COOPERATIVE EFFORTS AND COLLATERAL EFFECTS: THE COST-BENEFIT ANALYSIS OF A STATEWIDE SUBSTANCE ABUSE TREATMENT SYSTEM

By

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To the Faculty of Washington State University:

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Those who know me know that I am a longwinded and sentimental guy. This being said I would like to take this opportunity to acknowledge those individuals who have had a great impact on my life, both personally and academically. First off, I would have not accomplished this degree without the unconditional support from my entire family (>v<). To my wife Sancheen: you are my rock, there is no way in hell I would have gotten through this process without your unyielding sacrifice, love, and devotion – I appreciate everything you are and do, I love you.

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and prove that your investment in me was worthwhile by modeling my career in a way that reflects all the positive academic and social ideals that I believe you represent. I, of course, am limited in the fact that I do not wear cowboy boots and I cannot kick ass like Chuck Norris, but (seriously) I hope to live up to the principles that you encompass in my own way. My family and I are so very grateful for you – from the bottom of my heart – thank you.

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Idaho is presently facing major budget shortfalls. Social services, such as those associated with substance abuse treatment, are often considered ripe grounds for trimming costs. Currently, there is a growing demand to target cuts in funding through the use of cost-benefit research. In response to this demand, this study employed cost-benefit methods to estimate the economic costs and benefits associated with the provision of substance abuse treatment in Idaho. Taking methodological advantage of a naturalistic study design, this study was able to compare treatment group outcomes such as criminal recidivism, client monetary earnings, and correctional system involvement with those of a propensity score matched comparison group.

Outcomes tied to client monetary earnings and involvement in the Idaho Department of Correction did not strongly indicate a difference in patterns in favor of the treatment group. In regard to criminal recidivism, however, the outcomes fell significantly in favor of the treatment group. Findings indicated that a one-dollar investment in treatment saved $1.46 in the fifteen-month study period following discharge from treatment. Therefore, it is clear that treatment, compared to the absence of treatment, has a positive overall effect on economic outcomes.

To lend context to the cost-benefit findings, this research utilized theoretical concepts from the fields of public policy, criminal justice, and criminology. In recognizing that the
provision of substance abuse treatment is a valid form of social support, this study expands our understanding of the role of policy-makers within treatment systems. Specifically, this study details the impact that the network, collaborative capacity, and wicked problem concepts have on the criminal justice and treatment fields. Findings related to a collaborative capacity survey indicate a need for: 1) improvement in the relationships among treatment network partners; 2) the identification of sustainable financial and intellectual support; 3) the formation of a stable network structure that can handle the ongoing research needs of the system; and, 4) the creation of information on evidence-based practices and their short and long-term consequences for the health and safety of the people of Idaho.
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Dedication

This dissertation is dedicated to my wife Sancheen, my daughter Kaiya, and my son Lucas. You are my love, my life.
CHAPTER ONE
INTRODUCTION

In nearly every governing context, whether rich or poor or progressive or hidebound by habit, there is a litany of issues state policy makers must take into consideration when deciding how to allocate their scarce economic resources to public and private social service institutions and programs. In order to allocate resources effectively, state policy makers and practitioners at all levels rely on several sources of information, including the results of relevant empirical research. The need for such empirical research is at a premium, in regard to substance abuse treatment specifically, where annual costs for such treatment constitute millions of dollars of state and local government expenditures (SAMHSA, 2008). Policy makers and citizens alike want to know that the money being spent on treatment is being used effectively, and that there are measurable benefits associated with such expenditures. Equally, there is a desire by policy makers to understand the costs and benefits of substance abuse treatment in the State of Idaho.

Like many other states, Idaho is currently facing major budget shortfalls. Social services are often ripe grounds for trimming costs; however, lawmakers understand the value of an educated decision. There is a growing demand at the state (and national) levels for economic research, especially research projects which can show where scarce budget dollars are well spent. In response to this demand, this dissertation research employs cost-benefit methods in order to measure the benefits associated with the state-wide substance abuse treatment system.

The economic outcomes generated through cost-benefit research designs, such as the one utilized here, can also benefit from being understood within their unique context. That is, the outcomes alone may certainly be impactful and enlightening, but a deeper understanding of how
the system arrived at such outcomes is also needed. To lend context to the cost-benefit findings, this research borrows and integrates inter-disciplinary theoretical concepts from the fields of public policy and criminal justice/criminology. Notably, substance abuse is considered a complex public problem (referred to as a “wicked problem” by public policy scholars) that is in need of constant attention and substance abuse treatment is considered a form of social support (Cullen, 1994). As detailed in the following chapters, when these two unique theoretical components/frameworks are combined, they offer a rich context within which the cost-benefit findings can be better appreciated and understood. The next sections in this chapter highlight the enormity of the costs associated with drug use and abuse; followed by a short introduction to the guiding theoretical principles; an introduction and brief overview of some major policy developments that occurred in Idaho in the last ten years; and, the chapter ends with an introduction to the cost-benefit perspective and the overall goals of this dissertation.

Drug Control is an Expensive Endeavor

President Obama’s National Drug Control Budget summary for fiscal year 2011 requested $15.5 billion for support in the areas of drug abuse prevention, treatment, and enforcement. For treatment alone, the budget request topped $3.8 billion, while the government allocated significant amounts in the other areas of interdiction ($3.7 billion), domestic law enforcement ($3.9 billion), international programs ($2.3 billion), and prevention with research ($1.7 billion). These budget expenditure figures are monumental in scale; however, if one includes associated costs from drug control-related criminal justice system components such as those associated with policing, law and courts, and corrections, and costs to society which come in the form of health care expenditures, lost productivity, and victimization, the overall estimated

At the national level, to construct a model of interrelated costs associated with drug abuse would indeed be a daunting task. Moreover, to implement and monitor a set of policies that produce a positive effect on the problems surrounding drug abuse is equally challenging (ONDCP, 2008; Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 2001; Henning & Frueh 1996; Knight, Simpson, & Hiller, 1999; Lipton, 1998; Martin, Butzin, Saum, & Inciardi, 1999; Wexler, Melnick, Lowe, & Peters, 1999; Pearson & Lipton, 1999; Martinson, 1974). There is, in fact, a rich and lively longstanding debate concerning both the effectiveness of our national drug control policy within the context of the criminal justice system along with arguments for and against the existence of certain policy components (Inciardi, 2007; Walker, 2006; Wilson & Petersilia, 2002; Garland, 2001; Wilson & Petersilia, 1995; Cullen, 1994; Trebach & Inciardi, 1993). In particular, given the current problems associated with the recent travails of the recessionary U.S. economy, much of our existing national drug policy is newly under fire. Arguments for decriminalization and even legalization of certain drugs, especially marijuana, have at times become as salient as the debates surrounding America’s wars in the Middle East and Central Asia. To formulate the definitive answer to the pervasive questions surrounding drug policy, however, is neither feasible nor is it the focus of the analyses set forth here. To be clear, “what works” in regard to the US drug control agenda is an important question that is in constant need of attention and refinement. For many of those who labor in the trenches either at the

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1 The ONDCP (2004: vii) report stated that from 1992 to 2002, the costs associated with drug use have increased 5.34 percent annually. In 2002, the ONDCP estimated total costs at $180.9 billion. If this pattern is indeed correct and holds, one could estimate that annual costs associated with drug use in 2011 at $187.64 billion. This calculation does not take into account inflation or overall crime trends; it is simply used here for illustrative purposes.
community or at the state level, who give a voice to those we as a society so often marginalize, label, and disregard, the fight for resources and the power and knowledge to decide how to distribute them is personal, rather than academic.

**Theoretical Framework: The Principles of Social Support & Collaborative Capacity**

In his 1994 Presidential Address to the Academy of Criminal Justice Sciences, Frank Cullen argued that *social support* should be a guiding principle or “organizing concept” in the field of criminal justice, particularly as it pertains to research and theory development. Cullen’s (1994) contention, in a very general sense, was that there is an inverse relationship between social support and crime; an increase in social support leads to a decrease in crime. Although this is a very simplistic explanation of Cullen’s (1994) theory or guiding paradigm, it seems to make sense to both researchers and practitioners; if you provide support to people who are in need, targeted outcomes – such as reductions in recidivism – should be affected positively.

Cullen (1994) distinguished clearly among various sources of social support, and his efforts in this regard have prompted some researchers to note a bifurcation between supports garnered from non-governmental entities only versus supports originating out of a mix of both public and private cooperative efforts (Worrall, 2005). This research employs the latter of the two orientations by default because the data and services are maintained and paid for by state agencies (and tax-payers by association), but the services are delivered almost entirely by in-network (DHW approved facilities), private, community-based treatment providers and facilities.

The provision of treatment funded by tax dollars and managed by state-run agencies is clearly an important form of social support, and this type of social support is the main focus of this research. The second and equally important proposition that will be considered has to do
with how social support, as measured through the systemic provision of treatment services, may be impacted by how well a “cooperative” populated by state agencies can work together over time to address substance abuse problems. Much of what Cullen (1994) and others have focused on are outcomes that are a result of some measureable degree of social support (see Woolcock, 2010; White, 2009; Zhang, Cao, & Vaughn, 2009; Herrschaft, Veysey, Tubman-Carbone, & Christian, 2009; Colvin, 2007; Tittle, Broidy, & Gertz; Worrall, 2005; Paparozzi & Gendreau, 2005; Pratt & Gosey, 2003; Scott, Foss, Lurigio, & Dennis, 2003; Wright & Cullen, 2001; Bazemore, Nissen, & Dooley, 2000). One distinct consideration that some may have overlooked in the criminal justice literature is the concept of “collaborative capacity,” a construct which refers to the process of how social support is built and perhaps more importantly maintained (Weber & Khademian, 2008a; Weber & Khademian, 2008b; Agranoff, 2006; Kettl, 2006; Bryson, Crosby, & Middleton Stone, 2006; McGuire, 2006; Thompson & Perry, 2006).

For the purpose of this study, the concept of collaborative capacity is defined in terms of a type of network building which results in the integration of services across agencies and the incorporation of new information networks into inter- and intra-organizational operations. In order for collaborative capacity to exist, the processes which support it (network building and integration of services) need to be sustained and endure over time through institutionalization. This includes the ability for managers within the core state agencies studied here (see below discussion of the Interagency Committee on Substance Abuse Prevention and Treatment) to solve problems related to the substance abuse treatment network within Idaho. The methods of choice include the pooling of resources, the mapping of an evaluative process, joint decision making, data sharing, and agency personnel sharing and group problem solving. The catchwords in this interagency committee tend to be collaboration, communication, and coordination.
The Case of Idaho

Beginning in 2003, the State of Idaho began receiving federal funds to supplement, cultivate, and improve the State’s substance abuse treatment infrastructure and provide enhanced treatment services. As part of the effort to improve the overall treatment system and to begin to identify a process through which a cooperative of state agency personnel could systematically evaluate treatment system components and outcomes, a committee made up of various key-stakeholders was created (Access to Recovery Alliance, Continual Quality Sub-Committee). This multi-agency entity was charged with three principal tasks. First, to identify administrative data sources that held information to be used for evaluation studies. Not only were the data sources discovered, but key “gate-keeping” individuals within each agency were brought together to both identify valuable archival data and to facilitate the process of archival and current records data sharing. Second, the committee came up with a detailed list of research questions, many of which were developed with cost/benefit research in mind. Discussions centered on the identification of appropriate indicators of client success post-substance abuse treatment episode; earnings and avoidance of criminal justice system-related expenditures came to the fore in this regard. Third, the committee set the research plan in motion, culminating in a technical report (January, 2006) and a peer-reviewed publication (Collins, Cooper, Horn, Stohr, Walsh, Bostaph, & Baker, 2010).

The initial study both laid the groundwork for this dissertation research, providing important evidence of the benefits of building a more collaborative administrative system for sustaining efficacious treatment services. The question of how this dissertation study builds upon and expands our knowledge will be addressed; however, during the time period between the first

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2 This process generally followed the framework for economic analysis provided by Welsh, Farrington, and Sherman (2001).
study and this work (roughly 2005-2009), some very interesting developments related to collaboration occurred in Idaho. The most notable developments in this regard were the adoption by the Idaho State Legislature in 2006 of Idaho Statutes 39-303 and 67-821; establishing the Interagency Committee on Substance Abuse Prevention and Treatment (ICSA) and the Coordination of Policy and Programs Related to Drug and Substance Abuse (i.e., the establishment of the Idaho Office of Drug Policy).

For the last two decades the State of Idaho – or more precisely, several key legislators, private and public agency personnel, and key members of the public – have made a sustained effort to create a “best practices” atmosphere for substance abuse treatment and other state-level social services. While noteworthy positive efforts are clearly in evidence, serious roadblocks remain which hinder the ability of the key agencies and service providers to monitor, manage, communicate, and evaluate their efforts effectively. In 2005, the Office of Performance Evaluations (OPE) took a hard look at the State’s efforts to provide substance abuse treatment. The OPE (2005:ix) found that although Idaho Code required a “comprehensive and integrated system” at the time of their study key agencies were unable to provide answers to some very basic questions about the system. The questions that remained included the creation of a reliable estimate of statewide need for treatment; system capacity to address that need; the types of services being provided and to whom; what programs work better than others; and, whether the existing efforts were making any lasting difference in the life course of service recipients.

The 2005 OPE report focused on the performance of four agencies in particular – namely, the Department of Health and Welfare, Department of Correction, Department of Juvenile Corrections, and the Department of Education. All of these agencies provide a range of treatment and prevention services. Not directly included in their analyses were the Idaho State Police, the
Judicial Branch (i.e., drug courts), and the Idaho Transportation Department. Importantly, the OPE (2005:ix-x) study reported that these four agencies “collectively spent about $27.5 million in fiscal year 2005” and that $12 million – nearly half (44%) – were for law enforcement activities related to or “linked” to substance abuse.

The OPE (2005:x) study found that “Idaho does not have a coordinated system.” This finding was likely of little surprise to many of those working within the treatment area at that time; there was clear evidence of “silos” acting with too little interaction often resulting in discontinuity and disconnection between agencies and no vehicle for consistent oversight, coordination, and active collaboration. In fact, the previous legislatively-created commission on substance abuse treatment system coordination and oversight was eliminated in 1995 by the Idaho State Legislature on recommendation by then Governor Phil Baff (OPE, 2005). The efforts by some state leaders to rebuild coordination in the system after the 1995 decision made only limited success (OPE, 2005). In speaking about the coordination issue specifically, the OPE report (2005:x) noted: “Without a coordinated approach that includes participation from many state entities, the state does not have a comprehensive statewide plan, mechanisms to communicate best practices, strong fiscal oversight, or a readily available assessment of state efforts to address substance abuse.” Given this strong statement, the OPE (2005) recommended that a jointly appointed (by the legislature and governor) independent commission made up of multiple key state agency personnel, including the judicial branch, members of the legislature, government associations, and the public be created. This commission was called the Interagency Committee on Substance Abuse Prevention and Treatment (ICSA).

ICSA came into existence in 2006 as an appointed commission of the Idaho State Legislature. Housed within the Idaho Office of Drug Policy, the structure of the interagency
committee closely follows the proposed structure recommended within the OPE report (2005). It is chaired by the administrator of the Office of Drug Policy (ODP) and directly engages the directors, or their designees, from the following agencies/departments: Health and Welfare (DHW), Correction (DOC), Juvenile Corrections (DJC), Superintendent of Public Instruction, Idaho State Police (ISP), Idaho Transportation Department, Idaho Supreme Court (ISC), along with various chairpersons of senate and house committees, and any other “ad hoc nonvoting members” that the OPD administrator designates (IC 39-303).

ICSA is charged with some very challenging tasks in its enabling statute. The committee’s principal duties consist of the development of a state-wide treatment plan, the creation of performance measures, acting as a conduit for the exchange and dissemination of information, monitoring and evaluation at all levels from individual programs to systems of care, budgeting and fiscal oversight, needs estimation and capacity assessment, ongoing evaluation and reporting, and importantly – the facilitation of collaboration, cooperation, and coordination between and among ICSA members. This statute will sunset July 1st, 2011.

**The Importance of Collaboration**

The importance of a collaborative effort for managing a statewide substance abuse treatment system, like that of Idaho’s ICSA, is twofold. First, all of the major players dealing with substance abuse issues are brought together on a regular basis to discuss issues of common concern, as well as those problems that are unique to each agency but which have impacts beyond their respective agencies. The empirical research supports the idea that in addressing highly complex public policy problems, such as substance abuse, a higher level of cooperation, communication, and collaboration leads to increased levels of effectiveness and efficiency at the
system level (see Brown, Harris, & Russell, 2010; Weber, Lovrich, & Gaffney, 2007). The literature is clear, however, that collaborative processes are not universally successful (see Mandell, 2001; Norris, 2001) and are particularly difficult to maintain in the area of criminal justice (Lincoln, 2008). Second, as a group, ICSA may engage community leaders and members statewide – community by community – in carrying out its work. Such collaboration in the needs assessment and capacity assessment processes, for example, may enhance the overall level of social capital in the state. Some scholars in public administration have argued that social capital leads to the co-production of public good and more effective governance in many different settings (Weber et al., 2007; Lemmel, 2001; Potette, Janssen, & Ostrom, 2010).

**Current Study**

In addition to an investigation into the possible policy and social capital impacts that this relatively new collaborative body has occasioned, this dissertation also builds upon previous research related directly to substance abuse treatment outcomes. The evaluative and process-oriented aspect of this research is tightly nested within the context of the collaborative capacity building activities of ICSA. The degree to which improvements in the treatment system in general are attributable to the governing decisions of ICSA, including the monitoring and enhancement of client-related substance abuse treatment processes and outcomes, is an important question for this dissertation to answer. How information from those monitoring processes and evidence of outcomes is acted upon by ICSA will be of major import as well.

Therefore, this research serves two major purposes. First, it will contribute to knowledge about how the building of “collaborative capacity” might achieve progress on the complex public policy problem of substance abuse. If the ICSA can achieve noteworthy improvements in the
operation of the substance abuse treatment systems of the state via a collaborative process, the
dynamics of how that improvement was made need to be documented for replication elsewhere.
Second, this dissertation builds on previous empirical research directly related to treatment-
related cost and benefit outcomes. Evidence from such research has been critical to service
outcome improvements in many circumstances where legislative action is required for the
identification of best practices and preferred programs.

The Cost Benefit Perspective

An important component within the body of substance abuse treatment research centers
on economic analyses (Aos, Miller, & Drake, 2006; Fowles, Byrnes, & Hickert, 2005; Belenko,
Patapis, & French, 2005; Dismuke, French, Salomé, Foss, Scott, & Dennis, 2008; French,
Swaray, Bowles, & Pradiptyo, 2005; Welsh, Farrington, & Sherman, 2001). Some of this
research on drug and alcohol treatment has focused on efficiency, as measured primarily by
determining an impact upon recidivism (Welsh et al., 2001). This study takes a different but
related approach centering on the question of whether substance abuse treatment positively
impacts cost savings as measured by cost avoidance in criminal justice, correctional spending,
and benefits in the form of increased client earnings. The main goal is to investigate the
economic impact of substance abuse treatment on these relatively unexplored social support
realms in the State of Idaho. Not only are the quantifiable outcomes reported, but as with the
previous study this research also sheds some light on the analytical processes surrounding
empirical projects of this magnitude. As stated above, these processes, such as data acquisition
and information sharing, collaboration on data-linking projects, and the identification of
redundancies and inconstancies are nested within the “collaborative capacity building” context of ICSA.

Cost benefit research on substance abuse treatment centers on the conversion of all selected treatment measures or outcomes (criminal justice system involvement and recidivism, employment status and history, and client earnings, etc.) into one common unit of measurement (dollars), thereby enabling comparisons within and across treatment programs or treatment systems as a whole. The main objective is to create an economic benefits ratio produced from analyzing the difference in enumerated costs before and after a substance abuse treatment episode. For example, a cost benefit ratio is calculated by taking the pre-treatment estimated net costs within the selected fields of service (measures or outcomes) and comparing those same costs to those incurred during the post-treatment period. The pre-treatment costs minus the post-treatment costs will reveal the dollar amount offset or net benefit which can be considered a state-level cost savings. Outcomes associated with a treatment group are then compared to similar outcomes generated within the same time period by an appropriate comparison group.

The data used to estimate these costs (tangible and intangible alike) include a combination of administrative/accounting or claims data, employment history records and current socioeconomic status, historical and current criminal justice system involvement, extent of alcohol and drug use, medical services and treatment program use, along with other directly related costs. Some cost measurement, as associated with accounting data, is directly translatable to a dollar amount, while other non-monetary cost measures such as social costs or quality of life or criminal victimization are more difficult to quantify in monetary terms, as will be discussed in the next section of this dissertation.
As with the previous cost benefit study (Collins et al., 2010), I first identify viable data sources, create interagency data sharing agreements in order to draw in and combine all available information, and – with the input of the involved agencies – create agreed upon economic outcome measures to estimate the costs and resulting benefits of the state’s principal substance abuse treatment programs.³

Using quasi-experimental methods, the cost benefit research design takes advantage of recent economic “hard times” and treatment system limitations in Idaho that have resulted in the creation of a “wait-list” of clients who were assessed and deemed eligible for treatment services. This list of clients serves as a convenient comparison group in a natural experiment; those wait-listed clients will be compared to clients who received substance abuse treatment during roughly the same time period. The details of both study eligibility and sample selection and the techniques employed to match clients in the treatment and comparison samples are discussed in the methods section in Chapter Three.

**Study Aims**

Above all else, the possible benefits of this research include but are not limited to a better understanding of the economic impact of substance abuse treatment in the state of Idaho. The study’s purpose is to provide information that will assist state policy makers make informed decisions on substance abuse treatment funding overall, and help determine the proper level of support for specific treatment programs. Additionally, this research aims to identify a sustainable process of interagency collaboration that can be drawn upon on an annual basis to both generate

³ These identified data sources are discussed in full within chapter three, which includes detailed descriptions of both the systems and what variables are collected and used within this research.
new, up-to-date information on program impacts and facilitate the production of continued empirical findings related to the substance abuse treatment population in Idaho.

Chapter Overviews

Guided by the study propositions above, Chapter Two outlines the extant literature on the three main areas of cost benefit methods and findings, social support theory, and collaborative capacity. The theoretical concepts of social support and collaborative capacity are then further developed within a cost benefit framework. This chapter concludes with an overview of the two main theoretical propositions that are developed along with a discussion outlining the gaps in the extant research and how this study aims to address them.

Chapter Three provides detailed information on the operationalization of concepts through the use of specific indicators and data sources. The chapter begins with a discussion on the overall study design and then moves to a discussion of principal measures and indicators. The cost-benefit portion of the study is quasi-experimental, utilizing a pre-post design with both a treatment and comparison group. Due to the fact that multiple sources of data are used in this study, the discussion will begin with an overview of sample case selection process and a description of the two databases from which the original samples were taken. The original “seed” samples are individual or client-based, and they were used to match across the additional participating agencies’ databases. The linked client-level data are used specifically for the calculation of costs and benefits, so the cost-benefit portion of the study design will be discussed first. The second half of the study design, or that of the survey and qualitative network analysis, will then follow the detailed technical discussion on the cost-benefit analysis aspects of the study. Each sub-section of the cost-benefit analysis portion of the chapter will be labeled by
agency in reference to the data which it provided, and each sub-section will include a discussion of the operational measurements derived from the administrative database in question.

Chapter Four details the analyses carried out in both cost-benefit research and the documentation of collaborative capacity building through the survey tool. The cost-benefit analysis centers on the global question of whether treatment in general saves money compared to no treatment. The survey analysis addresses the general question as to how well the current network of substance abuse treatment system decision-makers works towards building collaborative capacity. The following hypotheses are tested:

H₁a: There will be a difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges.
H₁b: There will be a difference between the treatment and comparison groups on costs associated with post-treatment monetary earnings.
H₁c: There will be a difference between the treatment and comparison groups on costs associated with post-treatment involvement in incarceration and supervision.

Chapter Five provides a thorough discussion of both the research findings and the related public policy implications and recommendations. Results are mixed, but there is a strong indication that treatment versus non-treatment saved money in the post-study period. Additionally, the survey tool was validated and the results also indicate a need for improvements in building collaborative capacity. Where appropriate, relevant resource materials and process documentation protocols, such as data sharing agreements or data collection, linking, and manipulation tools, are placed in Appendices.


CHAPTER TWO
THEORETICAL FRAMEWORK: INTERSECTION OF POLICY AND PRACTICE

In their book entitled *Working Together*, Poteete, Janssen, and Olstrom (2010) discuss collaboration and collective action in the context of natural resource management. The authors offer a convincing argument for the adoption of multi-method approaches in collaborative-interdisciplinary research, which aims to tackle systemic and pervasive issues central to the effective co-management of natural resources. Although the book’s primary goal is to illuminate methodological concerns and promote multi-method research strategies, the context within which the authors situate their analyses and the collaborative essence in which it is steeped provide a convenient segue into the issues present in the study at hand. The complexities, the mixture of understandings and misunderstandings that inevitably arise out of the many discussions related to shared-resource management – such as use of non-renewable/sustainable energy sources, pursuit of economic development versus environmental protection concerns, expanded water resource use versus watershed management, and industrial agricultural production versus the promotion of public health – all have a single yet highly multifarious conceptual common-ground; at the heart of each set of discussions lies a *wicked problem*.

The complex problems that challenge policy makers in natural resource management are in part dictated by the context within which they arise. For example, the issues and controversies central to the climate change debate are not neatly contained geographically; rather, they are commonly multi-jurisdictional, often multi-national, and indeed even “global” in many respects. Consequently, responses to these issues must be, and many would argue have been, highly multi-faceted (Wilson, 2002; Perry, et al., 2001; Foster, 1999). The same general patterns and
challenges with collaboration and shared-resource management can be seen at a local level, at a national level, and internationally for many public health issues (Specter, 2009; Thaler & Sustein, 2008), for some areas of crime and crime control (Wilson & Petersilia, 1995, 2002; Garland, 2001), for the reduction of poverty (Reiman, 1998; Tonry, 1995; Wilson, 1987), and for illicit substance control, use/abuse, and treatment (Inciardi, 2007; Mosher & Akins, 2007; Cullen, 1994; Trebach & Inciardi, 1993) to name just a few. Much like the climate change debate, discussions regarding illicit substance abuse are centered on a particularly salient cross-cutting issue that not only warrants attention due to its manifest illegality, but demands attention to undesirable outcomes from a multitude of public service agencies dealing with those negative consequences.

**Wicked Problems and Illicit Substance Abuse**

Illicit substance abuse, for all intents and purposes, is properly conceptualized as what researchers in the public administration field term a “wicked problem.” Although this term conjures up images of smoke and shadows, boiling caldrons, shrill voices emanating from the dark, and perhaps evil itself, the concept “wicked problem” has a logical and operational definition which has been put to the test empirically in a variety of settings (Brown, Harris, & Russell, 2010; Weber & Khademian, 2008a, 2008b; Weber, Lovrich, & Gaffney, 2007; Agranoff, 2006; Kettl, 2006; Bryson, Crosby, & Middleton Stone, 2006; McGuire, 2006; Thompson & Perry, 2006). For the purpose of this discussion, a wicked problem is defined as an *unstructured, cross-cutting, and relentless* complex public problem that thoroughly demands the attention of the general public as well as those individuals occupied in public and private public service realms (Weber & Khademian, 2008b).
Substance abuse is an unstructured issue: parsimony in the world of causal inference regarding illicit substance use, abuse, and treatment may be achievable in the abstract; however, give the problem some real-world context and it gets very complicated very quickly. For example, if someone were to think of substance use/abuse over the life-course, from onset or initiation to death or desistance, how does he or she then define the problem? What causal mechanisms are at play during the initiation stage or during desistance? Do they differ? The truth is that there are as many, if not more, specifications of the underlying individual, group and societal causal mechanisms as there are differing theoretical perspectives of the problem itself. So then, is there a clear solution to the unstructured nature of the problem? Simply put, the answer is no, but there is hope that continuing progress in our understanding is likely to add to our ability to understand this more fully over time.

Substance abuse is a cross-cutting issue: the negative effects of substance abuse can take their toll on the individual user in many forms including the loss of liberty, deteriorating health, or a poor employment record. Interpersonal relationships may be strained, and families may become dysfunctional and even break apart. Communities may suffer from crimes related to the drug-trade or drug addiction. Entire national economies may be dependent on a black-market built on the international drug-trade, at great cost to humanity and the global community (Goldstein, 1985). Drug abuse is clearly connected to “other” problems of note. In the public policy realm, there are those in support of harsh penalties for drug use, while others champion decriminalization and treatment services; either way conflicting beliefs, attitudes and values are engaged. Due to the issues of interconnectivity and saliency, there is a high level of uncertainty when dealing with questions surrounding substance abuse, illegality, treatment and non-treatment.
Substance abuse is a relentless issue: at the individual level, and in line with the medical model, the underlying addiction and triggering mechanisms associated with substance abuse never fully disappear; clients are in a constant state of either maintenance or recovery from relapse. Thus, with respect to the system-level considerations it is the case that although positive strides have been and will continue to be made, in the end there will always be some level of need to address substance abuse problems. The truth is that no matter how much effort and how many resources we invest in the substance abuse problem, including law enforcement, drug interdiction, lengthy incarceration, and all forms of treatment, the core problem(s) motivating abuse will remain. Policy makers and practitioners will face new issues within new contexts over time and they will constantly need to “state the case” for whatever common goal or combination of goals they wish to promote, whether they be generally rehabilitative, retributive, incapacitative, or restorative.

Dealing with Wicked Problems: Networks and Collaborative Capacity

Networks Defined

The substance abuse problem is unstructured, cross-cutting, and relentless, and as a consequence, should be defined as a wicked problem. Central to any discussion on how to deal with wicked problems is the network concept. As illustrated by Poteete et al. (2010), many solutions offered which are meant to address wicked problems are too complex and cumbersome to initiate, and they often require far more resources than one person, group of people, or single agency or organization can provide. Moreover, as Weber et al. (2007:197) properly note, the complexity of these types of problems “forces agencies into interdependency—into reliance on others whose collaboration is essential to problem management.” Given these dynamics
associated with wicked problems requiring some form of governmental action, networks frequently arise in a pooled collaborative framework. Networks are defined simply by “the enduring exchange relations established between organizations, individuals, and groups” (Weber & Khademian, 2008b:334).

**How Networks Come About**

As illustrated by Weber et al. (2007) and Weber and Khademian (2008b:334), public policy-relevant networks may come together by: 1) voluntarily coalescing in order to jointly govern shared resources; 2) being initiated by legal mandate; and, 3) being crafted in a way that promotes program and resource effectiveness and/or enhancement. An actual network may have some or all of these attributes. Functioning networks, broadly defined, can be very beneficial for any given system because of their collective ability to accomplish complex tasks (such as those often tied to wicked problems). Networks are by nature flexible, resourceful, and have the capacity to learn and disseminate information. Networks are generally democratic in operation and seek equity in outcomes, traits which lead to possible increases in shared responsibility in problem solving and more effective, sustainable outcomes.

