conflicts of Interest.** All authors report no conflicts of interest.

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## ONLINE-ONLY CONTENT

See the online version of this article for **Appendix 1. Crisis Triage Guide. Appendix 2. Visual Management System for Patient Tracking. Appendix 3. Value Stream Map of the Triage Process. Appendix 4. Sample Shift Report.**

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## APPENDIX C

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# Mobile Integrated Healthcare Program Changing How EMS Responds to Behavioral Health Crises

Sat, Oct 1, 2016 | By [Stein Bronsky, MD](#) , [Kristin Giordano](#) , [Robin Johnson, MD, FACEP](#)



*Photos courtesy Stein Bronsky/Colorado Spring Fire Department*  
10/18/2019 F-56

The patch comes over the radio: A paramedic informs the local hospital's ED that her team is en route with a suicidal male who requires [psychiatric evaluation](#). The paramedic and her crew were on scene for an hour trying to convince him to consent to receive help.

At the hospital, the paramedic shares the information she collected with the ED staff, who assume responsibility for the patient. A lengthy ED stay—his fourth this year—is in this patient's future.

This all-too-common scenario occurs across the country, spurring the same thoughts among emergency providers who attend to patients in crisis: Wouldn't it be better if there was an efficient way to deliver definitive services to patients with psychiatric emergencies besides the status-quo inefficient field navigation and prolonged ED visits? Can the high recidivism of patients in behavioral health crisis be combatted with the proper tools and infrastructure to facilitate proper and timely navigation for these patients? Isn't there a more appropriate primary option for helping patients with behavioral health crises than the already-stretched-too-thin EMS, law enforcement and ED resources?



## Reforming Old Ways

Community stakeholders in Colorado Springs, Colo., decided to channel those lines of thought into action. In 2012, the Colorado Springs Fire Department (CSFD) started a [mobile integrated healthcare](#)/community paramedicine program to address the issue of frequent users of EMS and local EDs. The Community Assistance Referral and Education Services (CARES) program gave special attention to the 76% of frequent 9-1-1 users with behavioral health issues, with EMTs and paramedics making home visits and providing assistance with education and navigating patients to community resources.

The program achieved considerable success by dropping 9-1-1 one-year use by 50% among two-thirds of the program's patients.

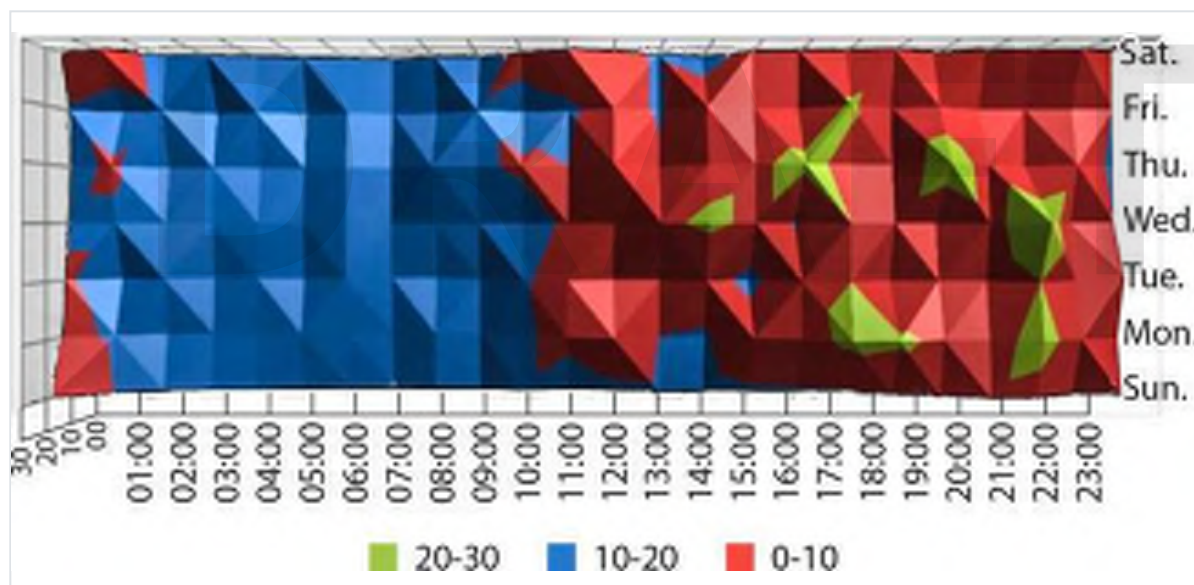
CARES program stakeholders recognized that if they didn't find working solutions to underlying psychiatric concerns in the community's population, the CARES programs



would see limited sustainable success without additional community assistance/support.

However, CARES was set up as a nonemergent program, working with patients only after multiple 9-1-1 calls or ED visits. CARES doesn't change the system's response to initial, emergent psychiatric crises. Calls to 9-1-1 by patients experiencing an emergent behavioral health crisis would still be met with the same timely response that a patient who had suffered severe trauma, myocardial infarction, or stroke would see: three CSFD EMTs, one CSFD paramedic, one American Medical Response (AMR) paramedic, one AMR EMT, and one to three law enforcement officers. A psychiatric patient might need further evaluation and medication and perhaps placement in a psychiatric hospital. A patient with a [mental health](#) crisis might wait days to receive the help that they needed, even after arriving at the ED. Clearly, this one-size-fits-all approach was neither necessary nor effective.

**Figure 1: Colorado Springs citywide time of day and day of week for behavioral health calls for service**



Creating a new program and protocols that would effectively address the issue of psychiatric crises wouldn't be easy. Years of history indicated that emergency personnel and other episodic care providers regularly experience complications in treatment and disposition of patients with underlying behavioral health conditions. The treatment modalities for psychiatric patients, in fact, reflect system-wide, multidisciplinary, resource utilization inefficiency.

Another challenge was that the training curriculum for firefighters, EMTs, paramedics and law enforcement doesn't include comprehensive training on managing behavioral

health crises, and even expanded protocols and training wouldn't give them the necessary tools to efficiently and safely manage and disposition psychiatric patients.

Moreover, community collaborators were aware that for patients who truly need psychiatric treatment, interaction with local emergency responders often doesn't result in optimum patient outcomes. When police respond and eventually contact EMS, there's already been a delay in care, sometimes with adverse outcomes. And the arrival of EMS doesn't necessarily translate into efficient care; EMS personnel aren't equipped to perform a true medical clearance, psychiatric evaluation, or determine and facilitate a definitive disposition.

Thus, EMS essentially becomes a taxi service to the ED. And once the patient arrives at the ED, he or she can spend several hours or even days there before appropriate intervention and disposition or treatment occurs. So what really exists is a handoff from one agency to the next, each of which isn't designed for effective management of behavioral crises. These suspicions would later be statistically confirmed by a retrospective evaluation of emergency calls in Colorado Springs that revealed 81.1% of all CSFD responses were medical in nature and 18.1% of the 49,297 medical 9-1-1 calls to CSFD in 2014 involved behavioral health emergencies, over 98% of which were transported the local EDs by AMR.



### **The Colorado Springs Community Response Team sees an average of 81**

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F-59

**patients per month.**

## Vital Elements Identified

Cross-agency collaboration was key in working toward a solution. In 2012, a local summit to address the lack of mental health services brought 36 different agencies together to map the existing behavioral health patient navigation process and better understand the issues.

At the outset, the stakeholders identified three critical elements as being vital to a positive outcome: scene safety, medical clearance and definitive disposition—and for optimal results, all of these components must take place simultaneously on scene.

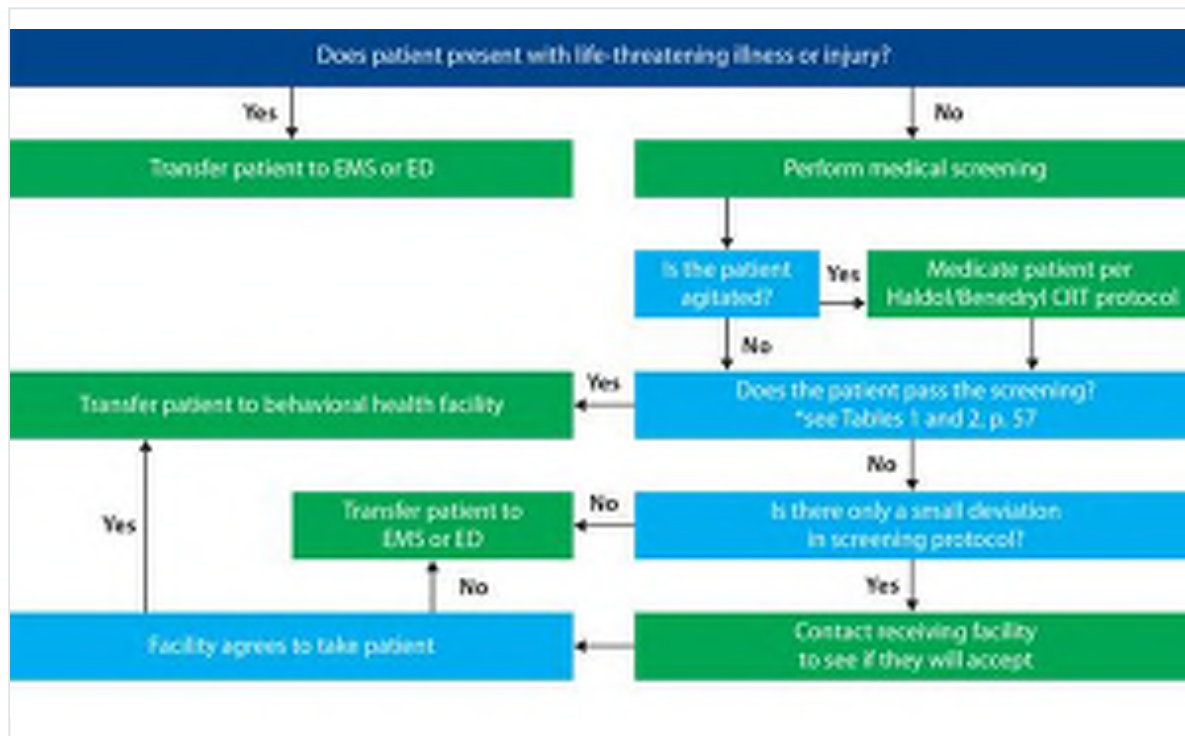
The first step toward program development involved conducting a comprehensive analysis of the treatment path for psychiatric patients in the EMS system as it already existed—from initial contact to definitive disposition. That exploration revealed that the system was surprisingly complex, involving more than 50 points of contact, including dispatch communication centers, crisis lines, law enforcement, the fire department, EMS, hospital EDs, physicians, nurses, lab technicians, social workers and behavioral health organizations.

Another surprise that emerged from the analysis was the significant number of contacts by law enforcement with individuals experiencing behavioral health issues that never resulted in EMS or ED contact. The analysis indicated that law enforcement officers were requesting EMS assistance on only 20% of calls in which they dealt with such patients. This data clearly demonstrated the enormity of law enforcement resource utilization in behavioral health issues.

With this information in hand, the Colorado Springs Police Department (CSPD) and CSFD collaborated with AspenPointe, a local behavioral health organization, to form a specially staffed mobile integrated mental **emergency response team** to efficiently and expertly evaluate and disposition behavioral health patients directly from the field.

First deployed in December 2014, the Community Response Team (CRT) consists of a CSFD medical provider, a CSPD officer and a licensed behavioral health clinician. Deployment was originally set at 40 hours per week from 10 a.m. to 7 p.m., Monday through Thursday, based on the days of the week and times of day with the highest behavioral health 9-1-1 call volume. (See Figure 1, above.)

## **Figure 2. Colorado Springs Fire Department Community Response Team protocol**



From December 2014 through May 2015, the unit responded to 764 incidents and saw 488 patients, averaging 81 patients per month, with 86% of patients being managed in place or dispositioned directly to a mental health facility, and only 14% of patients requiring transport to local EDs for further medical evaluation. These initial successes within the first six months led to the deployment of a second CRT unit on July 1, 2015.

CRT2 is scheduled an additional 40 hours each week to cover the weekend—Friday through Monday. The two units overlap deployment to address the higher volume of 9-1-1 psychiatric incidents that occur on Mondays and, together, the units ensure daily coverage to respond to 9-1-1 and crisis hotline calls where a patient is or may be experiencing a behavioral health crisis.

Prior to the CRT program, 98% of patients seen by the CSFD and AMR for a behavioral health crisis were transported to the ED. In a matter of months, this new approach has significantly reduced strain on local emergency services, law enforcement and local EDs by intersecting, diverting and redirecting behavioral health patients to appropriate community resources directly from the field.

The local 9-1-1 call center helps by diverting qualified calls directly to the CRT, therefore decreasing the burden of these calls from the regular EMS, FD and PD dispatch.



Table 1: Field medical clearance protocol		Table 2: Psychiatric facility admission exclusion criteria	
<b>Patient demeanor</b>		1	Unable to ambulate or transfer self if in a wheel chair.
Pt can follow basic commands		2	Wound care must be able to be cared for by patient and no active MRSA or Staph resistant infections are acceptable.
Pt is not aggressive		3	IV's, tracheostomies, chest tubes, or PIC lines.
Pt can demonstrate some self control		4	IQ < 70.
<b>Vital signs</b>		5	Patient on methadone.
Systolic BP: >90 <180		6	Shakes are OK but no serious active withdrawal from substance (for example change in vital signs, vomiting, hallucinations).
Heart Rate: >50 <120		7	Active TB or other communicable diseases.
PaO <sub>2</sub> : > 88% IRR > 8--< 24		8	Dialysis, chemotherapy, or HIV regimens or tube feedings.
<b>Chem 8 values</b>		9	Patient requires specialized medical equipment such as ventilator, positive pressure machine. This does not include oxygen or CPAP, Bi-PAP if they have their own equipment.
Na > 126 < 150	K > 3--< 6	10	On Coumadin if history of unstable INR that requires active testing.
TCO <sub>2</sub> > 16	Glu < 300	11	Active vomiting, diarrhea, acute head injuries, respiratory distress or uncontrolled asthma, uncontrolled seizures, severe alcohol withdrawal, prolonged post-ictal phase, other acute medical condition.
BUN < 25	Crea < 2		
Hb > 8.5	Anion gap < 15		
<b>UA values</b>			
Pregnancy test results (negative)			
Urine tox negative other than THC			
<b>Breathalyzer</b>			
EtOH ≤ 200			

## Unit Composition

The success of the CRT can primarily be attributed to the team's unique, multidisciplinary composition. When the CRT arrives on scene, it carries an assortment of personnel and skills: an EMS provider, law enforcement officer, and a licensed clinical behavioral health social worker.

A fire department medical provider performs a medical clearance in the field. (See Table 1, above.) The medical clearance algorithm includes a physical exam, serum labs, a urine toxicology screen and a urine pregnancy test. This medical clearance system allows the team to decrease and eliminate unnecessary evaluations in the ED. Additionally, the FD medical provider screens every patient by facility admission eligibility, using criteria pre-designed by the partnered psychiatric facility. (See Figure 2, above.) The medical provider also has the ability to employ chemical sedation when needed.

A police officer provides scene safety and addresses law enforcement needs. Scene safety is often a challenging obstacle for EMS providers in traditional behavioral health crises, and the presence of the officer on scene helps to mitigate potential negative outcomes for both the patient as well as for the EMS personnel. Having an officer on scene also helps prevent the need for EMS calls for PD assistance in the traditional response model.



**A medical clearance algorithm for behavioral health patients in an emergent crisis helps decrease prolonged field assessment times and eliminate unnecessary evaluations in the ED.**

A licensed clinical social worker provides guidance on how to manage the patient, including on-scene crisis de-escalation, navigation to outpatient resources or disposition to a behavioral health facility.

The CRT unit has the authority to transport patients to designated receiving facilities, reducing the overuse of limited resources. Implementation of the CRT unit has resulted in an unprecedented streamlining between the initial 9-1-1 call for an acute behavioral crisis and patient receipt of definitive behavioral health services. Of the 2,519 patients treated by both CRT units from Jan. 1, 2015 through June 30, 2016, 49% were treated in place and 27% were transported to the local Crisis Stabilization Unit (CSU). An additional 9% were transported by CRT to a non-CSU psychiatric facility, including the County Detoxification Facility and local in-patient psychiatric hospitals. About 15% didn't meet CRT criteria for scene clearance or disposition to an alternate destination and were therefore transported to the ED for further evaluation.

CRT refers patients requiring long-term stability to the CARES program for navigation to non-emergent medical, social and behavioral health resources.



Early indications reveal behavioral health patients are benefiting from ongoing navigation: ED recidivism for CARES patients has been reduced by nearly 50%, and 88% of patients seen by the CRT in 2015 were only seen once by the CRT.

The CRT has also proven to be a marked workforce multiplier for police, EMS and ED resources. From Jan. 1, 2015 through June 30, 2016, the CRT unit has responded to 3,984 calls and treated 2,519 patients, which resulted in a release of 906 fire/EMS crews and 2,448 police units back into service. When you take into account that each call consumed an average of 45 minutes, this adds up to a tremendous amount of personnel hours saved for other vital FD, EMS and PD services.

