

Process-Descriptive Study of
Judge-Involved Supervision Programs
In the Federal System

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Brad Sweet, who was at the time a social science analyst for OPPS, provided the NPR data and worked tirelessly with us over many months to develop and perfect the data definitions used to extract the study file on which most of our analyses were based. James Johnson, a probation administrator, produced the report's rearrest rates. Since the Federal Judicial Center did not, at the time, have permission to access the FBI data directly, this important information could not have been included without Mr. Johnson's excellent work. The parameters for the study file and the groupings for the arrest analyses evolved as the research progressed, resulting in our requesting many different versions of the data. Mr. Sweet and Mr. Johnson responded to these requests with precision, speed, and unfailing good humor, for which we are very grateful. Their collaboration was exemplary.

Our thanks also go to Laura Baber, a supervisory management analyst at OPPS. Her thorough knowledge of probation system data, key role in the development of the rearrest analysis file, knack for problem solving, and readiness to assist us made her an invaluable partner throughout this research.

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EXECUTIVE SUMMARY

At the request of the Judicial Conference Committee on Criminal Law, the Federal Judicial Center is conducting a multi-year study of judge-involved offender supervision programs in the federal system. The project consists of two prongs. The first is an experimental evaluation that began in September 2011 and is by design a long-term prospective study that will follow randomly selected offenders throughout their terms of supervision, and beyond, to compare their experiences and outcomes.

The second prong—the subject of this report—is a retrospective study undertaken to provide more timely material about the purposes, expectations, design, and implementation of judge-involved supervision programs that have been in operation for 24 months. It is not an evaluation of these programs overall, or of any one program in particular, but describes the variety of such programs operating in the federal courts, the populations served, the services provided, and through official data, how the participants have fared.

The key analyses presented in the report combine for descriptive purposes the experiences of offenders across 20 programs in 19 districts. No two of the study programs are exactly alike because each was customized to accommodate the program’s purpose, the district’s local conditions, and agreements worked out among the partner agencies participating on the program teams. As with any set of numbers that represent an amalgamation of sites and practices, the purpose is to present an average against which individual programs can assess their own experiences, and to inform a discussion of what judge-involved supervision programs in general can contribute to the federal supervision model.

Primary Findings

This study found that, overall, the offenders being served by these programs were at higher risk than the general supervision population; and—when compared with a group of offenders who were similarly situated when they began supervision—were supervised more closely, were referred for services more often, had their supervision revoked for technical violations more frequently, and were arrested for criminal offenses slightly less often. This “look more, see more” finding is consistent with studies of other intensive supervision programs.

These overall findings mask variations across programs, however. There were, for example, three programs for which closer supervision of participants was associated with *lower* rates of supervision revocation for technical violations, the result of a team commitment to early identification of problems, followed by swift, proactive, community-based responses. This finding suggests that reliance on supervision revocation as the usual response to “looking more” and “seeing more” is more an issue of program implementation and local culture than of program design.

Limitations

This retrospective research design relied on preexisting data which—because they were collected for other purposes—were not sufficient to address many questions of interest. Among the key data not available on a consistent basis were the number of drug tests, referrals for services that were not provided under government contract, and instances of and responses to noncompliance that did not result in revocation of the supervision term.

Because of these limitations, the raw numbers of service referrals and drug tests are underreported, and it was not possible to analyze the use and effectiveness of graduated sanctions in response to noncompliance.

Also missing was consistent information across programs as to program timing and status, which precluded a comparison of supervision outcomes for program participants by such pertinent features as time in program and program outcome. Furthermore, the Federal Judicial Center did not have direct access to arrest data and therefore could not explore the relationship between the timing and nature of arrests and supervision revocations.

These limitations will be addressed in the experimental evaluation, for which the additional information required to address these questions is being collected. That evaluation, which also features a longer follow-up period, should provide a more definitive picture of whether and how judge-involved supervision programs contribute in the long and short runs to more successful supervision outcomes, better community safety, and more efficient expenditure of supervision and prison resources.

I. OVERVIEW

This report presents the results of a retrospective process-descriptive study of judge-involved supervision programs in the federal courts. It is part of a larger research effort to investigate how programs modeled on state and local drug and reentry court programs operate in the federal system.

A. Background

In June 2010, the Judicial Conference Committee on Criminal Law asked the Federal Judicial Center to work with the Office of Probation and Pretrial Services (OPPS) of the Administrative Office of the United States Courts to design and conduct a formal study of offender reentry programs in the federal courts. Specifically, the Committee asked for a study of the operational aspects, outcomes, and cost-effectiveness of reentry programs, including an evaluation of how the effectiveness of these programs compares with that of other offender supervision approaches that may require fewer judicial resources.

Following consultation with the Committee and OPPS, the Center proposed a comprehensive two-pronged study. The first prong is a multi-year evaluation of new (or relatively new) reentry programs that utilizes an experimental design with random assignment. This experimental study began in September 2011 and is now under way at eight sites in five districts.¹

The second prong of the study—the subject of this report—is a retrospective process-descriptive assessment of selected judge-involved supervision programs that have been in operation for at least 24 months.

B. Study Focus

Unlike the experimental study, the process-descriptive assessment does not focus on reentry programs *per se*,² but examines the broader range of judge-involved supervision programs. These programs employ the authority of the court to impose graduated sanctions and positive reinforcements while using a team approach to marshal the resources necessary to support an offender's reintegration, sobriety, and law-abiding behavior. The team, by definition, always involves a judge, and in the federal system, it also involves representatives of the probation office. Depending on the program, prosecutors, defenders, or service providers may also participate as team members.

Also unlike the experimental study, the process-descriptive assessment does not evaluate judge-involved supervision programs in general—or any one program in particular—but describes the population served by the programs, the services provided, and how the participants fared. The study probes for relationships between outcomes and a variety

1. The sites are New York Southern (New York City), Florida Middle (Tampa, Jacksonville, Orlando), California Central (Los Angeles), Wisconsin Eastern (Milwaukee), and Iowa Southern (Des Moines, Davenport).

2. In the post-conviction context, *reentry* is defined as “the process of leaving prison and returning to society.” Jeremy Travis, *But They All Come Back: Facing the Challenges of Prisoner Reentry* xxi (Urban Institute Press 2005). Although the term *reentry* has been used widely in the judge-involved supervision context, most of the federal supervision programs that feature the active involvement of a judicial officer are modeled on drug court programs rather than limited to offenders returning from prison.

of program characteristics, and it compares the services and outcomes of program participants with those of a group of offenders whose expectations of success at the start of supervision were similar but who did not participate in a judge-involved supervision program.