Finally, because of the scope of actions taken collaboratively to address issues surrounding wicked problems, many public policy relevant networks enjoy the possibility of exercising political power. The successful completion of work associated with wading through complex bureaucratic red tape is more likely with political power in hand, and measureable outcomes based on both service delivery and enhanced public perceptions of the agencies involved as follows with the achievement of political power. The ability for the network to disseminate information effectively to the general public is yet one more benefit of the
achievement of network-based political power (Weber et al., 2007; Weber & Khademian, 2008b).

**How Networks Evolve and How They Succeed: Collaborative Capacity**

Networks evolve within many different contexts, and as illustrated above they have the ability to produce both positive and negative outcomes. In order for a network to be successful or “effective” in addressing whatever wicked problem inspires its evocation, it needs to possess a sustained short- and long-term problem-solving ability, a combination of traits referred to as collaborative capacity (Weber & Khademian, 2008a, 2008b; Weber et al., 2007; see also Agranoff, 2006). It is widely agreed among collaborative processes scholars that there are three basic ingredients to building collaborative capacity: 1) problem-relevant knowledge and information must be shared within the network; 2) this knowledge must be integrated into practice within the network (beyond mere sharing); and, 3) in order for knowledge to be both shared and integrated, trusting relationships amongst members of the network must be developed and sustained over time (Weber & Khademian, 2008b). Therefore, the key to effectively managing wicked problems is not just the integration of “functions” across the organizations, members of the public, and policy experts who make up the network, but it lies in the “effective transfer, receipt, and integration of knowledge across participants” in that same network (Weber & Khademian, 2008b:337; Gargiulo & Benassi, 2000).

In regard to their definition of effective wicked problem management noted above, Weber and Khademian (2008b; see also Agranoff, 2006; Carlile, 2002) note the importance of the proper conceptualization of the key ingredient of knowledge. The authors conceptualize problem-relevant knowledge in terms of three general process-based categories. The first is the
“sending” of information, which can be facilitated by a “common language” such as communication mechanisms, similar training or policies among network organizations, common computer languages, all of which aid in the identification of both slowing-boundaries and speed-enabling structural components. The second is the “receipt” of knowledge, which takes into consideration the common and shared interpretation of complex information prior to implementing problem management solutions adopted collaboratively. The third is the development of “practice-based” knowledge representing insights that are “understood in the context of practice” or that has evolved within a certain organizational or network environment through participants’ experience. Problems for both transfer and receipt of information often arise in collaborative networks where impervious boundaries (i.e., silos) exist either within or between organizations (Weber & Khademian, 2008b:339-340; see also Garguilo & Benassi, 2000).

Although each of these three basic components may be studied separately, the combination of the three into a tripartite conceptualization allows one to situate the flow of knowledge into a dynamic process that not only includes the sending and receiving of knowledge, but also incorporates localized or practice-based knowledge development. When this conceptualization is applied to the substance abuse network, the identified sources of discrepancies in common language, interpretation of sent information, and hardened boundaries may be surmountable through the network’s development of “collectively generated knowledge [which] is necessary for developing long-term problem-solving capacity” (Weber & Khademian, 2008b:340; Weber et al., 2007).
Measuring Collaborative Networks and Collaborative Capacity

In a study of 150 public officials who worked within 14 distinct public management networks, Agranoff (2006) compiled a list of ten practical lessons that were generated through a qualitative analysis of interviews, field observations, and secondary analyses of network or organizational documentation. Although each of the synthesized lessons that Agranoff (2006) sheds light upon represent a large body of research and knowledge, the main findings of his study remain consistent with those that other network researchers and practitioners raise – namely, that networks are but one form of collaboration, not the exclusive form. Even though significant work is accomplished through participation in a network, most work done by participating agencies and/or association managers is carried out within their own agency, organization, or hierarchical structure.

In this regard, there is an empirically documented list of benefits which can be ascribed to involvement in networks, and the focus of collaboration research has been almost entirely on benefits. There is considerable evidence, however, of noteworthy costs associated with network involvement. For example, decision making in networks requires a great deal of time, depends greatly on the network structure and level of trust present among network members, and at times resembles a deliberative agreement-reaching process featuring on-going uncertainty of outcomes. The sharing of knowledge can become more difficult over time as technology costs rise with respect to both hardware and human capital. Finally, networks do not replace public bureaucracies. In an ideal world networks help public bureaucracies become adaptive and sustainable.

Beyond these valuable descriptions of how inter-organizational networks provide support to public managers when dealing with wicked problems, other social science researchers have
addressed the processes involved in the collaboration itself. Thomson and Perry (2006) provide an overview of such collaborative processes and include an analysis of not only what these processes represent, but also where they are located in a theoretical model. Importantly, through the synthesis of existing studies on collaboration, Thomson and Perry (2006) provide insight on five key dimensions of collaboration (which were first developed by Thomson, 2001). Taken together, these syntheses offer a useful framework for understanding the multi-dimensional processes at work within any collaborative network. The authors outlined five key dimensions. The first is called governance, which refers to the ability to make joint decisions about self-governing rules and guidelines. The second is administration, which refers to the presence of an implementation structure that can move joint-decisions to action. The third is autonomy, which refers to an understanding of the tension between organizational self-interest and collective interest. The fourth is mutuality, which is defined by the notion that there must be mutual beneficial interdependencies present or shared interests, such as a mutual focus on target populations. The last, reciprocity, refers to the assumed or actual demonstration of the willingness to equalize the costs/benefits of the interactions (e.g., quid pro quo, “I will if you will”; Thomson & Perry, 2006).

Measuring Effectiveness

The research surrounding the collaborative process (i.e., the necessary ingredients for management success inside a network, or managing networks rather than hierarchies) is particularly well-documented (Thomson & Perry, 2006; McGuire, 2006). One common and important theme, however, is that bridging the gap between the network (collaborative behavior) and measuring network effectiveness (program outcomes) is problematic, and as some note,
nearly elusive (McGuire, 2006; Hudson, 2004; Provan & Milward, 2001). There is, however, a
growing body of research aimed at answering the core question of whether or not any given
collaborative network is effective (Herranz, 2010; McGuire, 2006; Meier & O’Toole, 2005;
Milward & Provan, 2003; Provan & Milward, 2001). In their study of collaborative processes
within changing mental health systems in four cities Milward and Provan (2003:7; see also
Provan & Milward, 2001; Provan & Milward, 1995) developed a “preliminary model of network
effectiveness.” Their model draws a direct link between what the authors call “network
structure” and “network effectiveness.” Importantly, the authors discover a mediating
relationship they call “network context.” At its most basic level, the general proposition posits a
positive or covarying relationship between network coordination and integration and overall
effectiveness in addressing a wicked problem; levels of effectiveness rise as coordination and
integration increase. Their dependent variable, network effectiveness, was measured through a
client-based survey⁴ and was defined as the degree of treatment satisfaction clients reported
within the mental health system being studied.

Their network structure construct included two independent measures; “centralized
integration” and direct, non-fragmented “external control.” Milward and Provan (2003:8) define
centralized integration as the “degree to which a community’s mental health authority had direct
relationships with a set of providers.” The authors found evidence that centralized integration
had a facilitative impact on integration and coordination. Milward and Provan (2003:8) define
direct, non-fragmented external control as the “degree to which funding links between the

⁴ Many, if not a majority, of the studies reviewed on measuring network effectiveness used survey and interview
methodology to address their research questions.
purchaser and the provider were directly linked and not run through any intermediary organizations.” The more direct the linkages, they argue, the more effective the network.

As stated above, the authors note that the relationship between network structure and network effectiveness is mediated by network context. Their network context construct includes two variables; resource munificence and network stability. Milward and Provan (2003) note that there are delicate balances to be considered when investigating resource availability and number of clients served. Moreover, networks that serve a number of definable substance abuse treatment populations through the allocation of, for example disparate treatment techniques or modalities based on criminogenic risk and need, increase the complexity of this relationship. That said, the authors argue that this balancing act aside, a “network that is characterized by high resource munificence will be more effective than one that is not” (Milward & Provan, 2003:8).

![Figure 2.1 Milward and Provan’s Model of Network Effectiveness (2003:7).](image)

They did note, however, that the importance of resource munificence within the model is questionable, as some networks still exhibited effectiveness in conditions of resource scarcity. On the other hand, Milward and Provan (2003) note that the mediating variable “network stability” is of critical importance within the theoretical model (see Figure 2.1 above). The
authors found that those networks that were, for example, in constant flux (or were subject to regime change) performed poorly. The inclusion of these two variables within the mediating network context makes great sense, as a network that is relatively stable over time has the ability to learn how to distribute its resources (limited or voluminous) in effective ways (Milward & Provan, 2003).

**Levels of Effectiveness**

Together the concepts of network structure, context, and effectiveness as set forth by Milward and Provan (2003) provide a theoretical explanation of how effectiveness may be attributed to a network. One may also benefit from earlier work by Provan and Milward (2001), which adds to our understanding of network effectiveness by outlining three levels of network analysis (as seen in Figure 2.2 below): 1) community, 2) network, and 3) organizational/participant. In their article, Provan and Milward (2001:416) define community “loosely […] as the local area that is served by a network.” The authors acknowledge that defining the boundaries of a community is often difficult; however, they argue that inclusion parameters should envelop all who “benefit, directly or indirectly, from the services provided by the network” (Provan & Milward, 2001:416). Their definition leaves the door open for application at many different population levels – whether town, city, county, region or larger. In defining community as all those who benefit from services, the current study expands the aperture on level-one to the state-level. The community, as used here, is synonymous with the general public (tax-payers or citizens) of Idaho.

At each level of network analysis described by Provan and Milward (2001) [each of which will be discussed in-turn], they offer an indication of which key stakeholders are involved
as well as a list of effectiveness criteria. For the most diverse level-one category they identify client advocacy groups, funders, politicians, regulators, and the general public as the key stakeholders. Likewise they specify costs to the community, of building social capital, of influencing public perceptions of problem solving, of reductions in incidence (and one could also add prevalence) of the problem, and aggregate indicators of client well-being as effectiveness criteria (Provan & Milward, 2001:416).

<table>
<thead>
<tr>
<th>Operational Level</th>
<th>Stakeholder/ Level of Analysis</th>
<th>Effectiveness Criteria/Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level-one: Idaho</td>
<td>General Public &amp; C/B Public Perspective</td>
<td>Costs to Public</td>
</tr>
<tr>
<td>Level-two: Network (ICSA)</td>
<td>Community/public Orgs. ICSA Members/Participants</td>
<td>Collaborative Capacity Survey Tool/Org. Level</td>
</tr>
<tr>
<td>Level-three: Participant</td>
<td>Treatment System Client</td>
<td>Cost of Service Client Outcomes</td>
</tr>
</tbody>
</table>

Figure 2.2 Adaptation of Provan and Milward’s (2001:416) Summary of Network Evaluation Relationships.

There is a direct theoretical link at level-one (state-level) within the Provan and Milward (2001) community conceptualization to cost-benefit research in general. The identification of the substituent parts within a level-one network-effectiveness evaluation process is important because it mirrors the method of identification of the “general beneficiary” in cost-benefit
research (see Welsh, Ferrington, & Sherman, 2001). The first question that researchers must ask when creating a cost-benefit evaluation framework is “who stands to benefit?” In defining the scope of analysis, Welsh and his colleagues (2001) describe the process of ascribing benefits to different groups of possible beneficiaries, which include the general public/societal, government, participants in the services, or victims (related to criminal justice populations for example). Furthermore, network-effectiveness criteria at level-one include costs to the community (or state general public here) as well as aggregate indicators of client change. In combining the two, the logic statement at level-one is: the community is defined as the state (general public); the stakeholders include the general public, so a general public/societal cost-benefit perspective (which includes public agencies, participants, and victims) is utilized; and, effectiveness measures will include costs and benefits to the public. Merging the framework of network evaluation at level-one from Provan and Milward (2001) with cost-benefit methods (as used in the current study) provides a critical tie between two independent but mutually supportive analytical perspectives.

At the organizational level (level-two), Provan and Milward (2001:417) define network as a “collection of programs and services that span a broad range of cooperating but legally autonomous organizations.” The measurement of level-two effectiveness includes both the considerations inherent within the preliminary model of network effectiveness and includes the recognition of key stakeholders, effectiveness criteria, and linkages between evaluation methods (Milward & Provan, 2003). At level-two Provan and Milward (2001:416) identify primary funders and regulators, the network administrative organization, and member organizations as key stakeholders. They set forth the following phenomena as effectiveness criteria: “network membership growth, range of services provided, absence of service duplication, relationship
strength (multiplexity), creation and maintenance of network administrative organization (NAO), integration/coordination of services, cost of network maintenance, [and] member commitment to network goals.” The logic statement at level-two as it relates to the current project is as follows: the network includes both public and private member organizations and stakeholders within the substance abuse prevention and treatment network (all voting and non-voting members or associates of ICSA); and, the effectiveness criteria/measures include qualitative indicators of network structure and context (which cut across much of what is listed above in Figure 2.2), as well as some indicators of the costs associated with network maintenance.

Level-two is critical within the context of this study for a couple of reasons. First, the level-two network evaluation cannot be easily merged with a cost-benefit framework. Although there is a “cost” measure within the level-two effectiveness criteria, the enumeration and valuation of such costs within a cost-benefit framework makes little sense for the current study. In many respects, the combination of these effectiveness measures creates a contextual set of independent variables. That is, the combined construct of network structure and context within the theoretical model serves as a predictor of effectiveness outcomes, or as used within the current study, cost-benefit outcomes. Second, as will be discussed in a later section, the network-level or level-two analysis provides critical contextual insight into the relationships between the management and effectiveness of the network and the measured cost-benefit outcomes. To reiterate, the level-two analysis provides a critical context for understanding the quantitative cost-benefit findings generated at levels one and three. This context is generated for the current study through the results of a survey of the ICSA network, which is discussed in the next section.

At the participant level (level-three), Provan and Milward (2001) define clients simply as the recipients/beneficiaries (indirect or direct) of network services. Provan and Milward
(2001:416) identify three groups of key stakeholders; member agency board and management, agency staff, and individual clients; they also specify several sources of effectiveness criteria. Although the authors identify and include additional key stakeholders and effectiveness criteria, the most important contribution for the current study include (at the stakeholder level) individual clients only, and use costs of service and client outcomes as effectiveness measures. These level-three measures, as with those of level-one, have an intrinsic similarity to enumerated costs used within a cost-benefit methodological framework. It can be said, then, that a cost-benefit method of evaluation such as the one used in the current study cuts across all three levels of Provan and Milward’s (2001) network effectiveness evaluation framework (see Figure 2.2 for visual adaptation). Thus, the common cost-benefit ratio – as an outcome – can be considered a network effectiveness proxy/measure.

**Using ICSA Survey Responses to Gain Network Context**

As Milward and Provan (2003; 2001; 1995) indicate, much of the previous research conducted on the measurement of network effectiveness has come through survey research. One example, developed by Lincoln (2008), examined collaborative partnerships and multi-agency collective action to address the problem of domestic violence in Spokane, Washington. He noted that much of the research surrounding networks centered on goal-related outcomes (what he called manifest goals) rather than the collaborative processes (or proximal outcomes), which went into creating and achieving such goals. As a result, Lincoln (2008:125-126) created a survey of persons involved in the Spokane Regional Domestic Violence Task Force (SRDVT) with the following conception in mind:
“On the basis of the experience of the Kellogg Foundation-funded public health collaborative partnerships, [this survey was] designed to measure the processes that aim to achieve three proximal outcomes: individual empowerment, bridging social ties, and synergy. The survey is intended to assess the underlying theory that all three proximal outcomes are needed to strengthen the problem-solving capabilities of collaborative partnerships over a sustained period of operation. The Kellogg Foundation CHG [Community Health Governance] model holds that a collaborative partnership process needs to develop certain characteristics to achieve the three proximal outcomes seen as critical to the building of problem-solving capacity – individual empowerment, bridging social ties, and synergy – and thus to effectively engage a broad array of people and organizations in solving complex problems at the level of local communities.”

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5 Although the following Kellogg Foundation guiding statements or hypotheses will not be addressed in a line-item fashion, as was the case in Lincoln’s (2008:127-128) dissertation, it may be informative to list them here as they were the guiding framework for testing whether the three proximal outcomes of individual empowerment, bridging social ties, and synergy were achieved: 1. Engaging the appropriate people and organizations is central. 2. The ability of the collaborative partnerships to achieve a high level of synergy is related to the sufficiency of the partnership’s non-financial resources (i.e., knowledge, skills, and expertise). 3. Participants need to be involved in ways different from the usual ways of doing business in community public policy work. 4. The collaborative partnership problem-solving process needs to be structured so that it is feasible for a broad array of people and organizations to be involved. 5. The participants need to have real influence in, and control over, the collaborative process. 6. To empower people, build bridging social relationships, and create synergy, a collaborative partnership process needs to enable a group of diverse participants to talk, to learn from, and work with each other over an extended period of time. 7. The collaborative processes need to be ongoing and iterative for an extended period, and include active agenda setting as well as planning and action in its work, and its work needs to focus on multiple issues and problems. 8. Ultimately the success of any collaborative partnership depends on the way it is run and managed. Leadership style and management practices influence the success of collaborations by determining who is involved in the process, how participants are involved, and the scope of the process. 9. To achieve the critical characteristics of a collaborative process, the leaders and staff of a collaborative partnership need to play certain roles and carry out certain functions as follows: (a) promote broad and active participation; (b) ensure broad-based influence and control; (c) facilitate productive group dynamics; and (d) extend the scope of the process. 10. Collaborative partnerships require a diverse group of leaders, and a key role of these leaders is to promote and build broad-based involvement in the process. 11. Leadership and management practices within a collaborative partnership need to play critical roles to prevent these powerful participants from exercising undue influence that compromises the integrity of the collaborative process. 12. A critical role of leadership and management is to make certain that sufficient time is allotted for the group process to evolve fully and become institutionalized among the partners.
Lincoln’s (2008:126) survey created ten domains which contain questions addressing the different characteristics of the SRDVT collaborative partnership.

Section I: Synergy
Section II: Formal and informal SRDVT leadership
Section III: Efficiency in the use of SRDVT resources
Section IV: SRDVT administration and management
Section V: SRDVT use of non-financial resources
Section VI: Use of SRDVT financial and other capital resources
Section VII: SRDVT decision making processes
Section VIII: Benefits of participation in SRDVT
Section IX: Drawbacks of participation in SRDVT
Section X: Satisfaction with SRDVT participation

Each of these sections represents an underlying latent concept. For example, synergy refers to a set of questions that ask respondents how well partners in the network are able to make gains through collective action. Many of the other question sets, for example, get at the overall effectiveness of the SRDVT network’s leadership, administration, decision making, use of varying types or resources amongst others. Lincoln (2008) found that, in general, each of the latent concepts above was properly measured within the survey, meeting acceptable levels of conceptual convergence within a principal component framework. After providing evidence to measurement accuracy, he noted that the summary statistics, or mean scores, fell below the accepted measurement level for almost every latent concept section above. In Lincoln’s (2008) research, he created a three-part additive scale (made from summing items in each section) that indicated whether the composite score fell within the “target, work, or danger zone.” Most of the ten domains scores fell into the “danger zone.” This meant that, overall, the SRDVT network was not performing to an acceptable level.

These findings are important as they are based on the assumption that collaborative networks perform better than single agents, which has been a rather elusive concept to measure.
(Lincoln, 2008; Milward & Provan, 2003; Provan & Milward, 1995). The ten sections measured within Lincoln’s (2008:173) survey assess the underlying “mechanisms that give collaboration its unique advantage.” Although Lincoln (2008:163) notes that these measurements differ from those aimed at describing the impact of a network on selected outcomes, he argues that for “collaborative partnerships to realize their full potential, […] participants in collaborative partnerships need to know what factors influence the ability of partnerships to achieve these outcomes.” Therefore, survey research such as this provides an important indicator of network effectiveness that is useful for those individuals who participate in it, as well as those who wish to measure its effectiveness in dealing with complex or wicked public problems. This survey is therefore germane to this dissertation research and is used to gauge the overall effectiveness of ICSA.

Using Cost-Benefit Analyses to Gauge Outcomes

The adaptation of cost-benefit methods within the theoretical model and framework developed by Provan and Milward (2001; 1995) and Milward and Provan (2003) may provide an additional method for evaluating the effectiveness of a network, such as exemplified within the State of Idaho’s substance abuse prevention and treatment system. Cost-benefit research has a long history of development within many different academic disciplines as well as across a wide variety of real-world applications (Boardman, Greenberg, Vining, & Weimer, 2006). The following section provides some information on what cost-benefit research is and how it has been applied to research and practice through the review of some existing empirical studies of direct relevance to this study. Directly following the discussion on cost-benefit research is a section that revisits the information provided on networks and will situate the merging of cost-
benefit methods with network effectiveness analysis within the theoretical context of social support theory.

Cost-benefit research on substance abuse treatment centers on the conversion of disparate treatment measures or outcomes (i.e., criminal justice system involvement and recidivism, employment status and history, and client earnings, etc.) into one common unit of measurement (dollars), thereby enabling comparisons within and across treatment programs and treatment systems as a whole. The main analytical objective here is to create an economic benefits ratio produced from analyzing the difference in enumerated costs between a treatment and counterfactual condition. For example, comparisons are often made between maintenance costs before and after a substance abuse treatment episode. In this case a cost benefit ratio is calculated by taking the pre-treatment estimated net costs within the selected fields of study (measures or outcomes) and compares those same costs to those incurred during the post-treatment period. The pre-treatment costs minus the post-treatment costs reveal the dollar amount offset (or net benefit), which are considered “cost savings.” Outcomes associated with a treatment group are then compared to similar outcomes among a comparison group, generated within the same time period.

Generally, cost-benefit evaluations have indicated that the cost of substance abuse treatment is outweighed by the economic benefits to society (see Drake, Aos, & Miller, 2009; Aos et al., 2006; Zavala et al., 2005; Holder, 1998). Importantly, studies that have utilized lengthy follow-ups find little to no diminution of savings (or increase of costs) over time (Koening et al., 2005; Necochea, 2006; Holder, 1998; Franey & Ashton, 2002; Dismuke et al., 2004). Although cost-benefit analyses are generally employed on unspecified populations of substance abusers, several studies have investigated specific substance abuse populations (along
with issues surrounding cost estimation); the results of these studies similarly indicate that society saves money by investing in substance abuse treatment. For example, Daley and colleagues (2000) explored the cost-benefit of substance abuse treatment for pregnant women and found that regardless of the type of treatment employed (e.g., detoxification, methadone, residential, out-patient, or a combination of residential and outpatient), the benefits documented outweighed the costs incurred.

Similarly, Holder (1998) examined numerous cost-benefit studies and differentiated between groups treated by the substance being abused (alcohol or illicit drugs) and found that drug abusers and alcoholics who did not receive treatment utilized the healthcare system twice as much as those who had received treatment. His research also suggested that the costs of healthcare, post-treatment, remained below the costs of healthcare pre-treatment for drug and alcohol abusers well into four-year evaluations. Finally, in regard to alcohol abuse specifically, Holder (1998) suggests that treatment for younger abusers netted greater benefits than for adult abusers, implying the importance of early intervention in substance abuse (see also Koenig et al., 2005; Cohen, Piquero, & Jennings, 2010).

Franey and Ashton (2002) also found similar results in a cost-benefit evaluation of cocaine treatment. As they point out additionally, longer treatment is better, not only clinically but also in terms of economic benefits (Franey & Ashton, 2002; see also Taxman & Bouffard, 2000). Furthermore, Koenig and colleagues (2005), found that, although the largest general cost-benefit ratio was found within the first six months post-treatment, productivity earnings continue to increase long after the provision of treatment. Similar results have been found for cocaine treatment in terms of the cost of crime to society (Flynn et al., 1999; Hubbard, Craddock, & Anderson, 2003).
Other examples of economic analyses have focused on the difficulty surrounding the estimation of costs and targeting multiple outcomes associated with substance abuse treatment, such as reductions in recidivism, arrests, and increases in gainful employment or earnings made (Zavala et al., 2005; Sindelar et al., 2004; French, 2000). Additional studies have provided comparisons of evaluative cost studies in the community and in the prison setting (Warren et al., 2006), as well as programs aimed at increasing productivity levels of employees (Jordan et al., 2008), while other studies compare outcomes among treatment populations such as pregnant women, the mentally ill, and sex offenders (French et al., 2002; Shanahan & Donato, 2001; Daley et al., 2000). Generally, what most of these studies have in common is the finding that treatment is more cost-effective than either no treatment or incarceration.

**Measuring Crime-Specific Costs**

There are several ways that researchers have gone about estimating crime-specific costs. As described by McCollister, French, and Fang (2010), many if not most researchers adopt a societal perspective on the costs of crime that includes singular use or (as they argue for) a complete combination of the four perspective components of: 1) victim costs; 2) criminal justice system costs; 3) crime career costs; and, 4) related intangible costs. As McCollister and colleagues correctly note (2010:99), “[t]he broad societal perspective [a combination of all four fields] is appropriate for economic analysis and program evaluation because more narrow perspectives […] apply to specific stakeholders or agendas.”

Previous researchers have estimated crime-specific costs; however, many of these studies used only a single perspective (i.e., victim or criminal justice system costs) to enumerate these unit cost estimates, while others who did employ multiple perspectives to gain estimates are now
rather outdated (McCollister et al., 2010). Moreover, the quality estimations that are available only cover a limited amount of crime categories (usually: murder, rape/sexual assault, assault, robbery, burglary, and larceny). Due to these incongruences, the crime-specific estimations differ – in some cases quite markedly – from study to study. Recognizing these issues, McCollister et al. (2010) set out to create updated crime-specific per-unit estimations, as well as expand the crime categories that are commonly covered to include fourteen offenses. Using a multitude of data sources viewed from a general societal perspective, McCollister and colleagues (2010) estimated accurate and up-to-date crime-specific costs across the four perspective components. These new and up-to-date crime specific cost estimates are put to use in the current study and a detailed list of the crime categories and corresponding cost estimations can be found in the following chapter.

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7 For their crime-specific estimations, McCollister et al. (2010) include official data from the NCVS, FBI UCR/NIBRS, FEMA, US Fire Administration (USFA) and the National Fire Incident Reporting System (NFIRS), BJS stats on crime prevention and prosecution expenditures, prison and jail inmate data, the Current Population Survey (CPS; for the Bureau of the Census for the Bureau of Labor Statistics), National Vital Statistics System/National Center for Health Statistics, the Consumer Price Index, as well as data from many previous studies and secondary data sources.

8 Cost-categories within the four areas are: 1) “victim costs: direct economic losses suffered by crime victims, including medical care costs, lost earnings, and property loss/damage; 2) criminal justice system costs: local, state, and federal government funds spent on police protection, legal and adjudication services, and corrections programs, including incarceration; 3) crime career costs: opportunity costs associated with the criminal’s choice to engage in illegal rather than legal productive activities; and, 4) intangible costs: indirect losses suffered by crime victims, including pain and suffering, decreased quality of life, and psychological distress” (McCollister et al., 2010:98-99).
Prior Cost-Benefit Focus Areas

There are numerous economic studies of treatment-related programs at various levels, from individual program evaluations to groups and aggregate level analyses. Some economic studies differentiate between cost-benefit, cost-effectiveness, and cost-offset analyses, and are often developed as an extension of a general evaluation done at the program level (Swaray et al., 2005). Well-designed (either experimental or quasi-experimental) studies at the program level build in a counterfactual, and such studies evaluate programs and/or significant program components in order to discover what particular treatments or interventions produce the best results (e.g., Pearson & Lipton, 1999; Patton, 1997). As Swaray, Bowles, and Pradiptyo (2005: 159) dutifully note in their literature review on economic analysis, there is a “dearth of experimentally rigorous evaluation of criminal justice policies.” Given all of the ethical considerations surrounding the denial of treatment to people in need, this is of no surprise to those researchers attempting to unearth and clarify best practices in substance abuse treatment. There are answers to many of the economic questions surrounding treatment, however, and there are many examples of studies that direct our attention to what really works (see Welsh et al., 2001). One promising approach focuses on the state-level treatment system as a whole in order to clarify or enumerate aggregate level impacts in the form of economic cost avoidance and gainful earnings savings associated with substance abuse treatment (Alterman, Langenbucher, & Morrison, 2001; Cartwright, 2000; Godfrey & Parrott, 2000).

Prior Research in Idaho

The first notable substance abuse treatment system-wide cost-benefit project conducted in Idaho was completed January 2006 for the Idaho Department of Health and Welfare (Collins et
The overall purpose of the original study was to describe and present cost-benefit outcomes on the economic impact of substance abuse treatment in Idaho. This study was conducted in concert with the Access to Recovery—Idaho\(^9\) (ATR-I) Continual Quality Improvement (CQI) research proposal and project. The research questions that were developed by the CQI subcommittee, at that time, reflected the fundamental nature of the issues associated with substance abuse treatment in Idaho. These questions centered on whether clients showed signs of improvement in three principal outcome fields of study post-treatment: 1) employment (measured as recorded quarterly earnings); 2) health (measured as change in Medicaid service utilization); and, 3) criminal justice (measured as change in incarceration and supervision).

Interviews were conducted with selected state agency personnel in order to identify key administrative data sources relevant to cost-benefit analysis. These interviews led to the identification of data access protocols, key contact personnel, and perceptions of the level of data access difficulty. As a function of resource availability, the first cost-benefit project focused on data accessibility and exploratory use of specific elements within administrative data sets. Administrative databases, as well illustrated within the research literature, can be an invaluable resource to document both short and long-term cost-benefit and treatment-related outcomes.

\(^9\) Access to Recovery-Idaho\(^9\) (ATR-I) was put into place in order to provide expansion to Idaho’s substance abuse treatment access and infrastructure through the use of a voucher system. The voucher system, which was based on client choice, allowed for a wider array of treatment options and recovery service. Funded through the Center for Substance Abuse Treatment (CSAT), and the Substance Abuse and Mental Health Services Administration (SAMHSA), Idaho was awarded a three-year Access to Recovery grant in the amount of $7.6 million per year for client services. To comply with the ATR grant award, the Idaho managing services provider (Business Psychology Associates) coordinated services to 1,596 clients by the end of year 1 (August 3, 2005), at least an additional 3,666 clients were offered treatment by the end of year 2 (August 4, 2005—August 3, 2006), and at least another 3,666 clients were included by the end of year 3 (August 4, 2006—August 3, 2007). A total of 8,928 individuals were targeted to receive benefits from the ATR Grant in Idaho over these three fiscal years.
(Collins et al., 2010; McFarland, McCamant, & Barron, 2005; Alterman, Langenbucher, & Morrison, 2001). As with other state-level administrative databases, the client-level information contained in Idaho’s administrative databases had been, and continues to be recorded over many years, a situation which at the time allowed for some basic selectivity (or maneuverability) within a secondary data analysis framework (Collins et al., 2010).

The study reported a $4.12 million overall benefit post-treatment for a large sample of substance abuse treatment clients. When this overall benefit was combined with the DHW cost of treatment, the difference resulted in 20 percent savings above the fixed treatment cost (Collins et al., 2010). It was found that for every $1.00 invested in substance abuse treatment there was a $1.20 in general savings.