## Looking Ahead

Initial support came from a combination of statewide grant funding and partner contributions. Continued partnerships with behavioral health organizations, FD and PD are generating opportunities for sustainability.

In evaluating the effect of the CRT program, one thing is clear: This innovative approach to responding to behavioral health crisis has shifted the EMS paradigm for Colorado Springs, and may serve as a model for other communities to achieve that same goal.

By

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## APPENDIX D

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# How Does Your Crisis System Rate?



A Framework for  
State/Regional Self-  
Assessment

For more info see  
<http://crisisnow.com>



	① Call Center Hub	② Mobile Outreach	③ Sub-acute Stabilization	Crisis Now System	Level 5 System Also Conforms to 4 Modern Principles
What makes Level 5 different?	Real Time Access Valve Mgmt	Meets Person at Home/Apt/Street	Direct LE Drop Off <10 Min	Equal Partners 1 <sup>st</sup> Responders	① Priority Focus on Safety/Security
Level 5: FULLY INTEGRATED	Air Traffic Control Connectivity	Adequate Access Statewide	Adequate Access Statewide	Adequate Access Statewide Plus →	② Suicide Care Best Practices, e.g. Systematic Screening, Safety Planning and Follow-up
Level 4: CLOSE	Data Sharing (Not 24/7 or Real Time)	Statewide Access but Reliant on ED	Statewide Access but Reliant on ED	Integrated System w/ Diversion Power	③ Trauma-Informed, Recovery Model
Level 3: PROGRESSING	Formal Partnerships	Adequate Access <1 Hr Response	Adequate Access >50% Bed Available	Adequate Access Major Payers Included	④ Significant Role for Peers
Level 2: BASIC	Shared MOU/ Protocols	Some Availability Limited to Urban	Some Availability Limited to Urban	Limited State/ County Support	
Level 1: MINIMAL	Agency Relationships	None or Very Limited Availability	None or Very Limited Availability	Fragmented Status Quo	

## APPENDIX E

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# Crisis Now

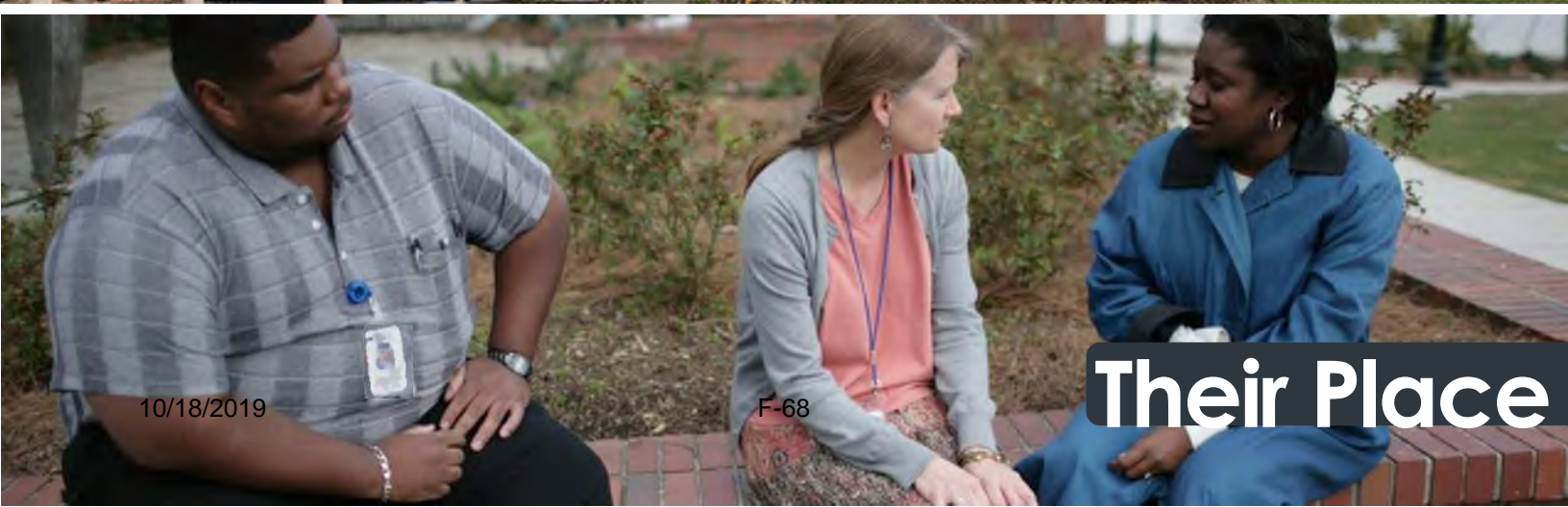
Transforming Services is Within Our Reach



High Tech



Home-Like



Their Place



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Suggested Citation Format: National Action Alliance for Suicide Prevention: Crisis Services Task Force. (2016). *Crisis now: Transforming services is within our reach*. Washington, DC: Education Development Center, Inc.

The National Action Alliance for Suicide Prevention (Action Alliance) is the public-private partnership advancing the [\*National Strategy for Suicide Prevention\*](#) by championing suicide prevention as a national priority, catalyzing efforts to implement high-priority objectives of the National Strategy for Suicide Prevention (NSSP), and cultivating the resources needed to sustain progress. Launched in 2010 by Health and Human Services Secretary Kathleen Sebelius and former Defense Secretary Robert Gates, the Action Alliance envisions a nation free from the tragic event of suicide. Education Development Center, Inc. (EDC), operates the Secretariat for the Action Alliance through the Suicide Prevention Resource Center.

Learn more at <http://actionallianceforsuicideprevention.org>





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## Foreword: Message from Co-leads

Vastly outnumbered. Ill equipped. Foraging for resources. The nation's emergency departments are the Alamo of mental health access and care.

The recent headline was not surprising: "8 in 10 ER Docs Say Mental Health System Is Not Working for Patients." The survey by the American College of Emergency Physicians (ACEP) of 32,000 physicians, residents, and medical students working in hospital emergency departments concluded that "boarding" wait times for psychiatric inpatient needed to be reduced and more training and education of staff about psychiatric emergencies was required (<http://prn.to/1VIKuU4>).



Sheree Kruckenberg is Vice President of Behavioral Health for the California Hospital Association, which represents 400 hospitals and health systems. Her April 2015 open letter drew similar conclusions:

*The increasing dependence on...hospital EDs to provide behavioral evaluation and treatment is not appropriate, not safe, and not an efficient use of dwindling community emergency resources. This includes not only hospitals, but emergency transportation providers and law enforcement. More importantly, it impacts the patient, the patient's family, other patients and their families, and of course the hospital staff (<http://bit.ly/1PxFqSq>).*

Everyone seems to agree with the problem.

While efforts to improve suicide care in emergency departments (e.g., as suggested by the recent Joint Commission Sentinel Event Alert #56) are necessary, we must also work toward more fundamental improvements in crisis care.

Several pioneering states have already shown us a path.

The vision of the National Action Alliance for Suicide Prevention is a nation free from the tragic experience of suicide. The members of the Crisis Services Task Force hope that this report, *Crisis Now: Transforming Services is Within Our Reach*, will lead to expedited and substantive changes in behavioral health crisis care.

The time is now. Together, we can, and must, do this.

David W. Covington, LPC, MBA  
CEO & President  
RI International

Michael F. Hogan, PhD  
Principal  
Hogan Health Solutions



## Introduction and Overview

### Summary of the Problem

Crisis mental health care in the United States is inconsistent and inadequate. This is tragic in that good crisis care is a known effective strategy for suicide prevention, a preferred strategy for the person in distress, a key element to reduce psychiatric hospital bed overuse, and crucial to reducing the fragmentation of mental health care.

Short-term, inadequate crisis care is shortsighted. Imagine establishing emergency services in a town by purchasing a 40-year-old fire engine and turning the town's old service shop into the fire station. It will work until there is a crisis.

With non-existent or inadequate crisis care, costs go up because of hospital readmissions, overuse of law enforcement, and human tragedies. In too many communities, the "crisis system" has been unofficially handed over to law enforcement, sometimes with devastating outcomes. Our current approach to crisis care is patchwork, delivering minimal care for some people while others (often those who have not been engaged in care) fall through the cracks—resulting in multiple readmissions, life in the criminal justice system, or death by suicide.

Our country's approach to crisis mental health care must be transformed. Crisis care is the most basic element of mental health care, yet in many states and communities, it is taken for granted. Limited. An afterthought. A work-around. Even non-existent. In many communities, the current crisis services model depends primarily upon after-hours work by on-call therapists or space set aside in a crowded emergency department (ED). These limited and fragmented approaches are akin to plugging a hole in a dike with a finger.

### Include Crisis in Mental Health Reforms

Foundational elements of an improved mental health system are in place with mental health parity, coverage expansion, the launch of the Certified Community Behavioral Health Clinics and the Excellence in Mental Health Act, and the national implementation of first episode psychosis programs. Our nation's political leaders recognize the work is not done, and for the first time in many years, there are several robust legislative proposals that focus on "fixing the broken mental health system." Now is the time to get it right. Therefore, comprehensive crisis care must be included in mental health reform. Yet systematic improvements in crisis care, which could save lives and reduce fragmentation, are not included in current leading reform proposals.

*Now is the time to establish comprehensive crisis care as a foundational, transformative, life-saving core element of behavioral health care and of suicide prevention.*



## A Time for Change

After reviewing approaches to crisis care across the United States, the Crisis Services Task Force (hereafter “Task Force”) of the National Action Alliance for Suicide Prevention (Action Alliance) believes now is the time for crisis care to change. The Task Force, established to advance objective 8.2 of the *National Strategy for Suicide Prevention* (NSSP), comprises many experts (see Task Force and Support Team Participants in the Appendix), including leaders who have built and who operate many of the most acclaimed crisis programs in the nation.

After reviewing the literature and model programs, we offer this report to suggest what can be done, galvanize interest, and provide a road map for change. Our comprehensive review finds that now is the time for crisis services to expand because of a confluence of factors and forces, including:

- Crisis care often being the preferred and most efficient care for people in crisis
- The absence of core elements of successful crisis care in many communities
- Mental health reform proposals that are on the table but fail to seize the opportunity to improve crisis care
- Mental health parity legislation and coverage expansion

The challenge EDs face addressing behavioral emergencies

The Task Force has studied elements of successful programs and reviewed their effectiveness. While some communities are crisis-ready, there are very few communities where all key elements of crisis care are in place, and many where even the “parts” of crisis care that exist are inadequate.

In short, core elements of crisis care include:

1. Regional or statewide crisis call centers coordinating in real time
2. Centrally deployed, 24/7 mobile crisis
3. Short-term, “sub-acute” residential crisis stabilization programs
4. Essential crisis care principles and practices

These elements are discussed in more detail later in this report. Effective crisis care that saves lives and dollars requires a systemic approach, and these key elements must be in place. In this report we will review the proven key components of good crisis care and demonstrate that piecemeal solutions are unacceptable.

## Crisis Care as a Part of Mental Health Infrastructure

The tragedies and problems associated with inadequate crisis care have produced wounds in our national identity and revealed unacceptable chasms in care. These chasms are longstanding, having been made worse by deinstitutionalization and never filled in the 50+ years since President Kennedy’s Community Mental Health initiative. Growth of some mental health services has undeniably occurred as



a result of parity legislation and coverage expansion. However, expanded coverage has not led to adequate crisis care, because crisis care must be built and paid for as part of mental health infrastructure.

### Preventable Tragedies

An adequate crisis network is the first line of defense in preventing tragedies of public and patient safety, civil rights, extraordinary and unacceptable loss of lives, and the waste of resources. Tragedies like:

- Thousands of Americans dying alone and in desperation from suicide: In 2014, 42,773 people ended their life by suicide. Over the last 15 years, the rate of increase in suicide deaths exceeds the increase in every other leading form of death except Alzheimer's disease. In July 2015, the Action Alliance launched the Task Force, with the goal to provide stronger 24/7 supports to the 9 million Americans at risk each year. Over 115 people per day in the United States die alone and in despair.
- Unspeakable family pain: In November 2013, Virginia State Senator Creigh Deeds told CNN that he was alive for just one reason: to work for change in mental health. A week earlier, he was stabbed 10 times by his son, Austin "Gus" Deeds, who then ended his life by suicide. The incident happened hours after a mental health evaluation determined that Gus needed more intensive services. Unfortunately, he was released before the appropriate services could be found (<http://bit.ly/cbs-deeds>).
- Psychiatric "boarding": In October 2013, the *Seattle Times* concluded its investigation of the experience for individuals with mental health needs in EDs. "The patients wait on average three days—and in some cases months—in chaotic hospital EDs and ill-equipped medical rooms. They are frequently parked in hallways or bound to beds, usually given medication, but otherwise no psychiatric care (<http://bit.ly/ST-boarding>)." In 2014, the Washington State Supreme Court ruled the practice of "psychiatric boarding" unconstitutional (<http://bit.ly/Forbes-SupremeCourt>).
- The wrong care in the wrong place, delivered in a way that compromises other medical urgent care: In April 2014, California approved \$75 million for residential and crisis stabilization and mobile support teams. This investment was based on the belief that 3 out of 4 visits to hospital EDs for mental health and addiction issues could be avoided with adequate community-based care (<http://bit.ly/CA-crisiscare>).
- Law enforcement working as "mobile crisis": Law enforcement resources in many communities are tied up delivering "substitute crisis care" because mental health crisis care is inadequate. The results have sometimes been tragic, have added to the stigma associated with mental illness, and have drawn police resources away from other priorities. A January 13, 2015, *New York Times* Op-Ed piece described the recent death of 19-year-old Quintonio LeGrier, who was shot and killed by a Chicago police officer a month earlier. The author links the death with recent substantial cutbacks in Illinois's troubled mental health system (including the closure of half of Chicago's mental health centers) and recommends that "we need to invest more broadly in a mental health crisis system to work in conjunction with the police" (<http://bit.ly/OpEd-LeGrier>).



Five compelling reasons for change. In this document, the Task Force will present solutions that work to address one of our most stubborn human problems.

### Some States Are Making Progress

In a few states and communities across the United States, solutions are in place. *But until now we did not have the vision or will to approach crisis care with national resolve and energy.*

Systematic reform of crisis care has been or is being implemented in a number of states like California, Colorado, Georgia, and Washington State. These states were driven to new approaches for different reasons; however, their approaches share the four core, common elements presented earlier and are explained in further detail below:

1. **Regional or Statewide Crisis Call Centers.** These programs use technology for real-time coordination across a system of care and leverage big data for performance improvement and accountability across systems. At the same time, they provide high-touch support to individuals and families in crisis that adheres to National Suicide Prevention Lifeline (NSPL) standards.
2. **Centrally Deployed Mobile Crisis on a 24/7 Basis.** Mobile crisis offers outreach and support where people in crisis are. Programs should include contractually required response times and medical backup.
3. **Residential Crisis Stabilization Programs.** These programs offer short-term “sub-acute” care for individuals who need support and observation, but not ED holds or medical inpatient stay, at lower costs and without the overhead of hospital-based acute care.
4. **Essential Crisis Care Principles and Practices.** These must include a recovery orientation, trauma-informed care, significant use of peer staff, a commitment to Zero Suicide/Suicide Safer Care, strong commitments to safety for consumers and staff, and collaboration with law enforcement.

These core elements of comprehensive crisis care are drawn from well-established principles for emergency services, as well as new developments in technology and mental health care. Historically, the essential nature of crisis/emergency services was established when emergency services were designated one of five categories of “essential services” required to be offered by community mental health centers (CMHCs). These centers resulted from President Kennedy’s 1963 Mental Retardation Facilities and Community Mental Health Centers Construction Act (Public Law 88-164).

The central mission of crisis services and the core elements described above are not new. In 1979, Massachusetts’s *Brewster v. Dukakis* Consent Decree (76-4423, D. Mass., 1979) defined the *crisis intervention unit* required for each area as “a program designed to provide crisis intervention on a 24 hour a day, 7 days a week basis for up to five days, 24 hours a day to clients both new to the [mental health] system and those already receiving services” (p. 151). The program was intended to serve “clients who are acutely and severely disturbed, including those who may be dangerous to themselves



or others, extremely psychotic, intoxicated, or experiencing some severe life crises” and was to act as a gatekeeper for hospital care “for highly assaultive persons or those needing medical attention” (p. 151–152).

In addition to these long-established principles, the evolution of information and communications technology and of best practices in mental health care has led to newer elements of comprehensive crisis care that we can now define as essential:

- Harnessing Data and Technology. The Georgia Crisis and Access Line utilizes technology and secure Web interfaces to provide a kind of “air traffic control” (ATC) that brings big data to crisis care and provides the ability of real-time coordination. This essential capability could not have been envisioned a generation ago.
- Power of Peer Staff. PEOPLE, Inc.’s Living Room model, peer staffing, and the retreat model provide safety, relief, and recovery in an environment more like a home than an institution. The paradigm of recovery and the value of peers, highlighted in the Surgeon General’s report on mental health (DHHS, 1999) and the report of the President’s New Freedom Commission on Mental Health (DHHS, 2003), are now cornerstones of modern mental health care.
- Power of Going to the Person. Colorado mobile crisis teams do not wait for law enforcement to transport a person in need to the hospital. They go to the person. Colorado is the first state to prove this can be done everywhere, and in *any* area: urban, rural, and even frontier. Combining modern technology with the long-established value of care close to home, this approach is essential in modern crisis care (also, see the Action Alliance’s *The Way Forward* report).
- Evidence-based Suicide Prevention. The effectiveness of high-quality crisis lines in suicide prevention has been well established (e.g., Gould et al., 2007). The nation has a national crisis line in the NSPL, but crisis care in many communities is lacking. Since the NSPL’s network of qualified local crisis lines depends on state and local resources to fund participating centers, many parts of the United States do not have a local crisis line. Thus, many calls to the NSPL’s 1-800-273-TALK (8255) number are answered in their regions or in a national call center, not in a local center where both crisis calls and in-person crisis support can be most effectively delivered.