C. Study Approach

The process-descriptive study uses National PACTS Reporting (NPR) System³ data from selected judge-involved supervision programs to describe

- the risk level, offense history, substance abuse history, age, and gender of the population served by the programs, compared with those of the supervision population in general;
- the level of key supervision activities (e.g., personal and collateral contacts, drug testing, treatment referrals) for program participants, compared with the level for a group of similarly situated offenders who were not in a program;
- the supervision outcomes (e.g., employment, income, education, stability, early termination, revocation of supervision) of program participants, compared with those of a group of similarly situated offenders who were not in a program; and
- the extent to which there is any relationship between outcomes and key program characteristics (e.g., type of program, number of phases, frequency of sessions, team composition) documented by a survey of chief U.S. probation officers conducted in 2010 (see *infra* Part II).

The study also uses the OPPS rearrest analysis file⁴ to compare the rearrest outcomes of program participants with those of a group of similarly situated offenders who were not in a program.

3. This OPPS database pulls together information collected in each district's Probation and Pretrial Services Automated Case Tracking System (PACTS).

4. The rearrest analysis file combines arrest information from the FBI with NPR data and data provided by the Federal Bureau of Prisons, the U.S. Sentencing Commission, and the Census Bureau. It includes records for offenders received for supervision starting in FY 2005 and is updated each fiscal year. For a complete description of the rearrest analysis file, see Laura Baber, *Results-Based Framework for Post-Conviction Supervision Recidivism Analysis*, 74 Federal Probation 3, 5–10 (2010).

II. METHODOLOGY

A. Selecting Programs

On October 4, 2010, the Federal Judicial Center polled chief U.S. probation officers as to whether their districts had or were planning to implement a judge-involved supervision program. This poll identified 41 districts that were (or would be by the end of 2010) operating 45 judge-involved supervision programs.⁵ On October 28, 2010, the Center sent a detailed survey to chiefs in 36 districts that had, at the time, been operating one or more judge-involved supervision programs for at least six months and were not participating in the experimental segment of this research project.⁶

Of the 39 programs for which survey information was obtained, 24 indicated that they had the NPR data that would be needed to identify their participants. These programs were contacted to see if they were interested in participating in this second phase of the process-descriptive study. Twenty programs from 19 districts agreed to participate. The participating programs represent all of the federal circuits except the District of Columbia. Their locations are pinpointed by the red dots in Figure 1 below.

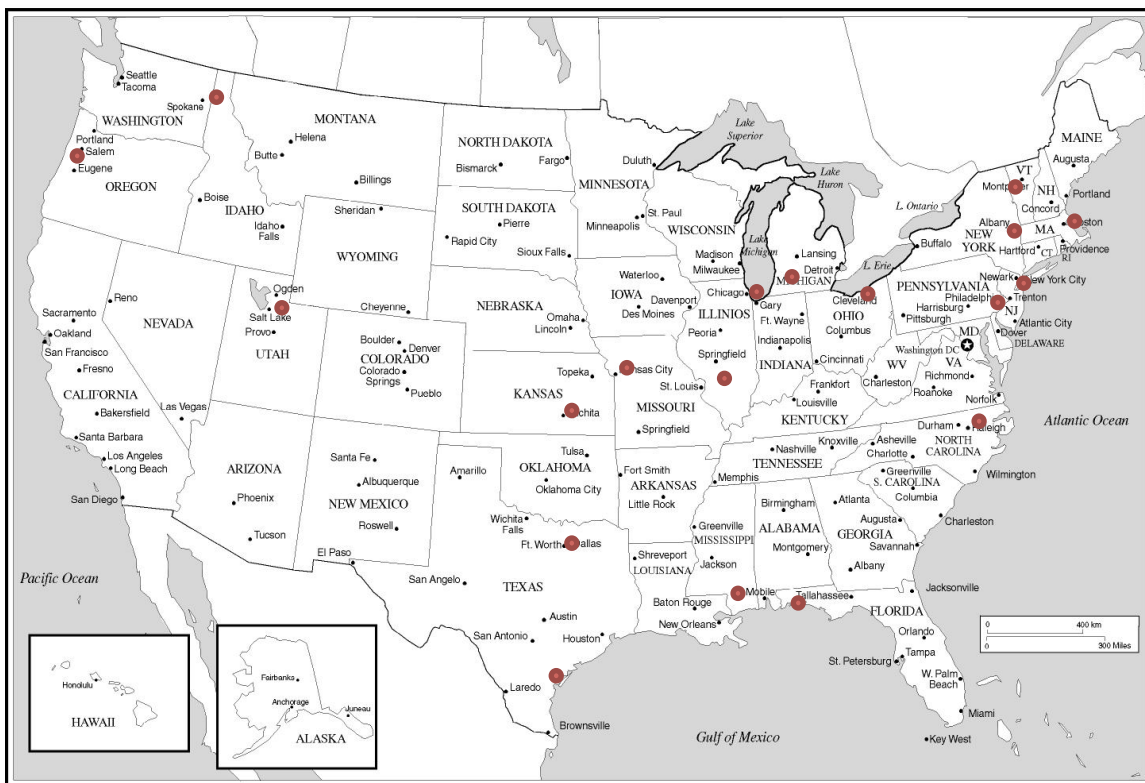


Figure 1. Locations of Judge-Involved Supervision Programs Included in the Study

5. An update by the Federal Judicial Center's Education Division in September 2011 identified 52 districts with operational programs.

6. For complete survey results, see Barbara Meierhoefer, *Judge-Involved Supervision Programs in the Federal Courts: Summary of Findings from the Survey of Chief United States Probation Officers*, 75 Federal Probation 2, 37–46 (2011).

No two of the study programs are exactly alike because each was customized to accommodate the program's purpose, the district's local conditions, and agreements worked out among the partner agencies participating on the program teams. These variations in approach were used to explore the relationships between program characteristics and participant outcomes, and are described in detail in Part V *infra*.

The other report analyses, however, *combine* the experiences across programs. As with any set of numbers that represent an amalgamation of sites and practices, the purpose is to present an average against which individual programs can assess their own experiences,⁷ and to inform a discussion of what judge-involved supervision programs in general contribute to the federal supervision model.