After downwardly adjusting for pre and post time frames, the overall benefit reached $3.98 million. When combined with the DHW cost of treatment, treatment provision resulted in a 16 percent savings above the fixed costs. Again, savings were found, where for every $1.00 invested in substance abuse treatment there was a $1.16 in general savings. These findings indicated that, through the utilization of substance abuse treatment, Idaho saved money ($4.12 to $3.98 million, respectively) and stimulated increases in client earnings (Collins et al., 2010). The authors noted that their analyses were limited by the lack of available data enumerating service and social costs derived from arrest records and victimization costs (among others) that may have prevented the identification of even greater savings. Moreover, the authors cited the many limitations in the methodological design. Although many of the current study’s improvements will be highlighted in the next chapter on data and measurement, the next short section provides some insight into the remedial problems that beset the first study.
Two Major Limitations of the Previous Study

The most important limitation of the previous study concerns the inability to attribute the cost-benefit outcomes to the treatment(s) administered to the client population. The lack of an appropriate comparison group was a major weakness. This same problem has proven to be a hurdle in many studies that focus on various populations of substance abusers. Fortunately, the current study will benefit from the addition of a strong counterfactual. As was briefly noted in the introductory chapter, the current study’s cost benefit research design takes advantage of recent economic “hard times” and treatment system limitations in Idaho that have resulted in the creation of a “wait-list” of clients who were assessed and deemed eligible for treatment services. This list of clients serves as a naturally formed comparison group similar to that of a controlled experiment (but without randomization). For the current study, wait-listed clients will be compared to clients who received substance abuse treatment during the same time period.

Second, the previous study did not have access to information on the type of specific treatment that each client received. It was for that reason that the authors could not assess whether any particular treatment modality was more cost-efficient compared to another or more effective with some clients as opposed to others. For the current study, profiles of all in-network treatment providers (those providers approved or designated to treat and bill the state DHW or their managing service provider for services rendered) were obtained. As a consequence, some analyses may be sub-categorized based not only on physical location (i.e., county), but also the general treatment modalities offered at each location. The provider profiles however, are not standardized, nor was the completion of these treatment provider profiles a mandatory requirement for acceptance into the State’s provider network. Moreover, each profile is unique,
as some providers gave very detailed information on each treatment modality offered while others provided very little detail. These issues will be discussed further in the next chapter.

**Social Support Theory**

As noted in the previous chapter, Frank Cullen (1994) has argued that *social support* should be a guiding principle or “organizing concept” in the field of criminal justice, particularly as it pertains to research and theory development. Cullen (1994) posited that there is an inverse relationship between social support and crime; an increase in social support leads to a decrease in crime. In mapping what he called the ecology of social support, Cullen (1994: 531-550) laid out these fourteen propositions:

1) America has higher rates of serious crime than other industrialized nations because it is a less supportive society; 2) The less social support there is in a community, the higher the crime rate will be; 3) The more support a family provides, the less likely it is that a person will engage in crime; 4) The more social support in a person’s social network, the less crime will occur; 5) Social support lessens the effects of exposure to criminogenic strains; 6) Across the life cycle, social support increases the likelihood that offenders will turn away from a criminal pathway; 7) Anticipation of a lack of social support increases criminal involvement; 8) Giving social support lessens involvement in crime; 9) Crime is less likely when social support for conformity exceeds social support for crime; 10) Social support is often a precondition for effective social control; 11) A supportive correctional system lessens crime; 12) Social support leads to more effective policing; 13) Social support lessens criminal victimization; and, 14) Social support lessens the pains of criminal victimization.

In the presentation of these fourteen empirically testable propositions, Cullen distinguished clearly among various sources of social support. The main division among these sources is between those sources coming from non-governmental entities only and those supports originating out of a mix of both public and private cooperative efforts (Worrall, 2005). This research employs the latter of the two orientations by default, as the data and services are maintained and paid for by state agencies (and tax-payers by association), but the services are
delivered almost entirely by in-network, private, community-based treatment providers and facilities. For the purpose of this research, the analytical construct of social support is defined as “the delivery (or perceived delivery) of assistance from communities, social networks, and confiding partners in meeting the instrumental and expressive needs of individuals” (Colvin, Cullen, & Vander Ven, 2002:20).

Not all of Cullen’s (1994) fourteen propositions are directly relevant to the current study, although each may be tangentially related. For example, in Cullen’s (1994:541-542) discussion of social support phenomena he argues that “[s]ocial support lessens the effects of exposure to criminogenic strains” (proposition 5). In this regard, Cullen argues that both marriage and employment are key social supports that act to reduce crime. This reduction in crime initially occurs rather indirectly, by increasing both social capital and informal social controls and then directly, by decreasing sources of crime that result from “emotional difficulties, strain, and deviant identities” (Cullen, 1994). These two variables, along with a third factor (formal education), are especially important in relation to substance abusers because many individuals suffer depletion or turmoil in these core areas specifically.

In another example, one can easily draw out the parallels to substance abuse treatment (and cost-benefit research) within propositions thirteen and fourteen, which state that social support lessens criminal victimization and the pains of criminal victimization. With a routine activities framework, Cullen (1994) cites increases in effective guardianship and decreases in motivation to offend and suitable targets as important products of effective social support. These changes in an offender’s routine activities, for example, may also be reflected in treatment goals (such as cognitive restructuring and the acquisition or steadying of employment). These goals
further impact measured outcomes related to criminal victimization, which in many cost-benefit frameworks are key enumerated costs.

**The Social Support, Network Effectiveness, & Cost-Benefit Nexus**

I propose a direct (or positive) relationship between network effectiveness (measured at level-two/collaborative capacity) and the amount and quality of social support and, following Cullen (1994), social support is inversely related to measured outcomes (crime, recidivism, cost, etc., see Figure 2.3 below). Thus, higher levels of network effectiveness will result in higher levels of deliverable social support, which will in-turn impact measurable outcomes at the client level (measured at levels one and three). If social support is a form of measurable action, then understanding the context within which this action generates or obtains its power is of the highest importance.

The combination of these two theoretical perspectives along with cost-benefit methodology offers a good prospect of generating insights into both theory development and practice improvement (Stokes, 1997). Again, social support is defined simply as “the delivery (or perceived delivery) of assistance from communities, social networks, and confiding partners in meeting the instrumental and expressive needs of individuals” (Colvin, Cullen, & Vander Ven, 2002:20). At the core of this definition is the action statement “delivery of assistance” to persons in need of it. What is missing from criminological theory of social support is a front-end explanation of how that delivery-action was formed and who was responsible for setting that action into motion. In defining substance abuse as a wicked public policy problem one can then import critical ideas that originate from the field of public policy studies and are centered on the formation, management, and measurement of networks and network effectiveness.
The affixing of key ideas about networks to the front end of social support seems simple enough. One quickly runs into problems, however, regarding how to measure each stage in the causal chain, and more importantly, how to attribute changes in outcomes to these concepts. As was illustrated above, much of the network effectiveness literature has used a combination of qualitative methods and survey research to gain understanding of how to both manage and measure effectiveness of networks. Additionally, although the current study does not aim to directly measure this theoretical model at this time, when simply assessing it, many might be concerned that, due to measurement overlap, there may be some inherent tautological issues (an effective network as measured by effective outcomes that indicate an effective network). This issue, however, may be dealt with in the future by adopting a non-recursive multi-level analytical approach which could measure the effects at each level of the model.

Measurement at the network level (level-two as described above) is focused on structural and contextual independent variables. Further, these variables are measured through survey and interview and secondary data analysis methods which aim to give context to the overall findings. Measurement at the social support level is focused primarily on pre-treatment client-level demographic information. It acts as a prism of sorts, filtering the directed action derived from the network, and further influencing measured cost-benefit outcomes at the final stage. The

Figure 2.3 New Theoretical Model of Network-Influenced Social Support.

![Diagram of network model]

<table>
<thead>
<tr>
<th>Network (Effectiveness)</th>
<th>Degree of Social Support - Tx</th>
<th>Costs: General Societal Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Relationship ↑↑</td>
<td>Inverse Relationship ↑↓</td>
<td></td>
</tr>
</tbody>
</table>

The diagram shows the flow of relationship between network effectiveness, degree of social support, and costs from a general societal perspective. The flow indicates positive and inverse relationships between these variables.
implementation of cost-benefit methods allows for standardization across a spectrum of sources of social support (types of treatment for example) that may influence measurable outcomes. These outcomes include changes in patterns of criminal offending and contact with the criminal justice system, drug use, recidivism, employment and earnings, and overall client health. Where cost-benefit methods excel is in the ability for one to compare standardized findings; for example, comparisons can be made between (and among) individual clients or between different types of treatment modalities. Those findings can be easily understood by key stakeholders and the general community in terms of a return on investment logic.

**Main Theoretical Propositions**

The provision of treatment funded by tax dollars and managed by state-run agencies is clearly an important form of social support. Within this context, the current research considers the following proposition within a cost benefit methodological framework: *clients who receive treatment will perform better on a number of measurable outcomes than a matched non-treated comparison group of clients*. In particular, enumerated aggregate costs associated with criminal activity will decrease post-treatment while aggregate level benefits such as earnings will increase and co-vary with treatment length and quality.

The second and equally important proposition that will be considered has to do with how social support, as measured through the systemic provision of treatment services, may be impacted by how well a “cooperative” (collaborative process) populated by state agency and private stakeholders can work together over time to address substance abuse problems (see propositions 2, 13, & 14 specifically). Much of what Cullen (1994) and other researchers have focused on are outcomes that are a result of some measureable degree of social support. One
distinct consideration that some may have overlooked in the criminal justice literature is the concept of “collaborative capacity,” a construct which refers to the process of how social support is built, and perhaps more importantly how it is maintained (Weber & Khademian, 2008a; Weber & Khademian, 2008b; Agranoff, 2006; Kettl, 2006; Bryson, Crosby, & Middleton Stone, 2006; McGuire, 2006; Thompson & Perry, 2006). The inclusion of the collaborative capacity principle here leads to the second main study proposition: increased collaborative capacity is a central component of building, sustaining, and generating social support.

Gaps in the Research

There are two distinct gaps that this study will address. First, there is a general lack of understanding of the economic impact that substance abuse treatment has in the State of Idaho. The dearth of cost-benefit related outcomes in the state is likely due to a: 1) lack of resources and expertise; 2) a general lack of quality data prior to about 2007; and, 3) structural and systemic issues (such as feelings of distrust in academically-based research partnerships). Therefore, above all else, this study aims to provide empirical information to policy makers who wish to better understand the economic impact of substance abuse treatment in the State of Idaho. In a similar vein, this research aims to identify a sustainable process of interagency collaboration that can be drawn upon on an annual basis to both generate new, up-to-date information on program impacts and facilitate the production of continued empirical findings related to the substance abuse treatment population in Idaho.

Second, the field of criminal justice and criminology has yet to adopt the public policy “wicked problem” concept. The argument here is that the adoption of this concept will positively impact the field in two distinct ways. First, by adopting the wicked problem concept (and by
default a collaborative network perspective), researchers in criminal justice and criminology will better conceptualize and assess complex and dynamic criminal justice organizational relationships. Part of this conceptualization may even lead to a prospective inquiry to develop ways in which to understand how social support is created and maintained, rather than just stating that it impacts selected outcomes. The second way that the adoption of the wicked problem concept may help fill gaps in the extant research is to help redefine the evaluation process. There is no “holy grail” for solving the problem of crime in general; however, people still attempt to find solutions. The same is true for substance abuse. Through a conceptualization of substance abuse as an unstructured, cross-cutting, and relentless complex public policy problem, practitioners and policy makers may be better equipped to understand what many researchers already know – client failure is to be expected and recovery from addiction is an ongoing process. Furthermore, incarceration is rarely the best response, and that effective (cost-beneficially) management of persons, who exhibit distinct lifestyle and criminogenic risks and needs, can be achieved through collaboration.
CHAPTER TWO REFERENCES


CHAPTER THREE

METHODOLOGY

Introduction

There are two main methodological pieces to this dissertation research. Part 1 is centered on the cost-benefit analyses, and is quantitative and outcome-driven. To give context to the cost-benefit analysis, Part 2 provides survey findings assessing the collaborative capacity and cooperative processes taking place within the ICSA group. This chapter begins with a description the cost-benefit methods, followed by a discussion on the survey methodology. *It should be noted that a cost-benefit methods description does not follow the traditional format of most empirical evaluation studies.* Rather, it follows the sequencing of events detailed by Welsh, Farrington, and Sherman (2001) (outlined below). Both sections provide information on sample selection, data elements, measurement strategy, sample descriptives, and the primary research hypotheses investigated.

**Part I: Cost-Benefit Methods**

As illustrated by Welsh and colleagues (2001:5), the process of conducting economic analyses should follow a specific sequence: “(1) define the scope of the analysis; (2) obtain estimates of program effects; (3) estimate the monetary value of costs and benefits; (4) calculate present value and assess profitability; (5) describe the distribution of costs and benefits; and, (6) conduct sensitivity analysis.” The current project uses these steps as a guide in carrying out the cost-benefit research portion of this study. The methodological concerns regarding the first through the fourth steps of the Walsh et al. (2001) sequence are addressed in the following
subsections within this chapter, while the results of the analyses performed are presented in the next chapter.

Scope of Analysis Defined

Scope of analysis for the current study refers to: (A) the identification of research partners; (B) the consideration of alternative comparisons and general study design, including limitations of this comparison, what perspective to take (public/societal, governmental, that of participants, or that of victims); and, (C) the identification of the general outcomes to be measured. Steps A through C are detailed in the following.

A. Research Partners

In building upon prior findings funded by the Idaho Department of Health and Welfare (Collins et al., 2010), this research engages the state agencies that had previously participated in statewide substance abuse cost benefit research. In conjunction with the research sponsor entity\textsuperscript{10} the participating organizations include the Idaho Departments of: Health and Welfare (and the DHW contracted service provider Business Psychology Associates, BPA), Correction (DOC), and Labor (IDL). Additionally, the Idaho Department of Juvenile Corrections (IDJC) and the Idaho Supreme Court (ISC) agreed to participate in this project and expand its scope, bringing the total cost-benefit data-involved state agencies to seven.

\textsuperscript{10} The Idaho Office of Drug Policy (ODP) in the Executive Office of the Governor.
B. Research Design

The strongest design here would be a randomized experiment; however, given the nature of this population and the ethical concerns surrounding the denial of treatment to people who are in need, this type of study is not an option at this time. The next best design is a quasi-experimental, matched treatment and comparison group, pre/post treatment analysis. In applied research that by design cannot be purely experimental in most settings, the identification of an appropriate comparison group is of utmost importance, both methodologically and substantively. In light of this requirement, the following section describes the unique data collection/research design that is followed in this cost-benefit research.

Study Eligibility Criteria and Matching Across Databases

The research design employed here takes advantage of an unanticipated consequence of the current treatment referral process and the recent economic shortfalls related specifically to substance abuse treatment in Idaho. Since June of 2009 there has been a widening gap between treatment demand and services available in Idaho, a situation which resulted in the creation of a treatment service wait-list. Individuals on the wait-list were initially screened or assessed, and were then placed on a maintained wait-list for services. Therefore, the current study defines eligible comparison group subjects as those individuals who were placed on the wait-list at some point between June 1st and August 31st 2009 and had yet to receive any treatment services up to twelve months post wait-list assignment (total original pre-match waitlist N= 854).

A treatment group sample frame was pulled from the Department of Health and Welfare substance use disorder (SUD) database. The treatment group study eligibility criteria were similar to that of the wait-list selection process, as individuals who discharged from treatment at
some point between June 1st and August 31st 2009 met selection requirements and were then selected as study subjects. As of August 2010, the discharged clients had yet to receive any additional treatment benefits from the Department of Health and Welfare treatment network allowing for, at the very least, a 12-month, post-treatment follow-up and comparison period (total original pre-match treatment N= 1,087).

The selected treatment and wait-list client-data that were then merged into one main dataset are referred to throughout the current study as the “seed” data. These seed data were then cross-referenced through the participating agency’s respective databases and any matching records were merged and returned. Each individual data source and agency is described in the following sections. Additionally, because of concerns over the effects of selection bias on outcomes, propensity score matching (PSM) techniques were utilized (discussed directly below).

Table 3.1 provides post-PSM positive match frequencies across the five main data sources11 (treatment and waitlist combined as seed, Idaho Supreme Court (ISC) felony and misdemeanor court filing records, Idaho Department of Labor (IDL) earnings records, and Idaho Department of Correction (IDOC) incarceration and supervision records).

| Table 3.1 Post-PSM Matching Frequencies Across Participating Agency Databases |
|-------------------------------|----------------|----------------|----------------|
|                               | Seed | ISC (f(%)) | IDL (f(%)) | IDOC (f(%)) |
| By Group                      |      |            |            |              |
| Tx n= 679                     |      | 367 (49)   | 621 (51)   | 460 (62)     |
| WL n= 679                     |      | 384 (51)   | 600 (49)   | 287 (38)     |
| Total Match                   |      | 751 (55)   | 1,221 (90) | 747 (55)     |

Note: Tx = Treatment Group, WL = Wait-list Group.

11 Five sources: DHW Treatment data, BPA waitlist data, DOC, IDL, and ISC data.
Comparison Group Construction: Propensity Score Matching

The main purpose for randomization in controlled experimental research designs is to dampen or eliminate the effects of selection bias. In order to more closely approximate causal effects (i.e., the positive effects attributable to a substance abuse treatment episode), a research design must account for time order, covariation, and non-spuriousness. The last requirement, non-spuriousness (can the outcome effects be attributed to the treatment or some other intervening variable), is achieved by gaining equivalence or closer approximations of the preexisting differences between a treatment group, and as utilized within this research, the comparison wait-list group (Stuart & Rubin, 2008). Take the example of the effects of substance abuse on earning potential and individual purchasing power; those individuals who abuse substances and are caught up in the criminal justice system and likely differ significantly from those who do not on many measurable characteristics (such as age, education, SES, etc.). Therefore, it is important to separate any preexisting group-selection effects these differences may have on the treatment outcomes of interest.

Propensity score matching (PSM) is a technique that does just this – that is, it emulates randomization by balancing the observed covariate distributions within the treatment and comparison groups (Stuart & Rubin, 2008). Due to the non-random assignment to either the treatment or waitlist groups, a one-to-one nearest neighbor propensity score matching technique\textsuperscript{12} was utilized to balance the covariate distributions (Stuart, 2010; Stuart & Rubin, 2008; Rosenbaum & Rubin, 1983). As noted by Stuart and Rubin (2008:156), there are two main

\textsuperscript{12} Additionally, there are different model specifications (distance measures such as exact, Mahalanobis, propensity score, and linear propensity score) and matching methods available beyond a one-to-one nearest neighbor scheme, such as subclassification (researcher-selected quintile strata), full matching (auto-assigned strata/subclasses), and weighting (inverse probability of treatment weighting) (see Stuart, 2010).
issues that must be taken into consideration when deciding the covariates on which to match cases: 1) one must select a set of variables that are to be compared; and, 2) those variables must be selected “without access to any of the outcome data, thereby preventing intentional or unintentional bias when selecting a particular matched sample to achieve a desired result.” Thus, outcome variables must not be included in the PSM model. In the one-to-one nearest neighbor technique employed here, a logistic regression is fit to model the likelihood of receiving substance abuse treatment based on age, gender, education, race, marital status, and level of care variables.\textsuperscript{13}

The predicted probabilities, or propensity scores are generated via logistic regression for the treatment group, for each observation (i.e. client), and are then matched to the nearest propensity score in the waitlist group.\textsuperscript{14} Clients in either the treatment or the waitlist group that were not successfully matched were omitted from the analyses presented in the next chapter. A total of \( N = 1,358 \) clients were successfully matched,\textsuperscript{15} reducing the treatment group sample size

\textsuperscript{13} Codes included for: Race = (AK Native, Am. Indian, Asian/Pac. Islander, Black/African Am., White/non-Hisp., Other Hisp., Unknown, Mode=White); Gender = (1, male; 0, female); Age = (range: 18 – 83); Education = (highest grade completed, range: 1 – 16, mode=12); Marital Status = (single/never mar., mar./cohabit., separated, divorced, widowed, Mode=single [48%]); Level of Care = (light/minimal services [assessment/ancillary], level I outpatient, level II.1 intensive outpatient, level III.1 adult halfway/transition/residential/ detox, Mode= level I outpatient).

\textsuperscript{14} As Stuart, (2010:8) notes, \( K:1 \) (or 1:1) matching can sometimes result in poor matches. In these cases she cites that some researchers “impose a caliper” or range within which a match can take place between two scores. When this technique is used, however, she notes that there may be some corresponding interpretation difficulties because some treatment individuals may not be matched. Therefore, a caliper is not used with the given samples at this time.

\textsuperscript{15} Note that the treatment group contained more subjects than the comparison group. This was due to a limited number of spaces for clients to occupy on the waitlist. In most, if not all, of the research that has used PSM techniques the comparison group is much larger. This issue is not likely to greatly affect the outcomes because clients are still matched one-to-one.
from n= 1,087 to 679 and the waitlist down from n= 854 to 679. As Stuart (2010) aptly notes, the omission of observations may lead some to raise issues with the consequent reduction of statistical power. This issue, however, is not as critical as one might think as Stuart (2010:8) correctly notes that “power increases when the groups are more similar because of the reduced extrapolation and higher precision that is obtained when comparing groups that are similar versus groups that are quite different.”

Table 3.2 below presents the groups and measures used in the PSM. The client gender (female, male) measure matched well across the treatment and comparison groups. Although there were more females in the comparison group, the difference was not statistically significant. Client marital status consists of five categories, single (never married), married (or cohabitating), separated, divorced, and widowed. About half of the total study population was single, while twenty percent were married and nearly a quarter were divorced at the time of this study. There is a near to perfect match across the treatment and comparison groups on the marital measure.

Client level of care (LOC) consists of four main categories. The first, minimal services, is a composite measure which consists of assessment and other ancillary services such as transportation. The second (level I outpatient) and third (level II intensive outpatient) consist of outpatient treatment services that range from light contact to intensive services. The last, (level III) consists of residential adult halfway, transition, and detox services. Nearly three-quarters of the entire sample were in outpatient treatment (treatment group) or assessed at the outpatient services level (comparison group). Of the four categories, the residential services category contains the smallest number of clients. There is a near to perfect match across the treatment and comparison groups on the LOC measure (used here, LOC is a proxy measure of treatment need).
Client race was originally measured using multiple categories (see footnote four above), including an ethnicity measure. Due to Idaho’s racial homogeneity, however, there were low cell counts in some non-White categories. Race was therefore recoded as White, non-White for ease in interpretability.

### Table 3.2 Post-Sample Selection Descriptives on PSM Variables (N= 1,358)

<table>
<thead>
<tr>
<th>Item</th>
<th>Tx</th>
<th>WL</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>f(%)</td>
<td>f(%)</td>
<td>f(%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>242 (35.6)</td>
<td>215 (31.7)</td>
<td>457 (33.7)</td>
<td>2.404</td>
<td>.068</td>
</tr>
<tr>
<td>Male</td>
<td>437 (64.4)</td>
<td>464 (68.3)</td>
<td>901 (66.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/Never Married</td>
<td>328 (48.3)</td>
<td>328 (48.3)</td>
<td>656 (48.3)</td>
<td>0.028</td>
<td>1.000</td>
</tr>
<tr>
<td>Married/Cohab</td>
<td>132 (19.4)</td>
<td>130 (19.1)</td>
<td>262 (19.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>52 (7.7)</td>
<td>53 (7.8)</td>
<td>105 (7.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>161 (23.7)</td>
<td>162 (23.9)</td>
<td>323 (23.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>6 (0.9)</td>
<td>6 (0.9)</td>
<td>12 (0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal Services</td>
<td>118 (17.4)</td>
<td>118 (17.4)</td>
<td>236 (17.4)</td>
<td>0.041</td>
<td>.998</td>
</tr>
<tr>
<td>Outpatient</td>
<td>324 (47.7)</td>
<td>322 (47.4)</td>
<td>646 (47.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensive Outpatient</td>
<td>194 (28.6)</td>
<td>197 (29.0)</td>
<td>391 (28.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>43 (6.3)</td>
<td>42 (6.2)</td>
<td>85 (6.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>551 (81.1)</td>
<td>544 (80.1)</td>
<td>1095 (80.6)</td>
<td>0.328</td>
<td>.849</td>
</tr>
<tr>
<td>Non-White</td>
<td>125 (18.4)</td>
<td>131 (19.3)</td>
<td>256 (18.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Grad Yes</td>
<td>522 (76.9)</td>
<td>503 (74.1)</td>
<td>1025 (75.5)</td>
<td>1.436</td>
<td>.128</td>
</tr>
<tr>
<td>High School Grad No</td>
<td>157 (23.1)</td>
<td>176 (25.9)</td>
<td>333 (24.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>32.66 (10.23)</td>
<td>32.72 (10.71)</td>
<td>32.69 (10.47)</td>
<td>-0.179</td>
<td>.907</td>
</tr>
</tbody>
</table>

Note: There were no statistically significant differences found between the two groups on any of these six variables. Further, effect sizes were calculated using Cohen’s $d$ (or $r$) for each variable and results indicate 0% non-overlap (no ES reached above 0.08) meaning the distribution of scores in the Tx group overlaps completely with the distribution of scores for the WL comparison group (Cohen, 1988).
About a fifth of the sample was non-White (dominated by Latino/Latina). Education was also measured as highest grade achieved (0-16), but was recoded here for ease of interpretation into high school graduate/non-graduate. A quarter of the study population has not graduated from high school.

The final balanced model revealed no significant differences between the treatment and waitlist groups based on the six matching variables that were employed. As a result of this process, one can be relatively confident that the cost-benefit outcome results (covered in the next chapter) are likely due to substance abuse treatment rather than any potential sample selection bias (Stuart, 2010; Krupski, Campbell, Joesch, Lucenko, & Roy-Byrne, 2009; Stuart & Rubin, 2008; Dehejia & Wahba, 2002; D’Agostino, 1998; Rosenbaum & Rubin, 1983).

C. Measures and Outcomes

An important outcome of interest that has been the focus of much similar research is criminal recidivism. There are many primary and secondary crimes that have been tied empirically to substance abuse; as a consequence, Idaho criminal justice agencies and judiciary (police, corrections, and courts) have a strong interest in empirical outcomes related to treatment and criminal recidivism. It is important to note that not all substance abuse treatment clients have been or are currently involved with the criminal justice system in Idaho; consequently, some useful comparisons and baselines can be studied for both criminal-involved and non-criminal-involved persons. In order to provide the most coverage and inclusion for the criminal justice agency partners involved in this research study, criminal justice related data are the main focus of this dissertation.
In light of these considerations, three important treatment outcomes\textsuperscript{16} will be considered (see Table 3.3 below). For this study, criminal recidivism is operationalized as: felony and misdemeanor court filings and a non-occurrence of court filings in the post study period as an indicator of treatment program success. Second, post-treatment client earnings are an outcome of broad interest, as they may be used as an important proxy for treatment success. Third, any pre-to-post treatment changes in levels of incarceration and/or supervision is also used as an indicator of treatment success. Due to the unique properties of each of these measures, each is further operationalized in the sections to follow.

### Table 3.3 Main Cost Outcome Measures: Descriptives (N= 1,358)

<table>
<thead>
<tr>
<th>Item</th>
<th>Tx (n= 679)</th>
<th>WL (n= 679)</th>
<th>Total</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>t/χ²</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings†</td>
<td>Total</td>
<td>$14,624</td>
<td>$14,403</td>
<td>$14,513</td>
<td></td>
<td></td>
<td>0.223</td>
<td>.824</td>
</tr>
<tr>
<td></td>
<td>(18,593)</td>
<td>(17,874)</td>
<td>(18,231)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOC</td>
<td>Incarceration</td>
<td>226 (33.3)</td>
<td>178 (26.2)</td>
<td>404 (29.7)</td>
<td>8.118</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td>417 (61.4)</td>
<td>235 (34.6)</td>
<td>652 (48.0)</td>
<td>97.722</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime</td>
<td>Felony</td>
<td>196 (28.9)</td>
<td>102 (15.0)</td>
<td>298 (21.9)</td>
<td>37.987</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Misdemeanor</td>
<td>251 (37.0)</td>
<td>342 (50.4)</td>
<td>593 (43.7)</td>
<td>24.789</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: SD = Standard Deviation; Tx = Treatment group; WL = Waitlist comparison group. DOC Involvement (incarceration and supervision) and Crimes (felony and misdemeanor) categories each non-mutually exclusive.

† These total (pre and post) earnings averages included in this table are not adjusted for inflation. The inflation adjusted total averages range from $11,172 (pre center date) to $9,762 (post center date); total adjusted and combined earnings averages are estimated at around $10,000.

\textsuperscript{16}There are many outcomes that will be built into this research and, as suggested by Welsh et al. (2001), all relevant outcomes should be included and measured at the beginning of the analysis. At a later point the monetary value of each can be estimated. Other outcomes that will be added in future analyses include the following: length and type of treatment, extent of benefit system use, days incarcerated or supervised, and employment status and history.
The main five outcome variable categories are presented in Table 3.3. For both the treatment and comparison groups, total earnings (combined quarterly) over the study period (quarter two 2008 through quarter three 2010, or two and a half years) averaged around fourteen and a half thousand dollars. These averages, however, are nominal calculations. When the earnings data are adjusted for inflation, as they are in the analyses in the next chapter, the total average earnings hover around ten-thousand dollars annually (in November, 2010 dollars).

Roughly one third of all clients (29.7%) had some incarceration involvement with the DOC. The treatment group, however, had a total of 33.3 percent involvement, while the comparison group had a total 26.2 percent incarceration involvement at some point during the study period. Nearly half of all clients (48%) had some supervision involvement with the DOC. Almost two-thirds of the treatment group had supervision involvement, while just over a third of the comparison group had supervision involvement at some point during the study period. It is important to note that these categories are non-mutually exclusive, thus one client could be counted in both incarceration and supervision categories.

Nearly a quarter of the entire sample had a felony charge at some point during the study period, while over two-fifths had a misdemeanor charge. Approximately one-third of the treatment group had a felony charge, while just 15 percent had a felony charge in the comparison group. Thirty-seven percent of the treatment group had a misdemeanor charge, while over half of the comparison group indicated a misdemeanor charge at some point during the study period. It is important to note that these categories are non-mutually exclusive, thus one client could be counted in both felony and misdemeanor categories.

Each of the above outcomes is tied to data that originates in a specific Idaho state agency. Therefore, each outcome measure is discussed within the context of its originating agency,
beginning with the ISC data (which includes a discussion on crime-specific cost-estimations), followed by a description of the IDL earnings data, and capped off with a discussion of the cost estimations used in concert with the DOC incarceration and supervision data.