These approaches to modern crisis care must be developed in every state. The systems blend both long established principles (regional or statewide 24/7 functioning, focus on urgent care for an entire population, use of structured alternatives to hospitalization) with new approaches that were not available or proven during President Kennedy’s time (sophisticated communications, real-time data, and the proven power of peers to facilitate engagement and recovery). Table 1 demonstrates this.

Big data and basic principles of coordination lead to an extraordinary level of safety for air travelers.

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Table 1: Modern Crisis Care Changes the Paradigm

FROM	TO
Absence of data and coordination on ED wait times, access, crisis bed availability, and outcomes	Publically available data in real-time dashboards
“Cold” referrals to mental health care are rarely followed up, and people slip through the cracks	Direct connections and 24/7 real-time scheduling
EDs are the default mental health crisis center	Mobile crisis provides a response that often avoids ED visits and institutionalization
Crisis service settings have more in common with jails; police transport to distant hospitals takes law enforcement off the beat and is unpleasant and stigmatizing for people in crisis	Crisis service settings—the urgent care units for mental health—look more like home settings and also provide a reliable partner for law enforcement
Despair and isolation worsened by trying to navigate the mental health system maze	Crisis care with support and trust: what the person wants and needs, where the person wants and needs it

Our society takes for granted a national emergency medical response system. 911 centers use advanced technology to ensure individuals with *other medical problems* do not fall through the cracks. For example, using mobile scanners for immediate assessment that supports timely administration of clot-busting medications has transformed stroke and heart attack care. With emergency medical services in nearly every area of the country, ambulance services go to the person directly to ensure life-saving care for acute heart disease. If this can be done for heart disease and stroke—a brain condition—we can, and must, also do it for mental health crises.

This brings us to our first recommendation:

*Recommendation 1: We recommend national-and state-level recognition that effective crisis care must be comprehensive and include the core elements listed above.*



## Overview of the Report

In the sections that follow we summarize findings about the essential elements of effective, modern, and comprehensive crisis care, and the actions needed to bring it to communities across the United States. The following is an overview of the report.

- **Section 1:** Regional 24/7 clinically staffed hub/crisis call center that provides crisis intervention capabilities (telephonic, text, chat), meeting the standards of the NSPL and also providing ATC-quality coordination of crisis care, with real-time data management of:
  - Clients in crisis
  - Availability of outpatient and inpatient services in the area
  - Mobile crisis teams
  - Crisis stabilization programs
- **Section 2:** Mobile crisis teams available to reach any person in the service area in his or her home, workplace, or other convenient and appropriate setting
- **Section 3:** Crisis stabilization facilities providing short-term observation and support in a home-like, non-hospital environment
- **Section 4:** The essential qualities that must be “baked into” comprehensive crisis systems, including:
  - Embracing recovery, significant use of peers, and trauma-informed care
  - Suicide safer care, providing comprehensive crisis services that include all core elements described in this report
  - Safety and security for staff and consumers
  - Law enforcement and crisis response training and coordination
- **Section 5:** Financing crisis care, including a discussion of current payment/financing models, as well as opportunities and threats in the current environment
- **Section 6:** Strategic directions for crisis care

## About the Task Force

This report, prepared by the Task Force of the Action Alliance, summarizes the status, needs, and opportunities for mental health crisis care. The Task Force was launched in July 2015 by the Action Alliance and was composed of 31 leaders in the field of crisis services (list of members is included at the end of this document). In preparing this report, which was reviewed by all members, the Task Force also considered a recent national review of key issues in crisis care, *Crisis Services: Effectiveness, Cost Effectiveness, and Funding Strategies* (Substance Abuse and Mental Health Service Administration, SAMHSA, 2014) for evidence of effectiveness and as a basis for recommendations on funding.





Our review has taught us that all the elements of excellent crisis care are proven and have been demonstrated as feasible in some communities. However, many essential elements are not available in most communities. Sadly, this gap is both fatal and expensive. It will only be filled by the efforts of both a united mental health community and leadership by elected and appointed officials.

In all the states that have achieved or are advancing comprehensive crisis care, the involvement of elected/appointed officials was crucial. Change was achieved with activating legislation in California and Colorado, engagement of governors in Colorado and Georgia, and prodding by the judicial branch (Department of Justice, Supreme Court) in Georgia and Washington State.

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## Section 1: Air Traffic Control (ATC) Capabilities with Crisis Line Expertise

As mentioned in the introduction, State Senator Creigh Deeds was stabbed by his son, Gus, who then took his own life by suicide. Shortly before, Gus had been assessed at a local hospital and a magistrate had ordered an involuntary commitment, but no beds were available at any nearby inpatient psychiatric hospitals, so Gus was sent home (Gabriel, 2013). Sadly, it is common for individuals in mental health crisis to initially be assessed, but then later be released, only to “fall through the cracks” (<http://bit.ly/CNN-Deeds>).

The cracks occur because of interminable delays for services deemed essential based on professional assessments and are often attributable to two critical gaps, including the absence of:

1. Real-time coordination of crisis and outgoing services
2. Linked, flexible services specific to crisis response, namely mobile teams and crisis stabilization facilities

Because of these gaps, individuals walk out of an ED often “against medical advice” and disappear until the next crisis occurs.

### Making the Case for a Close and Fully Integrated Crisis Services Collaboration

Prior to 2000, there were several hundred local crisis call centers across the country, underfunded, fragmented, and lacking in credibility with policymakers and funders. Staffed with dedicated volunteers, these poorly funded programs lacked the technology, data-tracking tools, and consistent protocols needed to effectively perform their work. In some larger communities with strong community mental health programs, crisis call centers were part of or strongly linked to mental health crisis care programs. But many communities lacked comprehensive crisis services, and advocates questioned the value and effectiveness of crisis call centers.

The nation’s approach to crisis call centers received a significant upgrade starting in 2004 with creation of the NSPL. Over time, the NSPL has demonstrated its effectiveness and raised the performance bar for crisis call centers.

Comprehensive crisis systems are necessary to prevent avoidable tragedies and to orchestrate effective care. It is time to establish crisis systems as essential in a system of care, and to raise the bar on their functioning, to achieve a different set of results.

*Recommendation 2: Crisis call services should participate in and meet the standards of the NSPL, and crisis intervention systems should adopt and implement Zero Suicide/Suicide Safer Care across all program elements.*



However, two critical problems remain. First, in many parts of the United States, there is no qualified crisis call center, thus calls roll over to a regional or national center, which may be in a different state. Second, in most communities there is not a comprehensive crisis care system that includes or is linked with ATC-like capabilities to the local call center.

ATC systems provide a meaningful point of reference for the necessity of national availability of service, with consistent standards and functioning. The ATC analogy teaches us important lessons in the value of real-time, technology-driven coordination and collaboration. Adopting an ATC model for crisis services could significantly reduce the incidence of suicide by individuals in crisis.

### Learning from ATC Safety

ATC works to ensure the safety of nearly 30,000 U.S. commercial flights per day. In the United States this occurs with a very high success rate. ATC makes it remarkably safe to fly today.

But it can be very unsafe for an individual experiencing a mental health crisis.

The advancements in ATC that have helped transform aviation safety are two vitally important objectives, and without them it is nearly impossible to avoid tragedy:

- Objective #1: Always know where the aircraft is (in time and space) and never lose contact.
- Objective #2: Verify the hand-off has occurred and the airplane is safely in the hands of another controller.

These objectives easily translate to behavioral health and to a crisis system of care in particular. Always knowing where an individual in crisis is and verifying that the hand-off has occurred to the next service provider seem like relatively easy objectives to fulfill, yet they are missing from most of the U.S. behavioral health and crisis systems. Individuals and families attempting to navigate the behavioral health system, typically in the midst of a mental health or addiction crisis, should have the same diligent standard of care that ATC provides.

### The ATC Model for Crisis Services

This model used within integrated crisis call centers creates a professional framework for all levels of crisis services. It provides a hub for effective deployment of mobile crisis and for ensuring timely, appropriate access to facility services like crisis stabilization and crisis respite, and ultimately psychiatric hospitalization. Furthermore, this model is considered a part of the whole, integrated crisis system of care. It identifies the next generation of integrated crisis systems and the essential components that are required, including:

- Qualified crisis call centers that meet the standards of and participate in the NSPL
- 24/7 clinical coverage with an identifiable single contact point covering a defined region

- The ability to deploy mobile crisis services, with control over access to a sufficient range and diversity of sub-acute alternatives (respite, etc.), and the ability to secure same-day/next-day outpatient clinical services
- Clinically sufficient personnel to make triage decisions, preferably including control of acute inpatient access
- Clear expectations for outpatient clinical providers that interface with crisis care of routine emergent care

*Note: The ATC approach does not imply a belief that human beings can be routed like objects, nor is it an effort to force a one-size-fits-all approach on unique geographies, demographics, funding streams, and behavioral health care systems. Rather, it ensures no individual gets “lost” in the system.*

#### Required Core Elements of an ATC Model Crisis System of Care

The “front door” of a modern crisis system is a crisis call center that meets NSPL standards and participates in the national network. Since 2005, SAMHSA has funded multiple research projects to evaluate the critical role of crisis call centers as indispensable resources for suicide prevention. Nationally more than 160 call centers meet the standards of and participate in the NSPL.

However, in many regions of the country—just as other crisis intervention programs like mobile teams are absent—there is no qualified call center, and calls from distressed people are routed to centers in other states. The Veterans Administration (VA) system, with its own national call center and national network of facilities, is a partial exception to this rule, although travel times to VA facilities in many parts of the country are excessive.

It is no longer acceptable for there to be no local access to a competent call center. Ideally, each call center is embedded in a comprehensive crisis system with ATC capabilities.

The system should provide electronic interconnectedness in the form of secure HIPAA-compliant, easy-to-navigate, Web-based interfaces and community partner portals to support communication between support agencies (including EDs, social service agencies, and community mental health providers) with intensive service providers (such as acute care psychiatric inpatient, community-based crisis stabilization, inpatient detoxification, and mobile crisis response services).



Ubiquitous and inexpensive technology is changing nearly every other industry. It's time for the same in crisis services.

Interfaces should also include Web-based submission forms for use by collaborating agencies to support mobile crisis dispatch, electronically scheduled referrals by hospitals as a part of discharge planning, and managed care and/or authorization requirements.

An ideal system would provide functionality described in the following sub-sections.

#### *Status Disposition for Intensive Referrals*

There must be shared tracking of the status and disposition of linkage/referrals for individuals needing intensive service levels, including requirements for service approval and transport, shared protocols for medical clearance algorithms, and data on speed of accessibility (average minutes until disposition). The program should take advantage of sophisticated software to help crisis professionals assess and engage those at risk and track individuals throughout the process, including where they are, how long they have been waiting, and what specifically is needed to advance them to service linkage. Some systems display names on a pending linkage status board, highlighted in green, white, yellow, or red, depending on how long they have been waiting.

#### *24/7 Outpatient Scheduling*

Crisis staff should be able to schedule intake and outpatient appointments for individuals in crisis with providers across the state while providing data on speed of accessibility (average business days until appointment).

#### *Shared Bed Inventory Tracking*

An intensive services bed census is required, showing the availability of beds in crisis stabilization programs and 23-hour observation beds, as well as in private psychiatric hospitals, with interactive two-way exchange (individual referral editor, inventory/through-put status board).

#### *High-tech, GPS-enabled Mobile Crisis Dispatch*

Mobile crisis teams should use GPS-enabled tablets or smart phones to quickly and efficiently determine the closest available teams, track response times, and ensure clinician safety (time at site, real-time communication, safe driving, etc.).

#### *Real-time Performance Outcomes Dashboards*

These are outwardly facing performance reports measuring a variety of metrics such as call volume, number of referrals, time-to-answer, abandonment rates, and service accessibility performance. When implemented in real time, the public transparency provides an extra layer of urgency and accountability.

*Recommendation 3. State and national authorities should review the core elements of Air Traffic Control qualified crisis systems, apply them to crisis care in their jurisdictions, and commit to achieving these capabilities within 5 years, so that each region of the United States has a qualified hub for crisis care.*





## A Continuum of Care

In 2010, the Milbank Memorial Fund published the landmark *Evolving Models of Behavioral Health Integration in Primary Care*, which included a continuum from “minimal” to “close and fully integrated” that would establish the gold standard for effective planned care models and change the views of acceptable community partnership and collaboration (<http://bit.ly/MilbankContinuum>). Prior to this, coordination among behavioral health and primary care providers had frequently been minimal or non-existent, and it would have been easy to accept any improvement as praiseworthy.

The Milbank report portrayed close agency-to-agency collaboration (evidenced by personal relationships of leaders, Memorandums of Understanding (MOUs), shared protocols, etc.) at the lowest levels of the continuum and insufficient. It described these community partnerships and their coordination as minimal or basic, citing only sporadic or periodic communication and inconsistent strategies for care management and coordination. Even organizations with numerous close relationships can be extremely inefficient and ineffective when clinical care relies on telephonic coordination of care (voicemails, phone tag, etc.). It called for frame-breaking change to the existing systems of care, and its report continues to reverberate throughout the implementation of integrated care.

A modification of the Milbank collaboration continuum provides a standard for evaluating crisis system community coordination and collaboration, as shown in Table 2 (<http://bit.ly/crisiscontinuum>).

Table 2: Continuum to Evaluate Crisis Systems and Collaboration

← CRISIS SYSTEM COMMUNITY COORDINATION & COLLABORATION CONTINUUM→				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>MINIMAL</b>	<b>BASIC</b>	<b>BASIC</b>	<b>CLOSE</b>	<b>CLOSE</b>
Agency Relationships	Shared MOU Protocols	Formal Partnerships	Data Sharing (Not 24/7 or Real-Time)	“ATC Connectivity”

In this model, the highest level requires shared protocols for coordination and care management that are supported in real time by electronic processes. For a crisis service system to provide Level 5 close and fully integrated care, it must implement an integrated suite of software applications that employ online, real-time, and 24/7 ability to communicate about, update, and monitor available resources in a network of provider agencies.

Given the now-established value of high-quality crisis call centers to support many individuals who may be suicidal or distressed, but who do not need or may not prefer face-to-face care, integration of crisis call centers as the telephonic hub of crisis care is a powerful and effective approach.





## Section 1 Conclusion

Statewide community collaboration for Level 5 crisis systems of care is needed. The approaches described above are not theoretical or hypothetical; they have been employed on a statewide basis for nearly eight years in Georgia. New Mexico and Idaho added statewide crisis and access lines in 2013; Colorado launched its statewide system in 2014.

In most U.S. locations, the crisis system is not able to properly track individuals receiving services, from their entry into the system—whether via an ED, a mobile crisis team, a crisis hotline, or a walk-in clinic—to their discharge. It is typical for hand-offs to occur throughout an individual’s experience in the crisis system. In a system without close, full integration supported by electronic communication, updates, and monitoring, individuals are too likely to fall through the cracks. The consequences of losing track of people who are in a crisis situation can be disastrous, including potential harm to self and to others.

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## Section 2: Community-Based Mobile Crisis Teams

Since the 1970s, community-based mobile crisis services have been a core component of crisis care systems. These services emerged in response to the mental health center movement of the 1960s and comprised significant changes in the treatment of people with mental illness (Ruiz et al., 1973).

### What is Mobile Crisis?

Community-based mobile crisis services use face-to-face professional and peer intervention, deployed in real time to the location of a person in crisis, in order to achieve the needed and best outcomes for that individual. Since the mid-2000s many metropolitan area mobile crisis programs have used GPS programming for dispatch in a fashion similar to Uber, identifying the location of teams by GPS signal and then determining which team can arrive at the location of an individual in crisis the quickest.

Most community-based mobile crisis programs utilize teams that include both professional and paraprofessional staff, for example, a Master's- or Bachelor's-level clinician with a peer support specialist and the backup of psychiatrists or other Master's-level clinicians. Peer support workers often take the lead on engagement and may also assist with continuity of care by providing support that continues past the crisis period.