B. Assembling Data

1. Program Participants

The participating programs provided the names and PACTS identifiers of offenders who had ever participated in their programs—regardless of whether they graduated—and, at a minimum, the date or dates that each participant began the program.⁸

OPPS provided the Federal Judicial Center with NPR data for the program participants that include information about offender characteristics and details of the offense and the supervision term. Of the 1,299 individual offenders (representing 1,370 program participations),⁹ a corresponding NPR supervision record was found for 1,257 (99%).¹⁰

2. Supervision Populations

OPPS provided separate NPR data for all offenders received in the districts where the programs operate for a supervision term that began during a time frame ranging from one year before the program commenced operations through December 31, 2011.¹¹ The data include separate probation and supervised release records for each term of supervision within the time period, and exclude juveniles and corporations.

7. Each of the participating programs is being provided with its own numbers for such a comparison.

8. Some programs were also able to provide the date the participant ended the program and whether he or she graduated, but this study was not designed to assess the impact of “dosage” (i.e., the actual amount of time an offender spent in the program) or program status. The impact of these intervening variables will be examined by the experimental prong of this research.

9. The difference between “participants” and “participations” results from the same person starting the program multiple times. There was an NPR match for 1,317 of the 1,370 participations (96%).

10. The “no matches” were 9 participants who were not found in NPR because their records were sealed, and 33 participants for whom the only NPR record match was to an inactive supervision or for a supervision term that began after the participant began the program.

11. The time range was set to accommodate the variety of analyses for this report. The comparison of program participants with the entire supervision population in Part III *infra* uses records through the end of calendar year 2011. The comparison of program participants with similarly situated offenders in Part IV *infra* uses the supervision start date as a matching criterion. Since many of the participants started their programs after they had been under supervision for some time, a one-year supervision-start cushion was built in for the file of potential matches.

3. Arrest Populations

The OPPS rearrest analysis file has information on arrests for new criminal conduct for offenders received for supervision between October 1, 2004, and September 30, 2011. The Federal Judicial Center provided to OPPS key identifying information for the program participants selected for inclusion in the arrest sample (see *infra* Part II.C) and their matches from the supervision population (see *infra* Part II.D). OPPS then matched these records to its rearrest analysis file using FBI number, date of birth, district, and supervision start date. Only those study sample offenders who had a record in the rearrest file that matched on these criteria were included in the final arrest analysis sample.

C. Identifying Participants for the “Similarly Situated” Offender Comparisons

The analyses in Part IV *infra* compare program participants with “similarly situated” offenders who did not participate in a program using four samples with different time frames:

1. a one-year supervision follow-up of offenders whose supervision term began on or before March 31, 2011 (using the NPR data);
2. an 18-month supervision follow-up of offenders whose supervision term began on or before September 30, 2010 (using the NPR data);
3. a one-year arrest follow-up of offenders whose supervision term began on or before September 30, 2010 (using the rearrest analysis file);¹² and
4. an 18-month follow-up of offenders whose supervision term began on or before March 31, 2010 (using the rearrest analysis file).

The first step was to identify the program participants to be included in the analyses. For methodological reasons, *excluded* from all of the samples were participants who

- started the program more than 6 months after they started supervision;¹³
- had supervision terms of less than 12 or 18 months (depending on the sample);
- had a supervision type of “Other”;
- were missing scores on both of the empirical risk assessment instruments—the Risk Prediction Index (RPI) and the Post-Conviction Risk Assessment (PCRA);¹⁴
- were missing valid follow-up data because supervision began after the sample cutoff date; or

12. OPPS performed this analysis because the Federal Judicial Center does not yet have permission to access the FBI arrest data in the rearrest analysis file. The Center is seeking such permission for the experimental prong of this research.

13. This requirement is needed to ensure that the participant had the opportunity for a significant exposure to the program when compared with a similarly situated offender who began supervision in the same general time frame.

14. The RPI is a risk assessment device developed by the Federal Judicial Center and used since 1997 by the federal probation system to determine the general risk level of offenders received for probation or supervised release supervision. The PCRA, now being phased in to the federal probation system, is a fourth-generation risk assessment tool developed using data from offenders received for supervision between October 1, 2005, and August 13, 2009. See James Johnson, Christopher Lowenkamp, Scott Van-Benschoten & Charles Robinson, *The Construction and Validation of the Federal Post Conviction Risk Assessment (PCRA)*, 75 Federal Probation 2, 16–29 (2011).

- were missing valid follow-up data because the supervision was closed by transfer, death, or “Other” before the expiration of the follow-up period (either 12 or 18 months, depending on the sample).

Using these criteria, the resulting samples included only participants for whom outcome information was available for, at a minimum, the length of their follow-up period (12 or 18 months) and who had an opportunity for significant exposure to the program by the end of their follow-up period—a minimum of 6 months for the 12-month follow-up and a minimum of one year for the 18-month follow-up.

This selection process identified 796 participants who met the criteria for the one-year supervision follow-up—the largest of the four samples (see Appendix C, Table C-1 *infra*). These participants constituted the target population to be matched to offenders who were “similarly situated” at the start of supervision for the comparative analyses.

D. Constructing Comparison Groups

The underpinning of the process-descriptive study is simple: Similarly situated offenders begin their terms of supervision. Some are exposed to a judge-involved supervision program; some are not. Do their experiences differ in terms of how they are supervised and whether or not they succeed, and if so, how? The key to making this a meaningful comparison is to properly define “similarly situated.”

The primary group of “similarly situated” offenders used for the comparison was constructed using a two-step one-to-one matching process.¹⁵ Step 1 was to construct a pool of potential “program eligible” matches from locations where the programs operate. Step 2 was to identify one specific match from within that pool for each individual in the participant sample.

As described in detail in Appendix A, we determined the pool of program eligibles using a combination of each program’s eligibility criteria and the characteristics of its actual participants. Within these parameters, each participant was matched with another offender who did not participate in a program. The individual match was based on a limited number of factors that are known at the start of supervision and that are believed to be most strongly related to supervision inputs and outcomes.

In consultation with OPPS, we determined that the most important factors for the individual match were the level of risk, and the place and timing of supervision. The first factor is used to match offenders who have the same likelihood of success at the start of supervision. The others ensure that offenders in both groups are being supervised in the same general economic, housing, and services environment by a probation office with the same general staffing and budgetary circumstances and with (presumably) fairly uniform data collection procedures and practices.