**Idaho Supreme Court (ISTARS) Data**

Idaho Supreme Court (ISC) manages a database designated as ISTARS (Idaho Statewide Trial-court Automated Record System) which functions as a repository for all state felony and misdemeanor court filings. Upon request, ISC staff quarried the ISTARS database using the “seed” data to search for positive matches. The case file records were matched on three key variables; first name, last name, and date of birth. Social security numbers were not used to match because they are not collected and maintained in the ISTARS database. Once the matches were made, the data were extracted into an external database. Because the files were raw – meaning there were possibly multiple rows of data for each matched client and very large – the data had to be segregated into separate Microsoft Excel files (6 for felony, 12 for misdemeanor). These files were then flattened and merged in Microsoft Access. Once the felony and misdemeanor files were merged and flat, they were linked back to the seed data matching indicators (name and DOB). Once this final step was done, any duplicate cases were removed and a final quality check\(^\text{17}\) was completed to ensure reliability. A total of \(n= 751\) (55%) mutually exclusive matches were made from the seed data to the ISC database; a total \(n= 367\) (49%) were treatment group clients, and \(n= 384\) (51%) were matched in the waitlist comparison group.

\(^{17}\) A duplicate case search was conducted in SPSS to indicate any data duplication that may have occurred during the matching phase, or during the conversion of data from the Excel files to SPSS formats.
Crime-Specific Cost Estimations

The next step in working with the ISC data was to estimate crime-specific costs; this is a necessary step in the calculation of a cost-benefit ratio and in answering the question as to whether group assignment had an effect on post-treatment criminal justice costs. Again, there are several ways that researchers have gone about estimating crime-specific costs. As described by McCollister, French, and Fang (2010), many if not most researchers adopt a societal perspective on the costs of crime that includes singular use or (as they argue for) a complete combination of victim costs, criminal justice system costs, crime career costs, and related intangible costs. As McCollister and colleagues correctly note (2010:99), “[t]he broad societal perspective [a combination of all four fields above] is appropriate for economic analysis and program evaluation because more narrow perspectives […] apply to specific stakeholders or agendas.”

These costs estimates were employed in the current study as they relate to felony charges only. As Table 3.4 illustrates, there were a total of ten cost categories that were used from the McCollister et al. (2010) study, while three other unique cost categories (DUI, illicit substance related charge and other) were enumerated for this study in particular.

The cost estimates for the felony DUI group were important to develop and estimate because they constituted eleven percent of all the felony charges combined. The current study estimated felony DUI costs using the same seven cost categories that a State of Illinois DUI fact book, published on the Illinois State Government website (www.cyberdriveillinois.com), used to estimate the per unit cost of a DUI conviction. The seven categories were insurance (high-risk insurance), legal fees (uncontested plea and hardship driving permit), court costs (fines, court operational costs, law enforcement reimbursement, storage fee), income loss due to incarceration (loss based on four weeks/average yearly income), remedial substance abuse class (including
counseling fees), driver license reinstatement, and the installation and monthly service costs of a Blood Alcohol Ignition Interlock Device (BAIID; Illinois, 2010). The Illinois (2010) report states that the estimated total cost of a DUI conviction is $16,100. Additionally, the report states that this figure does not include substantial costs associated with vehicle collisions such as injury or loss of life, compensatory damages, in-patient substance abuse treatment, and additional legal fees associated with jury trials and civil proceedings (Illinois, 2010).

Table 3.4 Crime-Specific Estimates: Felony Per Unit Costs

<table>
<thead>
<tr>
<th>Crime Category</th>
<th>Per Offense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder</td>
<td>$8,982,907</td>
</tr>
<tr>
<td>Rape</td>
<td>$240,776</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>$107,020</td>
</tr>
<tr>
<td>Robbery</td>
<td>$42,310</td>
</tr>
<tr>
<td>Motor Vehicle Theft</td>
<td>$10,772</td>
</tr>
<tr>
<td>Burglary</td>
<td>$6,462</td>
</tr>
<tr>
<td>Forger and Counterfeiting</td>
<td>$5,265</td>
</tr>
<tr>
<td>Fraud</td>
<td>$5,032</td>
</tr>
<tr>
<td>Vandalism</td>
<td>$4,860</td>
</tr>
<tr>
<td>Larceny/theft</td>
<td>$3,532</td>
</tr>
<tr>
<td>DUI</td>
<td>$10,000</td>
</tr>
<tr>
<td>Substance Related Charge</td>
<td>$2,000</td>
</tr>
<tr>
<td>Other</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Note: Calculations for all cost categories except DUI, substance related charge, and other, borrowed from McCollister et al. (2010).

- Includes all four cost fields.
- Includes costs associated with: insurance increases, legal fees, court costs, income loss, rehabilitation, driver’s license reinstatement, BAIID; cost categories borrowed from 2010 Illinois DUI Fact Book on Average Cost of a DUI Conviction.
- Costs include only statutory or average statutory penalties associated with substance use charges. The other category was used only when a charge did not fit into a cost category and was estimated at the lowest possible fine level using common Idaho felony statute penalties.

Beginning with these figures then, each offense category was used as a search term and costs were adjusted to both the sample and the statutory differences between the two states (see Idaho Statutes 18-8005). All of the original Illinois cost estimates were adjusted downward to accommodate the difference in state economic conditions and costs. For example, the Illinois
(2010) report calculated the loss of income ($4,000) using an average yearly income of $40,000. Knowing that that the average yearly income (earnings) for the entire sample (Tx and WL, N= 1,385) was only $10,000, the proportional estimated loss would then be just $1,000. Also, this research does not take into account additional losses associated with vehicular collision. For felony DUI, the per-unit cost figure used in this research is $10,000.

There were a total of 93 unique charge codes (descriptions) used for the felony file alone. Therefore, each one had to be recoded to fit within one of the ten borrowed categories from McCollister et al. (2010) or the DUI category. This process of cost estimation left all illicit substance related charges, such as possession, without calculated costs. Additionally, there were some charges that did not fit into any of these twelve categories above, but were still felonies under Idaho law, such as a concealed weapon charge. Because costs associated with (mostly victimless) substance-related crimes and crimes which fell into the “other” category are rarely enumerated, these cost categories were developed from a survey of Idaho State Statutes. Many felony penalties for drug crimes carry stiff penalties, such as fines between $10,000 and $50,000 and sentences ranging from one to many years in prison. The final felony substance-related cost, however, was estimated at just $2,000. Likewise, because of the victimless nature of many of the “other” category charges, the final felony “other” cost was estimated at $1,000. Again, as in the previous cost calculations noted, these costs estimates were purposefully conservative.

Misdemeanor crime-specific costs were developed differently for this study. Although many of the misdemeanor charges include a victim (such as misdemeanor assault or domestic violence), the misdemeanor estimations were calculated using Idaho State Statutory fine schedules only. Estimating costs in this way underestimates the cost to society within the “general societal perspective” employed here. Crime-specific cost estimations for misdemeanor
criminal charges and convictions have yet to be comprehensively created. Due to this fact, and in light of the enormous time commitment it would take to complete such a task, these simple estimations are employed at this time. Table 3.5 below provides the misdemeanor crime-specific estimations employed here, along with the corresponding Idaho Statute where the fines (mid-to-upper) were found. There were a total of 183 unique charge codes (descriptions) used for the misdemeanor file. These 183 charge codes were collapsed, by best-fit, into one of the seventeen categories listed in table 3.4. Again, as in the previous cost calculations noted, these costs were estimated conservatively to error on the side of caution.

### Table 3.5 Crime-Specific Estimates: Misdemeanor Per Unit Costs

<table>
<thead>
<tr>
<th>Idaho Statute(s)</th>
<th>Misdemeanor Crime Category</th>
<th>Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-8001</td>
<td>Driving non-DUI</td>
<td>$500</td>
</tr>
<tr>
<td>18-8005</td>
<td>Driving DUI</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-902, 904</td>
<td>Assault and Battery (DV, abuse, neglect, fighting)</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-1801, 18-7401</td>
<td>Court/DOC/Jail procedure violation (contempt, bail, etc.)</td>
<td>$200</td>
</tr>
<tr>
<td>18-7001</td>
<td>Arson or Vandalism</td>
<td>$500</td>
</tr>
<tr>
<td>18-2001-5</td>
<td>All Inchoate Crimes</td>
<td>$500</td>
</tr>
<tr>
<td>18-6401, 9</td>
<td>Conduct Charges: disturbing/disorderly/resisting</td>
<td>$500</td>
</tr>
<tr>
<td>36-1402</td>
<td>Animal Violation: Idaho Fish and Game</td>
<td>$500</td>
</tr>
<tr>
<td>37-2734A, 2732C*</td>
<td>Misdemeanor Substance Abuse or Alcohol Charge</td>
<td>$500</td>
</tr>
<tr>
<td>18-1501</td>
<td>Injury to child</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-2408</td>
<td>Theft: grand</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-2408</td>
<td>Theft: petit, receiving, control, etc.</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-7006, 8</td>
<td>Unlawful Entry or Trespass</td>
<td>$500</td>
</tr>
<tr>
<td>18-6503</td>
<td>Attempted Robbery</td>
<td>$1,000</td>
</tr>
<tr>
<td>18-1403</td>
<td>Burglary</td>
<td>$500</td>
</tr>
<tr>
<td>18-3128</td>
<td>False Information</td>
<td>$500</td>
</tr>
<tr>
<td>18-3316</td>
<td>Misdemeanor Weapons Charge</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Note: Costs include only statutory or average statutory penalties associated with substance use charges. The other category was used only when a charge did not fit into a cost category and was estimated at the lowest possible fine level using common Idaho felony statute penalties.

*Also includes 18-1502c.
The addition of ISC court filings data for this study is a major step forward for conducting these types of applied empirical studies. The previous study, for example, was limited in the sense that it lacked important criminal justice-related outcome measures closely linked to recidivism (Collins et al., 2010). These additional data provide a more accurate and up-to-date (due to institutional time-lines – or the fact that the result of behavior, in this case incarceration and supervision, happen towards the end of the process) picture of the many processes that exert pressure on the substance abuse treatment system.

**Idaho Department of Labor Earnings Data**

The measurement of employment or productivity is a strong focus within the literature (National Evaluation Data Services, 2002; Foster & Vaughn, 2004). Substance abuse, in relation to the workforce, has an impact on cost due to lost productivity (Foster & Vaughn, 2004). This cost associated with lost productivity is realized through on-the-job injuries, absenteeism, planned leave, and costs related to the absent employee’s temporary replacement worker (Foster & Vaughn, 2004). In their study of this area of cost, Foster and Vaughn (2004) found that costs related to substance abuse in the workforce in some instances might not warrant additional human resource concentration and spending on therapy or treatment, but they do acknowledge costs related to liability resulting from injury or damages incurred as a motivational factor for businesses to adopt pro-treatment policies. Moreover, lost productivity as a result of incarceration (absenteeism or planned leave) is a common cost measure used in economic analyses related to substance abuse and to crime in general (McCollister et al., 2010).

The use of client earnings within this study is meant to provide some insight into overall client stability or independence. Criminal involvement, as stated above, has also been shown to
have a strong impact on costs through lost productivity. This cost impact is realized through estimating costs related to an absence from the workforce/labor market and the household due to incarceration. Furthermore, a key indicator of effectiveness of treatment or incarceration is recidivism. High recidivism rates for released offenders may be linked to inadequate work skills and little access to vocational training opportunities (Petersilia, 2003; Turner & Petersilia, 1996). Because released offenders may not have adequate work skills, they may turn to illegitimate means in order to support their needs and those of their families (McCollister et al., 2010). As a consequence, it is also important to note that the earnings figures captured by the IDL only constitute those client earnings that were reported by employers. This information on income does not include any income that was a result of illegal activities or opportunity costs associated with time spent engaged in illicit activities (McCollister et al., 2010).

While not providing a complete picture of income, the Idaho Department of Labor (IDL) database does provide valuable information on client earnings. The IDL data does not capture daily, weekly, or monthly breakdowns of hours or wages. Furthermore, there is no way to determine full or part-time employment through the IDL database.\(^\text{18}\) Despite noteworthy limitations, the IDL-provided information is still very useful when considering the impact substance abuse treatment may have on earnings and ultimately the purchasing power of clients within the SUD system. Clearly, pre-treatment episode employment gainful earnings compared to post-treatment income are powerful indicators of potential benefit, both socially and monetarily, for the client. These particular data proved to be a crucial element in the understanding of substance abuse in Idaho in the previous Collins et al. (2010) study, and they

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\(^{18}\) The SUD/DHW data do contain self-reported employment information that can supplement the IDL data for the treatment group.
will be shown to again be central in the analysis below. Within the present study, the matching process positively identified a total of N= 1,221 (90%) clients within both the treatment (n= 621) and waitlist (n= 600) comparison groups that had recorded earnings for some period of time during the study period. The average yearly income of the study population was approximately $10,000 (the 2009 Federal guideline for poverty is $10,830 for a one person in family).

**Idaho Departments of Correction Data**¹⁹

The Idaho Department of Correction (DOC) used the “seed” data to match on service-based correctional indicators. The two fields used for this study are incarceration and supervision. Using the “seed” data, the DOC matched clients within their database and returned the matched records with information on days of incarceration and/or supervision per month for each matched client during the study period. The DOC provided the yearly average (2009) per-unit cost of supervision ($4.00/day) and incarceration ($52.00/day) to be used in calculating cost trends over the study period and for pre-post cost benefit analysis. Overall, there were a total n=

¹⁹ As was the case with the DOC data, the Idaho Department of Juvenile Corrections (DJC) provided data on juvenile offenders. Using the seed data, the DJC matched juvenile corrections records within their database and provided information on begin and end dates (which were to be calculated as number of days served multiplied by the average cost of custody) within the juvenile system. There were, however, a limited amount of positive matches within the entire sample, as there were just 27 (75%) positive matches within the treatment group and only 9 (25%) positive matches within the waitlist group. There are two general reasons for such a low match frequency. First, the average count of juveniles under state care in the DJC system at any given time is just 300; therefore, the numbers for potential matches are naturally low to begin with. Second, because of the sensitive nature of this population, both legally and philosophically, juveniles take priority in the line for treatment and therefore were not added to the waitlist for treatment at the same rates that occurred for the adult populations. Due to these circumstances and the overall lack of statistical power, the juvenile portion of the analysis has been abandoned for this current project. The DJC has, however, expressed great interest in developing a separate evaluation plan for their unique treatment system.
747 (55%) positive matches for the entire study population. There is a significant difference in representation between the treatment and comparison groups, however, as the treatment group matched 460 cases (62%) and the wait-list comparison matched 287 cases (38%). This issue of disproportionate match rates is discussed further in the analysis section in the next chapter.

**Cost-Benefit Recap**

To reiterate, the main cost-benefit question to be addressed in this dissertation research is whether substance abuse treatment saves money vis-à-vis an equivalent non-treated comparison group. In order to create a more manageable framework, this question is broken down into three parts relating to *criminal recidivism, financial indicators, and criminal justice system involvement*. Likewise, each of these three sections is again directly related to a corresponding database that is housed within each of the partner agencies involved.

In any cost-benefit research, the important decision of what perspectives are adopted will ultimately dictate what data should be collected, what outcomes should be featured, and how the various elements of the analysis will be measured. A framework such as the one utilized here that includes all potentially relevant perspectives is the most desirable and appropriate because it widens the cost-consideration aperture to include a wide array of potential beneficiaries – from the individual client, to their families, to the communities within which clients commit crimes and receive their care, and to the state in general. As McCollister and her colleagues (2010) observe, adopting a wide perspective protects against benefit-granting based on the specific agendas of specific stakeholders.
Cost-Benefit Hypotheses

The grand question to be investigated with these data is whether substance abuse treatment saves money in the long-term vis-à-vis an equivalent non-treated comparison group. To gain some understanding on this general research question, the following three-part question is investigated: do the treatment and comparison groups differ on the following key outcomes – *criminal recidivism* (measured by felony and misdemeanor court filings), *post-treatment monetary earnings* (measured by quarterly earnings), and *DOC involvement* (measured by days per month incarcerated and supervised prior to and after the study center date).

H$_{10}$: There is no difference between the treatment and comparison groups on combined costs associated with post-treatment misdemeanor and felony court charges.

H$_{1a}$: There is a difference between the treatment and comparison groups on combined costs associated with post-treatment misdemeanor and felony court charges.

H$_{20}$: There is no difference between the treatment and comparison groups on post-treatment monetary earnings.

H$_{2a}$: There is a difference between the treatment and comparison groups on post-treatment monetary earnings.

H$_{30}$: There is no difference between the treatment and comparison groups on combined costs associated with post-treatment DOC involvement in incarceration and supervision.

H$_{3a}$: There is a difference between the treatment and comparison groups on combined costs associated with post-treatment DOC involvement in incarceration and supervision.
Adjusting for Inflation

Previous research clearly illustrates the need to take inflation into account when conducting cost-benefit analyses. Boardman, Greenberg, Vining, and Weimer (2006:147) offer a good explanation of inflation and the difference in outcome assessment resulting from using nominal as compared to inflation-adjusted or real figures in the following passage from their study:

In order to control for the declining purchasing power of a dollar due to inflation, we convert nominal dollars to real dollars. [...] To obtain real, or constant, dollar measures, [...] analysts deflate dollars to account for higher prices. The two most commonly proposed deflators are based on the consumer price index (CPI) and the gross national product (GNP). [...] The CPI deflator is expressed as the ratio of the cost of purchasing a standard basket of market goods in a particular year to the cost of purchasing the same (or very similar) basket of goods in some base year [current US base year is 1982-1984], multiplied by 100.

In order to convert base year (1982-1984) dollars into present-day dollars, they are multiplied by the most Current CPI (All Items) figures. For example, the formula for the earnings adjustments for each quarter is:

\[\text{Nominal Earnings: } \left(\frac{Q1\ (2007)}{\text{CPI}\ Q1\ (2007)}\right) \times \text{CPI Nov.}\ (2010) = \text{Real Earnings}\]

Q1 (2007) represents the total nominal earnings for each client during the first quarter of 2007, which is then divided by the CPI (converted using the base year CPI/100, 1982-4) for that same period. The base-adjusted calculation is then multiplied by the selected CPI for the desired timeframe, such as the 2010 November CPI used here. Thus, the total nominal client earnings in each quarter are converted and expressed as real dollars. This process was repeated for each quarterly earnings category. Each converted quarter total was then used to calculate pre and post client earnings totals and trends. The same logic was used to convert costs associated with criminal and DOC involvement, although some of the time units of measurement differed.

Following this procedure, the raw or nominal figures derived from cost estimates generated from both the felony and misdemeanor charge information, the DOC costs estimates
on incarceration and supervision, and the earnings information were all converted to real dollar estimations by using deflation techniques as informed by Boardman et al. (2006). In this case monthly and quarterly CPI (All Items) figures from U.S. Department of Labor (base year used: 1982-1984) were used in the inflation adjustment process.

The estimation of the monetary value of costs and benefits closely follows recommendations laid out by prior documented cost estimates (c.f. McCollister et al., 2010; Aos et al., 2006; Welsh et al., 2001; VERA Institute of Justice, 2011). Fortunately, much of the cost information that is included in this study is captured and maintained by the participating agencies as part of their administrative in-house billing and accounting practices. Cost is conceptualized as the net cost or benefit (estimated and/or measured as a dollar amount) incurred through three social service realms: 1) criminal justice (criminal events pre- and post-treatment, average cost of the category of crime); 2) earnings (pre- and post-treatment quarterly earnings as reported to the Idaho Department of Labor); and, 3) corrections (pre- and post-days incarcerated and days supervised).

**Some Issues on Data Sharing**

Once drawn, the matched waitlist and treatment samples were combined into one complete “seed” data set. At this point, the new “seed” database was prepared for circulation and matching among the participating agencies. The sharing of identifiable data across agency boundaries in the past has been, and currently remains, a very difficult task (Kettl, 2006). Perhaps the most important factor to be taken into consideration is the protection of personal information contained in the data; given prevailing liabilities for the violation of privacy protection for official data on individuals has a strong tendency to elicit legal attention from each
department’s legal counsel at this stage of data collection. In consideration of the legally permissible sharing of portions of client records, along with many other issues at play, there are two major process areas that must be addressed with respect to sharing between state agencies; the first area is that of formal and informal interagency agreements (legal hierarchies), and the second is that of the development of advanced data security protocols.

For the current study, there was a mix of both formal written memorandums of agreement/understanding (MOUs) and informal agreements among agency or department directors used to achieve cross-agency data sharing \(^{20}\) (see Figure 3.1 below and Appendix for an example data security protocol).

\[\text{Figure 3.1 Formal and Informal Data Sharing Agreement Pathways Among ICSA Partners}^{21}\text{ for Current Project.}\]

\(^{20}\) The Office of Drug Policy, as chair of ICSA (legislative mandate) and an Executive Office of the Governor, has the statutory power to request data from each of the partnered ICSA agencies. As an organization, it never used its power to demand information from the other agencies. Although some may argue that ODP did raise the pressure from time to time, most agreements made at the director level were consensual in character.

\(^{21}\) Agency acronyms are as follows: IDHW: Idaho Department of Health and Welfare; BPA: Business Psychology Associates (contracted managing service provider, private); IDOC: Idaho Department of Correction; IDL: Idaho Department of Labor; IDJC: Idaho Department of Juvenile Corrections; ISC: Idaho Supreme Court; IODP: Idaho Office of Drug Policy.
Both forms were achievable at the theoretical level because most of the members of the Interagency Committee on Substance Abuse (ICSA) understand that although their particular agency’s goals may differ somewhat to those espoused by the ICSA network as a whole, client A for the DOC is the same client A for DHW, and for the Supreme Court, and so on. Thus, one can argue that there is recognition in the value of inter-agency knowledge and information sharing (at the director level and down). This is especially the case with regards to a system management perspective where the identification of service overlaps and gaps is very important.

The original research proposal for this dissertation was formally presented to the ICSA group in the spring of 2010. During that initial meeting most of the directors committed to working through inter-agency data sharing issues. To reach a verbal agreement among agency managers in a forum such as this was a great step forward, lending some confidence in prospects for gaining access to these types of data for future studies. Although the arguments in question represent a positive step, these types of ad hoc and agency-specific, one-time agreements fail to provide a sustainable and efficient structure for future empirical studies.

Over the last couple of years there has been a movement towards the adoption of a “general” multi-agency MOU that would identify the existing data sharing channels and would be legally sound if challenged on data security and privacy protection grounds. This type of agreement would not grant total sharing freedom among the linked agencies at all times, as each new request would need to be vetted and approved by the interagency committee (in whatever form it takes) or agency directors. It would, however, provide an existing sharing structure that in theory would significantly cut the time between data request, acquisition, and analysis.
Part II: Survey Methods

As previously stated, the network-level (or level-two) analysis provides critical contextual insight into the relationships between the management and effectiveness of the network and the measured cost-benefit outcomes. The link between network effectiveness and cost-benefit outcomes produced as an indication of a positive reaction to a substance abuse treatment episode is tacit and tangential; there are many immeasurable forces that impact the economic outcomes. To reiterate, because of the distance between the network ICSA and the actual treatment, the argument that outcomes are directly affected by ICSA decisions at this time would be premature. The contextual findings from this survey, however, are valuable because they may lead to an understanding of how to, in a theoretical sense, strengthen the causal ties between a governing or decision-making body such as ICSA and outcomes related to treatment. The core idea is relatively simple namely – improvements implemented by the network (such as increased efficiency, knowledge sharing, and the identification of gaps/overlaps in services) strengthen the quality and magnitude of socio-political support, which then should favorably impact outcomes related to the provision of substance abuse treatment.

This “indirect effects issue” was not raised to cast a shadow on the theoretical model developed in chapter two or to undermine the cost-benefit methods employed in this research; it was raised to provide continual grounding for that analysis. Some may argue that a collaborative capacity assessment conducted on such a small decision-making/governing body would reveal little important information on the network’s impact on social support. Although limited in size, there is no doubt that ICSA does have a meaningful impact on the substance abuse treatment system in Idaho. Not only are the directors of the core treatment system-related agencies jointly addressing issues and sharing information, but other critical decisions are made by these key
actions influenced by the ICSA experience. For example, the group has production and oversight power over the treatment system budget as a whole; at one point, the group decided on whether to continue funding a wait-list for treatment. At the time, the to-fund or not-to-fund question was a contentious issue because maintaining a state-wide wait-list for treatment provided a proxy for demand for treatment, a fact which some argued was useful in estimating statewide need and forecasting system resource provisions. Conversely, maintaining the wait-list was costing money that was being diverted from an already monetarily-depleted treatment budget. There is little doubt that the decision made by the ICSA voting group to end the wait-list had real system-wide repercussions because those awaiting treatment were in a way cut off from the system altogether.

The main point to take away from this short discussion is that the decisions attributable to a collaborative group such as ICSA do have an impact on the overall treatment system in multiple ways. The design of this research does not currently allow for a direct-effects type of analysis. It does, however, provide a starting point for the assessment of the theoretical model posited in Chapter Two by lending some valuable context to the outcome-based cost-benefit findings.

To clarify, here is another brief example that may shed light on the issues which drive the preceding discussion. When implementing a new program, policy makers and practitioners often exercise great care in selecting the beneficiaries (the “who”) of the treatment. Take, for example, the case of drug courts; some early outcomes-based evaluations were derived from populations of drug offenders who may have been particularly amenable to change. After “working out the bugs” so to speak, new policies were adopted to target more risky populations, a modification of eligibility policies which resulted in a dampening of the overall treatment effects (Gebelein, 2000). If one were to analyze this “hypothetical” drug court system and acquire outcomes pre-
and post-modification of this policy and interpret the findings without knowledge of the network/decision-maker driven policy change, the results would no doubt reflect negative outcomes. In engaging the front-end of the decision-making process, as is the case in this research, one can understand the patterns of outcomes within a meaningful context.

**Survey Tool**

To describe the context of the cost-benefit findings and to address issues surrounding the collaborative capacity of the ICSA group, a survey (see Appendix A for complete survey) was sent out via email to ICSA voting members and associates (persons who had continued involvement but without voting privileges, N= 24). The survey was first developed by Lincoln (2008) in an examination of collaborative partnerships and multi-agency collective action to address the problem of domestic violence in the Spokane, Washington geographic area.

**Question Item Sets**

Using Lincoln’s (2008:126) existing survey and framework, the following sections contain questions that address variant characteristics of the ICSA collaborative partnership. Each latent construct is listed here, along with a general explanation of how it is measured, followed by descriptives²² for each separate item.

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²² Note: Not all questions are reported as reflected on the original survey, as questions that were revealed through exploratory factor analysis to not adequately measure the corresponding latent concept were removed. M = mean, SD = Standard Deviation.
Section I - Synergy: the synergy items were aimed at getting an assessment of ICSA gains made through collective action. The nine questions in this section were prefaced with the statement: “Through working together…” Respondents were asked to indicate how well the item was achieved. For example, question one read: “Through working together, how well are these partners able to identify new and creative ways to solve problems?”

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>***Through working together, how well are these partners able to…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify new and creative ways to solve problems?</td>
<td>2.38</td>
<td>0.924</td>
<td>0</td>
</tr>
<tr>
<td>Include the views and priorities of the people affected by the partnerships work?</td>
<td>2.29</td>
<td>0.999</td>
<td>0</td>
</tr>
<tr>
<td>Develop goals that are widely understood and supported among partners?</td>
<td>2.04</td>
<td>0.999</td>
<td>0</td>
</tr>
<tr>
<td>Identify how different services and programs in the community relate to the problems the partnership is trying to address?</td>
<td>1.83</td>
<td>0.917</td>
<td>0</td>
</tr>
<tr>
<td>Respond to the needs and problems of the clientele?</td>
<td>1.67</td>
<td>0.917</td>
<td>0</td>
</tr>
<tr>
<td>Implement strategies that are most likely to work?</td>
<td>1.92</td>
<td>0.881</td>
<td>0</td>
</tr>
<tr>
<td>Obtain support from individuals and organizations outside of ICSA that can either block the partnership's plan or help move them forward?</td>
<td>2.29</td>
<td>0.908</td>
<td>0</td>
</tr>
<tr>
<td>Carry out comprehensive activities that connect multiple services, programs, or systems?</td>
<td>1.96</td>
<td>0.999</td>
<td>0</td>
</tr>
<tr>
<td>Clearly communicate to people in the community how the partnership's actions will address problems that are important to them?</td>
<td>1.54</td>
<td>0.977</td>
<td>0</td>
</tr>
</tbody>
</table>

Section II - Formal and informal ICSA leadership: ten leadership items examined respondents’ ratings of leadership effectiveness in key areas of the partnership. Examples included taking responsibility, motivating and empowering people, and resolving conflict.
Table 3.7 Set 2 – Leadership Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking responsibility for the partnership.</td>
<td>2.21</td>
<td>1.285</td>
<td>0.00</td>
</tr>
<tr>
<td>Inspiring or motivating people involved in the partnership.</td>
<td>2.04</td>
<td>1.429</td>
<td>0.00</td>
</tr>
<tr>
<td>Empowering people involved in the partnership.</td>
<td>1.91</td>
<td>1.306</td>
<td>8.33</td>
</tr>
<tr>
<td>Communicating the vision of the partnership.</td>
<td>2.00</td>
<td>1.474</td>
<td>0.00</td>
</tr>
<tr>
<td>Working to develop a common language within the partnership.</td>
<td>2.04</td>
<td>1.160</td>
<td>0.00</td>
</tr>
<tr>
<td>Fostering respect, trust, inclusiveness, and openness in the partnership.</td>
<td>1.50</td>
<td>1.251</td>
<td>0.00</td>
</tr>
<tr>
<td>Creating an environment where differences of opinion can be voiced.</td>
<td>1.96</td>
<td>1.364</td>
<td>4.17</td>
</tr>
<tr>
<td>Resolving conflict among partners.</td>
<td>1.18</td>
<td>1.097</td>
<td>8.33</td>
</tr>
<tr>
<td>Combining the perspectives, resources, and skills of partners.</td>
<td>1.92</td>
<td>1.316</td>
<td>0.00</td>
</tr>
<tr>
<td>Helping the partnership be creative and look at things differently.</td>
<td>1.83</td>
<td>1.239</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Section III - Efficiency in the use of ICSA resources: the three resource items addressed participant perceptions of the collective use of shared resources. Each of the items covered a distinctive resource area. The first item asks how well ICSA uses partner financial resources. The second asked how well ICSA uses the partnership’s in-kind resources (defined as skills, expertise, information, data, connections, influence, etc.). The third addressed how well ICSA uses the partner organization’s time.

Table 3.8 Set 3 – Efficient Use of Resources Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>***Please choose the statement that best describes how well ICSA…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses the partner organizations financial resources.</td>
<td>1.48</td>
<td>1.123</td>
<td>4.17</td>
</tr>
<tr>
<td>Uses the partner organizations in-kind resources (e.g., skills, expertise, information, data, connections, influence, space, equipment, goods).</td>
<td>1.91</td>
<td>1.083</td>
<td>4.17</td>
</tr>
<tr>
<td>Uses the partner organizations time.</td>
<td>1.70</td>
<td>1.146</td>
<td>4.17</td>
</tr>
</tbody>
</table>
Section IV - ICSA administration and management: the five-item administration and management section asked questions aimed at gauging the ability for the ICSA management to effectively carry out distinct partnership activities. Examples included coordinating communication among partners, people, and organizations outside the partnership, and evaluating the progress and impact of the partnership.