### Goals of Community-based Mobile Crisis Programs

According to SAMHSA's recent report on crisis care (2014, p. 10):

*The main objectives of mobile crisis services are to provide rapid response, assess the individual, and resolve crisis situations that involve children and adults who are presumed or known to have a behavioral health disorder (Allen et al., 2002; Fisher, Geller, and Wirth-Cauchon, 1990; Geller, Fisher, and McDermeit, 1995). Additional objectives may include linking people to needed services and finding hard-to-reach individuals (Gillig, 1995). The main outcome objective of mobile crisis teams is to reduce psychiatric hospitalizations, including hospitalizations that follow psychiatric ED admission.*

Community-based mobile crisis programs exist in the majority of states, but few have statewide coverage. While terms describing mobile crisis care differ, these programs share common goals to:

1. Help individuals experiencing a crisis event to experience relief quickly and to resolve the crisis situation when possible
2. Meet individuals in an environment where they are comfortable
3. Provide appropriate care/support while avoiding unnecessary law enforcement involvement, ED use, and hospitalization

### Evidence of Mobile Crisis Team Effectiveness and Cost-Effectiveness

SAMHSA's same report confirmed previous evidence on the effectiveness of mobile crisis service:

*Four studies were identified with empirical evidence on the effectiveness of mobile crisis services: one randomized controlled trial (Currier et al., 2010) and three that used quasi-experimental designs (Guo, Biegel, Johnsen, and Dyches, 2001; Hugo, Smout, and Bannister, 2002; Scott, 2000; Dyches, Biegel, Johnsen, Guo, and Min, 2002). The studies suggest that mobile crisis services are effective at diverting people in crisis from psychiatric hospitalization, effective at linking suicidal individuals discharged from the emergency department to services, and better than hospitalization at linking people in crisis to outpatient services.*

SAMHSA (p. 15) summarized the cost-effectiveness of mobile crisis, as well:

*Scott (2000) analyzed the effectiveness and efficiency of a mobile crisis program by comparing it to regular police intervention. The average cost per case was \$1,520 for mobile crisis program services, which included \$455 for program costs and \$1,065 for psychiatric hospitalization. For regular police intervention, the average cost per case was \$1,963, which consisted of \$73 for police services and \$1,890 for psychiatric hospitalization. In this study, mobile crisis services resulted in a 23 percent lower average cost per case. In another study analyzing the cost impact of mobile crisis intervention, Bengelsdorf et al., (1987) found that mobile crisis intervention services can reduce costs associated with inpatient hospitalization by approximately 79 percent in a six-month follow-up period after the crisis episode.*

### Task Force Findings on Mobile Crisis Services

After reviewing previous reports and research on mobile crisis programs and considering model programs, the Task Force finds mobile crisis services accomplish a wide range of tasks and are a necessary, core component of a well-integrated crisis system of care. To maximize effectiveness, the availability of mobile crisis services should match needs in the area/region they serve on a 24/7/365 basis and should be deployed and monitored by an ATC-capable regional call center.

Further, the Task Force recommends that essential functions of mobile crisis services should include triage/screening, including explicit screening for suicidality; assessment; de-escalation/resolution; peer support; coordination with medical and behavioral health services; and crisis planning and follow-up.

#### Triage/Screening

As most mobile crisis responses are initiated via phone call to a hotline or provider, the initial step in providing community-based mobile crisis services is to determine the level of risk faced by the individual in crisis and the most appropriate mobile crisis team. In discussing the situation with the caller, the mobile crisis staff must decide if emergency responders should be involved.

For example, if the person describes a serious medical condition or indicates that he or she poses an imminent threat of harm, the mobile crisis team should coordinate with emergency responders. The mobile crisis team can meet emergency responders at the site of the crisis and work together to resolve

A blurred image of an ambulance with its red and yellow emergency lights flashing, moving quickly. The word "DRAFT" is overlaid in large, semi-transparent white letters.

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It's time for a national ***mental health***  
Emergency Medical Services (EMS) system.

the situation. Explicit attention to screening for suicidality using an accepted, standardized suicide screening tool should be a part of triage.

### Assessment

The behavioral health professional (BHP) on the mobile crisis team is responsible for completing an assessment. Specifically, the BHP should address:

- Causes leading to the crisis event, including psychiatric, substance abuse, social, familial, and legal factors
- Safety and risk for the individual and others involved, including an explicit assessment of suicide risk
- Strengths and resources of the person experiencing the crisis, as well as those of family members and other natural supports
- Recent inpatient hospitalizations and/or current relationship with a mental health provider
- Medications and adherence
- Medical history

### De-escalation and Resolution

Community-based mobile crisis teams engage individuals in counseling throughout the encounter and intervene to de-escalate the crisis. The goal is not just to determine a needed level of care to which the individual should be referred, but to resolve the situation so a higher level of care is not necessary.

### Peer Support

According to SAMHSA (2009, p. 8), mental health crisis services “should afford opportunities for contact with others whose personal experiences with mental illness and past mental health crises allow them to convey a sense of hopefulness first-hand. In addition, peers can offer opportunities for the individual to connect with a supportive circle of people who have shared experiences—an option that may have particular relevance given feelings of isolation and fear that may accompany a mental health crisis” (see Significant Role for Peers in Section 4).

For community-based mobile crisis programs, including peers can add complementary qualifications to the team so that individuals in crisis are more likely to see someone they can relate to while they are receiving services. Peers should not reduplicate the role of BHPs but instead should establish rapport, share experiences, and strengthen engagement with individuals experiencing crisis. They may also

### Task Force Spotlight

#### **Becky Stoll, LCSW, VP for Crisis & Disaster Management**

Centerstone offers a comprehensive crisis system in 20 counties of Middle Tennessee. The entryway is via a 24/7 virtual Crisis Call Center. Staff work from home with telephonic crisis intervention and follow-up, silent monitoring, call recording, and supervision. Centerstone operates three Mobile Crisis Outreach Teams (MCOT) that respond to any location where an individual is experiencing a behavioral health crisis, regardless of payer status. Many assessments occur in local EDs. In partnership with the Healthcare Corporation of America and the Tennessee Department of Mental Health and Substance Abuse Services, Centerstone provides crisis assessments in many locations via telehealth.



engage with the family members of (or other persons significant to) those in crisis to educate them about self-care and ways to provide support.

#### Coordination with Medical and Behavioral Health Services

Community-based mobile crisis programs, as part of an integrated crisis system of care, should focus on linking individuals in crisis to all necessary medical and behavioral health services that can help resolve the situation and prevent future crises. These services may include crisis stabilization or acute inpatient hospitalization, treatment in the community (e.g., CMHCs, in-home therapy, family support services, crisis respite services, and therapeutic mentoring).

#### Crisis Planning and Follow-Up

SAMHSA's essential values for responding to mental health crisis include prevention. "Appropriate crisis response works to ensure that crises will not be recurrent by evaluating and considering factors that contributed to the current episode and that will prevent future relapse. *Hence, an adequate crisis response requires measures that address the person's unmet needs, both through individualized planning and by promoting systemic improvements*" (SAMHSA, 2009: p. 7, emphasis in the original). During a mobile crisis intervention, the BHP and peer support professional should engage the individual in a crisis planning process, which can result in the creation or update of a range of planning tools including a safety plan.

When indicated, they should then follow up with individuals to determine if the service or services to which they were referred was provided in a timely manner and is meeting their needs. For example, Behavioral Health Response (BHR) in St. Louis has a follow-up program in which eligible crisis callers receive a follow-up call within 48 hours by a follow-up coordinator who continues to ensure support, safety, assistance with referrals and/or follow-up until the crisis is resolved or the individual is linked to other services.

#### Section 2 Conclusion

Community-based mobile crisis is an integral part of a crisis system of care. Mobile crisis interventions provide individuals with less restrictive care in a more comfortable environment that is likely to produce more effective results than hospitalization or ED utilization. When collaboration exists with hospitals, medical and behavioral health providers, law enforcement, and other social services, community-based mobile crisis is an effective and efficient way of resolving mental health crisis and preventing future crisis situations.

*Recommendation 4: State and national authorities should work to ensure that mobile crisis teams capable of providing the functions we cite are available to each part of every state.*



### Section 3: Crisis Stabilization Facilities/Settings

Many individuals in crisis brought to hospital EDs for stabilization report experiencing increased distress and worsening symptoms due to noise and crowding, limited privacy in the triage area, and being attended to by staff who had little experience with psychiatric disorders. All of this increases frustration and agitation (Clarke et al., 2007). Agar-Jacomb and Read (2009) found individuals who had received crisis services preferred going to a safe place, speaking with peers and trained professionals who could understand what they were experiencing, and interacting with people who offered respect and dignity to them as individuals, an experience they did not have at the hospital. In such an alternative setting, psychiatric crises could be de-escalated.

#### What are Crisis Stabilization Facilities?

In its recent review of crisis services, SAMHSA (2014) defined crisis stabilization as:

*A direct service that assists with deescalating the severity of a person's level of distress and/or need for urgent care associated with a substance use or mental health disorder. Crisis stabilization services are designed to prevent or ameliorate a behavioral health crisis and/or reduce acute symptoms of mental illness by providing continuous 24-hour observation and supervision for persons who do not require inpatient services. Short-term crisis residential stabilization services include a range of community-based resources that can meet the needs of an individual with an acute psychiatric crisis and provide a safe environment for care and recovery" (page 9).*

Crisis residential facilities are usually small (e.g., 6–16 beds), and often more home-like than institutional. They are staffed with a mix of professionals and paraprofessionals. They may operate as part of a community mental health center or in affiliation with a hospital. The Task Force recommends crisis stabilization facility function is maximized when the facilities:

- Function as an integral part of a regional crisis system serving a whole population rather than as an offering of a single provider
- Operate in a home-like environment
- Utilize peers as integral staff members
- Have 24/7 access to psychiatrists or Master's-level mental health clinicians

#### Evidence on Effectiveness and Cost-Effectiveness of Crisis Stabilization Facilities

In general, the evidence suggests a high proportion of people in crisis who are evaluated for hospitalization can safely be cared for in a crisis facility, the outcomes for these individuals are at least



as good as hospital care, and the cost of crisis care is substantially less than the costs of inpatient care. In its recent review, SAMHSA (2014) summarizes evidence on crisis stabilization facilities as follows:

*The current literature generally supports that crisis residential care is as effective as other longer psychiatric inpatient care at improving symptoms and functioning. It also demonstrates that the satisfaction of these services is strong, and the overall costs for residential crisis services are less than traditional inpatient care. For the studies examined in this review, the populations range from late adolescence (aged 16–18 years) through adulthood. Regarding mental health and crisis residential, a recent systematic review examined the effectiveness of residential alternatives to hospital inpatient services for acute psychiatric conditions (Lloyd-Evans, et al., 2009). This review included randomized control trials or studies that provided specific quantitative comparisons of effectiveness of alternatives to standard acute inpatient care. The authors concluded that there is preliminary evidence to suggest that residential alternatives may be as effective and potentially less costly than standard inpatient units (pages 9–10).*

### Task Force Findings on Crisis Residential Facilities

After reviewing prior reports and research and considering presentations on model programs, the Task Force recommends that small, home-like crisis residential facilities are a necessary, core element of a crisis system of care.

To maximize their usefulness, crisis residential facilities should function as part of an integrated regional approach within a state serving a defined population (as with mobile crisis teams). Access to the program should be facilitated through the ATC-capable hub of the regional system.

The Task Force also notes two of the most exciting new approaches to crisis residential services: the “living room” and peer-operated respite.

#### The “Living Room” Model

Ashcraft (2006) and Heyland et al. (2013) describe an alternative crisis setting called “the living room,” which uses a different recovery model to support an individual’s stabilization and return to active participation in the community. Key elements include a welcoming and accepting environment, which conveys hope, empowerment, choice, and higher purpose.

Individuals in crisis are admitted as “guests” into a pleasant, home-like environment designed to promote a sense of safety and privacy. A team of “crisis competent” professionals, including peers with lived experience (individuals with first-person knowledge of receiving services and/or experiencing mental health, suicidal and/or addiction experiences), engages with the guest. Risk assessment and management, treatment planning, and discharge goals are set. A peer counselor is assigned to each guest to discuss any crisis and coping skills that can be used to reduce distress and empower the guest on his or her recovery journey.

In some communities, “living rooms”/crisis respite facilities are available for direct drop-off by trained law enforcement teams (see discussion below). This advanced practice can avoid both criminalization of crisis-induced behavior and the costs and potential trauma associated with hospitalization. If it is determined a guest continues to pose a safety threat to self or others, he or she may be transferred to a more intensive level of care.

### Peer-Operated Respite

The second new and very promising model of crisis facilities is peer-operated respite. Peer-operated/governed respite programs function at the intersection of the consumer/independent living movement and the professional behavioral health system. They provide restful, voluntary sanctuary for people in crisis, which is preferred by guests and increasingly valued in service systems. A 2013 survey by Ostrow found 13 such facilities around the country, with others planned in 12 states. In some cases, these facilities are part of a local array of peer-operated support activities. At Rose House (2 facilities in New York State), analysis showed costs of peer respite stays were 30% the cost of inpatient care. The Task Force finds that peer-operated respite facilities are a valuable alternative. Ideally, there should be one respite alternative in every crisis care system.

*Recommendation 5: After reviewing the findings about effectiveness and the cost-sensitive nature of crisis respite care, the Task Force recommends that these alternatives to hospitalization be made available as a core component of comprehensive crisis systems in every state.*

### Section 3 Conclusion

Many communities have only two basic options available to those in crisis, and they represent the lowest and highest end of the continuum. But for those individuals whose crisis represents the middle of the ladder, outpatient services are not intensive enough to meet their needs, and acute care inpatient services are unnecessary. Crisis stabilization facilities offer an alternative that is less costly, less intrusive, and more easily designed to feel like home.



Carolinas HealthCare's Charlotte crisis facility was designed with safety, privacy, and trauma-informed care principles.



## Section 4: Core Principles and Practices of Modern Crisis Care

The Task Force recommends several additional elements that must be systematically “baked in” to excellent crisis systems in addition to the core structural elements that we find essential for modern crisis systems (ATC capabilities, mobile crisis teams, and crisis residential facilities). These essential principles and practices are:

- Embracing recovery
- Significant role for peers
- Trauma-informed care
- Suicide safer care
- Safety/security for staff and consumers
- Crisis response partnerships with law enforcement

### Embracing Recovery

The fact that recovery is possible—and the realization that recovery means not just absence of symptoms, but also development of meaning and purpose in life—has begun to transform mental health care (Anthony, 1993). The President’s New Freedom Commission on Mental Health (Hogan, 2003) recommended that mental health care be “recovery-oriented” and enriched by person-centered approaches, a hopeful and empowering style, and increased availability of support by individuals with lived experience.

The Task Force found that the significance of a recovery-oriented approach is elevated for individuals in crisis, and thus for crisis settings. In an outmoded, traditional model, crises reflect “something wrong” with the individual. Risk is seen as something to be contained, often through involuntary commitment to an inpatient setting. In worst-case situations, this obsolete approach interacts with inadequate care alternatives, resulting in people restrained on emergency room gurneys or transferred to jails because of their behavior.

In a recovery-oriented approach to crisis care, the risks of harm to self or others are recognized, but the basic approach is fundamentally different. Crises are viewed as challenges that may present opportunities for growth. When crises are managed in comfortable and familiar settings, people feel less alone and isolated with their feelings of anxiety, panic, depression, and frustration. This creates a sense of empowerment and belief in one’s own recovery and ability to respond effectively to future crises. The Task Force finds that a recovery-oriented approach to crisis care is integral to transforming a broken system. Not only must we expand crisis care, but we must forge a better approach to crisis care.

### Significant Role for Peers

One specific, transformative element of recovery-oriented care is to fully engage the experience, capabilities, and compassion of people who have experienced mental health crises. Including peers as





core members of the crisis team and in all elements of the crisis system recognizes that individuals with lived experience could “take all of [their] experiences, regardless of the pain, and use them to transform [their] life into ‘living hope’ for others who want to recover” (Ashcraft, Zeeb, & Martin, 2007).

Analyses investigating peer services and supports have found support for a range of peer support models. Benefits include strengthened hope, relationship, recovery, and self-advocacy skills and improved community living skills (Landers & Zhou, 2011).

Using peers—especially people who have experienced suicidality and suicide attempts and learned from these experiences—can be a safe and effective program mechanism for assessing and reducing suicide risk for persons in crisis. Peer intervention in the crisis setting with suicidal individuals is particularly potent in light of the reported 11%–50% range of attempters who refuse outpatient treatment or abandon outpatient treatment quickly following ED referral (Kessler et al., 2005). Peers can relate without judgment, can communicate hope in a time of great distress, and can model the fact that improvement and success are possible. This increases engagement while reducing distress.

The role of peers—specifically survivors of suicide attempts as well as survivors of suicide loss—was bolstered when the Action Alliance’s Suicide Attempt Survivors Task Force released its groundbreaking report, *The Way Forward: Pathways to hope, recovery, and wellness with insights from lived experience*, in July 2014 (<http://bit.ly/AA-wayforward>). The report describes the many ways in which learning from and capitalizing on lived experience can be accomplished. This Task Force endorses recommendations of *The Way Forward* and finds that including individuals with lived experience in many roles in crisis care settings is effective. Further, taking this step will result in improved risk management and support for people with suicidal thoughts and feelings.

### Trauma-Informed Care

The great majority of individuals served in mental health and substance use services have experienced significant interpersonal trauma. The adverse effects of child trauma may present well into adulthood, increasing the risk for post-traumatic stress disorder (PTSD), mental illness, substance abuse, and poor medical health in these individuals (Finkelhor et al., 2005). Persons with history of trauma or trauma exposure were more likely to engage in self-harm and suicide attempts as well, and their trauma experiences make them very sensitive to how care is provided.