15. In addition to the straightforward one-to-one matching scheme described here, a second comparison group was constructed on the basis of propensity scores, a multivariate statistical approach. The purposes of having a second comparison group were to provide a validity check on the findings and to examine the potential for using simple matching schemes as part of a general research protocol that can be used by districts to assess various supervision programs. The numbers based on the propensity score-matched group are quite similar to those from the one-to-one-matched group presented in the body of the report; the overall findings are the same. A description of the propensity score matching process and the results of the analyses using this second comparison group are presented in Appendix B *infra*.

1. *Likelihood of success*: Offenders in the pool of potential matches were considered a match with participants on their likelihood of success if they fell into the same category on the PCRA.¹⁶ Although the PCRA was not in use as a risk assessment tool during the study period, it was developed and validated using data collected during the study period. Its items therefore reflect the most up-to-date research on the specific risk, need, and strength factors that are most strongly associated with the likelihood of succeeding under supervision (and beyond) in the federal system.

If either no PCRA score was available or there was no match on PCRA category, offenders in the pool were considered a match if they were scored the same or within one point on the RPI and also matched on the “Willingness to Change” assessment.¹⁷ If there was more than one potential match, the “best” was selected on the basis of the highest number of matches between the participant’s and potential match’s assessments for (a) violence, (b) institutional adjustment problems, (c) unstable family, and (d) pro-social associations.¹⁸

2. *Location*: Participants were matched with another offender supervised in the same probation office.¹⁹

3. *Timing*: We assessed similarity of supervision start dates sequentially. We looked first within the set of matches based on likelihood of success and location for offenders who began supervision within three months of the participant (89%). For those participants with no matches, we expanded the search to six months (9.5%) and finally to nine months (1%).

The resulting sample for the comparative supervision analyses presented in Parts IV.A, B, and C *infra* includes 761 matches for the 796 program participants selected for the 12-month follow-up (96%), and 662 matches for the 680 participants selected for the 18-month follow-up (97%). (See Appendix C, Table C-3 *infra* for details.)

The resulting sample for the comparative arrest analyses presented in Part IV.D *infra* includes 578 matches for the 680 program participants selected for the 12-month arrest follow-up (85%), and 482 matches for the 599 participants selected for the 18-month arrest follow-up (80%). The lower match percentages for these samples are due to the exclusion of both members of a matched pair if either the participant or his or her comparison offender could not be matched to a record in the rearrest analysis file.

16. See Johnson et al., *supra* note 14. The PCRA risk categories are Low (scores = 0–5), Low Moderate (scores = 6–9), Moderate (scores = 10–12), and High (scores over 12).

17. Unless otherwise noted, all references to “assessments” refer to the probation officer’s assessment of the offender’s circumstances in the Initial Case Plan, which is generally completed within 30 days of the start of a term of supervised release and within 60 days of the start of a probation term.

18. These enhancements to the RPI represent risk domains included on the PCRA that are not addressed by the RPI.

19. We consolidated the three offices served by one of the programs, and we changed the supervision office of the small number of participants who commuted from outside the program area to the office where the sessions were held.

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III. COMPARISON OF OFFENSE AND OFFENDER CHARACTERISTICS: PROGRAM PARTICIPANTS VS. THE GENERAL SUPERVISION POPULATION

Judge-involved supervision programs can be resource intensive²⁰ and therefore should be aimed at the higher risk/higher need offender population, which requires and benefits most from intensive supervision programs.²¹

Table 1 presents information on key demographic, offense, risk, and need factors for the group of program participants and for the general supervision population in those offices where programs operate. It indicates that judge-involved supervision programs generally are serving the higher risk/higher need populations that they should be targeting:

- The median RPI score of program participants is 6, compared with 4 for the general supervision population; 57% of the participants have scores from 6 to 9 (the riskiest group), and more than 90% have scores of 3 or above.²²
- Higher percentages of program participants than the general population were convicted of crimes involving drugs or weapons, were under age 36, were less well-schooled, and were not living with spouses and/or children when released.
- Ninety-six percent of the program participants had a history of substance abuse, compared with 71% of the general supervision population; and 81% had substance abuse treatment conditions, compared with 55% of the general population.

On the positive side of the “risk” ledger, more of the participants than the general population (42% vs. 33%) were assessed by their probation officers as “highly motivated to change” at the start of their supervision terms.

These findings are consistent with what would be expected based on the 2010 survey responses from these 20 programs: 15 of the programs targeted offenders with higher RPI scores, 13 focused exclusively on offenders with a history of substance abuse, all but 1 were voluntary, and 75% required that offenders express a willingness to change to be eligible to participate.²³

20. Meierhoefer, *supra* note 6, at 43–44.

21. See, e.g., Christopher Lowenkamp, Edward Latessa & Alexander Holsinger, *The Risk Principle in Action: What Have We Learned from 13,676 Offenders and 97 Correctional Programs?* 52 *Crime & Delinquency* 1, 77–93 (2006); Christopher Lowenkamp & Edward Latessa, *Understanding the Risk Principle: How and Why Correctional Interventions Can Harm Low-Risk Offenders*, Topics in Community Corrections (National Institute of Corrections 2004).

22. The RPI is the only actuarial risk predictor used for this comparison because the PCRA was not used as a program selection tool during the period of study and, since it is available only for offenders in the OPPS rearrest analysis file (which did not at the time of these analyses have information on offenders received after September 30, 2009), the score was missing for over 40% of the sample.