Table 3.9 Set 4 – Administration and Management Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating communication among partners.</td>
<td>2.27</td>
<td>1.241</td>
<td>8.33</td>
</tr>
<tr>
<td>Coordinating communication with people and with organizations outside the partnership.</td>
<td>1.73</td>
<td>1.279</td>
<td>8.33</td>
</tr>
<tr>
<td>Organizing partnership activities, including meetings and projects.</td>
<td>2.08</td>
<td>1.060</td>
<td>0.00</td>
</tr>
<tr>
<td>Preparing materials that inform partners and help them make timely decisions.</td>
<td>1.78</td>
<td>1.126</td>
<td>4.17</td>
</tr>
<tr>
<td>Evaluating the progress and impact of the partnership.</td>
<td>1.32</td>
<td>1.129</td>
<td>8.33</td>
</tr>
</tbody>
</table>

Section V - ICSA use of non-financial resources: these four items aimed at assessing whether or to what extent ICSA has the proper amount of non-financial resources to do its job effectively. Examples of non-financial resources included skills and expertise, legitimacy and credibility, and influence and ability to bring people together.

Table 3.10 Set 5 – Non-Financial Resources Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills and expertise.</td>
<td>2.67</td>
<td>0.702</td>
<td>0.00</td>
</tr>
<tr>
<td>Connections to target populations.</td>
<td>2.13</td>
<td>1.014</td>
<td>4.17</td>
</tr>
<tr>
<td>Legitimacy and credibility.</td>
<td>2.54</td>
<td>1.062</td>
<td>0.00</td>
</tr>
<tr>
<td>Influence and ability to bring people together for meetings and activities.</td>
<td>2.78</td>
<td>0.902</td>
<td>4.17</td>
</tr>
</tbody>
</table>
Section VI - Use of ICSA financial and other capital resources: these three items aimed at assessing whether or to what extent ICSA has the proper amount of financial and other capital resources to do its job effectively. Examples of financial resources included money, space, and equipment (goods and services).

Table 3.11 Set 6 – Financial Resources Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money.</td>
<td>2.27</td>
<td>0.703</td>
<td>8.33</td>
</tr>
<tr>
<td>Space.</td>
<td>3.24</td>
<td>0.831</td>
<td>12.50</td>
</tr>
<tr>
<td>Equipment and goods and services.</td>
<td>3.05</td>
<td>0.848</td>
<td>20.83</td>
</tr>
</tbody>
</table>

Section VII - ICSA decision making processes: this three-item section asked respondents to indicate their feelings towards how decisions are made in ICSA. These questions asked how comfortable the respondent is with the way that the decisions are made, how often they supported ICSA decisions, and whether they felt they were a part of the decision-making process.

Table 3.12 Set 7 – Decision Making Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>How comfortable are you with the way decisions are made in ICSA?</td>
<td>2.09</td>
<td>1.019</td>
<td>8.33</td>
</tr>
<tr>
<td>How often do you support the decisions made by ICSA?</td>
<td>2.55</td>
<td>0.858</td>
<td>8.33</td>
</tr>
<tr>
<td>How often do you feel that you have been left out of the decision making process?</td>
<td>1.81</td>
<td>1.030</td>
<td>12.50</td>
</tr>
</tbody>
</table>
Section VIII - Benefits of participation in ICSA: the seven-item benefit section asked respondents to indicate whether they felt that they have received the listed benefit or perceived that it had been achieved from being a part of the ICSA partnership. Examples included enhanced ability to address important issues, the development of new skills, the acquisition of knowledge, and an enhanced ability to meet the needs of their clients.

Table 3.13 Set 8 – Benefits of ICSA Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced ability to address important issues.</td>
<td>0.77</td>
<td>0.429</td>
<td>8.33</td>
</tr>
<tr>
<td>Development of new skills.</td>
<td>0.50</td>
<td>0.512</td>
<td>8.33</td>
</tr>
<tr>
<td>Increased utilization of my expertise or services.</td>
<td>0.67</td>
<td>0.483</td>
<td>12.50</td>
</tr>
<tr>
<td>Acquisition of useful knowledge about services, programs, or people in the community.</td>
<td>0.74</td>
<td>0.449</td>
<td>4.17</td>
</tr>
<tr>
<td>Enhanced ability to affect public policy.</td>
<td>0.67</td>
<td>0.483</td>
<td>12.50</td>
</tr>
<tr>
<td>Enhanced ability to meet the needs of my constituency or clients.</td>
<td>0.59</td>
<td>0.503</td>
<td>8.33</td>
</tr>
<tr>
<td>Acquisition of additional financial support.</td>
<td>0.30</td>
<td>0.470</td>
<td>16.67</td>
</tr>
</tbody>
</table>

Section IX - Drawbacks of participation in ICSA: the three-item drawback section asked respondents to indicate whether they have experienced any drawbacks due to their participation in the ICSA partnership. Examples included serious diversion of time and resources from other priorities, insufficient influence in partnership activities, and conflict between normal on-the-job duties and the additional work required by ICSA.
Table 3.14 Set 9 – Drawbacks of ICSA Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious diversion of time and resources away from other priorities or obligations.</td>
<td>0.48</td>
<td>0.511</td>
<td>4.17</td>
</tr>
<tr>
<td>Insufficient influence in partnership activities.</td>
<td>0.33</td>
<td>0.482</td>
<td>0.00</td>
</tr>
<tr>
<td>Conflict between my job and the partnership’s work.</td>
<td>0.23</td>
<td>0.429</td>
<td>8.33</td>
</tr>
</tbody>
</table>

Section X - Satisfaction with ICSA participation: this five-item section asked participants to rate their overall satisfaction with their participation in ICSA. The questions address how satisfied each respondents was with how well people have tended to work together, how satisfied they were with their own influence and role in the group, and how satisfied they were with ICSA’s plans for implementing and achieving its goals.

Table 3.15 Set 10 – Overall Satisfaction Item Descriptives

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>M</th>
<th>SD</th>
<th>% missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with the way the people and organizations in ICSA work together?</td>
<td>1.78</td>
<td>1.347</td>
<td>4.17</td>
</tr>
<tr>
<td>How satisfied are you with your influence in ICSA?</td>
<td>2.23</td>
<td>1.343</td>
<td>8.33</td>
</tr>
<tr>
<td>How satisfied are you with your role in ICSA?</td>
<td>2.45</td>
<td>1.224</td>
<td>8.33</td>
</tr>
<tr>
<td>How satisfied are you with ICSA’s plans for achieving its goals?</td>
<td>1.52</td>
<td>1.123</td>
<td>4.17</td>
</tr>
<tr>
<td>How satisfied are you with the way the ICSA is implementing its plans?</td>
<td>1.67</td>
<td>1.278</td>
<td>12.50</td>
</tr>
</tbody>
</table>

Along with scaled responses to the questions within each of the above sections, respondents were encouraged to provide written comments on their perceptions of ICSA. These comments are possibly the most important element of the survey, as the observations and concerns recorded provide much-needed insight into the interpersonal relationships within the
group and how those relationships may inform our understanding of intra-organizational dynamics. For descriptive purposes, exploratory factor analysis is employed in order to address the underlying or latent concepts illustrated above in the survey sections one through ten. Additionally, factor score variables for each of the above ten sections will be used to address whether there are any significant differences in reporting between the voting and non-voting members. Further descriptive analyses will be presented on specific questions where necessary.

ICSAs participants were given the option to complete the survey in electronic form and email it back, or to complete a hard copy and mail it back. The ICSA group is comprised of representatives from both state agencies and the community. An original list of 50 ICSA participants was developed by ODP staff. This list was then carefully reviewed with the ODP interim-director to confirm that person’s participation. Nineteen individuals on the original list were removed due to non-participation, they physically moved out of the state or region, or they were there as a simple fill-in designated by a regular participant who could not attend a particular meeting. Of the original 50, a total of 31 participants (N= 31) were confirmed, 13 of which were voting members. The survey was sent out late December, 2010 and three follow-up/reminder emails were sent out. ICSA participants who did not respond to the emails were called personally to confirm their voluntary choice to or not to participate. A total of 24 surveys were completed resulting in a 77.4% response rate. Additionally, 9 out of 13 voting members completed the survey.

**Voting vs. Non-Voting ICSA Members**

The voting members differ from non-voting members in some important ways. First, the voting members are legislatively mandated to attend (or provide their designee) and have voting
power (and other powers set forth in Robert’s Rules of Order meeting rules). Second, the voting members were most often directors or heads of their respective organizations and therefore have the power to take the information or decisions made by the group and implement them (or not) within their respective agencies. Given this difference in decisional authority, a voting/non-voting designation will serve as a main bifurcation in the survey analyses presented in the next chapter.

The non-voting members, or ICSA associates, are made up of mid- to upper-level managers from the representative agencies. They are in attendance as key stakeholders, to give support to their directors, and to gain first-hand knowledge on the topics being discussed and the decisions that most likely will impact their workloads and those of the employees they manage. Their input is also valuable because they are largely responsible for actually implementing the changes and turning managerial decisions into action.

For both groups of survey subjects, no further demographic information was collected beyond that which is already known. For both the voting and non-voting members, all individuals have had multiple years of work-experience (at the managerial or mid-managerial levels) within their respective agencies (and often had worked at other agencies within the ICSA network), they are almost all middle-aged, and are racially and socio-economically quite homogeneous. In general, one could say that this group is “seasoned” within this system (especially the directors); they have gotten to know and have worked with each other (in most instances) for quite some time.

Due to the small sample size, each member was contacted individually if they had not responded to the first (sent December 28, 2010) or second (sent January 4, 2011) email sent to them soliciting their participation in the survey. This was done to either confirm participation or
non-participation (completion was completely voluntary). Additionally, there was definitely some concern amongst the recipients that the survey was “political” and that individual responses could be used against a frank and honest respondent. In regard to these concerns, multiple reassurances were given that survey responses were completely confidential and that any results (in regard to the written comments, especially) would be coded and displayed in a way to mask any ties from reported response to a particular survey respondent (in the technical report or any other reports released directly to the participants). Those individuals who voiced concern did in fact complete the survey. The fact that this was a concern in the first place speaks to some of the issues present within the ICSA network; this observation which will be discussed further in the following chapters.

**Methods Recap**

In summary, there are two main methodological realms in this study. The first is centered on cost-benefit analyses, is quantitative in nature, and is outcome-driven. In order to lend some context to the part-one cost-benefit outcomes, the second portion of the dissertation includes a survey aimed at measuring the collaborative capacity and analyzing the cooperative processes at play within the ICSA group. Although the current methodological design lacks some precision in directly addressing the theoretical models presented in Chapter Two (especially the link between network effectiveness and measured cost-benefit treatment outcomes), it does represent a positive step in deepening our understanding of the relationship between collaborative capacity, social support, and treatment-based outcomes.
CHAPTER THREE REFERENCES


CHAPTER FOUR

ANALYSIS

There are two main methodological approaches used here to evaluate collaborative capacity and the effectiveness of drug treatment. The cost-benefit analysis was conducted in order to address the three general hypotheses surrounding client earnings, DOC involvement, and criminal involvement, while the survey portion seeks to assess network effectiveness and estimate the collaborative capacity of ICSA. The cost-benefit analysis is covered first, followed by a discussion of the results derived from the survey. Finally, the major noteworthy findings from both analyses are summarized.

Part I: Cost-Benefit Findings

The cost-benefit analyses were conducted to address the main hypotheses regarding whether the treatment and comparison groups differ on the following key outcomes – post-treatment monetary earnings (measured by quarterly earnings), DOC involvement (measured by days per month incarcerated and supervised prior to and after the study center date), and criminal recidivism (measured by felony and misdemeanor court filings). The results from these three main questions are presented seriatim, along with some brief considerations to be made in light of the findings. An in-depth discussion of the findings is set forth in the next chapter.
1. Earnings

Tables 4.1 and 4.2 present per-quarter earnings trends and total pre- and post-earnings outcome comparisons for the treatment and waitlist groups (Tx n=679; WL n=679). For all the analyses presented, the date range that a client either discharged from a treatment episode or was added to the waitlist (referred to as the center date) was used to identify earnings which fell into either the pre or post timeframe. Although both the treatment and waitlist groups’ trends were negative throughout the thirty-month study period, the treatment group tended to perform better after the center date. The treatment group earned 6 percent more post treatment than the comparison group, although this difference was not significant (t = -0.920, p = .358).

**Table 4.1 Earnings Trends: 2\textsuperscript{nd} Quarter 2008 through 3\textsuperscript{rd} Quarter 2010**
Table 4.2 Pre-Post Earnings Differences between Groups (Tx n= 679; WL n= 679)

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
<th>Round</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx</td>
<td>$5,414,200</td>
<td>$4,665,010</td>
<td>-$749,190</td>
<td>-0.1384</td>
<td>14%</td>
<td>+6%</td>
</tr>
<tr>
<td>WL</td>
<td>$5,496,657</td>
<td>$4,422,087</td>
<td>-$1,074,570</td>
<td>-0.1955</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

Note: All earnings adjusted using quarterly CPI (All) figures form the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars. (%Δ= Percent change).

Considerations: It is important to consider the adverse effect the general economy and the high rate of joblessness had on the earnings outcomes displayed here. Data from the Idaho Department of Labor (IDL) indicate substantial increases in unemployment rates during roughly the same time that data were collected for this research (i.e., 2008-2010) (see Table 4.3 below). For example, from the month before the recession, November 2007 to December 2010, the unemployment rate in Idaho increased by over 179 percent (from 3.4% to 9.5%), a rate of joblessness which was significantly higher than the national average (109% increase; from 4.7 to 9.8) for that same time period (IDL, 2011). Furthermore, one could argue that these overall negative economic trends have a concentrated effect on those who already tend to struggle financially, such as those with substance abuse issues and those persons who are also involved in the criminal justice system as offenders; both of these factors are widely known to have a decidedly negative impact on employability and employment record stability. The average income in 2009 of the individuals in both the treatment and waitlist groups was below $10,000 annually, which again, is below the 2009 federal poverty level.
Table 4.3 Idaho Statewide Unemployment Rate: November 2007 through December 2010

Note: These rates were adjusted for seasonality by IDL. Data were gathered from IDL: Labor Market Website (2/10/2011): http://lmi.idaho.gov/EmploymentUnemployment/CivilianLaborForceLAUS.aspx

2. DOC Involvement

Table 4.4 displays the supervision and incarceration trends. Table 4.5 shows the pre-to-post cost outcomes for the number of days per month from March 2008 to August 2010. The Idaho Department of Correction supplied average per-day costs for supervision (June 2009, $4.00) and for incarceration (June 2009, $52.00). These cost categories serve as proxy measures for treatment success outcomes; that is to say, we would anticipate that when treated individuals are compared to similar persons (waitlist subjects) with no access to the treatment, a decrease in incarceration and in supervision days served post-treatment should be expected. This, in turn, would drive overall costs down by decreasing the number of days in both incarceration and supervision.
Supervision

Table 4.4 Supervision Cost Trends: Days Per Month (Tx n= 417; WL n= 235)

There was a significant ($t = -7.142, p = .001$) 79% difference in pre-post change in supervision costs between the groups (in favor of the Tx group, post-center date). Overall, as Table 4.4 illustrates, the treatment group’s average cost of supervision was much higher than that of the waitlist group; however, post-center date costs decreased for the treatment group while they increased for the waitlist comparison group over the thirty-month period of study.

Table 4.5 Pre-Post Supervision Cost Differences (Tx n=417; WL n=235)

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
<th>Round</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx</td>
<td>$548,868</td>
<td>$512,729</td>
<td>-$36,139</td>
<td>-0.06584</td>
<td>-7%</td>
<td>79%</td>
</tr>
<tr>
<td>WL</td>
<td>$179,065</td>
<td>$308,144</td>
<td>$129,079</td>
<td>0.720851</td>
<td>72%</td>
<td></td>
</tr>
</tbody>
</table>

Note: All DOC costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars. (%Δ= Percent change).
Table 4.5 presents the pre-to-post cost summaries for the treatment and comparison groups. Although the treatment group’s costs were more than double the totals for the comparison group, the post-costs indicate a large increase in supervision costs for the comparison group, while the costs decreased for the treatment group.

**Incarceration**

**Table 4.6 Incarceration Cost Trends (Tx n= 226, WL n= 178)**

In regard to incarceration days, there was a significant (t = 2.790, p = .005) 40% difference in pre-post change in incarceration between the groups (in favor of the WL group, post-center date). Overall, both the treatment group and the waitlist comparison group had similar pre-treatment/center date incarceration costs. Table 4.6 provides the costs trends, per month, for both groups. There was a sharp decrease in costs for the treatment group prior to treatment discharge, while there was a sharp increase in costs for the waitlist comparison group. However, both groups return to their basic baseline rates three to four months post center-date.
As indicated in Table 4.7, the total cost of incarceration post-center date changed, however, in favor of the comparison group. Overall these differences accounted for a 14 percent increase in costs for the treatment group, or about $200,000 in incarceration costs.

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
<th>Round</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx</td>
<td>$1,446,999</td>
<td>$1,645,596</td>
<td>$198,597</td>
<td>0.137248</td>
<td>14%</td>
<td>40%</td>
</tr>
<tr>
<td>WL</td>
<td>$1,547,828</td>
<td>$1,141,658</td>
<td>-$406,170</td>
<td>-0.26241</td>
<td>-26%</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: All DOC costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars.

**Considerations:** The incarceration and supervision trends are likely interrelated in the sense that as clients exit incarceration they are put on some level of community supervision, so decreases in incarceration may be related to increases in supervision, and vice versa. Additionally, those individuals who have prior records and who are on supervision may have a greater probability of being arrested for new crimes or engage in technical violations of the terms of their release. These circumstances may lead to a level of misspecification in the resulting analyses. Additionally, the differences observed in the pre-post per cent changes between the groups must be considered in tandem with the actual cost outcomes for each group (i.e., the actual amount of money represented). These questions will be addressed in future analyses.

3. **Criminal Recidivism: Felony and Misdemeanor Crime-Specific Costs**

The Idaho Supreme Court supplied data (ISTARS) on both felony and misdemeanor court filings for the treatment and comparison groups pre- and post-center date. As previously
noted, the primary source used for the crime-specific felony cost estimations was McCollister, French, and Fang (2010), while the misdemeanor crime-specific cost estimations were created using corresponding fines found in Idaho Statutes. These are arguably the best crime-specific cost estimations available to-date. Some clients had multiple charges over the study period, and in those cases, due to data availability only the first three charges were used in the calculations presented below. Felony and misdemeanor post-center date average benefits were summed and then divided by the average cost of a treatment episode. The results indicate that for the combined felony and misdemeanor charges, the treatment group outperformed the waitlist group by 39% in the post-center date period. This finding can also be expressed as for every dollar invested in treatment, the state saved $1.46.

Table 4.8 Cost Benefit Pre-Post Averages (2010 Dollars): Crime (Tx n= 367; WL n= 384)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment (Tx)</td>
<td>$3,253</td>
<td>$528</td>
<td>$3,781</td>
<td>1.46</td>
<td>0.39</td>
</tr>
<tr>
<td>Comparison (WL)</td>
<td>$1,653</td>
<td>$1,117</td>
<td>$2,770</td>
<td>1.07</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1. PPB= Pre-Post Benefit Average Per Client; Misd.= Misdemeanor; Diff. = Difference.
2. Avg. benefits felony & misd.= ttl benefit (Pre–Post: diff.)/n of clients (Tx= 367; WL=384), mutually exclusive.
3. C/B Ratio = total benefit/average cost of treatment per episode ($2,585), mutually exclusive.
4. These figures include DOC costs.
5. All costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars.

Considerations: The crime-specific cost figures borrowed from McCollister et al. (2010), which include both tangible and intangible costs, were applied to the felony cases.

Note: Cost estimations in the following analyses on differences pre-post center date regarding felony and misdemeanor court filings contain costs associated with incarceration and supervision. Therefore, in order to avoid issues with the double-counting of costs, these estimations should not be combined.

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exclusively. Crime-specific costs for the misdemeanor group were estimated by reviewing the mid- to upper-limit fines described in Idaho’s corresponding criminal statutes. These estimations do not take into consideration criminal justice system costs, victim-related costs, crime career costs (lost productivity through incarceration), and other intangibles such as pain and suffering. Therefore, the figures reported here may be somewhat underestimated; the resulting total average savings for the combined recidivism measure may be less (for both groups) than if these costs included these considerations. Costs were adjusted using quarterly CPI (All) figures from the U.S. Department of Labor (base year = 1982-4) and are expressed as November 2010 dollars.

Cost-Benefit Findings Overview

Overall, some positive findings can be reported here with respect to treatment effects. Results from most of the analyses fall in favor of the treatment group. When examining client earnings, both trends were negative; however, the treatment group tended to perform better in the post-center date period than did the comparison group. Hypothesis 1 states that there will be a positive and significant difference between the treatment and comparison groups on costs associated with post-treatment monetary earnings was not supported, as the effects were not as strong as anticipated. The outcomes related to supervision and incarceration were mixed, showing some increases for the treatment group in incarceration days after treatment which could have an effect on both the earnings and crime (court filings) outcomes. Hypothesis 2 states that there will be a positive and significant difference ($t = 2.157, p = .031$) between the treatment and comparison groups on combined costs associated with post-treatment involvement in incarceration and supervision. Given the related findings, hypothesis 2 was not supported. The court filing outcomes, however, both include costs associated with the correctional system and
indicate that investments in treatment for clients with substance abuse problems are cost-
beneficial. Hypothesis 3 states that there will be a positive and significant difference between the
treatment and comparison groups on combined costs associated with post-treatment
misdemeanor and felony court charges. Given these findings, hypothesis 3 is supported.

**Aggregate Cost-Benefit Findings and Drill-Down Capabilities**

The aggregate level analyses presented above provide insight to cost patterns pre- and
post-treatment and provide answers to the main hypotheses presented in Chapter Three. These
main cost-benefit questions were fashioned in partnership with ICSA, as they were interested in
the overall cost trends in each of these core service areas. Beyond the utility of aggregate level
findings, the cross-agency linked and combined longitudinal database, which contains over 350
variables for each individual, has considerable potential for drill-down analyses. A number of
important, more in-depth questions may be addressed with these data in future analyses.
Truthfully, one could spend years investigating patterns of costs and benefits captured in these
data. This is especially the case in regard to modality and quality of treatment effects. For
instance, additional future analysis will include type of treatment as a stratification variable,
thereby enabling cost and benefit comparisons across treatment types. Type of treatment is not
currently collected by the DHW managing service provider.

Although the main cost-benefit questions have been answered, ODP staff and ICSA
members have begun to request additional drill-down analyses. For example, a deeper
understanding of some of the preliminary DOC and crime-related outcomes was of interest to the
ICSA group. Specifically, because felony offenders are a priority population, the group asked if
descriptives could be provided for felony-only DOC-involved (indicated by the presence of an
incarcerated days indicator pre- and post-center date) clients. To fulfill this request, the following analysis (Table 4.9) was provided.

### Table 4.9 Changes in Incarceration Prevalence Over the Study Period: Felony-Only Client Frequencies Pre and Post (Tx n= 196; WL n= 102)

<table>
<thead>
<tr>
<th></th>
<th>No Days</th>
<th>Days Pre</th>
<th>Days Post</th>
<th>Both Pre &amp; Post Days</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx</td>
<td>90 (46)</td>
<td>35 (18)</td>
<td>37 (19)</td>
<td>34 (17)</td>
<td>196</td>
</tr>
<tr>
<td>WL</td>
<td>29 (28)</td>
<td>9 (09)</td>
<td>25 (25)</td>
<td>39 (38)</td>
<td>102</td>
</tr>
</tbody>
</table>

Note: Selection criterion: felony charge indicator at any stage of the study period, then linked incarcerated days indicator at any stage of the study period. All categories are mutually exclusive; frequencies represent individual clients.

These findings are of particular importance in regard to the overall patterns that were revealed for the DOC-specific cost-benefit analyses. Recall that the incarceration cost outcomes favored the waitlist group. The findings for the felony-only group reveal a somewhat divergent story, as the percentages of clients in each category (no days, days pre, days post, and days pre and post) favor the treatment group rather than the comparison group. As is evident from the findings set forth in Table 4.9, 46 percent of the felony-only treatment group had no new days incarcerated, while just 28 percent of the comparison group had no new days incarcerated over the entire period ($\chi^2 = 60.991, p = .001$). Additionally, 18 percent of the treatment group had days incarcerated during the pre-stage, while just 9 percent of the comparison group had recorded pre-category incarceration; for the post-category 19 percent of the treatment group had days incarcerated, while 25 percent of the comparison had a recorded post-days incarcerated indicator. Quite noteworthy is the observation that the difference from pre- to post-center date period incarceration for the treatment group revealed just a 5 percent increase, while comparison group incarceration increased 178 percent. Although these simple comparisons
were not very difficult to develop, the supplementary analysis provided important context to the overall DOC-related findings observed in the cost benefit analysis. This example of drill-down analysis shows that there are many similar important questions to be addressed within these data.

PART II: ICSA Survey Results from an Exploratory Factor Analysis

The ICSA survey data analyses were conducted in order to address the effectiveness of the ICSA network and assess the ability of the group to form and sustain collaborative capacity. The results assembled from this survey process are presented below, along with some brief considerations to be made in light of the findings. As described in the previous chapter, the ICSA collaborative capacity survey contains ten distinct sets of questions. Each question set was crafted with the intent to measure a single underlying latent concept. For example, the first section of the survey asked questions centering on ICSA gains made through collective action; this section is labeled synergy. An exploratory factor analysis (EFA) was conducted to validate the survey instrument overall, and was carried out for each set of questions in order to identify how many components were present in the data and to identify any items that were not sufficiently correlated to the other items and the latent concept. After examining scree and component plots for the question sets that had more than one component, items that either did not sufficiently correlate or were not spatially grouped were removed. The following tables provide information on each set of questions after this psychometric process was completed.

Set 1 - Synergy

An EFA was conducted on the nine Synergy items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.837). This
outcome would be characterized as ‘great’ according to Field (2009). Additionally, all values for
the individual scale items calculated for this question set were well above the acceptable limit of
.5 (Kaiser, 1974). Bartlett’s test of sphericity \( \chi^2 (36) = 149.844, p < .001 \) indicated that
correlations between items were sufficiently large for an EFA. After the initial EFA was
conducted, one component had an eigenvalue over Kaiser’s criterion of 1 (5.94) and explained
66.02% of the variance. Table 4.10 shows the factor loadings (only one component was
extracted, as a consequence there was no rotated solution and thus there are no structure or
pattern matrices to report). The clustering of these items on one component suggests that it
represents synergy (gains made through collective action) quite well for the collected sample.

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>***Through working together how well are these partners able to…</td>
<td></td>
</tr>
<tr>
<td>Identify new and creative ways to solve problems?</td>
<td>0.861</td>
</tr>
<tr>
<td>Include the views and priorities of the people affected by the partnership’s</td>
<td>0.833</td>
</tr>
<tr>
<td>work?</td>
<td></td>
</tr>
<tr>
<td>Develop goals that are widely understood and supported among partners?</td>
<td>0.768</td>
</tr>
<tr>
<td>Identify how different services and programs in the community relate to the</td>
<td>0.807</td>
</tr>
<tr>
<td>problems the partnership is trying to address?</td>
<td></td>
</tr>
<tr>
<td>Respond to the needs and problems of the clientele?</td>
<td>0.886</td>
</tr>
<tr>
<td>Implement strategies that are most likely to work?</td>
<td>0.759</td>
</tr>
<tr>
<td>Obtain support from individuals and organizations outside of ICSA that can</td>
<td>0.785</td>
</tr>
<tr>
<td>either block the partnership's plan or help move them forward?</td>
<td></td>
</tr>
<tr>
<td>Carry out comprehensive activities that connect multiple services, programs,</td>
<td>0.826</td>
</tr>
<tr>
<td>or systems?</td>
<td></td>
</tr>
<tr>
<td>Clearly communicate to people in the community how the partnership's</td>
<td>0.779</td>
</tr>
<tr>
<td>actions will address problems that are important to them?</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>5.94</td>
</tr>
<tr>
<td>% of Variance</td>
<td>66.02</td>
</tr>
<tr>
<td>α</td>
<td>0.935</td>
</tr>
</tbody>
</table>

Notes: KMO = .837; Bartlett’s \( \chi^2 (36) = 149.844, p < .001 \); Little’s MCAR test = n/a (no missing values).
Set 2 - Leadership

An EFA was conducted on the ten Leadership items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.903, ‘superb’ according to Field, 2009), and all values for individual scale items were well above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2 (45) = 211.056, p < .001$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was identified to possess an eigenvalue over Kaiser’s criterion of 1 (7.69) and explained 76.92% of the variance. Table 4.11 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of leadership (effectiveness of both informal and formal leadership in ICSA) quite well for the collected sample.

Table 4.11 Summary of EFA Results for: Leadership (n= 21)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking responsibility for the partnership.</td>
<td>0.866</td>
</tr>
<tr>
<td>Inspiring or motivating people involved in the partnership.</td>
<td>0.892</td>
</tr>
<tr>
<td>Empowering people involved in the partnership.</td>
<td>0.919</td>
</tr>
<tr>
<td>Communicating the vision of the partnership.</td>
<td>0.879</td>
</tr>
<tr>
<td>Working to develop a common language within the partnership.</td>
<td>0.904</td>
</tr>
<tr>
<td>Fostering respect, trust, inclusiveness, and openness in the partnership.</td>
<td>0.850</td>
</tr>
<tr>
<td>Creating an environment where differences of opinion can be voiced.</td>
<td>0.852</td>
</tr>
<tr>
<td>Resolving conflict among partners.</td>
<td>0.805</td>
</tr>
<tr>
<td>Combining the perspectives, resources, and skills of partners.</td>
<td>0.863</td>
</tr>
<tr>
<td>Helping the partnership be creative and look at things differently.</td>
<td>0.933</td>
</tr>
</tbody>
</table>

| Eigenvalue | 7.69 |
| % of Variance | 76.92 |
| $\alpha$ | 0.965 |

Notes: KMO=.903; Bartlett's $\chi^2 (45)= 211.06, p< .001$; Little's MCAR test: $\chi^2 (25)= 24.801, p= .474$. 
Set 3 – Efficient Use of Resources

An EFA was conducted on the three Efficient Use of Resources items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.735, ‘good’ according to Field, 2009), and all values for the individual scale items were well above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity \[ \chi^2 (3) = 48.886, p < .001 \] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was identified to possess an eigenvalue over Kaiser’s criterion of 1 (2.62) and explained 87.33% of the variance. Table 4.12 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of efficient use of resources (ICSA partnership effective use of pooled resources) rather well for the collected sample.