#### Task Force Spotlight

##### Shannon Jaccard, MBA, CEO

The San Diego affiliate of NAMI began in the early 1970s as a group called “Parents of Adult Schizophrenics.”

Over the decades, it has found that a Family Support Specialist is an invaluable resource to those whose family member is in crisis, and adjunct to peer support. It is designing a program with coaches to help family members navigate next steps immediately following an involuntary commitment in which the loved one is forcibly removed from the home by law enforcement. These services are especially important if it is the first experience with psychosis.



A first implication is that mental health crises and suicidality often are rooted in trauma. These crises are compounded when crisis care involves loss of freedom, noisy and crowded environments, and/or the use of force. These situations can actually re-traumatize individuals at the worst possible time, leading to worsened symptoms and a genuine reluctance to seek help in the future.

On the other hand, environments and treatment approaches that are safe and calm can facilitate healing. Thus, the Task Force finds that trauma-informed care is an essential element of crisis treatment. In 2014, SAMHSA posited five guiding principles for trauma-informed care:

1. Safety
2. Trustworthiness and transparency
3. Peer Support and mutual self-help
4. Collaboration and mutuality
5. Empowerment, voice and choice
6. Cultural, historical and gender issues

These principles should inform treatment and recovery services. If such principles and their practice are evident in the experiences of staff as well as consumers, the program's culture is trauma-informed and will screen for trauma exposure in all clients served, as well as examine the impact of trauma on mental and physical well-being. Addressing the trauma that family and significant others have experienced is also a critical component that assists stabilization and reduces the possibility for further trauma or crisis.

Trauma-informed systems of care ensure these practices are integrated into service delivery. Developing and maintaining a healthy environment of care also requires support for staff, who may have experienced trauma themselves. An established resource for further understanding trauma-informed care is provided by SAMHSA (2014): *Trauma-Informed Care in Behavioral Health Services* (TIP 57).

The Task Force finds that trauma-informed care is urgently important in crisis settings because of the links between trauma and crisis, and the vulnerability of people in crisis (especially those with trauma histories).

### Zero Suicide/Suicide Safer Care

Crisis intervention programs have *always* focused on suicide prevention. This stands in contrast to other health care and even mental health service, where suicide prevention was not always positioned as a core responsibility. This has begun to change, largely through the efforts of the Action Alliance.

One of the first task forces of the Action Alliance was the Clinical Care and Intervention (CCI) Task Force. Its report, *Suicide Care in Systems Framework* (2012), suggested transformational change in health care on two dimensions: adopting suicide prevention as a core responsibility, and committing to dramatic reductions in suicide among people under care. These changes were adopted and advanced in the



revised *National Strategy for Suicide Prevention* (2012), specifically via a new Goal 8: “Promote suicide prevention as a core component of health care services” (p. 51).

The recommendations of the CCI Task Force have now been translated into a set of evidence-based actions (together known as Zero Suicide or Suicide Safer Care) that health care organizations can implement to work more systematically on this goal. An implementation toolkit for health care organizations has been developed (see <http://zerosuicide.sprc.org/toolkit>) by the Suicide Prevention Resource Center (SPRC) at Education Development Center, Inc. (EDC), and several hundred health and behavioral health organizations are implementing the approach.

The seven key elements of Zero Suicide or Suicide Safer Care are all applicable to crisis care:

- Leadership-driven, safety-oriented culture committed to dramatically reducing suicide among people under care, which includes survivors of suicide attempts and suicide loss in leadership and planning roles
- Develop a competent, confident, and caring work force
- Systematically identify and assess suicide risk among people receiving care
- Ensure every individual has a pathway to care that is both timely and adequate to meet his or her needs and that includes collaborative safety planning and reducing access to lethal means
- Use effective, evidence-based treatments that directly target suicidal thoughts and behaviors
- Provide continuous contact and support, especially after acute care
- Apply a data-driven quality improvement approach to inform system changes that will lead to improved patient outcomes and better care for those at risk

See more at <http://zerosuicide.sprc.org/about>

It should be noted that the elements of zero suicide closely mirror the standards and guidelines of the NSPL, which has established suicide risk assessment standards, guidelines for callers at imminent risk, protocols for follow-up contact after the crisis encounter, and has promoted collaborative safety planning, reducing access to lethal means, and incorporating the feedback of suicide loss and suicide attempt survivors.

Given that crisis intervention programs have always focused on suicide prevention, how do these developments affect crisis intervention services? The Task Force has made two findings related to this question.

First, since comprehensive crisis intervention systems are the most urgently important clinical service for suicide prevention, and since this report confirms most parts of the country do not have adequate crisis care, we find a national- and state-level commitment to implementing comprehensive crisis services as defined in this report is foundational to suicide prevention. Comprehensive crisis

intervention systems must include all of the core elements and core principles and practices that we discuss.

Second, although suicide prevention is central to crisis services, the Task Force finds best practices in suicide care (for clinical settings, “Zero Suicide”) have not been implemented uniformly in all crisis settings. Additionally, these best practices in suicide care are not yet required by health authorities (i.e., payers, plans, state agencies, Medicaid and Medicare).

### Safety/Security for Consumers and Staff

Safety for both consumers and staff is a foundational element for all crisis service settings. Crisis settings are also on the front lines of assessing and managing suicidality, an issue with life and death consequences. And while ensuring safety for people *using* crisis services is paramount, the safety for staff cannot be compromised.

People in crisis may have experienced violence or acted in violent ways, they may be intoxicated or delusional, and/or they may have been brought in by law enforcement, and thus may present an elevated risk for violence.

Trauma-informed and recovery-oriented care is safe care. But much more than philosophy is involved. DHHS’s Mental Health Crisis Service Standards (2006) begin to address this issue, setting parameters for crisis services that are flexible and delivered in the least restrictive available setting while attending to intervention, de-escalation, and stabilization.

The keys to safety and security in crisis delivery settings include:

- Evidence-based crisis training for all staff.
- Role-specific staff training and appropriate staffing ratios to number of clients being served.
- A non-institutional and welcoming physical space and environment for persons in crisis, rather than Plexiglas “fishbowl” observation rooms and keypad-locked doors. This space must also be anti-ligature sensitive and contain safe rooms for people for whom violence may be imminent.
- Established policies and procedures emphasizing “no force first” prior to implementation of safe physical restraint or seclusion procedures.
- Pre-established criteria for crisis system entry.
- Strong relationships with law enforcement and first responders.

Ongoing staff training is critical for maintaining both staff competence and confidence, and promotes improved outcomes for persons served and decreased risk for staff (Technical Assistance Collaborative, 2005). Nationally recognized best practices in crisis intervention such as CPI (Crisis Prevention Institute, Nonviolent Crisis Intervention Training) and Therapeutic Options (Therapeutic Options, Inc.) are highly effective and instrumental in their utilization of positive practices to minimize the need for physical



interventions and re-traumatization of persons in crisis. Such approaches have contributed to a culture of safety for staff and clients in the crisis setting.

Adequate staffing for the number and clinical needs of consumers under care is foundational to safety. Access to a sufficient number of qualified staff (clinicians, nurses, providers, peer support professionals) promotes timely crisis intervention and risk management for persons in crisis who are potentially dangerous to self or others (DHHS, 2006).

In some crisis facilities that are licensed or certified to provide intensive services, seclusion and/or restraint may be permitted. Though some practitioners view physical and/or pharmacological restraint and seclusion as safe interventions, they are often associated with increased injury to both clients and staff and may re-traumatize individuals who have experienced physical trauma. Therefore, restraint and seclusion are now considered safety measures of last resort, not to be used as a threat of punishment, alternative to appropriate staffing of crisis programs, as a technique for behavior management, or a substitute for active treatment (Technical Assistance Collaborative, 2005).

The National Association of State Mental Health Program Directors (NASMHPD) (2006) discussed core strategies for mitigating the use of seclusion and restraint. These included leadership that sets seclusion and restraint reduction as a goal, oversight of all seclusion/restraint for performance improvement, and staff development and training in crisis intervention.

Person-centered treatment and use of assessment instruments to identify risk for violence were also critical in developing de-escalation and safety plans. Other recommendations include partnering with the consumer and his or her family in service planning, as well as debriefing staff and consumers after a seclusion/restraint event, to inform policies, procedures, and practices to reduce the probability of repeat use of such interventions.

Following the tragic death of Washington State social worker Marty Smith in 2006, the Mental Health Division of the Department of Social and Health Services sponsored two safety summits. The legislature passed into law a bill (SHB 1456) relating to home visits by mental health professionals.

According to SHB 1456, the keys to safety and security for home visits by mental health staff include:

- No mental health crisis outreach worker will be required to conduct home visits alone.
- Employers will equip mental health workers who engage in home visits with a communication device.
- Mental health workers dispatched on crisis outreach visits will have prompt access to any history of dangerousness or potential dangerousness on the client they are visiting, if available.

The Task Force finds that ensuring safety for both consumers and staff is the very foundation of effective crisis care. While safety is urgently important in all health care, in crisis care, the *perception of safety* is

also essential. The prominence and damaging effects of trauma and the fear that usually accompanies psychological crisis make safety truly “Job One” in all crisis settings.

### Law Enforcement and Crisis Response—An Essential Partnership

Law enforcement agencies have reported a significant increase in police contacts with people with mental illness in recent years. Some involvement with mental health crises is inevitable for police. As first responders, they are often the principal point of entry into emergency mental health services for individuals experiencing a mental health or substance use crisis.

Police officers are critical to mobile crisis services as well, often providing support in potentially dangerous situations (Geller, Fisher, & McDermeit, 1995). Research investigating law enforcement response to individuals with mental illness (Reuland, Schwarzfeld, & Draper, 2009) found police officers frequently:

- Encounter persons with mental illness at risk of harming themselves
- Often spend a greater amount of time attempting to resolve situations involving people exhibiting mental health concerns
- Address many incidents informally by talking to the individuals with mental illness
- Encounter a small subset of “repeat players”
- Often transport individuals to an emergency medical facility where they may wait for extended periods of time for medical clearance or admission

However, in many communities across the United States, the absence of sufficient and well-integrated mental health crisis care has made local law enforcement the *de facto* mental health crisis system. This is unacceptable and unsafe. The Task Force finds that the role of local law enforcement in mental health crisis response is essential and important. However, the absence of adequate mental health crisis care, which has led to this function being dumped on law enforcement, is deplorable. Adequate mental health crisis systems must be built. With good mental health crisis care in place, good collaboration with law enforcement can proceed in a fashion that will improve both public safety and mental health outcomes.

We now know a good deal about crisis care/law enforcement collaboration. Deane et al. (1999), reporting on partnerships between mental health and law enforcement, found the alliance between first responders and mental health professionals helped to reduce unnecessary hospitalization or incarceration. Specialized responses to mental health crisis included police-based specialized police

#### Task Force Spotlight

**Barbara Dawson, MEd, Deputy Director, Comprehensive Psychiatric Emergency Program Division**

The Harris Center for Mental Health and IDD, formerly known as “MHMRA of Harris County,” has partnered with Houston Police Department (PD) and the Emergency Communications 9-1-1 Center to co-locate and integrate its mental health crisis line team members, with the purpose of diverting appropriate calls from law enforcement interaction. Houston PD received more than 30,000 mental health calls in 2014.



response, police-based specialized mental health response, and mental health-based specialized mental health response. These forms of collaboration share the common goal of diverting people with mental health crises from criminal justice settings into mental health treatment settings and were rated as “moderately effective” or “very effective” in addressing the needs of persons in crisis.

Specialized police responses involve police training by mental health professionals in order to provide crisis intervention and act as liaisons to the mental health system. The Memphis Crisis Intervention Team (CIT) model pioneered this approach. In CIT, training for law enforcement includes educating officers about mental illness, substance use and abuse, psychiatric medications, and strategies for identifying and responding to a crisis (Tucker et al., 2008). Lord et al. (2011) found most officers involved volunteered to participate in the training.

Consistent with the findings above, CIT necessitates a strong partnership and close collaboration between the police officers and mental health programs (e.g., availability of a crisis setting where police can drop off people experiencing a mental health crisis). CIT has been cited as a “Best Practice” model for law enforcement (Thompson & Borum, 2006).

With a second type of law enforcement-based response program, police-based specialized mental health response, mental health professionals are partnered with law enforcement officers at the scene to provide strategic consultation/intervention and to support persons in accessing treatment. Outcome studies comparing models of police response to individuals in mental health crisis found that officers in a police-based response were more likely than other officers to transport individuals to mental health services. As discussed above, availability of a central crisis drop-off center for individuals with mental illness that had a no-refusal policy for police cases increased the number of police calls that implemented a specialized response (Steadman et al., 2000).

Specialized law enforcement responses to mental health crises have shown improved safety outcomes for persons served. Studies examining CIT have found significantly less use of force in situations rated as high violence risk (Skeem & Bibeau, 2008), and Morabito et al. (2012) found CIT-trained officers used less force as person’s resistance increased compared to resistance experienced by officers who lacked CIT training. In a qualitative study, Hanafi et al. (2008) noted that officers reported the application of their CIT skills served to decrease the risk of injury to officers and individuals with mental illness.

In many cases, officers receive a call that is not presented as a suicidal crisis, but rather as a public disturbance, domestic violence, or other dangerous situation. The CIT officers identify people at risk for suicide, address safety issues for all present, and offer support and hope to the person who is suicidal. In conjunction with other mental health service providers and/or Emergency Medical Services (EMS) personnel, they may directly transport or arrange transport for the person who is potentially suicidal to be brought to an ED or mental health center for an evaluation (Suicide Prevention Resource Center, 2013).



In addition, as first responders for persons with mental illness in crisis, the officers can assess individuals and provide transport to alternative levels of care to divert hospitalization. Further support for the model is provided by police officers' reports of improved confidence in identifying and responding to persons with mental illness and enhanced confidence in their department's response to mental health-related calls (Wells & Schafer, 2006).

The Task Force finds that strong partnerships between crisis care systems and law enforcement are essential for public safety, including suicide prevention. We also find that the absence of comprehensive crisis systems has been the major "front line" cause of the criminalization of mental illness, and a root cause of shootings and other incidents that have left people with mental illness and officers dead.

*Recommendation 6. The Task Force recommends that national and state authorities (and where relevant, accrediting organizations and payers such as health plans) commit to ensuring that the core principles and practices covered here are addressed in existing and to-be-developed comprehensive crisis systems.*

#### Section 4 Conclusion

It is easy to fall into the trap of attempting to guarantee safety in community-based crisis programs with the use of Plexiglas-walled rooms and security keypads that separate staff and guests. Other programs work to ensure that law enforcement has sent a consumer through a lengthy ED visit prior to admission to the program. However, the most effective community-based crisis care occurs in welcoming and trauma-informed care environments that serve individuals whose mental health and/or addiction crisis has resulted in interactions with law enforcement. The critical component to making these approaches work is the integration of trained and certified peer support staff and law enforcement.



## Section 5: Financing Crisis Care

The method of financing crisis mental health services varies from state to state. In many cases, it is cobbled together. Inconsistently supported. Inadequate.

The federal government provides a very small SAMHSA investment (just over \$6 million annually) in the NSPL; however, that investment only provides for a national call infrastructure and does not cover the state/local costs of either crisis lines or crisis intervention systems. Aside from this minimal investment, there is no dedicated national funding source, nor is there a national infrastructure for a service that is perhaps the most important single element of community mental health care, and which provides the most important elements of acute suicide care.

### Crisis Care Funding vs. Emergency Care Funding

It is revealing to compare mental health crisis care to other first responder systems like firefighting or EMS. There are striking similarities:

- The service is essential.
- The need for it is predictable over time, but the timing of crises is not predictable.
- Effective crisis response is lifesaving, yet it is also much less expensive than the consequences of inadequate approaches.

For EMS, we might measure its effectiveness in lives saved because of timely intervention for individuals with acute heart disease. For mental health crisis response, we can see the impact of comprehensive approaches in lives saved from suicide and people cared for effectively and more efficiently via mobile crisis visits or brief crisis respite stays at about \$300/day vs. inpatient rates of \$1000/day.

It is also useful to think about financing of core crisis services. It would be unthinkable for any community except frontier or very small ones to go without a fire department. Because this is known to be an essential public expenditure, fire stations and fire trucks are always provided. Sometimes users may pay a fee for service calls, but the station and the equipment are provided. A frequent scenario for mental health crisis services is the opposite approach. Health coverage (e.g., Medicaid) will pay for the visit, but often no one will pay for the infrastructure: phone and computer systems, 24/7 coverage, or crisis facilities.

This will not work.

### A Financial Crisis for Crisis Care

SAMHSA's (2014) report on crisis service effectiveness and funding discusses "funding strategies" for this care. The report includes important information about funding *approaches*, but provides no analysis of funding *levels*. Given the absence of any national expectations for establishing or maintaining crisis



infrastructure (excepting the NSPL network) and the absence of national funding for crisis care, the general absence of comprehensive crisis services is not surprising.