23. Meierhoefer, *supra* note 6, at 38.

Table 1. Characteristics of Program Participants and of Other Offenders Received for Terms of Supervised Release or Probation in Offices Where Programs Operate from One Year Before Program Commencement Through December 31, 2011

Characteristic ^a	Program Participants ^b	Supervision Population ^c
Gender	1,316	31,349
Male	85.9%	84.3%
Female	14.1%	15.7%
Ethnicity	1,313	31,069
Hispanic	12.9%	19.2%
Non-hispanic	87.1%	80.8%
Race	1,313	31,289
White	53.8%	60.2%
Black	44.3%	35.4%
Other	1.8%	4.4%
Instant Offense	1,310	31,134
Drugs	45.2%	36.5%
Property	16.2%	24.7%
Immigration	0.7%	4.6%
Violence	8.7%	10.4%
Weapons	26.0%	16.4%
Other	3.3%	7.3%
Conditions^d	1,317	31,361
Substance Abuse Treatment?		
Yes	81.2%	54.8%
No	18.8%	45.2%
Mental Health Treatment?		
Yes	31.9%	26.7%
No	68.1%	73.3%
Education	1,204	27,548
College or Above	2.0%	8.1%
High School Diploma	38.5%	41.0%
Less than High School or GED	59.6%	50.9%
RPI	1,314	30,540
Median RPI (Risk) Score	6	4
Low (0–2)	8.7%	34.5%
Moderate (3–5)	33.9%	34.4%
High (6–9)	57.4%	31.1%

Characteristic ^a	Program Participants ^b	Supervision Population ^c
RPI Items ^e	1,260	29,462
Median Age	33	36
Under 26	12.5%	11.5%
26–35	46.3%	35.3%
36 or Older	41.1%	53.2%
Median No. of Prior Arrests	8	4
Employed?		
Yes	44.4%	45.5%
No	55.6%	54.5%
History of Substance Abuse?		
Yes	96.0%	71.4%
No	4.0%	28.6%
College Degree?		
Yes	2.5%	8.8%
No	97.5%	91.2%
Living with Spouse and/or Children?		
Yes	18.6%	32.3%
No	81.4%	67.7%
Absconded from Previous Term of Supervision?		
Yes	26.7%	13.6%
No	73.3%	86.4%
Key Assessment Items	1,260	29,462
Highly Motivated to Change?		
Yes	42.1%	33.0%
No	57.9%	67.0%
Strong Social Support?		
Yes	35.0%	35.3%
No	65.0%	64.7%

a. The dynamic characteristics refer to the offender's status at the start of supervision as documented on the Initial Case Plan. See the Glossary for definitions of characteristics that are not self-evident.

b. If an individual entered the program more than once, data from all associated supervision terms are included. The total participant *n* of 1,317 represents 1,257 individuals.

c. Excludes program participants.

d. Includes only conditions that were imposed by the court before the start of supervision and activated at some point during the term.

e. All of the RPI and assessment items are missing for 57 participants and 1,899 offenders in the general supervision population who did not have an Initial Case Plan in PACTS.

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IV. COMPARISON OF SUPERVISION ACTIVITIES AND OUTCOMES FOR PROGRAM PARTICIPANTS AND SIMILARLY SITUATED OFFENDERS

A. Supervision Activities

The program participants and their similarly situated matches were compared on a number of supervision activities to determine if participants were supervised more closely. The results shown in Tables 2 and 3 suggest that they were.

1. Controlling Strategies

Table 2 shows the median number of contacts and drug tests per month of supervision, and the percentage of offenders contacted or tested more than once per month during the first 12 months and 18 months of supervision.²⁴ For both time periods, there were more contacts of each type with (or on behalf of) offenders who participated in a program than with those in the comparison group. During the first 18 months

- 89% of the participant group was contacted, on average, more than once a month, compared with 72% of the comparison group;
- a higher proportion of the program participants were contacted in the field, in the office, and by telephone more than once a month;²⁵
- the median number of known drug tests for program participants²⁶ is almost double the number for the comparison group, and participants were a third more likely than their matches to be tested more than once a month;
- a higher percentage of the participants (11% vs. 6.5%) were referred for location monitoring; and
- officers had more contact with collateral sources for offenders in the participant group.

24. The median number refers to the median number of contacts or tests per month of active supervision. It is calculated by dividing the number of contacts or tests for each offender in the group by the number of months he or she was under active supervision (up to 12 or 18 months, depending on the follow-up period) and taking the median of those scores for the group. There were four offenders who were under supervision for less than 1 month; for those offenders, the number of months under supervision was set to 0.5.

25. This study's retrospective methodology—which relies on a counting of contacts according to whatever chronological record recording scheme each program district and office adopted—does not allow for an assessment of the extent to which the higher number of personal contacts with offenders is due to their court appearances in connection with the program. Though this issue is clearly a likely source of the differences reported here, a full exploration of it must await the results from the experimental prong of this research, which includes a uniform chronological record reporting mechanism for program contacts.

26. The number of drug tests are most likely underreported in PACTS, as the extent to which tests done by outside vendors are recorded in the system is not known. However, the underreporting is likely to affect participants and their matches in the same way, so the comparison should be valid even if the numbers are low.

Table 2. Controlling Strategies

	During the First 12 Months of Supervision (<i>n</i> = 761)		During the First 18 Months of Supervision (<i>n</i> = 662)	
	Program Participants	Comparison Group	Program Participants	Comparison Group
All Contacts with Offender ^a				
Median Per Month	2.50	1.50	2.28	1.44
% More Than 1 Per Month	90.7%	72.9%	88.8%	71.6%
In-Person Field Contacts				
Median Per Month	0.58	0.42	0.57	0.39
% More Than 1 Per Month	25.2%	9.1%	22.4%	8.8%
In-Person Office Contacts				
Median Per Month	0.78	0.50	0.71	0.50
% More Than 1 Per Month	35.0%	21.2%	31.6%	20.4%
Telephone Contacts ^b				
Median Per Month	0.75	0.42	0.72	0.42
% More Than 1 Per Month	36.3%	20.6%	34.3%	19.0%
Contacts with Collateral Sources				
Median Per Month	1.25	0.67	1.18	0.67
% More Than 1 Per Month	55.3%	36.5%	54.2%	35.5%
Known Drug Tests				
Median Per Month	0.67	0.42	0.61	0.33
% More Than 1 Per Month	41.9%	31.8%	37.3%	27.6%
% Referred for Location Monitoring	8.9%	5.1%	11.2%	6.5%

a. This and all of the contact strategies include only completed contacts. The numbers are based on chronological record codes either entered by officers or, in the case of drug tests, imported from the substance abuse testing module within PACTS. (See the Glossary for the codes counted for each type of contact.) Drug tests, in particular, are likely to be underreported, as the extent to which tests done by outside vendors are recorded in the PACTS system is not known.

b. Excludes voice mail messages.