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The partner organizations financial resources.</td>
<td>0.903</td>
</tr>
<tr>
<td>The partner organizations in-kind resources (e.g., skills, expertise, information, data, connections, influence, space, equipment, goods).</td>
<td>0.955</td>
</tr>
<tr>
<td>The partner organizations time.</td>
<td>0.945</td>
</tr>
</tbody>
</table>

Eigenvalue 2.62
% of Variance 87.33
\[ \alpha = 0.926 \]

Notes: KMO = .735; Bartlett's \[ \chi^2 (3) = 48.886; p < .001 \], Little's MCAR test: \[ \chi^2 (3) = 1.574, p = .665 \].
Set 4 – Administration and Management

An EFA was conducted on the five Administration and Management items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.792, ‘good’ according to Field, 2009), and all values for the individual scale items were well above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity \( \chi^2 (10) = 64.380, p < .001 \) indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was identified to possess an eigenvalue over Kaiser’s criterion of 1 (3.83) and explained 76.69% of the variance. Table 4.13 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of administration and management (effectiveness in carrying out partnership activities) rather well for the collected sample.

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating communication among partners.</td>
<td>0.927</td>
</tr>
<tr>
<td>Coordinating communication with people and with organizations outside the partnership.</td>
<td>0.826</td>
</tr>
<tr>
<td>Organizing partnership activities, including meetings and projects.</td>
<td>0.902</td>
</tr>
<tr>
<td>Preparing materials that inform partners and help them make timely decisions.</td>
<td>0.861</td>
</tr>
<tr>
<td>Evaluating the progress and impact of the partnership.</td>
<td>0.859</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>3.83</td>
</tr>
<tr>
<td>% of Variance</td>
<td>76.69</td>
</tr>
<tr>
<td>α</td>
<td>0.915</td>
</tr>
</tbody>
</table>

Notes: KMO = .792; Bartlett’s \( \chi^2 (10) = 64.380, p < .001 \); Little’s MCAR test: \( \chi^2 (14) = 10.132, p = .752 \).
Set 5 – Non-Financial Resources

An EFA was conducted on the four Non-Financial Resources items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.757, ‘good’ according to Field, 2009), and all values for individual scale items were well above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2 (6) = 46.494$, $p < .001$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was found to possess an eigenvalue over Kaiser’s criterion of 1 (2.89) and explained 72.36% of the variance. Table 4.14 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of non-financial resources (the extent to which non-financial resource needs are met by ICSA) rather well for the collected sample.

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills and expertise.</td>
<td>0.844</td>
</tr>
<tr>
<td>Connections to target populations.</td>
<td>0.764</td>
</tr>
<tr>
<td>Legitimacy and credibility.</td>
<td>0.931</td>
</tr>
<tr>
<td>Influence and ability to bring people together for meetings and activities.</td>
<td>0.856</td>
</tr>
</tbody>
</table>

Eigenvalue 2.89  
% of Variance 72.36  
$\alpha$ 0.863

Notes: KMO = .757; Bartlett's $\chi^2 (6) = 46.494$, $p < .001$; Little's MCAR test: $\chi^2 (2) = 0.253$, $p = .881$. 

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Set 6 – Financial Resources

An EFA was conducted on the three Financial Resources items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.682, ‘mediocre’ according to Field, 2009), and all values for individual scale items were above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2 (3) = 13.125, p < .005$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, one component was shown to possess an eigenvalue over Kaiser’s criterion of 1 (2.06) and explained 68.53% of the variance. Table 4.15 shows the factor loadings (only one component was extracted, hence there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of financial resources (the extent to which financial resource needs are met by ICSA) adequately. Additionally, due to the combination of a small number of items in set-6 and its similarity to set-5, further psychometric analysis was conducted.

First, sets 5 and 6, non-financial and financial resources, respectively, were combined in an EFA to investigate whether there was evidence of a common latent component. The resulting scree and component plots indicated the existence of at least 2 components and the items grouped along with the corresponding set. This analysis indicated that these two sets should remain separate and distinct. Second, in order to assess missing values, the Little’s MCAR test for set-6 [$\chi^2 [3] = 10.684, p = .014$] was significant, which indicated that the missing values do indeed have an impact on the overall model. Simple mean replacement was selected to attempt to correct this issue; however, this action was not fruitful. Given these considerations, the findings displayed in Table 4.15 should be considered with due caution.
Table 4.15 Summary of EFA Results for: Financial Resources (n= 19)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money</td>
<td>0.862</td>
</tr>
<tr>
<td>Space</td>
<td>0.786</td>
</tr>
<tr>
<td>Equipment and goods and services</td>
<td>0.833</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>2.06</td>
</tr>
<tr>
<td>% of Variance</td>
<td>68.53</td>
</tr>
<tr>
<td>α</td>
<td>0.752</td>
</tr>
</tbody>
</table>

Notes: KMO = .682; Bartlett’s $\chi^2$ (3) = 13.125, $p < .005$; Little's MCAR test: $\chi^2$ (3) = 10.684, $p = .014$.

Set 7 – Decision Making

An EFA was conducted on the three *Decision Making* items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.670, ‘mediocre’ according to Field, 2009), and all values for the individual scale items were above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2$ (3) =31.068, $p < .001$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was shown to possess an eigenvalue over Kaiser’s criterion of 1 (2.39) and explained 79.88% of the variance. Table 4.16 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents the latent concept of *decision making* (level of support for ICSA decisions and feelings towards individual decision making processes) adequately.
Table 4.16 Summary of EFA Results for: Decision Making (n= 21)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>How comfortable are you with the way decisions are made in ICSA?</td>
<td>0.942</td>
</tr>
<tr>
<td>How often do you support the decisions made by ICSA?</td>
<td>0.875</td>
</tr>
<tr>
<td>How often do you feel that you have been left out of the decision making process?</td>
<td>-0.862</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eigenvalue</th>
<th>2.39</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Variance</td>
<td>79.88</td>
</tr>
<tr>
<td>α</td>
<td>0.868</td>
</tr>
</tbody>
</table>

Notes: KMO = .670; Bartlett’s $\chi^2$ (3) = 31.068, $p < .001$; Little’s MCAR test: $\chi^2$ (2) = 4.465, $p = .107$.

Set 8 – Benefits of ICSA

An EFA was conducted on the seven Benefit items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.727, ‘good’ according to Field, 2009), and all values for individual scale items were well above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2$ (21) = 62.747, $p < .001$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was shown to possess an eigenvalue over Kaiser’s criterion of 1 (4.00) and explained 57.13% of the variance. Table 4.17 shows the factor loadings (only one component was extracted, as a result there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents benefits of ICSA (benefits realized by the ICSA partnership) rather well.
Table 4.17 Summary of EFA Results for: Benefits (n= 20)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced ability to address important issues.</td>
<td>0.777</td>
</tr>
<tr>
<td>Development of new skills.</td>
<td>0.807</td>
</tr>
<tr>
<td>Increased utilization of my expertise or services.</td>
<td>0.697</td>
</tr>
<tr>
<td>Acquisition of useful knowledge about services, programs, or people in the community.</td>
<td>0.682</td>
</tr>
<tr>
<td>Enhanced ability to affect public policy.</td>
<td>0.836</td>
</tr>
<tr>
<td>Enhanced ability to meet the needs of my constituency or clients.</td>
<td>0.844</td>
</tr>
<tr>
<td>Acquisition of additional financial support.</td>
<td>0.618</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.00</td>
<td>57.13</td>
<td>0.852</td>
</tr>
</tbody>
</table>

Notes: KMO = .727; Bartlett's $\chi^2$ (21) = 62.747, $p < .001$; Little’s MCAR test: $\chi^2$ (11) = 7.783, $p = .733$.

Set 9 – Drawbacks of ICSA

An EFA was conducted on the three *Drawback* items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.534, ‘mediocre’ according to Field, 2009), and all values for individual scale items were near or above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2$ (3) = 11.540, $p < .01$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was shown to possess an eigenvalue over Kaiser’s criterion of 1 (1.76) and explained 58.61% of the variance. Table 4.18 shows the factor loadings (only one component was extracted, hence there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents *drawbacks of ICSA* (drawbacks realized by the ICSA partnership) rather poorly for the collected sample.
Table 4.18 Summary of EFA Results for: Drawbacks (n= 22)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious diversion of time and resources away from other priorities or obligations.</td>
<td>0.485</td>
</tr>
<tr>
<td>Insufficient influence in partnership activities.</td>
<td>0.890</td>
</tr>
<tr>
<td>Conflict between my job and the partnership’s work.</td>
<td>0.855</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>1.76</td>
</tr>
<tr>
<td>% of Variance</td>
<td>58.61</td>
</tr>
<tr>
<td>α</td>
<td>0.606</td>
</tr>
</tbody>
</table>

Notes: KMO = .534; Bartlett's $\chi^2 (3) = 11.540, p < .01$; Little's MCAR test: $\chi^2 (3) = 4.544, p = .208$.

Set 10 – Overall Satisfaction

An EFA was conducted on the five Overall Satisfaction items with oblique (direct oblimin) rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for this analysis (.744, ‘good’ according to Field, 2009), and all values for individual scale items were near or above the acceptable limit of .5 (Kaiser, 1974). Bartlett’s test of sphericity [$\chi^2 (10) = 80.280, p < .001$] indicated that correlations between items were sufficiently large for an EFA. After the initial EFA was conducted, only one component was shown to possess an eigenvalue over Kaiser’s criterion of 1 (3.51) and explained 70.31% of the variance. Table 4.19 shows the factor loadings (only one component was extracted, consequently there was no rotated solution and thus there are no structure or pattern matrices to report). The clustering of these items on one component suggests that it represents overall satisfaction with ICSA (individual satisfaction with participation in ICSA) rather well for the collected sample.
Table 4.19 Summary of EFA Results for: Satisfaction (n= 21)

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>***How satisfied are you with…</td>
<td></td>
</tr>
<tr>
<td>The way the people and organizations in ICSA work together?</td>
<td>0.685</td>
</tr>
<tr>
<td>Your influence in ICSA?</td>
<td>0.816</td>
</tr>
<tr>
<td>Your role in ICSA?</td>
<td>0.841</td>
</tr>
<tr>
<td>ICSA’s plans for achieving its goals?</td>
<td>0.909</td>
</tr>
<tr>
<td>The way the ICSA is implementing its plans?</td>
<td>0.920</td>
</tr>
</tbody>
</table>

| Eigenvalue | 3.51 |
| % of Variance | 70.31 |
| α          | 0.890 |

Notes: KMO = .744; Bartlett's $\chi^2$ (10) = 80.280, $p < .001$; Little's MCAR test: $\chi^2$ (6) = 7.519, $p = .275$.

Validation of the ICSA Collaborative Capacity Survey Instrument

With the exception of the drawback set of questions, which had a Cronbach’s alpha just above .6, all other question sets had alphas ranging from good to excellent ($\alpha$ range = .752 - .965, omitting drawbacks). There were two sets of questions that did not perform as well as expected; drawbacks and financial resources. The drawbacks items did not load well on a single component, as most of the test statistics were marginal at best. When assessing the Cronbach’s alpha, however, one should remember that the value of $\alpha$ is in part dependent on the number of items in the scale$^{24}$ (Field, 2009). Therefore, the drawbacks three-item scale alpha of .6 is acceptable for the purpose of this analysis. The three-item financial resources scale did not

$^{24}$ Note the $N^2$ on the top half of the $\alpha$ equation: $\alpha = \frac{N^2 \sum \sigma^2_{\text{item}}}{\sum \sigma_{\text{item}}^2 + \sum \sigma_{\text{item}}}$ (Field, 2009: 674-675).
perform as well as expected, and it also suffered some from some missing data (in the form of non-response) in as much as the Little’s MCAR statistic was significant. Because of this issue, two separate analyses were conducted to attempt to improve the scale’s accuracy. First, a mean-imputed EFA model was tested and it was found that the model did not improve. Second, the financial items were combined with the non-financial items to investigate whether they both measured the latent component *resources*. As explained above, this test did not resolve the problem. There is an explanation, however, that goes beyond simple statistical calculations. The ICSA partnership had *no shared financial resources to manage*. Each agency’s budget is managed primarily by that same agency’s managers; the sole exception would be the Office of Drug Policy, acting lead agency for the ICSA, which has budgetary oversight over Health and Welfare. For the purposes of the present analysis it makes little sense to use the financial survey items in the assessment of collaborative capacity of ICSA.

**ICSA Survey Main Findings**

With the EFA issues duly documented and noted above, the overall validation of this survey instrument was identified. New additive or summary variables were created from these item sets to assess both the overall impact of ICSA and to explore the attitudes of the key individuals who were a part of the collaborative group. In the following analyses these summary variables are highlighted along with key survey items, and an overall descriptive assessment of the ICSA partnership.

In order to examine the overall attitudes towards the ten dimensions measured in the survey, scores from the EFA-included items within each set are averaged to create summary scores. With the exception of the benefits and drawbacks questions, which were nominally coded
(0= no, 1= yes), all other scales were reported on a 5-point Likert-type scale (coded 0-4). Table 4.20 provides these scores for each of the ten main item sets, along with the separate and important “do benefits of ICSA exceed the drawbacks” question (which is also illustrated in Figure 4.1, below). Additional analyses were conducted to investigate whether significant differences exist between the summary means of the voting (n= 9) and non-voting (n= 15) ICSA participants.

<table>
<thead>
<tr>
<th>Item Set</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synergy</td>
<td>1.99</td>
<td>0.768</td>
</tr>
<tr>
<td>Formal and Informal Leadership</td>
<td>1.86</td>
<td>1.105</td>
</tr>
<tr>
<td>Efficiency in the Use of ICSA Resources</td>
<td>1.69</td>
<td>1.015</td>
</tr>
<tr>
<td>ICSA Administration and Management</td>
<td>1.84</td>
<td>0.977</td>
</tr>
<tr>
<td>Use of Non-Financial Resources</td>
<td>2.53</td>
<td>0.774</td>
</tr>
<tr>
<td>Use of Financial Resources</td>
<td>2.85</td>
<td>0.567</td>
</tr>
<tr>
<td>ICSA Decision Making Processes</td>
<td>2.27</td>
<td>0.811</td>
</tr>
<tr>
<td>Benefits of Participation in ICSA †</td>
<td>0.61</td>
<td>0.335</td>
</tr>
<tr>
<td>Drawbacks of Participation in ICSA †*</td>
<td>0.35</td>
<td>0.347</td>
</tr>
<tr>
<td>Overall Satisfaction with Participation</td>
<td>1.93</td>
<td>0.988</td>
</tr>
<tr>
<td>ICSA Participation Benefits Exceed Drawbacks</td>
<td>2.67</td>
<td>1.494</td>
</tr>
</tbody>
</table>

Note: All means calculated on 0-4 likert scale. † denotes nominal coding: 0= no, 1= yes. *The drawbacks question set interpretation is reverse, as a lower score denotes a more positive outcome (note that it mirrors the benefits question set). All item set means were tested for significant differences between voting and non-voting members of ICSA. Scale values and labels were: 0 = poor; 1 = not so well or fair; 2 = somewhat well or good; 3 = very well or very good; 4 = excellent.

For the first set, synergy, survey respondents were asked to think about and to assess how well gains have been made through collective action within the ICSA partnership. The average measured below the scale mid-point and between the “not so well (1)” and “somewhat well (2)”
ratings. For the second set, *leadership*, survey respondents were asked to rate the total effectiveness of ICSA’s leadership in several key areas (e.g., responsibility, motivation, empowerment, communication, resolving conflict, etc.). The total average measured below the scale mid-point and between the “fair (1)” and “good (2)” ratings. There was no significant difference between voting and non-voting ICSA members on the leadership item set. On average, the non-voting ICSA participants rated ICSA leadership effectiveness the same as voting members.

For the third set, *efficiency in the use of ICSA resources*, respondents were asked to rate the use (poor-to-excellent) of three types of resources (financial, in-kind, and organizational time). The total average measured below the scale mid-point and between the “fair (1)” and “good (2)” ratings. There was no significant difference between voting and non-voting ICSA members on the efficiency in the use of resources item set. On average, the non-voting ICSA participants rated ICSA use of resources effectiveness the same as the voting members.25

For the fourth set, *administration and management*, respondents were asked to rate the effectiveness of ICSA in carrying out administration and management activities (poor-to-excellent). The total average measured below the scale mid-point and between the “fair (1)” and “good (2)” ratings. There was, however, an indication of the test nearing a level of significant difference between voting and non-voting ICSA members on the administration and management item set (voting mean= 2.26; non-voting mean= 1.58). Due to small sample size, an effect size calculation (r) was performed to tease out any meaningful differences. It was found that there is in fact a medium effect size ($t = -1.724, p = .09; r = .345$). On average, the non-

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25 Population group variances did significantly differ; $F [22] = 6.913, p = .015$; therefore, equal variances were not assumed; however, the t-value was non-significant.
voting participants rated ICSA administration and management effectiveness more negatively than the voting members.

For sets five (use of non-financial resources), six (use of financial resources), and seven (ICSAs decision making processes), respondents were asked whether non-financial/financial needs had been met (on a scale of none of what it needs to all of what it needs) and how comfortable each respondent was with how decisions were made in ICSA (none of the time – to – all of the time). The total average for all three measures scored above the scale mid-point and between the “some of need/time (2)” and “most of need/time (3)” ratings.

For the last three item sets, eight and nine (benefits and drawbacks of ICSA participation), along with set ten (overall satisfaction), respondents were asked to simply indicate (yes or no) whether they had received the corresponding benefit or drawback, and finally they were asked to indicate their level of satisfaction (on a scale ranging from not at all to completely) with important aspects of participation in ICSA. The total average of both sets eight and nine measured above the scale mid-point (drawback items were reversed), indicating that benefits outweighed costs on these measures. The average score for overall satisfaction with participation in ICSA measured below the scale mid-point and between the “a little satisfied (1)” and “somewhat satisfied (2)” ratings.

One additional stand-alone question on the survey asked respondents whether the benefits in participating with ICSA outweighed the drawbacks (on a scale ranging from drawbacks greatly exceed to benefits greatly exceed). The average score for the benefits of participation versus the drawbacks of participation in ICSA measured well above the scale mid-point and between the “benefits and drawbacks are equal (2)” and “benefits exceed the drawbacks (2)” ratings. Figure 4.1 below further illustrates the distribution of scores on this specific question.
Importantly, 45.8% of the respondents felt that the benefits of participation in ICSA greatly exceeded the drawbacks.

Figure 4.1 The Benefits of ICSA Participation Versus the Drawbacks (N= 24)

Figure 4.2 below illustrates the same general pattern, but the scores are segregated by voting versus non-voting ICSA members. Only non-voting members felt that the drawbacks of participation in ICSA greatly exceeded the benefits. The distribution of scores, however, shows that nearly half of the other non-voting members felt the opposite, or that the benefits of participation greatly exceeded the drawbacks.

The difference between those members who have voting power versus non-voters is a bit hazy, but there is some distinction. The most appropriate distinctions are that voting members are legislatively designated to attend the meetings and they are either the director of their respective agency or an appointed executive. The non-voting members were comprised of community treatment facility directors, interested mid-level managers, and other executives who are key
stakeholders in the substance abuse treatment field. This distinction is important to make because those participants who are not mandated to attend and do not have a direct decision making power may feel as if their opinions do not matter, which could have an effect on their survey outcomes.

![Figure 4.2 The Benefits of ICSA Participation: Voting/Non-Voting Breakdown (N= 24)](image)

**Figure 4.2 The Benefits of ICSA Participation: Voting/Non-Voting Breakdown (N= 24)**

**Written Responses in the Survey: Key Themes**

There were two places in the survey where respondents were asked to provide written comments. The first directly followed the survey sections that aimed to measure benefit and drawback levels (item sets eight and nine above), labeled below as *benefits/drawbacks comments*. The second comment response solicitation was located at the end of the survey, labeled below as *concluding comments*. Most of the respondents who provided written comments did so in the space provided at the end of the survey (n= 13, 54%; voting n= 5; non-voting n= 8).
A few survey participants gave feedback in both sections, and one survey featured additional hand-written comments in response to specific questions on the survey.

There were some serious concerns voiced by the participants in the reprinting of their comments verbatim, and many thought that because of the relatively small size of the group that their colleagues could decipher individual comments and trace them back to their originator. Due to this issue, only the broad themes are presented within the text of this study and within any survey results materials that are reported back to the group. The full text responses are available in Appendix B.

The following section summarizes the main themes that were garnered from the comments volunteered in the survey. Three main summary categories capture the set of themes that were repeated throughout the written comments. Themes include: negative responses, ineffectiveness, and positive responses. Each main category is covered below, beginning with negative responses.

Summary Categories

The negative responses category captured themes which centered on conflict, distrust, finger-pointing, and fear. These four inter-related themes were often followed by concerns with frustration and dysfunctional tension within the group. In many workplace and inter-personal relationships, even within a network aimed at providing aid to those in desperate need, there is going to be contention over objectives and methods and some degree of dysfunction. These issues may also be magnified during times of limited shared-resources and limited client-service resources. Under these circumstances a common reaction among parties is to “dig-in” and defend what little resources you have so that you may fight another day. Part of this digging-in process
involves a common play-ground tactic – namely, that of casting blame upon perceived opposition. The blame game is clearly present within the ICSA participant ranks – whether agency directors or program managers wish to acknowledge it or not.

Fueled by fear of reprisal (both political and financial in the form of budget cuts), general distrust, and policy goal conflict among participants, a number of participants viewed the ICSA collaboration as a source of substantial frustration. Some of them observed that the apparently productive communication going on amongst partners in ICSA, that to outward appearances seemed to be positive, was more an illusion than reality; they opined that this apparent cooperative outlook was not truly representative of several individuals’ feelings and actual sentiments. Some felt that an atmosphere of perceived threats prevailed in the ICSA process. What do people do when they feel threatened? They may get defensive and cast blame on others. This leads to the following category, ineffectiveness themes.

Comments related to the overall ineffectiveness of the ICSA partnership were raised in several contexts. First, a number of participants believed that ICSA was not as effective as it could be because it lacked a clearly defined role in the policy process. One survey respondent even questioned whether ICSA was created as merely a political promise without the expectation that it be truly operational. Due to this perceived lack of a clear role, some individuals perceived ICSA as an impediment to effective operations. For example, instead of streamlining the many processes (or cutting through the red-tape) in the Substance Use Disorder (SUD) system, they felt that ICSA only added another layer to the already muddled bureaucracy. Other survey participants made the point that ICSA’s perceived failures could have been thwarted had the group had proper funding and more support staff. Finally, one respondent noted that there
seemed to be a great distance between the decision-makers in ICSA and the substance abuse treatment clients who were affected by their decisions.

It is important to note that there were some notable “bright-spots” observed in the comments. A number of survey participants cited the fact that an increased level of cooperation was taking place among the active participants. These conclusions were substantiated through the observation of increased knowledge-sharing, data-sharing, intra-organizational transparency (especially in budgeting), and more open dialog. Some respondents noted that with the softening of the barriers between these organizations, communication was enhanced leading to greater coordination among partners. These three main positive strides – enhanced cooperation, communication, and coordination of activities – worked to decrease levels of frustration for some ICSA respondents. For example, one survey respondent noted that ICSA provided a forum that allowed participants to not only voice their opinion, but it also served as a resource for finding answers to tough questions.

Overall, it is fair to say that many of the comments mirrored the negative findings extracted from the analysis of the survey items. A lot of the negative perceptions seem to originate from the idea that ICSA was a rigid structure that was forced upon the system and the decision-makers within that system. It may have given some individuals the impression that they could not be trusted with the management of their own agencies, thereby reducing local control and disrupting legacy power structures. Some ICSA participants felt that it was necessary to require that such a group be formed because of the various problems of silo-orientated actions that have plagued the system historically. For example, some were concerned with problems such as lack of sufficient resources, lack of reliable data, and lack of sustained and fair oversight. One respondent raised this very issue, questioning whether the actors within this system could
come together voluntarily in a sustained fashion for any great length of time. A genuine commitment to come together to address the many complex policy issues that face the substance use disorder system seems to be one necessary requirement if attitudes are going to change with respect to the collaborative process. These patterns of negative perceptions indicate that, overall, the key stakeholders need to reengage and approach the problem solving effort with a renewed sense of responsibility and build a level of trust required to achieve the synergies of thought and practice that would improve the system. In light of these issues, some key recommendations are presented in the next chapter.

Cost-Benefit and Survey Analyses Summary

The cost-benefit results from most of the various analyses conducted fall largely in favor of the treatment group. When examining client earnings, both trends were negative; however, the treatment group tended to perform better post-center date. The hypothesis that there will be a positive and significant difference between the treatment and comparison groups on costs associated with post-treatment monetary earnings finds some support. The outcomes related to supervision and incarceration were mixed, showing some increases for the treatment group in incarceration days post treatment, which could have an effect on both the earnings and crime (court filings) outcomes. The hypothesis that there will be a positive and significant difference between the treatment and comparison groups on costs associated with post-treatment involvement in incarceration and supervision was therefore not supported. The court filing for felony and misdemeanor offenses outcomes, however, both include costs associated with the correctional system and indicate that investments in treatment for clients with substance abuse problems are clearly cost-beneficial. Consequently, the hypothesis that there will be a positive
and significant difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges is supported.

Overall, the findings related to the ICSA participant survey indicate that, on average, participants in the ICSA partnership felt that they did not do a good job making gains by way of collective action, and that the formal and informal leadership along with administrative and management activities were not very effective. Moreover, the predominant view is that ICSA did not make use of its resources (time, money, and in-kind services) to an appropriate degree. Participants felt that, on average, ICSA participation benefits outweighed the drawbacks; however, they were only mildly satisfied overall with their involvement. The findings drawn from the analysis of the survey items mirror the written sentiments provided by the respondents rather closely. These findings will be discussed further in the following chapter.
CHAPTER FOUR REFERENCES


In regard to past efforts to estimate costs of crime by category, many studies began with a limited perspective. Therefore, outcomes or estimates only covered, for example, crime victims only or a single agency or small group of organizations (McCollister, French, & Fang, 2010). Using what they call a general societal perspective that includes costs associated with victimization, criminal justice system, crime career (lost productivity due to incarceration) and intangible costs (indirect crime victim losses), McCollister et al. (2010) provide a new, comprehensive list of crime-specific costs estimates; that list is used here.
CHAPTER FIVE
DISCUSSION AND CONCLUSION

As stated in the introduction of this study, Idaho is currently facing major budget shortfalls. Social services, such as those associated with substance abuse treatment, are often ripe grounds for trimming costs; however, many lawmakers do understand the value of investing in treatment programs that produce economic savings over time. Currently, there is a growing demand at the state (and national) levels for cost-benefit research, especially with regard to research projects which can show where scarce budget dollars are well spent. In response to this demand, this study employed cost-benefit methods to measure the economic benefits associated with the provision of substance abuse treatment.

To lend context to the cost-benefit findings, this research utilized inter-disciplinary theoretical concepts from the fields of public policy analysis, criminal justice administration, and criminology. Notably, substance abuse is considered a complex public problem (referred to as a “wicked problem” by public policy scholars) in need of constant attention and management, and substance abuse treatment is considered a form of social support (Cullen, 1994). As detailed in the preceding chapters, when these two unique theoretical components/frameworks are combined, they offer a rich context within which the cost-benefit findings can be better appreciated and understood.

This chapter presents a discussion of the analyses provided in Chapter Four. To begin, the cost-benefit results are discussed, followed by a summary and discussion of the ICSA survey results. These two sections will conclude with a summary of the overall research questions and hypotheses. Next, these findings are discussed in the context of the theoretical framework laid
out in Chapter Two. Limitations are then noted, followed directly by a discussion of recommendations for future research. This chapter concludes with a discussion of policy implications and recommendations for Idaho substance abuse treatment system policy makers.

**Cost-Benefit Findings**

The grand question that was investigated in this study was whether a group of clients who received substance abuse treatment saved the State money in the long-term vis-à-vis an equivalent non-treated comparison group. To gain some understanding on this general research question, the following three-part question was investigated: do the treatment and comparison groups differ on the following key outcomes – *post-treatment monetary earnings* (measured by quarterly earnings), *DOC involvement* (measured by days per month incarcerated and supervised prior to and after the study center date), and *criminal recidivism* (measured by felony and misdemeanor court filings). Each research question is addressed in-turn.

**Monetary Earnings**

The hypothesis for client earnings tested the question of whether there was a positive (from pre to post) and statistically significant difference in monetary earnings between the treatment and control groups. When the client earnings were examined, it was found that aggregate earnings trends for both groups were negative; however, the treatment group tended to perform better post-center date. The hypothesis associated with post-treatment monetary earnings finds some support in that there was a 6% difference in pre-post change in earnings.

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27 \(H_{0b}\): There is no difference between the treatment and comparison groups on post-treatment monetary earnings.  
H1b: There is a difference between the treatment and comparison groups on post-treatment monetary earnings.
between the groups. Due to the overall negative trends and lack of statistical significance, however, the alternative hypothesis must be rejected.

In light of the overall earnings trends, there are some additional considerations that must be noted. As was noted previously, data from the Idaho Department of Labor (IDL) indicate substantial increases in unemployment rates (from a rate of 3.5% to 9.5% over the study period) during roughly the same time that data were collected for this research (i.e., 2008-2010). These overall negative economic trends likely have a greater impact on those who already struggle financially, such as those with substance abuse issues and those persons who are also involved as offenders in the criminal justice system. Both of these factors are widely known to have a negative impact on both employability and employment record stability (Walker, 2006).

Additionally, the earnings data represent only client income that is reported to the IDL and do not include income from non-reported sources. For example, earnings do not include any income from jobs that are paid “under the table” and other income gained from illegal activities such as drug dealing or the selling of stolen property. Therefore, the earnings data employed here only capture a portion of each client’s true income.

**DOC Involvement – Supervision and Incarceration**

The hypothesis for client DOC involvement tested the question of whether there was a positive (from pre to post change) and a statistically significant overall difference in cost savings associated with pre- to post-decreases in combined supervision and incarceration costs between

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28 H0c: There is no difference between the treatment and comparison groups on total costs associated with post-treatment DOC involvement in incarceration and supervision.  
H1c: There is a difference between the treatment and comparison groups on total costs associated with post-treatment DOC involvement in incarceration and supervision.
the treatment and control groups. Costs were supplied by the DOC on average per-day costs for supervision (June 2009, $4.00) and for incarceration (June 2009, $52.00). These cost categories served as indicators for treatment success. Although there was some indication of positive treatment effects (there was a statistically significant difference in supervision costs favoring the treatment group, however, the combined costs were significant and pointed in favor of the comparison group), the findings associated with DOC involvement were not conclusive enough to reject the null hypothesis.

The findings for supervision alone fell in favor of the treatment group, as the overall trend in spending decreased post-center date by seven percent, which on average saved $36,000 dollars during that same time period. Also, the comparison group had a large increase in supervision costs, as there was a seventy-two percent increase in days served, which on average cost the system $130,000 over post-center date study period.

The costs associated with incarceration days pre- and post-center date, however, eroded whatever savings were identified for the treatment group through the supervision-related computations. In examining the incarceration trends, the patterns are near reverse-images of each other. There is a distinct decrease in treatment group costs associated with days incarcerated during the first fifteen-month period, while the costs for the comparison group spike. The patterns then reverse, with a sharp increase in treatment group costs during the last fifteen-month period, while the costs for the comparison group drop dramatically, then gradually increase. The forces that are driving these patterns need more investigation. We can infer, however, that there is a treatment policy-related influence at work. The troubling issue here is that when examining the treatment group pattern, it is clear that the effects of treatment are not sustained over the course of the study. It may be that the increase in treatment group costs associated with more
incarceration days are driven by those treatment clients who failed to complete their treatment regimens by either self-selecting out or by entering or reentering prison.