Partial data on the financing of crisis care have been compiled by NASMHPD. In his presentation to the Task Force, Brian Hepburn, MD, NASMHPD Executive Director, shared data at both the provider and state levels that illustrate the problem. NASMHPD's analysis of funding patterns for one typical crisis care provider demonstrates how financing is cobbled together from multiple sources:

- State grant funding: 41% (includes hotline/mobile crisis team/detoxification)
- Federal funding: 10% (includes portion of hotline costs paid through mobile crisis team payments)
- Fee for service: 45% (33% of this is Medicaid; 67% State general funds)
- Private organizations & miscellaneous: 4%
- TOTAL: 100%

#### The Problem with Typical Funding Patterns

What is wrong with this typical pattern of crisis care funding? First, there is no overall, reliable source of funding. Resources are cobbled together from multiple sources, including private fund raising. It is as if we had a fire department with no fire station and the fire fighters must use their own vehicles. The Task Force finds that the absence of national expectations for crisis care infrastructure, as well as lack of funding for such infrastructure, is the primary cause of inadequate crisis services.

Second, less than half of all funding in this typical example comes from a dedicated/reliable source (in this case, the State Mental Health Authority). This is problematic, since dedicated state mental health funding is threatened by the transition of services paid by Medicaid, which is typically delivered per unit-of-care (i.e., the visit), not for the 24/7 infrastructure essential for crisis care.

According to NASMHPD surveys, over \$4 billion, or about 10%, in state mental health funding was cut/eliminated in the 2007–2009 recession; however, funding has been restored through Medicaid Expansion. Therefore, there needs to be a method for covering crisis services through changes to the State Medicaid Plan.

To put this cut into perspective, NASMHPD reports that *total* funding through state mental health agencies is only \$39 billion. Additionally, as Medicaid has become a more reliable way to pay for many mental health services, state budget offices have been reducing general state mental health funding, which is currently the major source for crisis funding. While this works well in terms of overall investments in mental health, which have improved, it is a problem for crisis care.

Third, and reinforcing this point, the biggest single source of funding in this example is Medicaid billings. This is both an expensive/cumbersome way to bill for crisis care (a claim must be submitted for every contact), and it also reveals the overall lack of program funding for the core elements of crisis care.

Finally, in this example one sees no payment from Medicare and commercial/private health insurers. This means that the nation's crisis care infrastructure has essentially no support from mainstream health payers. In more sophisticated crisis systems, there is some billing to health insurers.

In his presentation to the Task Force, NASMHPD Executive Director Brian Hepburn reported that a survey of states reveals great variability in patterns of crisis funding.

Table 3: Examples of State Funding for Crisis Care

STATES	MOST STATES	MAINE	RHODE ISLAND	PENNSYLVANIA	OHIO
Sources of Crisis Funding					
State Mental Health	Primary	70%	50%	--	16.5%
State/Federal/Other	--	--	--	--	5%
Medicaid	Limited	30%	50%	54%	29.5%
Block Grant	--	--	--	46%	4%
Local/County	--	--	--	--	45%

The NASMHPD survey data reinforce the conclusions about crisis care funding, namely the lack of consistent, reliable, and robust national support for the 24/7 infrastructure of crisis care, and the virtual absence of payment by health insurance programs except for Medicaid.

#### Patchwork Medicaid Funding

The NASMHPD data complement SAMHSA's 2014 report, which also illustrates the patchwork nature of crisis service funding. To complete the SAMHSA report, Truven Health Analytics examined patterns of Medicaid funding of crisis care in all 50 states. Examining Medicaid is particularly important because it is the largest payer for community mental health care. The SAMHSA report notes that its survey methodology—that is, review of Medicaid State Plans and other official documents—was thorough, but limited. The review also included in-depth case study interviews with officials from eight states. SAMHSA





did note that in some states, authorities have worked through their managed care partners to support comprehensive crisis care. The Task Force examined the Truven/SAMHSA findings with reference to the three core structural elements of comprehensive crisis care that we identified.

The SAMHSA report finds:

- No states are using Medicaid to pay for the central, ATC-capable infrastructure that is needed as the hub of comprehensive crisis care, including the crisis call center.
- A dozen states are using Medicaid to pay for mobile crisis services.
- Ten states are using Medicaid to pay for crisis residential services and/or observation beds.

The Task Force finds that the absence of consistent expectations for crisis care functioning and funding is problematic given Medicaid's key role as a payer. It is perhaps likely to become more problematic as Medicaid managed care responsibilities are increasingly integrated with/scattered to competing mainstream health plans that are less likely to support an integrated, statewide crisis care solution.

### An Emerging Opportunity: New Legislation

The Comprehensive Community Behavioral Health Centers (CCBHC) legislation (Section 223 of the Protecting Access to Medicare Act, also referred to as "Section 223") represents perhaps the most significant national effort to build community mental health capacity in the past several decades. The legislation authorizes demonstration grants to eight states that agree to raise standards for and implement a statewide network of CCBHCs. Currently in 2016, 24 states have received planning grants totaling \$22.9 million to develop an infrastructure that will allow them to compete to become one of the eight demonstration states. Legislative advocacy to expand the number of pilot states is also occurring.

The Section 223 initiative is relevant and helpful to crisis care and suicide prevention in several ways. As we referenced early in this report, crisis care was one of five "essential services" in CMHCs funded under President Kennedy's legislation. However, CMHC grants were time-limited, most areas of the country never received one, and CMHC requirements were all but eliminated when the CMHC program was converted to a block grant in President Reagan's first budget.

The Section 223 requirements for CCBHC crisis care are robust and include requirements for 24/7 availability, a continuum of crisis care options, and individuals in crisis to be seen within 3 hours. Section 223 also elevates requirements for suicide care, including additional training, protocols for risk assessment, the expectation that all consumers are informed about crisis lines, and finally a mandate to measure suicide deaths for people in care.

To date, the Section 223 requirements are perhaps the most concrete and useful federal steps to improve access to crisis care. The Task Force finds that this is a very promising development and urges that Section 223 be made permanent and extended to all states. These would be very substantial and



helpful steps. They would not, however, accomplish all the actions we recommend here to make comprehensive crisis care available across the United States.

*Recommendation 7: This recommendation follows directly from the Task Force's conclusion that crisis calls should always be answered by an NSPL-qualified and participating center in the caller's area. Federal support for crisis call centers is necessary to allow for, at a minimum, the development of crisis call centers in areas where one does not exist. Ideally, funding would come from an expansion of the Mental Health Block Grant, coupled with a requirement that states ensure the presence of qualified call centers covering their population. Call centers should be part of comprehensive crisis systems that have all the core requirements we have discussed: 24/7 clinical coverage with ATC capabilities, adequate mobile crisis teams, and sufficient crisis respite alternatives.*

*Recommendation 8: All major health payers should recognize and reimburse crisis services provided to their members by comprehensive crisis systems. An analogy for this is payment for EMT by health providers. This step is necessary in order to have adequate capacity for crisis care and for efficiency. In order to achieve this step, leadership will be needed from CMS (Medicare/Medicaid), the Department of Labor, and state Insurance Commissioners.*

## Section 5 Conclusion

In order to achieve the kind of EMS response in mental health crises described above, payers must prioritize these services and programs. The piecemeal approach currently utilized by states has been inconsistent with the original tenets of the community mental health movement. Funding of a primary community capacity for mental health crisis response is also consistent with current mental health parity, coverage expansion, and the launch of the Comprehensive Community Behavioral Health Center initiative.



## Report Conclusion

The Task Force has outlined five compelling reasons for change. These include:

- Thousands of Americans dying alone and in desperation from suicide
- Unspeakable family pain for those whose children have serious mental illness
- Inhuman treatment of individuals who sometimes wait for days in EDs
- The wrong care in the wrong place, compromising other medical urgent care
- Tying up valuable law enforcement resources to substitute as “mobile crisis”

We have presented the solutions, and they are accessible now, summarized below.

The problem with delaying is...crises are happening now.

### *Summary of Task Force Recommendations*

*Recommendation 1: We recommend national-and state-level recognition that effective crisis care must be comprehensive and include these core elements and practices: a) ATC-capable central coordination, using technology for real-time care coordination while providing high-touch support meeting NSPL standards; b) availability of centrally deployed Mobile Crisis Services on a 24/7 basis; c) residential crisis stabilization programs; and d) conformance with essential crisis care principles and practices.*

*Recommendation 2: Crisis call services should participate in and meet the standards of the NSPL, and crisis intervention systems should adopt and implement Zero Suicide/Suicide Safer Care across all program elements.*

*Recommendation 3: State and national authorities should review elements of ATC-qualified crisis systems, apply them to crisis care in their jurisdictions, and commit to achieving these capabilities within 5 years, so that each region of the United States has a qualified hub for crisis care.*

*Recommendation 4: State and national authorities should work to ensure that mobile crisis teams are available to each part of every state.*

*Recommendation 5: Residential crisis stabilization alternatives to hospitalization should be made available as a core component of comprehensive crisis systems in every state.*



*Recommendation 6: The Task Force recommends that national and state authorities (and where relevant, accrediting organizations and payers such as health plans) commit to ensuring that the core principles and practices discussed in this report are addressed in existing and to-be-developed comprehensive crisis systems.*

*Recommendation 7: This recommendation follows directly from the Task Force's conclusion that crisis calls should always be answered by an NSPL-qualified and participating center in the caller's area. Federal support for crisis call centers is necessary to allow for, at a minimum, the development of crisis call centers in areas where one does not exist. Ideally, funding would come from an expansion of the Mental Health Block Grant, coupled with a requirement that states ensure the presence of qualified call centers covering their population. Call centers should be part of comprehensive crisis systems that have all the core requirements we have discussed: 24/7 clinical coverage with ATC capabilities, adequate mobile crisis teams, and sufficient crisis respite alternatives.*

*Recommendation 8: All major health payers should recognize and reimburse crisis services provided to their members by comprehensive crisis systems. An analogy for this is payment for EMT by health providers. This step is necessary in order to have adequate capacity for crisis care and for efficiency. In order to achieve this step, leadership will be needed from CMS (Medicare/Medicaid), the Department of Labor, and state Insurance Commissioners.*



Making the crisis center welcoming and comfortable is an important first step (RI Crisis in Peoria, Arizona).



## Appendix

### Task Force and Support Team Participants

A group of consensus national experts were invited to participate in the Task Force and associated Support Team. They include government and health plan administrators, provider executive leaders, people with lived experience, and family members of those with serious mental illness:

David Covington, LPC, MBA, Task Force Co-lead; EXCOM member; RI International;  
Behavioral Health Link

Michael Hogan, PhD, Task Force Co-lead; EXCOM member; Hogan Health Solutions

Jason H. Padgett, MPA, MSM, Deputy Secretary, National Action Alliance for Suicide Prevention; Suicide  
Prevention Resource Center; Education Development Center, Inc. (EDC)

Bart Andrews, PhD, Behavioral Health Response

Leon Boyko, MBA, MSW, LCSW, RI Crisis (RI International)

Lisa Capoccia, MPH, Suicide Prevention Resource Center, EDC

Lynn Copeland, Georgia Department of Behavioral Health and Developmental Disabilities

Barbara Dawson, MEd, The Harris Center for Mental Health and IDD

Susan Dess, RN, MS, Crestline Advisors

Steven Dettwyler, PhD, Community Mental Health and Addiction Services Delaware DHSS/DSAMH

Bea Dixon, BSN, PhD, Optum WA Pierce RSN

John Draper, PhD, Link2Health Solutions; National Suicide Prevention Lifeline

Phil Evans, ProtoCall Services

Gerald Fishman, PhD, RI Crisis (RI International, Inc.)

Vijay Ganju, PhD, Behavioral Health Knowledge Management

Larry Goldman, DMD, Beacon Health Options

Gabriella Guerra, MSW, Mercy Maricopa Integrated Care

Brian Hepburn, MD, National Association of State Mental Health Program Directors (NASMHPD)



Shannon Jaccard, MBA, NAMI San Diego

Helen Lann, MD, Beacon Health Options

Nick Margiotta, Phoenix Police Department

Richard McKeon, PhD, Substance Abuse and Mental Health Services Administration (SAMHSA)

Tim Mechlinski, PhD, Crestline Advisors

Steve Miccio, PEOPLE, Inc.

Heather Rae, MA, LLP, Common Ground

John Santopietro, MD, DFAPA, Carolinas HealthCare System

Wendy Schneider, LPC, Behavioral Health Link

Cheryl Sharp, MSW, ALWF, National Council for Behavioral Health

Becky Stoll, LCSW, Centerstone

Eduardo Vega, MA – EXCOM member; MHA of San Francisco

James Wright, LCPC, SAMHSA





## Task Force Schedule

The Crisis Services Task Force worked a sprint schedule meeting twice monthly by WebEx Video Conferencing from September to December 2015:

- Introductions & Task Force Sponsors (September 4, 2015) – Co-chairs David Covington and Mike Hogan launch the Action Alliance Crisis Services Task Force
- The Framework & Agenda (September 18) – Introductory comments from the Action Alliance (Jason Padgett) and SAMHSA (Richard McKeon), and description of the Task Force roadmap
- Topic 1: Peers & Recovery (October 2) – Living Rooms, peers, and new models for crisis alternatives (Steve Miccio) and trauma-informed care (Cheryl Sharp)
- Topic 2: Air Traffic Control (October 16) – Adaptation of the Milbank integration continuum (David Covington) and Georgia Crisis & Access Line (Wendy Schneider)
- Topic 3: Integration with First Responders (November 6) – Harris County 9-1-1 co-location (Barbara Dawson) and Crisis Intervention Team Training (CIT) - International Board Member and Phoenix Police Department (Nick Margiotta)
- Topic 4: Community-based Mobile Crisis (November 20) – St. Louis-area Behavioral Health Response model (Bart Andrews) and Centerstone (Becky Stoll)
- Topic 5: Safety/Security for Consumers and Staff (December 4) – State of Washington Safety Summit Clinical Training (Bea Dixon) and RI Crisis utilization of peer staffing and healing spaces (Leon Boyko)
- Topic 6: Pay for Value, Financing, and ROI (December 18) – Shift to value-based care/financing (Larry Goldman) and NASMHPD/public-sector (Brian Hepburn)



## Timeline of Crisis Innovations

1958

**First Free, 24-Hour Crisis Hotline** – In 1958, Edwin Shneidman founded the Los Angeles Suicide Prevention Center, which was the nation’s first crisis hotline and later consolidated into Didi Hirsch Mental Health Services. Ten years later, Shneidman would form the American Association of Suicidology (<http://www.didihirsch.org/History>).

1995

**Hi-tech, Professionally Staffed** – Behavioral Health Response was formed by the Missouri legislation after the shooting deaths of prominent family members by a person with serious mental illness. It was first with advanced software, clinical staffing, mobile crisis, and a Board of Directors comprised of local CMHCs (<http://bhrstl.org/>).

2003

**Full Continuum of Crisis Services** – Harris County MHMRA developed a groundbreaking array of integrated crisis services for the greater Houston metropolitan area, one of the largest in the United States, with a psychiatric emergency room, crisis residential services, mobile crisis outreach team, homeless services, and crisis help line (<http://www.mhmraharris.org/Crisis-And-Emergency-Services.asp>).

2006

**Statewide Crisis & Access Line** – After Hurricane Katrina, the Georgia Department of Behavioral Health and Developmental Disabilities expanded its Single Point of Entry into a statewide program for all 159 counties with 24/7 scheduling, online dashboards, and advanced analytics (recognized as innovation by *Business Week*) (<http://behavioralhealthlink.com/>).

2010

**Big Box Full Continuum** – The Regional Behavioral Health Authority for Tucson and University Physicians Hospital partnered on a \$54 million community bond to launch a mega-crisis center with co-located call center, crisis stabilization (adults and teens), law enforcement sally port, and more (<http://bit.ly/TucsonCRC>).



**Americans with Disabilities Act & Olmstead** – The Department of Justice entered into a Settlement Agreement with Georgia over complaints of unnecessarily institutionalization. The agreement included

new crisis stabilization programs, mobile crisis teams, crisis apartments, expanded crisis hotline, etc. ([http://www.ada.gov/olmstead/olmstead\\_cases\\_list2.htm](http://www.ada.gov/olmstead/olmstead_cases_list2.htm)).

2012

**24/7 Outpatient & Short-term Residential** – The Regional Behavioral Health Authority for Phoenix, Arizona, expanded its robust crisis continuum with two new Access Point/Transition Point facilities for individuals with after-hours presentations but whose needs did not require sub-acute stabilization (<http://bit.ly/CBAccessPoint>).

**A Plan to Safeguard All Coloradans** – In response to the Aurora theater tragedy, Governor Hickenlooper and the Colorado legislature introduced over \$100 million in state funds for a five-year contract to expand crisis stabilization, crisis respite, mobile crisis, crisis call center, warm line, and marketing. (<http://bit.ly/CO-Crisis>).

2013

**Investment in Mental Health Wellness Act** – California legislation SB 82 provided nearly \$150 million to improve access to and capacity for crisis services, believing that 70% of ED presentations for psychiatric evaluation could be avoided with improved crisis stabilization, mobile crisis, and crisis triage (<http://bit.ly/CAimhwa>).

2014

**Air Traffic Control Level 5 System** –Milbank collaboration continuum modified (original citation: Doherty, 1995) for evaluating crisis system community coordination and collaboration. The model suggests five required elements, including electronic crisis bed inventories (<http://bit.ly/crisiscontinuum>).