In addition to providing a comparison of the controlling strategies used with the two groups, Table 2 indicates slightly more active supervision of both groups during the first year of supervision. This finding most likely reflects the removal of the riskier non-compliant offenders over time, and is also in keeping with both supervision policy²⁷ and

27. Admin. Office of the U.S. Courts, Guide to Judiciary Policy, vol. 8, pt. E, § 170(f).

the design features of many programs that call for a reduction in the intensity of supervision over time for compliant offenders who are meeting their goals.

2. Key Service Referrals

Although there is good reporting of service referrals to contract providers who are being paid by the federal government, it is rare for other referrals to be reported systematically in the local PACTS databases. The service referral information shown in Table 3 is therefore partial and does not accurately reflect the level of supervision referral activity. There is, however, no reason to suspect that non-contract referrals would be recorded in PACTS any differently for participants than for comparison group offenders within the supervision office, so the comparison should be valid even if the numbers are known to be low.²⁸

Table 3. Known Service Referrals

% Referred for: ^a	During the First 12 Months of Supervision (<i>n</i> = 761)		During the First 18 Months of Supervision (<i>n</i> = 662)	
	Program Participants	Comparison Group	Program Participants	Comparison Group
Any Referral ^b	66.8%	42.6%	69.8%	46.1%
Substance Abuse Treatment (excludes testing only)	59.3%	34.7%	61.5%	38.4%
Mental Health ^c	21.0%	15.5%	23.3%	16.5%
Other Referrals ^b	3.3%	1.1%	4.2%	1.4%
Employment	2.8%	0.7%	3.9%	0.9%
Education	0.1%	0.0%	0.2%	0.0%
Life Skills	0.5%	0.5%	0.6%	0.6%

a. See the Glossary for definitions of the referral types.

b. The percentages in the unshaded areas will not add to those in the shaded areas, since an individual offender can be referred for more than one type of service.

c. Includes the two participants and one comparison group offender referred for sex offender treatment.

A higher percentage of program participants were referred for services of all types during both the first 12 months and first 18 months of supervision. At the end of the first 18 months, 70% of program participants had been referred for some type of service, compared with 46% of the comparison group. The most striking difference was for substance abuse treatment: program participants were more likely to have been referred than the comparison group offenders (61.5% versus 38%).

28. The experimental prong of this research includes a uniform chronological record reporting scheme to capture referrals for the full range of contract and non-contract services and will therefore be able to address directly the impact of programs on service referrals.

Program participants were also more likely to have been referred for mental health treatment, and although known referrals for other services are rare for both groups, they are more frequent for the participants than for the comparison group offenders.

B. Interim Supervision Outcomes

1. Status Changes After 18 Months of Supervision

When offenders begin supervision, a probation officer assesses their risks, needs, and strengths during the initial supervision planning process. The officer then documents the results in a case plan that is generally due within 30 days of the start of supervision for offenders serving terms of supervised release (the vast majority) and within 60 days for offenders starting a probation term.²⁹ This assessment helps the officer to devise a supervision plan best tailored to controlling risks and promoting offender strengths. Under current supervision policies, the assessment is to be updated after 6 months of supervision and again after 18 months of supervision.³⁰

Comparing the assessments of offenders' key dynamic risk or need factors at the time of the initial plan with those for the 18-month plan,³¹ Table 4 shows (a) the percentage of offenders in each group who changed in either direction on an assessment item, and (b) the net percentage change for offenders in each group—calculated as the percentage who changed in a positive direction minus the percentage who changed in a negative direction.

There was no change for over 80% of offenders in both groups for each assessment area. This finding may reflect the reality of offenders' progress (or lack thereof), or may implicate the reliability of the assessment data—particularly at later plan updates—or may be an artifact of the methodology.³²

Where there was a change, offenders in the program participant group did about as well or better than those in the comparison group in all areas except underemployment, and they outperformed their matches in the areas of gaining employment, improving the quality of their community associations, and motivation to change. The opposite direction of the changes for unemployment and underemployment suggests that, although the programs' emphasis on finding jobs for their participants is paying off, some of these jobs may not fully meet the offenders' employment needs.

29. In this sample, 93% of the offenders were serving terms of supervised release and 7% were serving terms of probation.

30. Admin. Office of the U.S. Courts, *supra* note 27, § 370.20.20.

31. The follow-up plan prepared from 12 to 24 months from the start of supervision that was dated closest to the 18-month mark of supervision was selected as the "18-month plan" for purposes of this comparison.

32. To maintain comparability of the groups, we calculated the percentages on the complete 18-month supervision follow-up sample and assigned offenders in either group whose supervision was revoked prior to that time or who—for whatever reason—did not have an 18-month plan in PACTS to the "no change" category for each of the assessment items.

Table 4. Changes in Offender Assessment After 18 Months Of Supervision (*n* = 662)

Assessment Area ^a	Program Participants		Comparison Group	
	Percentage with Change	Net Change	Percentage with Change	Net Change
Substance Abuse	5.6%	+2.0%	6.3%	+1.8%
Mental Health	4.7%	−2.6%	3.3%	−2.7%
Unemployment	14.2%	+8.2%	13.9%	+3.9%
Underemployment	9.1%	−2.4%	5.6%	−1.7%
Education/Skills	2.4%	+0.3%	3.5%	−0.8%
Residence	4.8%	+2.1%	5.6%	+1.1%
Family	3.9%	−0.3%	3.8%	+0.2%
Criminal Associations	3.6%	−0.9%	2.7%	−1.8%
Lack of Pro-social Associations	3.8%	+0.5%	2.9%	−1.4%
Community Support	12.7%	+5.4%	8.9%	+2.9%
Motivation to Change	18.0%	+3.5%	10.4%	+0.8%

a. See the Glossary for definitions.

2. Noncompliance

The only type of noncompliance for which NPR information is reliably available is a positive drug test. A higher percentage of the participant group than the comparison group tested positive for drugs—41% vs. 36% for the 18-month follow-up—but this doesn't necessarily relate to differences between the two groups in substance abusing behavior.

It is not possible to meaningfully compare the groups' positive test rates because the participant sample was tested more frequently (see Table 2) and therefore had a higher exposure. Meaningful assessments of the impact of supervision programs of any type on interim noncompliance measures must await more consistent data collection and more sophisticated methodologies.