Importantly, additional analyses indicated that when looking at individual felony-only client’s changes in incarceration days, the percentages of clients in each category (no days, days pre, days post, and days pre and post) significantly favor the treatment group rather than the comparison group. In fact, 46 percent of the felony-only treatment group had no new days incarcerated, while just 28 percent of the comparison group had no new days incarcerated over the entire period. Additionally, 18 percent of the treatment group had days incarcerated during the pre-stage, while just 9 percent of the comparison group had recorded pre-category incarceration; for the post-category nineteen percent of the treatment group had days incarcerated, while 25 percent of the comparison had a recorded post-days incarcerated indicator. The significant difference from pre- to post-center date period incarceration for the treatment group revealed just a five percent increase, while the comparison group incarceration prevalence increased by 178 percent. This supplementary analysis provided important context to the overall DOC-related findings and indicate that further such “drill down” analyses are needed.

Criminal Recidivism – Felony and Misdemeanor Court Filings

The hypothesis[^29] for criminal recidivism tested the question of whether there was a positive (from pre to post change) and significant overall difference in cost savings associated with pre- to post-decreases in combined felony and misdemeanor crime-specific per-unit costs

[^29]: H0a: There is no difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges.
H1a: There is a difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges.
between the treatment and control groups. Crime-specific per-unit cost estimations for the felony court filings were applied (McCollister et al., 2010). The crime-specific per-unit cost estimations for misdemeanor court filings were estimated using mid to upper-level fines that corresponded to each specific charge. These cost categories served as proxy indicators of treatment success. Findings revealed a strong indication of positive treatment effects. Therefore, the findings associated with criminal recidivism were sufficiently conclusive to reject the null hypothesis in favor of the alternative, that there is a significant difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges.

The average (per-offender) combined pre-to-post economic benefit for the treatment group was $3,781. This resulted in a positive cost-benefit ratio of 1.46, which can be interpreted as meaning that for every dollar invested in treatment there was a savings of $1.46. The average (per-offender) combined pre-to-post economic benefit for the comparison group was $2,770. This resulted in a positive cost-benefit ratio of 1.07, which can be interpreted as for every dollar invested in the waitlist, there was a savings of $1.07. When compared, the treatment group outperformed the comparison group significantly by 0.39 percent or $0.39 per dollar spent. Overall, for this study, a one-dollar investment in treatment yielded a savings of $1.46. It is important to note that these savings include costs tied to those clients who failed their treatment and/or had additional criminal charges in the last fifteen months of this study.

The crime-specific cost figures previously computed by McCollister and colleagues (2010), which include both tangible and intangible costs, were applied to felony cases only. Crime-specific costs for the misdemeanor group were estimated through a review of fines described in Idaho’s corresponding criminal statutes. These estimations do not take into
consideration criminal justice system costs, victim-related costs, crime career costs (lost productivity through incarceration), and other intangibles such as pain and suffering. Consequently, the cost figures reported here are knowingly conservative. Additionally, McCollister and colleagues (2010) included costs within their estimates associated with incarceration and supervision, such as the average sentence length of any corresponding crime and then its associated marginal costs. Thus, DOC-related costs are nested within the cost estimates for the felony crime-specific cost estimations. The inclusion of these costs within the crime-specific estimates is important to note here to avoid the urge to merge or compare the DOC-related cost trends with the recidivism estimates because of the possible issue of double counting costs.

**Cost-Benefit Summary**

The cost-benefit analyses conducted indicate mixed overall results. That said, there are nonetheless some positive patterns with respect to treatment effects. The outcomes related to client earnings, supervision, and incarceration were mixed, showing some increases for the treatment group in incarceration days post treatment, which could have an effect on both the earnings and crime (court filings) outcomes. The hypotheses that there will be a positive and significant difference between the treatment and comparison groups on costs associated with post-treatment involvement in incarceration and supervision, and client earnings, were therefore not supported.

The court filing for the combined felony and misdemeanor offenses outcomes, however, both include costs associated with the correctional system and indicate that investments in treatment for clients with substance abuse problems are cost-beneficial. Therefore, the
hypothesis that there will be a positive and significant difference between the treatment and comparison groups on costs associated with post-treatment misdemeanor and felony court charges is supported.

When additional analyses were conducted on specific groups, such as the felony-only group, some stronger patterns emerged that indicate positive treatment effects. This example indicates a need for further analyses of this kind. For example, the treatment group cost estimations are conducted here at the aggregate level and could benefit from isolating effects by treatment outcomes, such as whether the treatment client successfully completed treatment. Even with the inclusion of the cost-estimations tied to non-successful treatment clients within the treatment group, the overall cost benefit ratio for criminal recidivism was positive, which indicates that treatment is effective, even when a portion of those receiving it drop out or fail.

**Survey Findings**

The ICSA survey data analyses were conducted in order to address the effectiveness of the ICSA network and assess the ability of that interagency group to form and sustain collaborative capacity. Overall, the findings indicated that the average participant in the ICSA partnership felt that, as a group, ICSA members did not do a good job making gains by way of collective action. Further, many respondents indicated that the formal and informal leadership along with administrative and management activities were not very effective. The prevailing view among participants is that ICSA did not use its resources (time, money, and in-kind services) to an appropriate degree. Participants also felt that, all things considered, ICSA participation benefits outweighed the drawbacks; however, they were only mildly satisfied overall with their involvement in the collaborative process.
Ten separate latent domains were conceptualized and measured by the survey. After validating the survey items within each set of grouped questions, new summary variables were created. The analysis of the question set summaries revealed relatively low levels of ICSA participant ratings on synergy, leadership, resource use, administration and management, and overall satisfaction with collaborative process participation. The separate resource question sets, along with the decision-making questions scored, on average, a bit higher, tending to measure on the mid-range on the scale.

Although these patterns indicate some negative perceptions of participation and of the group, when asked whether the benefits of participating with ICSA outweighed the drawbacks, the average response measured well above the mid-point on the scale. This finding is a bit contradictory however, as it indicates that ICSA participants had some concerns with how the group was managed, or how ICSA made decisions. Most process participants felt that the benefits of participating in ICSA nonetheless outweighed the drawbacks. This overall sentiment was also present within the written comments, as many survey participants indicated that while there were numerous problems associated with ICSA they understood that there were some clear and noteworthy benefits in working together.

As suggested in the foregoing analysis, a lot of the negative perceptions recorded seemed to originate from the idea that ICSA was a rigid structure that was forced upon the system. This structure reduced local control and discretion, thereby disrupting legacy power structures. Some survey participants felt that it was necessary to require such a group because of the various problems that have plagued the system, such as: silo-centered thinking, lack of sufficient resources, lack of reliable data and data sharing, and lack of sustained and fair oversight.
Whatever experiences may have given impetus for complaints, if attitudes are going to change with respect to the collaborative process there needs to be a genuine commitment to come together to address the many complex policy issues that face the substance use disorder system. These patterns of negative perceptions indicate that key stakeholders need to reengage and approach the problem solving effort with a renewed sense of responsibility. They need to work on building a level of trust required to achieve the synergies of thought and practice that would improve the system.

**The Cost-Benefit and Collaborative Capacity Nexus**

The current research considered the proposition that clients who receive treatment will perform better on a number of measurable cost-benefit outcomes than a matched non-treated comparison group of clients. In particular, it was proposed that enumerated aggregate costs associated with criminal activity and involvement in the criminal justice system would decrease post-treatment while aggregate level benefits such as earnings will increase. Along with this first proposition, the second and equally important proposition considered how social support, as measured through the systemic provision of treatment services, may be impacted by how well a “cooperative” (collaborative process) of state agency and private stakeholders can work together to address substance abuse problems. A theoretical concept not yet addressed in the criminal justice literature is the concept of “collaborative capacity,” which refers to the process of how social support is built and maintained (Weber & Khademian, 2008a; Weber & Khademian, 2008b; Agranoff, 2006; Kettl, 2006; Bryson, Crosby, & Middleton Stone, 2006; McGuire, 2006; Thompson & Perry, 2006). Therefore, the second proposition argues that increased collaborative capacity is a central component of building, sustaining, and generating social support.
When these two propositions are combined, I argue that there is a positive relationship between collaborative capacity and social support and an inverse relationship between increased social support and costs associated with criminal activity – namely, activities related to illegal substance use and abuse. Although a direct link between these two theoretical propositions has not been made here, there have been some positive steps taken to begin to understand this process in action. Furthermore, the general ideas do find support. First, there is evidence that the ICSA group has not performed at the level hoped, indicated by the ICSA participant’s frustrations with the collaborative process and the overall outcomes that have been impacted, such as budget overruns. Thus, the overall ability for this system to build and sustain collaborative capacity is hampered, and this low collaborative capacity has negatively impacted the quality and provision of social support (treatment) throughout the system. This low collaborative capacity is reflected in the mixed cost-benefit findings presented here.

**The Combined Impact**

First, this study sought to address the issues surrounding general lack of understanding of the economic impact that substance abuse treatment has in the State of Idaho. This goal had two parts. The first was to provide empirical information centered on cost-benefit to policy makers. The second part sought to identify a sustainable process of interagency collaboration. The hope was that this collaboration could be drawn upon (on an annual basis) to both generate new, up-to-date information on program impacts and facilitate the production of continued empirical findings related to the efficiency of substance abuse treatment services in Idaho.

This study has accomplished both of these tasks. It was shown that there are available cost and benefit data that, when merged properly, can be used to document treatment effects and
inform policy makers as to the cost-beneficial outcomes related to investments in substance abuse treatment. It has shown that although there have been efforts to build and sustain a collaborative network of key stakeholders and policy makers in the state, the process is still in need of refinement, and much work remains to be undertaken to improve the collaborative capacity of the system.

Second, the field of criminal justice and criminology has yet to adopt the “wicked problem” concept used in public policy studies. I believe that the adoption of this concept will positively impact the field in two distinct ways. First, by adopting the wicked problem concept (and by default a collaborative network perspective), researchers in criminal justice and criminology will better conceptualize and assess complex and dynamic criminal justice organizational relationships. Part of this conceptualization may even lead to a prospective inquiry to develop ways in which to understand how social support is created and maintained, hence going beyond the practice of just stating that it impacts selected outcomes.

The second way that the adoption of the wicked problem concept may help fill gaps in the extant research is to help redefine and deepen the public policy evaluation process by adding a critical contextual dimension. Measured outcomes in treatment evaluation studies often stand alone, without a review of the system (made up of key decision-makers) that governs it. In adding the contextualizing collaborative capacity and network analyses into evaluation frameworks, researchers will gain deeper understanding of the system-related influence on outcome patterns.

Overall, the adoption of this concept means two things for the State of Idaho. First, state budgets must include the modest resources required for building and sustaining a collaborative body that is tasked with continual monitoring and systematic empirical evaluation of the
operations and outcomes of the substance abuse treatment system. This group must operate under an open-system model and draw upon outside sources of support such as additional grant funding and university-based intellectual resources. Furthermore, this group must have unimpeded access to data across the system and have the ability to merge it, either through a central data repository or through routinized data sharing. Moreover, there must be a core research staff that is dedicated and well supported in their efforts to address these issues. The current piecemeal approach is not an efficient way to continue to conduct evaluation within this system. It follows that, at some point, the Idaho Legislature must develop a long-term plan for financial support of any ICSA-like process. Without such long-term support it is unlikely that any substantial steps to improve the system, as it currently exists, will be undertaken.

Through the conceptualization of substance abuse as an “unstructured, cross-cutting, and relentless complex public policy problem,” practitioners and policy makers alike will be better equipped to understand what many researchers in this area already know – client failure (i.e., relapse and recidivism) is to be expected and recovery from addiction is an ongoing process. Furthermore, incarceration is rarely the best form of intervention for non-violent drug offenders, and that effective (cost-beneficially) management of persons, who exhibit distinct lifestyle and criminogenic risks and needs, can be achieved through ongoing collaboration and information sharing and collective analysis. As stated, the effort to improve substance abuse treatment services should be understood as an inclusive cooperative effort with collateral effects, and the system and collaborative network of care involved should be analyzed as such.
Study Limitations and Recommendations for Future Research

Within the framework laid out in this research there are two interrelated considerations to be addressed. First, treatment quality does not mean much if treatment type is not included in the analysis. Given this fact, once data are available\(^{30}\), treatment type will be used as a stratification variable within the cost benefit framework, and it will be used as well within the multivariate models that will be featured in subsequent studies. Grouping outcomes by type of treatment will provide a cost-effectiveness narrative that will more fully inform policy decisions made by officials and legislators responsible for treatment-system oversight.

Previous cost-benefit research in Idaho has not addressed treatment type as an important factor in impacting outcomes measured within either a cost-effectiveness or cost-benefit framework (modality, location/rural services, number of unique episodes, program type/overall description, etc.). Presently, there is no up-to-date or reliably maintained data source on the in-network treatment providers with respect to detailed information of what types of treatments clients within this study actually received. In-network providers are required to maintain a certain level of quality of care and best practices to join the network and to maintain membership. This process of certification and monitoring, however, has not been carefully developed and institutionalized, a fact which has led to an overall dearth of treatment-level information in the state.

Treatment type must be included in studies to follow this one if valuable conclusions are to be drawn for making decisions about treatment modalities to be preferred. Therefore, program

\(^{30}\) To reiterate, treatment type information is not currently systematically collected and maintained by the managing service provider for the Department of Health and Welfare. These data will become available, however, in subsequent studies for which this dissertation can serve as a foundation.
information pertaining to all treatment providers within the Health and Welfare network and treatment modalities offered within the correctional system will be included in future work built out from this study. Importantly, in-network provider profiles should be reviewed and new content-derived data should be created in order to document treatment modalities offered by different providers as a proxy for treatment type.

The cost estimations related to the earnings data do not include income from other, non-reported sources. Therefore, the earnings data should not be considered a complete picture of client income. Although this measure is incomplete, it still serves as an acceptable indicator of client stability. For example, one would assume if any one client had sparse and inconsistent income pre-treatment and steady income over a long period post-treatment intervention, that this pattern would indicate treatment success (at some level).

Additionally, the available earnings-related findings are difficult to interpret due to the recessionary economy and the skyrocketing unemployment rate in Idaho occurring over the course of this study. Although this study did not integrate the unemployment rate into the earnings figures, there is no doubt that unemployment had a significant impact on this population. As stated previously, I would argue that these effects are amplified in this population. Given that the average income of the entire sample is below the federal poverty line, most of these clients likely do not possess the ability to “weather the economic storm” as well as more prosperous citizens. Many of the individuals within this study probably do not have sufficient savings to pay basic and core bills such as rent and utilities, not to mention decent food, if they experience unemployment. The impacts of unemployment must also be integrated in future cost-benefit studies that include earnings and employment measures.
The DOC estimations should also be treated with caution because the costs are based on average daily costs per inmate (which may include fixed operational costs that do not vary on a daily basis) and may not be an accurate representation of the marginal costs of additional or reduced days in either supervision or incarceration realms. Further, this research does not attempt to estimate the risk of new criminal victimization assumed upon any client’s release from custody. Thus, it may be that there are no impactful costs or benefits related to the DOC data because the data available may not penetrate to the appropriate level of cost estimation based on an assessment of the marginal costs associated with one day or unit of supervision or incarceration.

There are also some limitations in using the crime-specific cost estimations for the felony court filings developed by McCollister and colleagues (2010). These estimations were developed with national-level data from several disparate sources (e.g. UCR/NIBRS, NCVS, etc.). Therefore, there may be some over- or under-estimation in each crime-specific category when applied to Idaho-specific crimes. Additionally, the crime categories, along with how they are legally defined may also impact the outcomes; crimes in each category may be “legally” operationalized differently in each state, including Idaho. Researchers working in the field of cost-benefit analysis do note however that this method of estimating crime-specific costs is widely accepted (Aos & Drake, 2010).

The methods used to estimate costs associated with the misdemeanor-specific court filings also presented a challenge. There are no widely accepted misdemeanor-level national estimates similar to those provided by McCollister and colleagues (2010) for felonies. Therefore, estimates were created using only the associated fines for each crime category found in the Idaho Criminal Statutes. There is no doubt that using these fines as an estimate of crime-specific costs
is flawed. These fine figures, however, were the only cost-estimation proxies available for this study. Moreover, although these estimates are indeed flawed, there is little doubt that the conservative misdemeanor-specific estimates do in fact err on the side of caution.

There are some limitations to note in regard to the ICSA survey utilized. First, although the response rate was high (almost 80%), because there was only a limited amount of ICSA participants, the final sample size (N = 24) was very small. Therefore, statistical power is limited and any patterns noted may be subject to misinterpretation. Additionally, because of the contextual circumstances experienced by ICSA participants (which are unique to the Idaho substance use disorder treatment system), the survey findings reported here are not generalizable to networks outside the Idaho system. The findings do, however, accurately represent the thoughts and feelings of ICSA participants and are germane to the study at hand.

Second, there were some issues with the survey tool itself that would need to be adjusted if it were to be used again. For example, in several of the question sets the Likert-style responses were accompanied by a “don’t know” answer. In future surveys, removing this as a possible answer in order to prevent missing and non-usable answers is recommended. Additionally, there were some questions that did not pertain to the ICSA group. For example, ICSA did not manage any “shared financial resources” within the network and as a consequence the responses to these items did not make much sense in this context. Many of these more minor issues could be fixed upon the use of this collaborative capacity survey tool in any additional and similar research.

**Next Steps**

As stated above, beyond this research some next steps will be to describe the findings or the distribution of the costs and benefits among the treatment programs. This process will
include: 1) the identification of which programs are successful and under what conditions these programs are most efficient or cost-beneficial; 2) the provision of empirical evidence on who benefited most from treatment programming and provide insight to the question of whether treatment is more cost beneficial than no treatment; and, 3) it will provide the State of Idaho with a more comprehensive cost-benefit research framework that will allow researchers in each agency to access information across the participating agencies and conduct yearly or up-dated cost-benefit and cost-effectiveness reports for policy makers.

The main question of whether group assignment (treatment or waitlist) saved money was addressed here. Findings, however, could benefit from some further analyses. For example, the savings identified within the treatment group are aggregates, and they do not take into consideration a measure of those clients who exited or discharged from their treatment successfully or those who failed (re-incarcerated) or left against the advice of their provider. Further differentiation using these criteria may further isolate the treatment effects.

The results from the ICSA survey are static and cannot be linked to treatment system outcomes at this time. Further research needs to address how decisions made by collaborative groups such as ICSA impact outcomes of interest, such as the elasticity between treatment system funding sustainability and capacity and its impacts on treatment-specific outcomes. These types of inquiries provide a better understanding of the relationships between collaborative capacity, social support, and measured outcomes. The successful completion of these future steps will also help to build continuity in future cost-benefit research in Idaho by beginning to describe the “range of values within which assumptions can be safely ignored or the specific conditions that must be found or produced if a policy or program is to yield the desired results” (Barnett & Escobar, 1987: 391, cited in Welsh et al., 2001: 10).
Policy Implications

There are several policy implications tied to the findings reported here. First, the study’s cost-benefit findings, in particular those related to the criminal recidivism costs, were recently cited in the Joint Finance Appropriations Committee presentation in the 2011 Idaho Legislative Session (February 14th, 2011). Furthermore, the core cost-benefit finding indicating that treatment saved $1.39 compared to the wait-list group, has been cited in an article in the February 14th issue of Idaho’s largest newspaper (see report in The Spokesman-Review, Russell, 2011). Moreover, researchers from the Washington State Department of Social and Health Services have recently requested the findings from this study to report in their respective legislative session. This indicates that these findings have already had some impact. Whether the cost-benefit findings are a factor in decisions on how much to cut from the state’s treatment budget is yet to be seen. It is clear however, that policy makers are interested in the findings of this study.

Second, the process of collecting and merging the data used in this study followed a different path than that of the first study. The ability to address all of the directors of the key agencies involved at the same time was a crucial time-saving step in this current study. Moreover, having the additional legitimacy and power to persuade agency personnel to step away from their normal job-related duties to both address research-related questions and to take the time to pull and deliver their respective data sources was critical. This power came by legislative mandate through ODP and, as an extension, the Governor’s Office; the ICSA process participants contributed further to this effort in important ways. The ability to push data requests through could only come with the blessing of each agency director. Without their cooperation, this project would not have been completed. Thus, the strengthening of the process of systematic
information sharing has been impacted favorably to the benefit of the substance abuse treatment system.

Moreover, it is hoped that those involved in this system will see the need to further widen the aperture of data-sharing and adopt a general memorandum of understanding that will allow for periodic study replication. Part of the issue is that these types of projects take considerable effort to develop and complete. In streamlining the front-end process, the research and evaluation itself may become more efficient, freeing up time to address other systemic issues such as those related to data quality and enhancement. As more cost-benefit studies are conducted in the State of Idaho this study (as well as previous studies) can be used as a general road map indicating what is needed, as well as what should be avoided in conducting this type of research.

Third, the findings reported here show that collaborative capacity within the substance abuse treatment network was not built or sustained at the levels needed to attain even more positive impact. There are issues with instability, communication, and trust within and between the key organizations. These issues also seem to be exacerbated during times of heightened uncertainty attributable to extraordinarily tough budgetary times. To make matters worse, it is often during such tough budgetary times that mistakes in the allocation of funding for key programs can have an increased adverse and lasting impact. Indeed, cutting effective program or treatment funding may free up some extra dollars in the short run, but the associated costs will come further down the road. It is hoped that the network-related findings reported here can illuminate issues to be addressed and fixed (i.e., communication, trust, and knowledge sharing) as well as a path towards building sustainable collaborative capacity.
Conclusion

This study has served two general purposes. First, it has provided some new economic information related to the costs and benefits of investing in substance abuse treatment in the State of Idaho. Taking methodological advantage of a naturalistic study design, which prompted the creation of a treatment waitlist, this study was able to go beyond mere description of the treatment population by comparing their outcomes with the outcomes of a propensity score matched comparison group. The overall cost-benefit findings were mixed, however. Outcomes tied to client’s monetary earnings and involvement in the Idaho Department of Correction did not strongly indicate a difference in patterns between the two groups in favor of treatment.

In regard to criminal recidivism, however, the outcomes fell significantly in favor of the treatment group. Findings reported here indicated that a one-dollar investment in treatment saved $1.46 in the fifteen-month period following discharge from treatment. Importantly, the estimates used to develop the criminal recidivism cost-benefit ratio include costs associated with all criminal justice system involvement, including incarceration. Therefore, it is clear that treatment, compared to the absence of treatment, has a positive overall effect on these economic outcomes.

Second, in recognizing that the provision of substance abuse treatment is a valid form of social support, this study expands our understanding of the role of decision-makers within treatment systems. More specifically, this study details the impact that the network, collaborative capacity, and wicked problem concepts have on the criminal justice and treatment fields. Treatment outcomes, positive or negative, do not occur in a vacuum. There are rich contexts that must be included within cost-benefit research if policy makers and researchers are to reach a deeper understanding of the relationships between treatment outcome patterns and the decisions to fund or not to fund treatment programs or systems. Findings related to the collaborative
capacity survey indicate a need for improvement in the relationships between and among the main network (ICSA) partners. Partners should continue to enhance inter- and intra-agency communication, trust, problem-solving, and knowledge sharing. There is clearly an indication of a willingness to work together among the participating agencies; however, this study finds a need for partners to identify and acquire sustainable financial and intellectual support and form a stable network structure that can handle the research needs of the system.

Substance abuse is most certainly a wicked problem; it is an unstructured, crosscutting, relentless and complex public problem. Scholars in the public policy field understand that one way of dealing with wicked problems is to build and sustain collaborative capacity in a network setting. This concept has yet to be fully integrated into criminal justice parlance and practice. I argue that the criminal justice field will benefit from its adoption, better equipping it to understand the complex relationships between policy decisions and outcomes, such as those cost-benefit outcomes tied to substance abuse treatment. There will always be a need to address issues with substance abuse and addiction, therefore processes and programs aimed at dealing with these problems need to be built and managed within a sustainable network of social support.
CHAPTER FIVE REFERENCES


This is a request for completely voluntary participation, and your responses will remain totally confidential—only researchers in the Division of Governmental Studies and Services at Washington State University who are conducting this survey as part of a Ph.D. dissertation study by Peter Collins will see your answers and comments. You may leave blank any questions you feel uncomfortable answering. You are assured that the university will maintain the confidentiality of all survey results. This study has been reviewed and approved by the Washington State University Institutional Review Board (IRB) for human participation. If you have any questions or concerns regarding the study you may contact the researchers at (509) 335-4811, and if you have any questions or concerns about your rights as a study participant you can call the WSU IRB at (509) 335-9661 or send an e-mail to irb@wsu.edu. You have been provided a pre-addressed, postage-paid envelope for your convenience. Please call 509 954-5685 if you have questions regarding any of the questions in this survey. Thank you in advance for your participation in this important effort to learn from the important work of Idaho’s Interagency Committee on Substance Abuse Prevention and Treatment (ICSA).

Peter A. Collins, Doctoral Candidate, Washington State University
Nicholas P. Lovrich, Supervising Faculty, Regents Professor, Washington State University

Instructions

This survey asks questions about different aspects of your collaborative partnership experience with ICSA. The questionnaire will take between 20 to 30 minutes to complete. The survey allows you to express your frank opinions and provide information about your experiences anonymously. PLEASE DO NOT WRITE YOUR NAME ANYWHERE ON THE QUESTIONNAIRE; your name will not be attached to the responses you give. By answering the questions on the survey, you will help ICSA members learn about the group’s strengths and weaknesses, and identify steps that can be taken in the future to improve the collaboration process. There are no right or wrong answers on the questions included on the survey. Thoughtful and honest responses will give ICSA the most valuable form of information. Please check only one answer per question.***Note: It is understood that the law pertaining to the formation of ICSA will sunset in the year 2011, so please think of the following questions in terms of the group’s continuation under a similar form, but a different acronym.

To complete the questionnaire: Please use a BLUE or BLACK ink pen. Be sure to read all the answer choices before marking your answer. Answer each question by placing a legible check mark or “X” in the box to the left of your answer, as follows:

[ ] Extremely well OR [ X ] Extremely well
The following questions are aimed at getting an assessment of ICSA gains made through collective action; please think about the people and organizations that are participants in ICSA in responding to each of the following questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Extremely well</th>
<th>Very well</th>
<th>Somewhat well</th>
<th>Not so well</th>
<th>Not well at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Through working together, how well are these partners able to identify new and creative ways to solve problems?</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>b. Through working together, how well are these partners able to include the views and priorities of the people affected by the partnership’s work?</td>
<td>[ ]</td>
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<td>c. Through working together, how well are these partners able to develop goals that are widely understood and supported among partners?</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>d. Through working together, how well are these partners able to identify how different services and programs in the community relate to the problems the partnership is trying to address?</td>
<td>[ ]</td>
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<tr>
<td>e. Through working together, how well are these partners able to respond to the needs and problems of the clientele?</td>
<td>[ ]</td>
<td>[ ]</td>
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<td>f. Through working together, how well are these partners able to implement strategies that are most likely to work?</td>
<td>[ ]</td>
<td>[ ]</td>
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<tr>
<td>g. Through working together, how well are these partners able to obtain support from individuals and organizations outside of ICSA that can either block the partnership’s plans or help move them forward?</td>
<td>[ ]</td>
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<td>[ ]</td>
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<tr>
<td>h. Through working together, how well are these partners able to carry out comprehensive activities that connect multiple services, programs, or systems?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tbody>
</table>
i. Through working together, how well are these partners able to clearly communicate to people in the community how the partnership’s actions will address problems that are important to them?

[ ] Extremely well  [ ] Very well  [ ] Somewhat well  [ ] Not so well  [ ] Not well at all

Please think about the people who provide either formal or informal leadership in this partnership. Please rate the total effectiveness of ICSA’s leadership in the following areas:

a. Taking responsibility for the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

b. Inspiring or motivating people involved in the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

c. Empowering people involved in the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

d. Communicating the vision of the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

e. Working to develop a common language within the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

f. Fostering respect, trust, inclusiveness, and openness in the partnership.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

g. Creating an environment where differences of opinion can be voiced.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

h. Resolving conflict among partners.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know

i. Combining the perspectives, resources, and skills of partners.

[ ] Excellent  [ ] Very good  [ ] Good  [ ] Fair  [ ] Poor  [ ] Don’t know
j. Helping the partnership be creative and look at things differently.

[ ] Excellent     [ ] Very good     [ ] Good     [ ] Fair     [ ] Poor     [ ] Don’t know

### Efficiency in the Use of ICSA Resources

1. **Please choose the statement that best describes how well ICSA uses the partner organizations financial resources.**

[ ] The partnership makes excellent use of each organization’s financial resources.
[ ] The partnership makes very good use of each organization’s financial resources.
[ ] The partnership makes good use of each organization’s financial resources.
[ ] The partnership makes fair use of each organization’s financial resources.
[ ] The partnership makes poor use of each organization’s financial resources.

2. **Please choose the statement that best describes how well ICSA uses the partner organizations in-kind resources (e.g., skills, expertise, information, data, connections, influence, space, equipment, goods).**

[ ] The partnership makes excellent use of each organization’s in-kind resources.
[ ] The partnership makes very good use of each organization’s in-kind resources.
[ ] The partnership makes good use of each organization’s in-kind resources.
[ ] The partnership makes fair use of each organization’s in-kind resources.
[ ] The partnership makes poor use of each organization’s in-kind resources.

3. **Please choose the statement that best describes how well ICSA uses the partner organizations time.**

[ ] The partnership makes excellent use of each organization’s time.
[ ] The partnership makes very good use of each organization’s time.
[ ] The partnership makes good use of each organization’s time.
[ ] The partnership makes fair use of each organization’s time.
[ ] The partnership makes poor use of each organization’s time.

### ICSA Administration and Management

Think about the administrative and management activities the take place in ICSA. Please rate the effectiveness in carrying out each of the following partnership activities:

a. **Coordinating communication among partners.**

[ ] Excellent     [ ] Very good     [ ] Good     [ ] Fair     [ ] Poor     [ ] Don’t know

b. **Coordinating communication with people and with organizations outside the partnership.**
A partnership needs non-financial resources in order to work effectively and to achieve its goals. For each of the following types of resources, to what extent does ICSA have what it needs to work effectively?

a. Skills and expertise (e.g., leadership, administration, evaluation, law, public policy, cultural competency, training, community organizing).