**National Council Leadership** – Linda Rosenberg and the National Council for Behavioral Health launched the first-ever specialized track for crisis service at the spring Washington, DC, conference, including a pre-conference, town hall, and multiple sessions on crisis services, and one of its most actively subscribed list serves ever (<http://bit.ly/1KVp54i>).

**“Psychiatric Boarding” Ruled Illegal** – In 2013, ten persons filed a suit in Pierce County contesting their petitions due to long waits. A year later, the Washington State Supreme Court said holding an individual in an ED until an appropriate bed is available is unconstitutional and therefore unlawful (<http://onforb.es/1P4pXaX>).





2015

**Effective Inpatient Interventions & Alternatives** – NIMH, NIDA, SAMHSA, and AFSP release Request for Information (RFI): Building an Evidence Base for Effective Psychiatric Inpatient Care and Alternative Services for Suicide Prevention. “While a number of interventions... have been effective and even replicated, the effectiveness of inpatient care... remains a question” (<http://1.usa.gov/1JWouEH>).

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Now is the time for crisis care to change.



*Crisis Services Task Force*

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**APPENDIX G: Review of Historical Documents**

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Lake County, IL - Crisis Wellness Center Study  
Review of Historical / Project Records

#	Document Title	Year	Author/Entity	Brief Purpose Summary	Relevant Take-Aways	Gaps/Needs Indicated	Follow-up/Next Steps Noted
1	2018 BH services grid	2019	Behavioral Health Services in Lake county	Breakdown of outpatient and inpatient services by entity	Organizational values for services given, clients served, staff, and other varying metrics in outpatient or inpatient care by different entities	Identification / quantity gaps in services	LC to survey parties to identify service gaps and needs.
2	Admission & Discharge Policy for Crisis Care Program (CCP)	2019	Joe Tranchita and Mary Czornobil	Outlines the admissions and discharge policy for CCP	Intent is to provide policy in order to make an admission decision for CCP to best address needs, interest, and welfare of the client. Dictates the use of a face-to-face interview. Medical conditions and imminent risk are a criteria for admission. Policy dictates steps to be taken depending on stability of medical condition. Provides complete list of admission criteria, including age, residency, medically stable, increase in symptoms or potential for increase in a series of listed symptoms. Also provides list of exclusion criteria including aggression/combative behavior, being under the influence, sex offender, and refusal to participate, among others. Additionally includes discharge criteria.	Appears completed	Note in report as is
3	Lake County Mental Health Visits Treated and Released by the Emergency Department (Secured).pdf	2019	Lake County	Provides annual admissions for 2016 and 2017 by "Block."	Annual admissions for 2016 to 2017 categorized by blocks, which consist of general MI categories which are broken down into ICD-10CM codes with descriptions and counts for each. Includes a variety of blocks, including mood disorders, mental and behavioral disorders, behavioral syndromes, etc.	Appears completed	Consider use for SOW and bed projections
4	Healthcare QI	2019	Lake County	Psychotropic Medication Snapshot	This document contains information, Specifically Clients information including their prescriptions and the professionals who gave them their medication and how long they need to take it.	Appears completed	Review for jail MI population / needs
5	Healthcare QI (2)	2019	Lake County	ZIP file Containing Varying Health information	This document contains information There are Risk assessments, medications, suicide watches	Appears completed	Same as above



Lake County, IL - Crisis Wellness Center Study  
Review of Historical / Project Records

6	Lake County Illinois Meeting Agenda - Final	2019	Lake County Board of Health	Includes meeting agenda, minutes, slides for presentation at the meeting, as well as attached service discount spreadsheets, cost sheets, expenses/revenue sheet for FY19 for Lake County, some policy information.	Meeting agenda includes overall outline, president's report, brief notes on updates for boards and councils. Included presentation: Acute Care of Psychiatrist Patients and Law Enforcement Response by Leslie S. Zun. Presentation includes: Definition of mental health crisis, defines emergency psychiatric condition. Includes a list of "wants" for psychiatric patients (such as verbal interventions, increased staff training, more privacy). Outlines list of settings for types of care (mental health or psychiatric office, alternatives, hospital inpatient and outpatient). List of Care Models (Police Drop Off Center, Sobriety Centers etc.). Discussion on interaction between those with mental illness and police as offender, disorderly person, or victim. Desires of law enforcement, establishing crisis response sites, pros and cons of police drop off. Details on emergency departments and psychiatric emergency services. Indicates ED departments are overburdened by MI patients, pros and cons of ED. Defines Sobering Center with pros and cons. The functions of acute psychiatric care, and patient types. Discusses "Regionalization of Acute Psychiatric Care" and quick information on boarding time. Additional documents include expenses and revenue sheets, brief information on change in federal poverty guidelines for 2019, Schedule of Discounts for different organizations and groups. Various corporate policies, such as employee healthcare, fitness for duty. Budget expenses and carry forwards.	Need for volume and client data, service decisions, need for funding	Assume items listed as needs would be part of future steps: volume and client data, service , need for funding.
7	3002 Grand Evac Plan	2019	Lake County Health Department & Community Health Center	Emergency Evacuation Route	Informs project about current facility evacuation path and design	Appears completed	Complete project
8	Lake County Population Trends and Forecasts	2019	Lake County Health Department & Community Health Center	Report briefly highlights trends and population projection for 2015 to 2025 for Lake County.	Includes most recent estimation of the population (703,052) and projections based on assumptions on factors including births, deaths, and migration. Population provided for 2010, with projections for 2015, 2020, and 2025 (794,076). Provides demographic balancing equation for reference used for estimation and a table projecting the number of births, deaths, net migration, and fertility rates.	Gender / age data trends missing	If possible, use population forecast as one measure for projecting bed capacity.

Lake County, IL - Crisis Wellness Center Study  
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9	Lake County Mental Health Data Sharing Project Report (Lake-County-Mental-Health-Data-Sharing-Executive-Summary)	2019	Lake County Mental Health Coalition	Executive summary for the Data Sharing Report ( see additional document: Data Sharing Report (121117-Lake-County-Mental-Health))	Includes introduction, indicating that Lake County has BH problems to address. Describes briefly the Lake County Mental Health Coalition formed in Oct 2016 to address problems and strengthen services. Introduction also briefly describes data sharing project and data sharing report. Describes purpose of data sharing and briefly mentions the need to mobilize recommendations. Briefly describes data issues, such as technological capabilities, standardization across systems, data sharing agreements and the inability of current data (due to several reasons including type, amount, format, and sharing) to meet standards for national best practices. Indicates need for standardizing data and need for aggregated data for system planning and oversight. Describes barriers to sharing data and general steps to overcome them (address organization reporting, resource concerns, etc. Additionally, indicates that there are legal concerns related to personal identifiable information (PII). Consider potential parallel objectives with local and national initiatives. Includes information needed/desired for future data sharing model, including ability to identify clients and needs, assess behavioral care, and review outcomes.	Lake County does not have system-wide performance measures. There is not the technological capability to collect and report data within and across systems. Standardization. Data sharing agreements. Data available is unable to meet national best practices.	Includes a list of activities described as positive and aligned with the goals of the Data Sharing Project (Mental Health First Aid training, CIT training, health and wellness initiatives, etc.). Data steward workgroups. General goals for a future data sharing model to meet to overcome barriers.
10	Mental Health Intake Disposition	2019	Mental Health Intake Screening	Mental Health Risk Assessment by booking	Patient information, Number, Risk, Recorded by and Date recorded.	Appears completed	NA
11	3002 Grand Facility Map	2019	N/A	Organization of Providers in a Facility?	Informs project about current facility geography / location	Appears completed	Complete project
12	Data Matrix (Future Data Sharing Workshop 2)	2019	North Highland	Matrix of coalition provider data	Matrix of coalitions entities, the data they have, if the data is available, and could it be used to support key decisions	Appears completed	Adding additional providers to the matrix, brainstorming with the information provided for next steps

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13	Lake-County-Crisis-Workshop-Final-Report-061719	2019	Policy Research associates/Policy Research, Inc.	Documentation of information covered in a full day workshop	Development of a crisis diversion center. The crisis center needed the following things as determined by the workshop participants. First, for programming, they need to establish a timeline of events, review population data, and find funding sources. Second, they established their target population, which were frequent fliers, acute behavioral crisis, jail and emergency department diversion, hospital I step downs. Third, working towards greater community engagement by stakeholders, establish the message, and "champions". Fourth, data needed for better outcomes. Specifically, intake, treatment, intervention, transfer, and location data available at a countywide level. Fifth, Pathways for the adult populations. The group will work forward towards revision of legislation and rules for transportation to the crisis center instead of emergency departments. Sixth, is legislative advocacy to change rules and statutory regulations which limit the utility of the crisis center? This includes Medicaid termination, where the individual is transported to, and for EMS to provide medical clearances.	Underinsured or uninsured individual service provision, residential treatment for adolescent females, resources for medication management and medication compliance, additional triage services from emergency providers, mobile crisis teams, 24/7 crisis center for individuals with a no wrong door policy,	Finish the development of the crisis diversion center and aiding clients by using the paper "Crisis Reliability Indicators Supporting Emergency Services (CRISES): A Framework for Developing Performance Measures for Behavioral Health Crisis and Psychiatric Emergency Programs" to determine the best client focused care
14	Historical Data for Crisis Care and Addiction Treatment Program	2019	Unknown	Provides counts on capacity for CCP and ATP, along with number of admissions, evaluations, occupancy, bed days, and M/F ratio.	Capacity for these programs is as follows: Crisis Care Program - Respite 8; ATP - Detox 6; ATP - Rehab 16. Time period covered is 2016-2018. CCP evaluations increased during this time frame. The admissions to CCP increased and the admissions for ATP decreased. Occupancy percent increased from 2016 to 2018 for CCP and ATP. The bed day's calculation shows an increase over the years, reflecting the occupancy of these programs. The M/F ratio for CCP has shifted from higher % male in 2016 to higher % female in 2018. The ratios for ATP are unchanged.	Use of information SOW and capacity needs	Complete project
15	2016-2019 Drug Overdose - Redacted	2019	Unknown	Drug overdose incident list	For overdoses 2016-2019, includes incident number, incident date and time, incident type, CFS Disposition	Appears completed	Note in report as is
16	2016-2019 Mental Health - Redacted	2019	Unknown	Mental health incident list	For mental health incidents 2016-2019, includes incident number, incident date and time, incident type, CFS Disposition	Appears completed	Note in report as is

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17	2016-2019 Public Intoxication - Redacted	2019	Unknown	Public intoxication incident list	For public intoxication incidents 2016-2019, includes incident number, incident date and time, incident type, CFS Disposition	Appears completed	Note in report as is
18	Jail Admissions 2007-2019	2019	Unknown	Data Provision of Jail Admissions	The First tab provides, J CA_Number, Booking_Number Name_First, Name_Middle, Name_Last, Address, City, State, Sex, RaceDate_Born, Bond_Amount, Why_Out, Transferred_Jail_ID, Final_Disposition, Charge_Type, Statute_Desc, Sentence_Effective_Date, Scheduled_Release_Date, Arresting_Agency_Name, Date_Entered, Date_Released, the other tabs appear to be data trimmings	Cannot analyze due to uninterpretable data set. County IT to contact vendor for assistance and respond.	NA
19	Wold Data Request from 5- 6-19 - CCP Data	2019	unknown	Spreadsheet of data points being requested, data provided, source of data needed from another organization	Includes data requested for: existing crisis services/resources (some provided in additional tabs) including number of agencies with crisis hotlines, calls per year, referrals to what services, referrals to stabilization beds, caller demographics and zip codes, number of unique callers, challenges faced by providers. Separate section on Crisis BH Stabilization/MH beds available, with total beds, number of agencies with beds, services provided, non-eligibility conditions, annual bed days used, demographics, basic patient information, zip codes, wait- list time, challenges. Final section is on jail diversion, including questions on current practices, number of LE calls involving MH/SUD issues, persons that could have been diverted, existing LE policies, number of staff trained on Crisis Intervention, agency surveys. A number of items in this section indicate they will need to be provided by the jail.	Appears completed	NA as next steps are for the draft of final report
20	Service Providers and Transports 2017 to 2018	2018	Behavioral Health Services in Lake county	Tables with inpatient bed and admission counts by provider and outpatient counts by provider. Also included are counts of police service calls from 2015 - 2017.	Includes counts for a service of providers providing services in Lake County. Inpatient providers are listed with bed counts for adults, youth/adolescents, annual admissions, detox beds, rehab beds, respite beds, and length of stay. Outpatient providers are listed with the number of annual encounters, unduplicated clients, crisis calls, crisis sessions, psychiatrists (in FTEs), and estimates for 2 providers on the percent of ESL patients. Police service calls are tallied from 2015 to 2017 and provide CAD call counts, police report counts, jail admissions, jail CAD calls, and (for 2017) CIT.	Appears completed	Consider use for SOW and report

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21	Lake County Mental Health Coalition (22618-MHC-slides)	2018	Cities Thrive	Explains the 8 "Go First Strategies" For the sub-committees to implement	Strategies Listed 1. Implement a Data Sharing Pilot 2. Develop and Mobilize Data Governance Structures and Activities. 3. Formalize Change Management Structure. 4. Engage with Medicaid Managed Care Organizations. 5. Identify Knowledge Opportunities for Behavioral Health Providers. 6. Support Expanding the Behavioral Health Services Continuum. 7. Influence Federal and State Laws. 8. Explore Potential Funding Mechanisms to Establish a Sustainable Data Sharing Program.	Need for using CAD and EMS Data to inform policy	1. Pilot Project with unduplicated, de-identified aggregated data. 2. Data Governance. 3. Legislation. 4. Anti-Stigma Campaign
22	Systemic-Questions Workshop 2	2018	Lake County	The second set of questions and discussions on prioritizing approaches.	The article works towards a breakdown of questions and needs across several domains. Predominately it asks who is in need of behavioral health care and are their service needs being met. These two questions are asked across community providers, emergency departments, Inpatient psychiatric hospitalization, dispatch, police, jails, probation, and housing	Appears completed	Development of additional data sets in addressing the themes asked in the first priority meeting and this meeting
23	Lake County Mental Health Coalition Infographic (22618 MHC Infographic)	2018	Lake County Mental Health Coalition	To inform the importance and relevance of data sharing by enacting the "Go First Strategies"	The three main goals of the initiative are, establish a data sharing and program sharing network of services available in the community, align services based upon client need, and build a continuum of care in the community. By achieving these goals, the coalition believes it will aid people with severe mental illness, and will reduce burdens on the criminal justice, and health care systems.	Data sharing and reduction of the siloing of services.	Getting organizations to submit aggregated data metrics to a central repository, and then get to organizations submitting participant level data to a central repository.
24	Lake County IL Full Jail Inmate Release report	2018	n/a	Release data Lake County IL Inmates	Excel spreadsheet of release report, includes inmate ID, name, address, sex, race, DOB, admission date, bond amount, release type, transfer agency if applicable, status at release, admission type, charges, sentence effective date, scheduled release date, actual release, and facility of release. Releases spanning 2017.	Need a reliable Admissions Report for required analytics	Obtain Admissions Report. If not possible, obtain monthly admissions and releases, ADP, but gender 2016-2019

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25	Lake County Mental Health Coalition Meeting - Current Data and Data Sharing Assessment	2018	North Highland	PowerPoint presenting highlights for the coalition charter and data sharing project update.	<p>Lake County Mental Health Coalition Charter highlights include an overview of the coalition, the vision and purpose of the coalition, the objectives of the coalition. Objectives aimed at a series of outcomes, including collecting and sharing data, developing framework to share data across communities, using data to identify needs and gaps, and developing policy and practices. Coalition goals discussed. Results of data sharing described, included improving accessibility, decreased costs, and jail diversion, among others. Outlines the importance of data sharing, presents an interacting pyramid with several levels of data: participant, organization, partnership, and system data with example questions and data points. Describes preceding steps (identifying data as it exists, sharing mediums and practices). Current steps include conducting a gap analysis of the data, finding health information exchange models. Future steps: facility workshop to discuss models, create ranking, create data governance. Infographic style slide showing North Highland interview approach, quick stats, partner titles, and sectors. Discusses briefly Lake County's strengths, insights into sectors, data availability, data sharing (limited at this point), barriers, progress. Includes a Healthcare Organization Assessment with strengths, opportunities, barriers, and a section on "what's in it for me". The same points are provided for a Justice System Sector Assessment, a Community Organization Assessment. Includes graphic identifying what data is occasionally collected and shorted, collected and shared, or does not exist or is not shared across a series of health measures and level of care needs and behavioral health system process measures. Data categorized as individual level, data shared within the organization, shared between organizations, and system wide data sharing. The data categorization used for data from system partners for proxy measures, social outcome measures, and homelessness measures. Barriers identified specifically include difficult of generating reports and concerns for sustainability and data governance. System wide barriers.</p> <p>Provides data on inpatient, outpatient, and reference to police services. Inpatient services provide length of stay and bed totals by agency. Outpatient provides unique admissions, crisis calls, and staff. Police service calls report the counts for varying agencies.</p>	Data is not shared widely and the majority of sharing is through fax and telephone calls.	Identify data points and aggregate data needed. Workshop to discuss and rank health information exchange models. Create data governance for the model.
26	Copy of Lake County	2018	unknown	Data Provision of Jail Bed Services	<p>Provides data on inpatient, outpatient, and reference to police services. Inpatient services provide length of stay and bed totals by agency. Outpatient provides unique admissions, crisis calls, and staff. Police service calls report the counts for varying agencies.</p>	NA	NA