C. Supervision Status and Revocation Type

We compared the participants and the comparison group offenders after 12 months and 18 months of the start of the supervision term as to the percentage still under active supervision. We also determined if supervision was terminated, whether it was by expiration of term, early termination, or revocation, and if supervision was revoked, what was the nature of the revocation.³³

Table 5a shows very little difference between the groups in supervision status at 12 months; the revocation rate for both groups is 13%. Technical violations were the basis

33. Recall that the analysis samples exclude offenders whose supervision was closed by transfer, death, or "Other" before the expiration of the follow-up period (either 12 or 18 months, depending on the sample). See *supra* Parts II.C and II.D.1. See the Glossary for definitions.

for the majority of revocations in both groups, but the percentage was slightly higher for the participant group. Although revocations for new major criminal conduct were rare during the first year, the comparison group's revocations were double the number of those of the participant group, 2.8% vs. 1.4%.

After 18 months, more of the participant group than the comparison group had terminated their terms of supervision. This was due to higher proportions of *both* early terminations (9% vs. 1%) and revocations (23% vs. 19%). (See Table 5b.)

Table 5a. Supervision Status After 12 Months of Supervision for Offenders Received for Supervision on or Before March 31, 2011 (*n* = 761)

	Participant Sample	Comparison Group
% Remaining Active	86.2%	86.6%
% Terminated		
% Expiration of Term	0.4%	0.4%
% Early Termination	0.1%	0.0%
% Revoked	13.3%	13.0%
% Technical	10.9%	9.2%
% New Minor Criminal Conduct	0.9%	1.1%
% New Major Criminal Conduct	1.4%	2.8%

Table 5b. Supervision Status After 18 Months of Supervision for Offenders Received for Supervision on or Before September 30, 2010 (*n* = 662)

	Participant Sample	Comparison Group
% Remaining Active	67.2%	79.0%
% Terminated		
% Expiration of Term	1.4%	0.5%
% Early Termination	8.8%	1.2%
% Revoked	22.7%	19.3%
% Technical	18.3%	13.3%
% New Minor Criminal Conduct	1.2%	2.0%
% New Major Criminal Conduct	3.2%	4.1%

1. Early Termination

The higher rate of early termination for participants is what would be expected given that all of the programs in this study provide for early termination of supervision for their successful program participants. That the difference between the two groups' termination

rates is not much larger reflects the relative youth of many of the programs, the short follow-up periods used for this study, and the timing of the early termination award. Only one program grants the early termination upon graduation; the others require that offenders who complete the judge-involved segment of the program follow this with a year of successful traditional supervision before they grant (or consider) the early termination.³⁴

The longer three-year follow-up planned for the experimental prong of this research will provide a much better picture of the impact of the early termination award.

2. Revocation of Supervision

The higher overall revocation rate for participants resulted from more revocations for technical violations (18% vs. 13%) that were not offset by the slightly higher rate of revocation for new criminal conduct among the comparison group (6% vs. 4%). The implications of this finding in the context of the programs' goals and focus on graduated sanctions are discussed in Part VI *infra*.

D. Arrest Rates

Although revocations as reported from NPR are a meaningful outcome measure, they represent a combination of the behavior of the offender, the officer, and the court; they are limited to the period of supervision; and the timing of the revocation does not necessarily reflect the timing of the antisocial behavior.

Arrests are a more timely response to new criminal conduct than revocations are, and they include behavior beyond the period of supervision. While not all criminal conduct results in an arrest and not everyone who is arrested has, in fact, committed a crime, arrests are a reasonable surrogate for criminal conduct and have been adopted by OPPS as the measure of choice for assessing the effectiveness of its supervision policies and programs.³⁵

The analyses in this section were performed by OPPS using its rearrest analysis file. Tables 6a and 6b present the number and percentage of program participants and comparison group offenders who were arrested for new criminal conduct 12 and 18 months from the date they began supervision.

Fewer of the program participants than the comparison group offenders—16% vs. 19%—were arrested for new criminal conduct during the first 12 months of supervision, and more of the comparison group offenders were arrested for each of the substantive crime types except firearms offenses (for which three offenders in each group were re-arrested). After 18 months, the gap between the groups had narrowed to 1.4 percentage points, and participants by then had outpaced the comparison group offenders in the number of arrests for drug crimes, firearms offenses, and public order offenses.

34. The 19 programs that require additional supervision vary as to whether the early termination award can or cannot be rescinded for subsequent misconduct.

35. Baber, *supra* note 4, at 6.

Table 6a. Rearrest for New Criminal Conduct After 12 Months of Supervision for Offenders Received for Supervision on or Before September 30, 2010 (*n* = 578)

Rearrest Status	Program Participants		Comparison Group	
	Number	Percentage	Number	Percentage
Not Arrested	485	83.9%	468	81.0%
Arrested	93	16.1%	110	19.0%
Drugs	19	3.3%	23	4.0%
Violence	18	3.1%	23	4.0%
Public Order	18	3.1%	19	3.3%
Property	16	2.8%	22	3.8%
Escape/Obstruction	11	1.9%	12	2.1%
Firearms	3	0.5%	3	0.5%
Sex Offense	1	0.2%	3	0.5%
Immigration	0	0.0%	1	0.2%
Other	1	0.2%	1	0.2%
Unknown	6	1.0%	3	0.5%

Table 6b. Rearrest for New Criminal Conduct After 18 Months of Supervision for Offenders Received for Supervision on or Before March 31, 2010 (*n* = 482)

Rearrest Status	Program Participants		Comparison Group	
	Number	Percentage	Number	Percentage
Not Arrested	367	76.1%	360	74.7%
Arrested	115	23.9%	122	25.3%
Drugs	28	5.8%	24	5.0%
Violence	22	4.6%	30	6.2%
Public Order	24	5.0%	19	3.9%
Property	20	4.1%	25	5.2%
Escape/Obstruction	10	2.1%	11	2.3%
Firearms	5	1.0%	3	0.6%
Sex Offense	1	0.2%	3	0.6%
Immigration	0	0.0%	1	0.2%
Other	1	0.2%	1	0.2%
Unknown	4	0.8%	5	1.0%

These arrest rates for both groups are higher than those reported for the fiscal year 2010 arrest analysis of the general supervision population.³⁶ The rates of arrest for new criminal conduct in that study were 10% for the one-year follow-up of offenders received between October 1, 2004, and August 13, 2009, and 17% for the two-year follow-up of offenders received between October 1, 2004, and August 13, 2008. The difference in arrest rates is probably due to the higher risk/need offenders targeted by judge-involved supervision programs, but could also be influenced by changes in populations or processes over time, or differences between the districts that participated in this study and the system in general.