[ ] All of what it needs   [ ] Most of what it needs   [ ] Some of what it needs
[ ] Almost none of what it needs   [ ] None of what it needs   [ ] Don’t know

b. Data and information (e.g., statistical data, information about community perceptions, values, resources, and politics).
A partnership also needs financial and other capital resources in order to work effectively and achieve its goals. For each of the following types of resources, to what extent does ICSA have what it needs to work effectively?

a. Money

[ ] All of what it needs  [ ] Most of what it needs  [ ] Some of what it needs
[ ] Almost none of what it needs  [ ] None of what it needs  [ ] Don’t know

b. Space

[ ] All of what it needs  [ ] Most of what it needs  [ ] Some of what it needs
[ ] Almost none of what it needs  [ ] None of what it needs  [ ] Don’t know

c. Equipment and goods and services

[ ] All of what it needs  [ ] Most of what it needs  [ ] Some of what it needs
[ ] Almost none of what it needs  [ ] None of what it needs  [ ] Don’t know

ICSA Decision Making
a. How comfortable are you with the way decisions are made in ICSA?

[ ] All of the time [ ] Most of the time [ ] Some of the time
[ ] Almost none of the time [ ] None of the time

b. How often do you support the decisions made by ICSA?

[ ] All of the time [ ] Most of the time [ ] Some of the time
[ ] Almost none of the time [ ] None of the time

c. How often do you feel that you have been left out of the decision making process?

[ ] All of the time [ ] Most of the time [ ] Some of the time
[ ] Almost none of the time [ ] None of the time

For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership.

a. Enhanced ability to address important issues.

[ ] Yes [ ] No

b. Development of new skills.

[ ] Yes [ ] No

c. Heightened public profile.

[ ] Yes [ ] No

d. Increased utilization of my expertise or services.

[ ] Yes [ ] No

e. Acquisition of useful knowledge about services, programs, or people in the community.

[ ] Yes [ ] No

f. Enhanced ability to affect public policy.

[ ] Yes [ ] No

g. Development of valuable relationships.

[ ] Yes [ ] No
h. Enhanced ability to meet the needs of my constituency or clients.

[ ] Yes [ ] No

i. Ability to have a greater impact than I could have on my own.

[ ] Yes [ ] No

j. Ability to make a contribution to the community.

[ ] Yes [ ] No

k. Acquisition of additional financial support.

[ ] Yes [ ] No

For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in ICSA.

a. Serious diversion of time and resources away from other priorities or obligations.

[ ] Yes [ ] No

b. Insufficient influence in partnership activities.

[ ] Yes [ ] No

c. Viewed negatively due to association with other partners or the partnership.

[ ] Yes [ ] No

d. Frustration or aggravation.

[ ] Yes [ ] No

e. Insufficient credit given to me for contributing to the accomplishments of the partnership.

[ ] Yes [ ] No

f. Conflict between my job and the partnership’s work.

[ ] Yes [ ] No

So far, how have the benefits of participating in ICSA compared to the drawbacks?
Check ONE of the following:

[  ] Benefits greatly exceed the drawbacks
[  ] Benefits exceed the drawbacks
[  ] Benefits and drawbacks are about equal
[  ] Drawbacks exceed the benefits
[  ] Drawbacks greatly exceed the benefits

COMMENTS:

<table>
<thead>
<tr>
<th>Satisfaction with Important Aspects of ICSA Participation</th>
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<tbody>
<tr>
<td>a. How satisfied are you with the way the people and organizations in ICSA work together?</td>
</tr>
<tr>
<td>[  ] Completely satisfied     [  ] Mostly satisfied     [  ] Somewhat satisfied     [  ] A little satisfied</td>
</tr>
<tr>
<td>[  ] Not at all satisfied</td>
</tr>
<tr>
<td>b. How satisfied are you with your influence in ICSA?</td>
</tr>
<tr>
<td>[  ] Completely satisfied     [  ] Mostly satisfied     [  ] Somewhat satisfied     [  ] A little satisfied</td>
</tr>
<tr>
<td>[  ] Not at all satisfied</td>
</tr>
<tr>
<td>c. How satisfied are you with your role in ICSA?</td>
</tr>
<tr>
<td>[  ] Completely satisfied     [  ] Mostly satisfied     [  ] Somewhat satisfied     [  ] A little satisfied</td>
</tr>
<tr>
<td>[  ] Not at all satisfied</td>
</tr>
<tr>
<td>d. How satisfied are you with ICSA’s plans for achieving its goals?</td>
</tr>
<tr>
<td>[  ] Completely satisfied     [  ] Mostly satisfied     [  ] Somewhat satisfied     [  ] A little satisfied</td>
</tr>
<tr>
<td>[  ] Not at all satisfied</td>
</tr>
<tr>
<td>e. How satisfied are you with the way the ICSA is implementing its plans?</td>
</tr>
<tr>
<td>[  ] Completely satisfied     [  ] Mostly satisfied     [  ] Somewhat satisfied     [  ] A little satisfied</td>
</tr>
<tr>
<td>[  ] Not at all satisfied</td>
</tr>
</tbody>
</table>

Concluding Comments: We are very interested in any comments you would like to make on this study and on your experience in working with ICSA. (Attach additional sheets if you wish.)

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS IMPORTANT AND TIMELY SURVEY.
APPENDIX B

ICSA SURVEY: COMPLETE WRITTEN COMMENTS

There were two places in the survey where respondents were asked to provide written comments. The first was directly after sections that aimed to measure benefit and drawback levels, labeled below as benefits/drawbacks comments. The second comment response solicitation was located at the end of the survey, labeled below as concluding comments. Most of the respondents who provided written comments did so in the space provided at the end of the survey (in the concluding comments section). A few gave feedback in both sections and one survey had additional hand-written comments in response to specific questions. The following comments were taken verbatim from the survey. The heading codes (e.g., SN2) simply refer to the survey from which they were taken.

SN2: Concluding Comments

“The Department of Health and Welfare has spent 4 years working against the legislative mandate of the Interagency Committee. That Department, either by its incompetence or its arrogance, has willfully failed to perform its duties to deliver a coordinated and effective system of substance use disorder treatment. Most of the other members of the Interagency Committee have performed their duties to the best of their ability, time and resources.”

SN3: Concluding Comments

“As an observer I thought ISCA grew into a very capable group. The first years were normal for any new entity – a period of formation. During the beginning I perceived a level of distrust among community groups because it (HB 833) also changed their power and structure.”

“During the first 18 month period of time I observed walls between agencies and organizations diminish. Budgeting seemed to be much more transparent by the 24 to 30-month mark.”

“My perception is that while differences may continue to exist between the agencies, there is more open dialogue and I perceive more empathy of each agency’s challenges.”

“Also, because the locus of control for all decisions does not rest with ICSA (federal mandates, court orders, etc.), 100% achievement of ICSA’s goals is not, in my opinion, possible. But, the simple recognition that factors outside of the partnership’s control are applying force is a positive outcome (especially my perception of a wide spread recognition that an individual agency is not in control and also struggling to manage something somewhat unmanageable).”

“As a tax payer I am saddened at the thought of ICSA sun-setting without a required continuation of structure. I believe the existence of state code requiring the various agencies partner was a positive force in making over all positive changes. One can only image where substance abuse services would be in our current economic conditions without the model we have working through the end of July. This is not to say that agency directors and staff will stop cooperating – I don’t mean that. However, with extreme demands in today’s environment, the
void of no ICSA will be easily filled with other valuable work. It will require an incredibly strong commitment among the current members to continue to meet voluntarily; experience tells me it will eventually diminish though the need will not.”

“The potential of a behavioral health cooperative is an admirable goal; continuity of a group with ICSA’s mission and goals is worth maintaining in the interim. Their full achievement is not yet realized, but momentum has built. Also, the current model for the cooperative seems to have even less local/grassroots expertise built in to the decision making. I hear echoes of distrust.”

SN4: Concluding Comments

“Although the frustration of working together in a system with different purposes/goals/objectives can be overwhelming, this process has worked very well to enhance communication and coordination.”

SN5: Concluding Comments

“I am not an ICSA member but do attend the meetings. It appears that tension continually exists between ODP, Corrections, Courts and the State. It seems that more time is spent debating the issues and less time concentrating on being solution focused. It also seems that good ideas arise with little ability to see them through. The substance use budget is consistently overspent without ability for ICSA to manage it effectively. The process can be very frustrating.”

SN6: Concluding Comments

“I am not a primary member of ICSA but have been involved at the operational level. This level was more engaged up until the termination of the Executive Operations Committee, which termination, in retrospect, was probably a mistake. There is much substantive work to be carried out in this collaboration that is beyond the time commitment and availability of the primary ICSA members. A subordinate level of participation is really needed. I believe it (the Executive Operations Committee) was terminated due to some not uncommon conflict among members that probably would have gotten worked out had the committee continued. Clearly there was a lack of communication between the EOC and the ICSA members themselves but that too could have been resolved.”

“The ICSA relationships became pretty conflictual [sic] and much of this conflict became personalized between staff of ODP and DHW. Some of that conflict was built in from the very organization of the IDP and ICSA. (Giving ICSA a level of authority over an executive agency of state government was inherently conflictual and I think was ultimately ineffective). And some conflict resulted from a clash of styles and personalities. Also lack of clarity in the role of ICSA and ODP also created confusion and conflict.”

“I have long been an advocate of organizations such as ICSA and I must confess that I have never seen them achieve the promise that theoretically should be possible. It is possible that the results of this survey could be a catalyst for renewed effort and resolution of some of the issues. For that to happen it would take an expert facilitator (from outside) and a renewal of
commitment among the members which I frankly doubt is there. Clarification of roles of the ODP and ICSA would be important. Perhaps having staff for ICSA that was separate and distinct would help.”

**SN7: Benefits/Drawbacks Comments**

“ICSA demands significant time and attention. I am frustrated by the Governor’s lack of overt support for the activities of the committee. There appear to be issues impeding our progress that are not discussed openly; I get the feeling there are elephants in the room but I am challenged to name them directly.”

**SN7: Concluding Comments**

“It would benefit the process if the issues impacting substance abuse policy and services delivery were presented in a more candid fashion. Where do treatment, intervention and prevention fall on the Governor’s list of priorities? To what extent is he willing to fight for our work with the legislature? How can we extract personality conflicts and focus on the issues at hand? How can we get to a point where the issues are discussed without fear of political / financial retribution?”

**SN8: Benefits/Drawbacks Comments** (this survey had many blank answers)

“It’s hard to rate this as I am not a voting member and much of the activity is beyond my scope and level of understanding or ability to influence.”

**SN13: Benefits/Drawbacks Comments**

“ICSA leadership seems to be ignorant of the fact that they, by virtue of the statute that created it, are called upon to make critical decisions in regards to the budget. This coupled with a poor understanding of the cause and effect that budget management has, has led to consistent cost overruns the past two fiscal years. Basically, you can’t just talk about the problems and hope they will get fixed; you need to make motions and follow up on them.”

**SN13: Concluding Comments**

“ICSA, while good in concept, has been completely ineffective, if not counter effective. Let me preface this with the statement that this is no one member organizations fault, but the partners share equal responsibility in its failure.”

“Beginning with the Chair position, there seems to be a fundamental lack of ability to grasp the reality of situations. Too often the group addresses pet projects that are inappropriate for a group with the scope ICSA is intended to have. Additionally, there seems to be a lack of resolve on the part of the Chair. Rarely are substantive motions made, and when they have been, they are not followed up on in a manner to ensure implementation. I’m not sure if this is done out of a lack of political capital on the chairs part, simple ignorance, or perhaps both.”
“Partners are equally as culpable. They regularly take advantage of the ineffective chair and claim that as an excuse to not take action themselves. Far too often, commentary is simplified to a level that is safe and thus important issues don’t get addressed. There are some shining exceptions to this, but more of than not discussions that must occur for an effective committee don’t.”

“In conclusion, ICSA has been an attempt to try and streamline a multifaceted system and rather then cut though bureaucratic red tape it simply has become another set of red tape for the system to get entangled in.”

SN14: Benefits/Drawbacks Comments

“I believe ISCA should be allowed to Sunset because the organization has not contributed to the populations it is supposed to serve in any tangible way. The Leadership has close connection to the Governor’s office, making it little more than an office to satisfy a political promise. ICSA, in conjunction with the Office of Drug Policy, has overspent Health and Welfare’s budget for FY2010 by several million dollars and are on track to do the same for FY2011. Leadership in both offices has historically chosen to not listen to the people who spend every day working with Substance Use Disorders issues, while they have very little education or experience themselves. None of the members of ICSA want to stand up and say what they need to, for fear of reprisals. ICSA and ODP were left over from Gov. Risch short term and should have been dissolved when Gov. Otter took over. They serve no purpose except to add another layer of control between DHW and the people they are required to serve.”

SN16: Concluding Comments

“The ICSA concept is excellent however it was conceived and executed as a method of managing the Substance Use Disorder bureau of Health and Welfare. The narrow focus has kept ICSA from establishing broad policy development so individual agencies could integrate their operational objectives into a cohesive statewide effort. For example law enforcement and interdiction was never addressed by ICSA. Prevention was discussed but no coordinated plan executed.”

“My hope for ICSA was never realized as it was political, not operational in delivery. That said we can make it work through the cooperative, a smaller more focused group of agency heads. This is critical as the nation moves into health insurance reform and substance treatment money moves from block grants and general funds to insurance policy driven benefits.”

“Idaho is successful because we are small and department heads talk to each other as a normal process of doing business.”

SN17: Benefits/Drawbacks Comments

“Participation with ICSA has been very positive. Any frustration typically stems from the nature of the problems ICSA is tasked to address or from concerns about timely/well informed decisions to address those issues.”
SN17: Concluding Comments

“My experience with ICSA has been positive. Prior to my current position, I was a member of a Regional Advisory Committee and we found ICSA to be a forum to raise issues and receive answers/guidance.”

“As ICSA sunsets, a challenge that the successor will have to address is enhancing the ability to perform timely, informed, decision making. ICSA has both the will and the expertise to make these decisions, but it is limited by data, particularly regarding detailed expenditures.”

SN18: Concluding Comments

“The concept of the Interagency Committee on Substance Abuse Prevention and Treatment is well founded. But, as in many concepts, the devil is in the details. In my view, ICSA has not met the potential the concept holds because it was understaffed and under resourced. Additionally, without more authority over the agency controlling the SUD budget, contractor and data, ICSA could not be as effective as envisioned.”

“The one promise of the concept that has been accomplished is encouraging communication between agencies and at least some attempt to address the silos bureaucracy creates. I found those involved as members of ICSA sis find the trust to communicate, but without the ability to coordinate based on communication, the communication could not always be turned into action. Recently a colleague discussing a similar attempt noted the illusion of communication occurred rather than actual communication.”

“Two areas of huge frustration for this effort, I found, were, 1. The failure to come to an agreement about what data is needed to facilitate good communication and decision making; and 2. When data needs were noted a lack of capability to assure the data was provided in a form that could be used for communication and decision making.”

“Another area of concern was what I perceived to be a detachment between the ICSA members and the substance abusers impacted by Idaho’s SUD system. In my view because of the lack of staff and resources, the state agencies became the defacto leaders and sometimes effectively precluded the effective communication of other members who may have had better connection to the populations Idaho’s SUD system serves.”

“One element that seems to have worked well with the ICSA concept was prevention coordination. This effort was a major element of the energies of ODP with the backing of ICSA. Those involved with prevention appear to be jointly engaged and have developed joint resources.”

“All in all the opportunity I have had to participate in ICSA was a very interesting and worthwhile experience. The efforts made by individuals to make this concept work were exemplary. Relationships were important and true efforts to improve the system did result in some improvements. The difficulties occurred from the structural problems I’ve noted.”
SN19: Benefits/Drawbacks Comments

“Collaboration with other State agencies to address Substance Use Disorders is an excellent concept; however, I think the authority over service delivery that has been given to ICSA has been detrimental to our system and the clients that we are supposed to serve.”

SN19: Concluding Comments

“I am not a member of ICSA and do not usually attend the meetings but my job is greatly impacted by the process and decision made by ICSA. I think members of ICSA have good intentions for collaboration but the process breakdowns when important decisions need to be made. It seems that ICSA members are often in disagreement and getting a group consensus to make a decision is difficult. ICSA’s authority over budgetary issues and inability to make timely decisions has made it almost impossible for the State to implement budget-control measures and be responsive to over expenditures.”

SN23: Benefits/Drawbacks Comments

“I would gladly do it all again. The benefits that I have seen in the system vastly outweigh the time away from my responsibilities and any frustration I may feel at times. Most frustration comes from a lack of budget resources to treat the people we know need these services. Knowing that thoughtful consideration goes into each policy decision makes my frustration level much lower than if I was not part of that process.”

SN23: Concluding Comments

[Redacted] have done a good job in getting the different agencies, health and welfare, and providers around the table to do what is best for the clients and taxpayers in the State. I would like to see more cooperation from Health and Welfare with ICSA, but I believe that this relationship will improve [Redacted]. Overall, I am very satisfied with the work ICSA has accomplished and appreciate the opportunity to be a part of the group.”

SN24: Written-in Question Comments

Q# Leadb: “In looking at the past four years.”

Q# Leadf: “Could have been better if all understood accounting and where to find the numbers.”

Q# Eff3: “It takes time to find the source of the problem and then correct it.”

Q# Drawa: “Our office [ODP] has a lot of other responsibilities, too, however ICSA has to be a priority.”

Q# Drawd: “Partnerships are like marriages, problems have to be dealt with regardless of frustration.”
Q# Sate: “It is hard to have a perfect anything, since people aren’t perfect.”

SN24: Benefits/Drawbacks Comments

“Measurement of ICSA has to be measured by dollars and populations. There has been a HUGE cost savings by working together in comparing the costs/populations from four years ago.”

SN24: Concluding Comments

“In looking at ICSA overall, has ICSA accomplished its goals? Yes.”

“Is there still work to be done? Yes.”

“Life is always challenging, however, more gets accomplished is we work together.”
39-303. INTERAGENCY COMMITTEE ON SUBSTANCE ABUSE PREVENTION AND TREATMENT. [EFFECTIVE UNTIL JULY 1, 2011] (1) There is hereby created within the office of drug policy, as provided for in section 67-821, Idaho Code, the interagency committee on substance abuse prevention and treatment. The purpose of the interagency committee is to focus on statewide efforts to address substance abuse by assessing statewide needs, developing a statewide plan, and coordinating and directing efforts of all state entities that use public funds for efforts to address substance abuse.

(2) Membership of the interagency committee shall be:
(a) The administrator of the office of drug policy, or the administrator’s designee;
(b) The director of the department of health and welfare, or the director’s designee;
(c) The director of the department of correction, or the director’s designee;
(d) The director of the department of juvenile corrections, or the director’s designee;
(e) The superintendent of public instruction, or the superintendent’s designee;
(f) The director of the Idaho state police, or the director’s designee;
(g) The director of the Idaho transportation department, or the director’s designee;
(h) The administrative director of the supreme court, or the director’s designee;
(i) The chairperson of the state board of health and welfare, or the chair’s designee;
(j) The chairperson of the board of correction, or the chair’s designee;
(k) The chairperson of the board of juvenile corrections, or the chair’s designee;
(l) The chairperson of the drug court and mental health court coordinating committee established under section 19-5606, Idaho Code, or the chair’s designee;
(m) The chairperson of the senate health and welfare committee, or the chair’s designee;
(n) The chairperson of the house of representatives health and welfare committee, or the chair’s designee;
(o) The chairperson of the senate judiciary and rules committee, or the chair’s designee;
(p) The chairperson of the house of representatives judiciary, rules and administration committee, or the chair’s designee;
(q) The chief administrative official of each other state governmental entity that expends funds to provide services to address substance abuse, or that chief administrative official’s designee;
(r) One (1) representative of the regional advisory committees as determined in section 39-303A, Idaho Code; and
(s) Such additional ad hoc nonvoting members as the administrator of the office of drug policy may designate.

Interagency committee members shall serve without additional compensation but may be reimbursed by their respective entities for interagency committee related travel and expenses pursuant to chapter 20, title 67, Idaho Code.

(3) The duties of the interagency committee shall be to:
(a) Develop and annually update a statewide plan to address substance abuse, including the creation of common performance measures;
(b) Exchange information on programs that address substance abuse;
(c) Identify and promote opportunities for coordination, cooperation, collaboration and elimination of service duplication among relevant state entities;
(d) Monitor programs and evaluate outcomes;
(e) Identify state needs for addressing substance abuse, including promoting implementation of multiagency strategic budgeting;
(f) Review and assess the use of funds available to address substance abuse;
(g) Promote coordinated approaches to substance abuse prevention and treatment;
(h) Research, share, discuss and promote the use of best practices;
(i) Annually report to the legislature and governor prior to the beginning of the legislative session on the state’s efforts to address substance abuse, including descriptions of:
(i) The statewide need for services to address substance abuse;
(ii) The state’s capacity to meet those identified needs;
(iii) The types of substance abuse services being provided, and the groups and numbers of people served;
(iv) Which programs are effective in addressing substance abuse and which are not; and
(v) An overall evaluation of the state’s efforts to address substance abuse; and
(j) Develop and submit through the office of drug policy, no later than the first of September, any budgeted program enhancements or program expansions in a coordinated budget request pursuant to section 67-3502, Idaho Code, including estimated appropriation needs for the next fiscal year by the judicial department, the department of correction, the department of health and welfare, the department of juvenile corrections and any other department or agency, for expenditures relating to services provided by such department or agency in connection with the statewide substance abuse prevention and treatment delivery system.

(4) Each state administrative agency that expends public funds to provide services to address substance abuse shall report semiannually to the interagency committee, and shall include the following information:
(a) The amount of moneys expended on programs or services to address substance abuse;
(b) The number of individuals served or the extent of services provided, by specific type of service;
(c) The number of individuals not served and/or placed on waiting lists for services, by specific type of service;
(d) The agency’s overall capacity to provide specific types of services;
(e) The completion, dropout and relapse rates for treatment programs, and the relevant indicators for other services and programs;
(f) The average length of stay for individuals in each type of treatment program, or the average duration of other services and programs. The interagency committee shall establish procedures for collecting and compiling the information required for these reports and the distribution of the compiled information to all interagency committee members, the legislature and the governor.

(5) The administrator of the office of drug policy shall serve as chairperson of the interagency committee. The interagency committee shall meet at least once each calendar quarter, or more frequently at the call of the chairperson. Public notice of each interagency committee meeting shall be given two(2)weeks in advance thereof. Any interagency committee member may submit agenda items to be discussed at the interagency committee meetings.

(6) Each state administrative agency or entity with representation on the interagency committee shall share in
providing the administrative support required by the interagency committee. The allocation of administrative support among the state administrative agencies represented on the interagency committee shall be collectively determined by the chief administrative officer of each such agency and reassessed at least annually.

TITLE 67
STATE GOVERNMENT AND STATE AFFAIRS
CHAPTER 8
EXECUTIVE AND ADMINISTRATIVE OFFICERS -- GOVERNOR AND LIEUTENANT-GOVERNOR

67-821.COORDINATION OF POLICY AND PROGRAMS RELATED TO DRUG AND SUBSTANCE ABUSE. (1) There is hereby established in the office of the governor the "Office of Drug Policy." The administrator of the office of drug policy shall be the official in the state designated to oversee and execute the coordination of all drug and substance abuse programs within the state of Idaho. The administrator shall be appointed by and shall serve at the pleasure of the governor, and shall be subject to confirmation by the state senate.

(2) The office of drug policy shall:
(a) Cooperate and consult with counties, cities and local law enforcement on programs, policies and issues in combating Idaho’s illegal drug and substance abuse problem;
(b) Serve as a repository of agreements, contracts and plans concerning programs for combating illegal drug and substance abuse from community organizations and other relevant local, state and federal agencies and shall facilitate the exchange of this information and data with relevant interstate and intrastate entities;
(c) Provide input and comment on community, tribal and federal plans, agreements and policies relating to illegal drug and substance abuse; and
(d) Coordinate public and private entities to develop, create and promote statewide campaigns to reduce or eliminate substance abuse.

(3) The administrator shall act as chairperson of the interagency committee on substance abuse prevention and treatment, as created in section 39-303, Idaho Code, to ensure that the interagency committee coordinates and directs all state entities regarding substance abuse prevention and treatment delivery services statewide.
A. The following provisions will be made in order to properly safeguard each participating agency’s data:

1. Information provided by any participating Idaho State agency will be used solely for the purpose of the current research project; for evaluative or statistical purposes described in the research proposal.

2. Limit access to said information to the researcher or participating agency’s employees who need such access, and have been advised of, and agree to comply with, the provisions of the agreements made between the Idaho Office of Drug Policy and any participating agency.

3. Store all data received securely within a limited access, password secured and encrypted data file.

4. The researcher agrees not to disclose any of the said information in a form that is identifiable to an individual, in any project report or in any manner whatsoever.

5. All identifying information for client records included in this study shall be destroyed upon completion of the matching process.

6. Copies of the data will not be made, only as clearly necessary for use by employees or contractors to accomplish the purposes of this research. Every reasonable effort shall be made to utilize coded identification data as an alternative to names when producing copies of criminal history record information for working purposes.
APPENDIX E

SUPPLEMENTAL REPORT TO ICSA

The analyses presented in the original ICSA/ODP cost-benefit report centered on the comparison of a group of clients who received treatment, compared to a group of clients who were shown to be in need of treatment, but due to budgetary constraints, where placed on a waitlist. The aggregate cost-benefit findings reported in that initial report were mixed. There was some indication, however, that the treatment group was outperforming the comparison group on a number of important indicators. To lend further understanding to those aggregate findings, this supplemental report details the cost-benefit patterns for those treatment clients who were discharged or completed their treatment regimen successfully.

1. Client Earnings

Table 1. Earnings Trends: Second Quarter 2008 – Third Quarter 2010 (N= 299)

<table>
<thead>
<tr>
<th>Q2 2008</th>
<th>Q3 2008</th>
<th>Q4 2008</th>
<th>Q2 2009</th>
<th>Q3 2009</th>
<th>Q4 2009</th>
<th>Q2 2010</th>
<th>Q3 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>$600,000</td>
<td>$550,000</td>
<td>$650,000</td>
<td>$700,000</td>
<td>$750,000</td>
<td>$650,000</td>
<td>$550,000</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

Table 2. Pre-Post Earnings: Successful Treatment (N= 299)

<table>
<thead>
<tr>
<th>STx</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,984,101</td>
<td>$3,099,289</td>
<td>$115,188</td>
<td>+0.04</td>
<td></td>
</tr>
</tbody>
</table>

Note: all earnings adjusted using quarterly CPI (All) figures form the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars. (%Δ= Percent change). STx = Discharged Successful.
The initial report indicated that although both the treatment and waitlist groups’ aggregate trends were negative throughout the thirty-month study period, the treatment group tended to perform better after the center date (noting that there was a 6% difference in pre-post change in earnings between the groups, in favor of the Tx group, post-center date). Moreover, it was noted that these aggregate patterns may have been impacted by the State’s poor economy and high unemployment rate during the study period. When looking at successful treatment completers only, the quarterly earnings in Table 1 indicate a rather level trend. In fact, as Table 2 illustrates, there is actually an increase in recorded earnings during the fifteen month post-study period.

2. DOC Involvement

The initial ICSA report presented information on the aggregate trends in costs associated with supervision and incarceration (measured in days). These aggregate trends were mixed for the treatment group, showing some decreases in spending for supervision, but some increases in days incarcerated.

Supervision

Table 3. Successful Discharge: Supervision Cost Trends (N= 299)

<table>
<thead>
<tr>
<th>Month</th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar08</td>
<td>$282,055</td>
<td>$262,177</td>
<td>-$19,878</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Table 4. Pre-Post Supervision Cost Differences (N = 299)

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>STx</td>
<td>$282,055</td>
<td>$262,177</td>
<td>-$19,878</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Note: All DOC costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars. (%Δ= Percent change).
In regard to supervision costs, the trend line for the successful treatment group presented in Table 3 is similar to the pattern illustrated in the initial ICSA report for the entire treatment group. Table 4 provides the actual cost data (days multiplied by average cost per day $4.00), pre- and post-center date. In this case, the negative sign represents a decrease in cost over the study period. There was a 7 percent decrease in supervision costs, which averages to $66 in savings per client during the 15 month post-study period.

**Incarceration**

**Table 5. Successful Discharge: Incarceration Cost Trends (N= 299)**

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Diff</th>
<th>%Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>STx</td>
<td>$480,951</td>
<td>$116,167</td>
<td>-$364,783</td>
<td>-0.76</td>
</tr>
</tbody>
</table>

Note: All DOC costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars.

The aggregate incarceration trends detailed in the initial report show a very distinct decrease in incarceration days (costs) for the treatment group leading up to the center date and a distinct increase in incarceration days (costs) a few months later. In fact, findings for the treatment group indicated an increase in spending in the fifteen month post-study period. For those clients who completed and were discharged from their treatment episode successfully, there is a much different trend. As table 5 illustrates, there is a sharp decrease in costs during the pre-study period, which actually bottoms out at zero. There is a gradual increase in costs during the post-study period, but as indicated in Table 6, there was a 76 percent decrease in spending during the fifteen month post-study period, which averages to $1,220 in savings per client.
3. Criminal Recidivism: Felony Crime-Specific Costs

The initial ICSA report indicated that for the combined felony and misdemeanor charges, the treatment group outperformed the waitlist group by 39% in the post-center date period. This finding could also be expressed as for every dollar invested in treatment, the state saved $1.46.

<table>
<thead>
<tr>
<th>Successful Treatment</th>
<th>Pre</th>
<th>Post</th>
<th>Diff.</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1,067,537</td>
<td>$328,685</td>
<td>-$738,852</td>
<td>2.82</td>
</tr>
</tbody>
</table>

Notes:
2. Avg. benefits felony only = total benefit (Pre–Post: diff.)/n of clients (STx= 77), mutually exclusive.
3. C/B Ratio = total benefit/average cost of treatment per episode ($3,408), mutually exclusive.
4. These figures include DOC costs.
5. All costs adjusted using quarterly CPI (All) figures from the US Department of Labor, base year = 1982-4, and all figures expressed as Nov. 2010 dollars.

Table 7 provides the difference in costs from pre- to post-study period for felony criminal charges only. The misdemeanor charges analysis has yet to be completed. These cost estimations were calculated the same way, using the per-unit and crime specific cost figures borrowed from McCollister and colleagues (2010). As illustrated above, when focused on just those clients who successfully completed treatment, there is a much larger impact pattern. These results indicate that for the felony charges, the successful discharge treatment group outperformed the waitlist group by 175 percent in the post-center date period. This finding can also be expressed as, in regard to those clients who successfully completed their treatment regimen, for every dollar invested in treatment, the state saved $2.82.

Conclusion

This supplemental analysis was conducted to shed light on the cost patterns of only those clients who discharged from their treatment episode successfully. In contrast to the patterns conveyed in the initial ICSA report, when focused on those successful treatment completers, there were positive patterns across the board. Despite a weak state (and national) economy and historically high rates of unemployment, there were actual gains in the post-earnings study period. Likewise, there were significant decreases in costs for both supervision and incarceration days. Finally, the criminal recidivism measure indicated strong post-study period savings – double those found when focused on the entire treatment group and almost triple those reported for the non-treated waitlist comparison group. Some may argue that it is to be expected that those who complete treatment successfully should reflect positively on measured outcomes, as is indeed the case here. These analyses are important however; as they shed light on the economic impact that successful treatment alone has on the system. It is clear that those who complete treatment successfully help to reduce the negative impact of those who fail their treatment.
References


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