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27	Integrated Data: Unlocking Insights into Vulnerable Populations	2017	Dawn Wiest, PhD	Presentation on Camden, NJ with data on hospital costs by spatial area, arrests and hospital costs, and system high utilizers.	Provides statistics on Camden including: population, percent of persons living below poverty line, graduation rate, and unemployment rate. Map included showing spatial analysis of hospital costs (receipts) by spatial area, indicating specific blocks and building by portion of cost. Chart indicating what portion of patients account for what portion of costs (10% account for 73% of costs). Provides sample outlier patients on a grid with medical complexity and social complexity ranging from high to higher. Venn diagrams showing overlap between police arrest data and hospital claims data in counts and percent. Includes chart of dual-system higher utilizers, defined here as 10 or more ED visits and 6 or more police accounts over five years (205 persons). Includes bullets on risk of police encounters and ED, substance abuse related hospital visit, hospital visit with violence-related diagnosis, and substance abuse hospitalization. Included bar chart on prevalence of substance abuse, mental health, and homelessness, showing population, police only high utilizers, and dual-system high utilizers. Includes chart showing findings of individual case study's emergency department visits, inpatient visits and a series of diagnoses (wounds and infections, alcohol and substance abuse, mental health, etc.) and related crime if any (public nuisance, theft-related, violent crime, arrest warrant). Includes two tables on individuals sequence of events (n=278) with the first table including police overdose, hospital overdose, drug charge, and other hospital or police encounters from the 1st to 100th event and second table includes alcohol/substance abuse hospital visits in addition to the items in the first table.	Appears completed	Consider use for SOW and report
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28	Data Sharing Report (121117-Lake-County-Mental-Health)	2017	Lake County Mental Health Coalition	Report on the data sharing project and provides recommendations for the project	The report provides the research findings and recommendations based upon phase 1 of the project. Lake County needs to develop an online database sharing system that providers can access and be able to more adequately address client's needs. Next Lake County needs to establish a system of data governance. Data governance needs to create a standardization of information, defining compliance within the system, and design for long term and short term utility. After the data system is built and governed the coalition needs to foster relationships with state Medicaid agencies. Then the coalition needs to modernize healthcare provision by fostering best practices across the continuum of care and expedited means of learning opportunities to the specific needs of the behavioral health providers.	Lacked information on performance measures, no documentation of how data is shared and collected by service providers	Creation and governance of an electronic database that is accessible and useful to the coalition providers.
29	Lake County Coalition Meeting (10-9-17)	2017	Lake County Mental Health Coalition	Review the data sharing project, then discuss the next steps based upon the North Highland recommendations.	Discussion and graphical presentation of the data sharing vision, through a guide of the directional relationship of data and entities. The meeting then discusses the pilot project. Then the meeting discusses the "Go First" model and how it needs to establish a general agreement among providers. Then the meeting goes through the 8 recommendations from north highland.	Appears completed	NA as next steps are for the draft of final report
30	Continuing to align on a data sharing model for Lake County(Coalition Meeting 9-11-2017)	2017	Lake County Mental Health Coalition	Discussion of aligning data sharing models and data measurements	The meeting was intended to advance sustainable community level change through collaboration. The presentation provided roughly 10 different behavioral health initiatives throughout the country and reiterated the importance of having a collaborative coalition that actively shares and manages it data.	Structure of Data Governance needs to be determined	Creation of a detailed implementation plan for data sharing.
31	Lake County Mental Health Coalition Charter	2017	Lake County Mental Health Coalition	Designated charter for the coalition in its purpose and responsibilities	The article provides the vision, purpose, objectives, outcomes guiding principles, responsibilities of the coalition, and membership. The vision is "All adults with a diagnosis of, or at risk for developing, a mental illness will have access to a coordinated, integrated, well-funded mental health system that promotes recovery and social inclusion through timely access to prevention, treatment, and recovery support services".	Appears completed	Consider for SOW and in report

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32	North Highland Introduction (Coalition Meeting 5-22-2017)	2017	North Highland	Introduction to the North Highland Organization and presentation of next steps for project objectives	The agency's goals are to establish the data quality from program collaborations, analysis of the available data, and recommend steps to increase efficiency in delivering evidence based practices to clients, community, and total population	final program vision and accountability of providers	Choosing additional organizations for coalition entities. Provide technical specialist contact information.
33	Lake County Mental Health Initiatives	2017	Unknown	1 page graphic showing services in place, physical sites, future services, studies and reports with related offices and departments, committees, and funding source.	Lists services provided, including specific programs (i.e. Enroll! Lake County! 2013, Text-a-Tip, TASC Assessments, CIT training). Related committees identified as County or non-County. Physical service sites listed (i.e. Zion Health Center, Crisis Care Center 24/7). Studies and reports identified by related offices and departments, includes Strategic Plan LC HD/CHC 2013-2016, Community Health Status Assessment Report 2012, community action plan, survey, etc. Future Services lists as well (includes Crisis Care drop-off center, Mobile Response Team, HD/Live4LALI Mobile Response Team).	Appears completed	Future services indicated, no additional information provided.

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34	Lake County Jail Diversion & Health Engagement Project Implementation Guide	2016	Community Oriented Correctional Health Services	Provides summary of findings, information gathered, propose models of care, discuss potential policy opportunities and challenges.	Data on mental health and substance use in the jail population not available, but application of national estimates indicates approximately 120 with MH issues and 400 with substance use in the facility. Key informant interviews were conducted. Generally a centrally located diversion facility was preferred, with a program designed to provide a variety of services at one location. Challenges faced include the need for evaluation, the need to avoid duplicating efforts, education, lack of access to services, and funding. Recommendations include a central drop off location, training, and mobile crisis response. Provides details, benefits, and challenges on a variety of proposed models. Provides details on Lake County's work on three training programs, Crisis Intervention Training, Mental Health First Aid, and Trauma-Informed Care Trainings. Some discussion on funding such as Medicaid Administrative Claiming and identifying activities eligible for funding. Includes the recommendation of Targeted Case Management and the 21st Century Cures Act. Briefly discusses data and connecting data from diverse agencies, leveraging 90/10 funding, encourages Medicaid enrollment efforts, encourages informing the public to avoid NIMBY issues. Recommended implementing evaluation at the onset of programs.	Data not available to conduct an in-depth financial analysis. Challenges in identifying population for diversion.	Recommendations include seeking funding and looking into fundable activities, increasing Medicaid enrollment, preparing public statements appropriately.
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35	Live Well Lake County Community Health Improvement Plan, 2016-2021	2016	Lake County	Lake County's 5 year plan lead to the implementation of interventions to address cardiovascular disease and hypertension, obesity, behavioral health, and diabetes. Goal of the plan is to identify these priorities, focus attention and resources on strategies, monitor progress, improve community health.	Includes description of the four identified community health priorities. Infographics for each priority provide statistical information, including the prevalence in the population, cost, and race with some variation by priority. Indicates that a modified Hanlon Method to meet assessment needs. Factors included in this method include size (prevalence of priority in the population) and seriousness (categorized by morbidity, mortality, health equity, and comparability. Defines specific terms (such as objective, intervention, strategic issue) and presents these for the health priorities. For example, one objective for obesity is to reduce prevalence by 10% by 2031. For strategic issues related to the priorities, includes impact objectives and potential evidence-based interventions, identifying the type of intervention, sectors involved, and references source literature. Includes section on next steps, include proposed Action Teams, structure of the teams, tasks (development of work plans and reporting progress). Includes graphic showing this structure and interaction between Action Teams and Steering Committee. Includes contact information, a section discussion The Together Summit, and an appendix with intervention citations.	No needs indicated other than those of the community.	The formation of six proposed action teams (Walking, Eat Well, Diabetes Prevention, Tobacco Prevention and Cessation, Behavioral Health Capacity, and Health Literacy).
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36	Live Well Lake County Community Improvement Plan	2016	Lake County Health Department & Community Health Center	Infographic highlighting vision, priority, and strategies of this program, with section on priorities, needs, trends, specific health data, goals, and visual representations of health equity.	Includes the program vision and priorities (cardiovascular disease and hypertension, obesity, behavioral health capacity and infrastructure, and diabetes). Strategies listed include improving policies, systems, environments, increasing physical activity, improving and promoting nutritional, improving clinical interventions, improving BH capacity and infrastructure. Outlines community priorities (such as chronic disease and housing), health system needs (including improving data sharing, linkages to healthcare), and emerging trends (including mental health, healthcare access). Provides brief statistics on Lake County rates for obesity and overweight adults, hypertension in adults, and diabetes in adults. Lists goals associated with program priorities (reducing prevalence of various diagnoses, improve mental health, reduce ED visits due to diabetes. Includes several graphics under health equity to demonstrate visually the area and percent of: children in poverty, rates of housing stress, and percent of adults with education less than high school diploma.	Appears completed	Consider for SOW and in report
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37	LCHC/CHC and Live Well Lake County - 2014 Behavioral Health Needs Assessment and 2015 Behavioral Action Plan	2016	Lake County Health Department & Community Health Center	Outlines the 2015 Behavioral Health Action Plan	Briefly discusses the 2014 Behavioral Health Capacity Study. The study included quantitative and qualitative data and demographic analysis. Findings indicate a limited capacity for psychiatry and therapy services and a need for more Medicaid providers. Findings also indicate disparities in socioeconomic and cultural competency/linguistics. The implementation of the ADA would expand access and stress current system. Outlines 4 areas for the Action Plan with 13 strategies. Includes a list of the Behavioral Health Action Planning Partners. Included also is a general timeline for each area and strategy for planning, piloting, and expanding, and sustaining from Year 1 to Year 5. Includes a flowchart organization chart of steering committee, action team, and interactions between these and external groups and the Health Department. Also has an org chart of the BH Capacity Action Team structure. Identifies additional efforts including jail diversion (reduction of recidivism through data sharing and coordination of services; additional Crisis Intervention Training, Mobile Crisis Team, and Crisis Drop Off Center. Identifies the Live Well Lake County top 8 health priorities. Appendix with details for the action plan. Includes workforce development strategies, suggests a series of strategies, including an overview, definition of success in 5 years, the impact, partners involved, cost, relevance for age groups, cultural and linguistic competencies and time to implement.	Findings indicate limited capacity for services, the need for additional Medicaid providers, particularly in light of the ACA.	A series of strategies outlined as part of the Action Plan. These strategies include: 1. Developing internships and residencies; 2. Developing recruitment strategies; 3. Expanding use of tele psychiatry; 4. Integrating behavioral health into primary care; 5. Integrate primary care into behavioral health; 6. Develop referral network; 7. expanding use of technology to facilitate a referral network; 8. co-locate behavioral health providers; 9. expand supportive housing; 10. School-based behavioral health services; 11. Develop transportation program; 12. Mental health first aid; 13. Design a public awareness campaign.
38	Mental Health Overview	2016	Lake County Mental Health Coalition	Introduction to the community based coalition and the intended impact areas	The need to discover the types of programs and services needed for Mental, emotional, and behavioral (MEB) health individuals in lake county. The types of programs and services are for housing, homeless veterans, employment, treatment/support, medical/hospitals, Justice/law enforcement, and education.	Prevalence of mental illness in Lake County. Are those with mental illness able to access services within the county? Are the resources being invested in the right combination for the counties need?	Active participation in the coalition, review of policies and systems to enable better integration, share data information and current service gaps and/or barriers, as well as program evaluations and their results.

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39	Community Action Plan	2015	Leading Healthy Futures	Report to address unmet needs in behavioral health	Lake County prioritized four population groups whose behavioral health needs should be addressed for a successful action plan: low income adults and youth who have non-severe mental health conditions; individuals who have substance abuse disorders and are not severely mentally ill; individuals who are severely mentally ill, do not require residential treatment, and are not homeless; and individuals who are severely mentally ill, and require residential treatment and/or are homeless. In addition to the four population groups, four main underlying issue areas to address were identified: provider workforce; coordination/continuum of care; awareness; and access. The report then goes on to state 13 different strategies with possible benefits and costs and collaboration needed. The strategies range from new program and provider development to social media campaigns	Additional aid to populations described throughout the document and described in take a ways.	Choosing which strategies to pursue in addressing the four targeted populations.
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40	An Assessment of Behavioral Health Needs, Service Capacities and Projected Trends in Northern Lake County	2014	Rob Paral and Associates	Provides description of behavioral health needs, service capacities, and projections for Northern Lake County, with an emphasis on low-income populations.	Finds that the need in Northern Lake County is high, estimating high numbers of residents engaging in behaviors including: binge drinking, illicit drug dependence, serious suicidal thoughts, and experiencing major depressive episodes. Also states a significant number of young adults engaging in tobacco use and binge drinking. Individuals 15-24 account for twice as much emergency department use in comparison to the portion of the population. Some areas and zip codes have much higher rates of emergency room use. Latinos are underrepresented in hospital use and African Americans are over represented in emergency services. Services listed as needed include additional psychiatrists, general counseling, case management, and housing. Lake County Health Department serves a small number in comparison to demand, non-profits are at capacity, and for-profits in the area do not accept Medicaid and are not considered a "major player." Projections: The Affordable Care Act is predicted to improve access to health insurance, but it is believed this will strain the system. Newly insured persons under the ACA considered part of "Medicaid Expansion" will have the opportunity to seek care outside of county facilities, resulting in the need to compete to retain "newly insured (i.e., paying) customers". Population growth driven by immigration will require effort in language solutions and appropriate services. Provides information on service providers, hospitals, service usage, emergency services facilities, inpatient service facilities, professional licenses in Lake County (i.e. psychologist, counselor, etc.), race and age profiles for the ACA - Medicaid group, population projections, poverty growth,	Changes in data systems made it impossible for the authors to track all service areas prior to 2010.	Recommendations include retaining the Medicaid Expansion group, more Medicaid providers are needed, investment in services to meet the cultural and linguistic needs of diverse populations.
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41	LCHD/CHC, NICASA, PADS Comparison to Lake County Sherriff Bookings Analysis	2014	Lake County Health Department & Community Health Center	PowerPoint presenting analysis of Lake County booking data.	Highlights indicate approximately one in four individuals booking by LCSO have had an interaction with at least one social service organization. Describes methodology, specifically that bookings and client lists were provided by LCSO, PADS, and NICASA which were then matched on last name, first name, and DOB. Data time period was the Jan to July 2016. Graphic showing whether there was no overlap and what agencies the overlap was with for individuals in the timeframe. Table providing counts and percent of the same. Demographics for BCSO booking data for race/ethnicity and gender. For behavioral health population, provides race/ethnicity, housing status, gender. Provides client comparison with the same for LCHD/CHC BH and NICASA clients. Race/ethnicity and gender provided for LCSO booked NICASA clients. Client comparison with for LCHD/CHC BH and PADS clients. Race/ethnicity and gender provided for LCSO booked PADS clients. Comparison provided with demographics for LCHD/CHC BH and jail bookings. Table providing top ten zip codes by jail/social services combinations. Summary of 2016 and lifetime bookings for clients by social service provider. Top sites listed with counts for social service providers.	Appears completed	Consider for SOW and in report
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42	Lake County Mental Health Coalition Workshop Part 1	2014	North Highland	Presentation for workshop detailing data models, information matrix, and models for Lake County.	Discusses coalition goals and results of data sharing. Graphic showing data sharing, interactions between levels, example questions, and example data points. Progress and direction overview listing preceding steps, current steps, and subsequent steps. Defines a series of theoretical models for data sharing, defined, pros and cons provided and potential methodologies listed for: silos, point to point, central repository, and hybrid models. Outlines points for theoretical application, including model evolution, data governance rules. Provides a series of examples for cross system collaboration data sharing models with U.S. map indicating location site. Discusses model from San Diego, CA with: planning start year, data inputs, sponsorship team, sectors/players sharing data, technology used, governance structure, data points/measurements available. Outlines programs and benefits enabled, key enablers and differentiators. Describes in more detail purpose and origins, methodologies and tools, and funding. Shows Live Well San Diego Data Dashboard with indicators, measures, San Diego figures, California figures, and U.S. figures. Discusses model from King County, WA with: planning start year, data inputs, sponsorship team, sectors/players sharing data, technology used, governance structure, data points/measurements available. Also discusses purposes and origins, methodologies and tools, and funding. Shows visual depiction of operationalization of Familiar Faces, a King County program. Lists reports King County is able to produce and statistics on patients ready for discharge and detention placements by category. Discusses model from Louisville, KY (Community Care Management Network) with: planning start year, data inputs, sponsorship team, sectors/players sharing data, technology used, governance structure, data points/measurements available. Reviews community care management network data process flow for Louisville. Includes also Lake County data points entered into Service Point by organizations and aggregated data. Shows release of information form used for Louisville DDCT.	Appears completed	Consider measurements for a dashboard, priority questions, and suggestions on data models.
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