There is also quite a large discrepancy (see Table 7) between the percentage of arrests for new criminal conduct shown in Tables 6a and 6b and the far smaller percentage of revocations for new criminal conduct reported in Tables 5a and 5b (see *supra* Part III.C).

Table 7. Revocations and Rearrest for New Criminal Conduct

Outcome Measure	12-Month Follow-up		18-Month Follow-up	
	Participants	Comparison Group	Participants	Comparison Group
Revocations for New Criminal Conduct	2.3% (n = 761)	3.9% (n = 761)	4.4% (n = 662)	6.1% (n = 662)
Arrests for New Criminal Conduct	16.1% (n = 578)	19.0% (n = 578)	23.9% (n = 482)	25.3% (n = 482)

There are a number of likely explanations for the discrepancy.

- Arrests are posted close in time to the alleged criminal behavior, whereas the formal revocation process takes considerably longer. Revocations will therefore show up later in the reported statistics than will arrests.
- The arrest measure, unlike revocations, addresses conduct at any time during the follow-up period, regardless of whether the offender was under supervision.
- In accordance with federal supervision policy,³⁷ the probation system will respond to some arrests for minor crimes (e.g., public order offenses) with community-based sanctions rather than revocation.
- The time frames for the two measures overlap, but are not identical; for example, the 12-month revocation follow-up includes all offenders received for supervision before October 1, 2010, whereas the 12-month arrest follow-up includes only those received before April 1, 2010.

Additional analyses that compare the timing of arrests and supervision outcomes for individual offenders would shed more light on these differences and should be considered

36. Baber, *supra* note 4, at fig. 4.

37. Admin. Office of the U.S. Courts, *supra* note 27, § 620.40.

when the data access issues are addressed. But the takeaway from both analyses is the same: Within 12 or 18 months of starting their sentences of community supervision, program participants were arrested and/or had their supervision revoked for new criminal conduct slightly less frequently—by 1.5 to 3 percentage points—than similarly situated offenders in the comparison group.

V. REVOCATION OUTCOME BY PROGRAM CHARACTERISTICS

The responses to the Federal Judicial Center's survey of chief U.S. probation officers in 2010 (see *supra* Part II.A) indicated that the judge-involved supervision programs participating in this study vary as to how long they have been in operation, their purpose, and their design. Analyses were performed to see which, if any, of these differences are related to revocations after 18 months of supervision overall and revocations for new criminal conduct as a subset. Correlational analyses such as these do not speak to causality, but they are useful in identifying interesting relationships for further investigation.

Unlike the analyses reported in the last part, these correlations do not compare program participants with similarly situated offenders, but examine associations between program characteristics and the revocation rates for participants across programs. All of the program participants in the 18-month follow-up sample, including those for whom a match was not found for the comparative analyses, are included in the analyses ($n = 724$).

The rates of revocation for new criminal conduct across the programs ranged from 0 to 9.5%, with a median of 5.1%. None of the program characteristics examined here were significantly related to these variations in revocation for new criminal conduct.³⁸

The variation in overall revocation rates was considerably greater, ranging from 0 to 69%, with a median of 22%. Of the 22 program characteristics examined here, 10 were significantly related to this variation across programs (see Table 8).

A. Time of Operation

As of March 31, 2012, the operating time of the participating programs ranged from 23 months to more than 100 months, and all but five programs were in operation for at least three years. (See Appendix A, Table A-1 for program start dates.)

Longer times of program operation were associated with lower revocation rates.

B. Program Focus

At the time of the survey

- the majority of the programs—11—followed a general “drug court” model, available only to probationers and supervised releasees with a documented history of substance abuse.
- two were reentry programs targeting higher risk offenders released from prison regardless of their substance abuse history.
- two were limited to returning prisoners, but only if they had a history of substance abuse (“reentry drug” programs).
- five targeted any higher risk probationer or supervised releasee who met the risk parameters set by the program (“risk management” programs; see Appendix A, Table A-1 for risk targets).

The reentry programs were associated with higher overall revocation rates, and the “risk management” programs were associated with lower overall revocation rates.

38. Because of the large number of correlations, an association is reported only if the significance of the correlation indicates a 99% chance that the finding was not an anomaly that was due to sampling error.

Table 8. Association Between Program Characteristics and Overall Revocation Rate (*n* = 724)

Program Focus	
Is a reentry program	Positive
Is a risk management program	Negative
Is a drug court program	–
Is a drug court reentry program	–
Eligibility Criteria	
Offenders with serious mental health issues are eligible	Positive
Sex offenders are eligible	Negative
Violent offenders are eligible	–
Weapons offenders are eligible	–
Illegal immigrants are eligible	–
Willingness to change required	–
Team Features	
Only a magistrate judge participates	–
Only an active district court judge participates ^a	–
Uses a full team	Positive
Has a treatment provider on the team	Positive
Has a U.S. attorney representative on the team	–
Has a defender representative on the team	–
Defender on team has an attorney–client relationship with participant	–
Team makes decisions by consensus	–
Implementation Features	
Has more than one phase	Positive
Number of meetings per month with offenders	Positive
Time set aside for preparatory meetings and program court time	Positive
Other	
Time of program operation	Negative

Note: “Positive” indicates that revocation was more common if a dichotomous characteristic was present or at higher levels of other types of characteristics; “Negative” indicates the opposite. A dash indicates no significant relationship.

a. Although senior district court judges were involved in several of these programs, all of these programs also involved an active district court judge or a magistrate judge.

C. Eligibility Criteria

The programs varied as to the eligibility of probationers, violent or weapons offenders, sex offenders, career offenders, and illegal aliens; and as to whether a substance abuse history and/or particular risk level is required for participation. Fifteen of the 20 programs also required that participants express a willingness to change to be eligible.

Programs that accepted sex offenders ($n = 6$) and those that excluded offenders with serious mental health problems ($n = 12$) were associated with lower revocation rates.

More important to revocation outcome than the official program criteria was the actual status of the participants. For example, an offender's being in a program that required him or her to express a "willingness to change" to participate *was not* associated with revocation outcome, but an offender's being assessed by a probation officer at the start of supervision as having a strong desire to change *was* associated.

D. Team Features

The composition of the teams ranged from a partnership between a judicial officer and the probation office ($n = 2$) to a full complement, including a prosecutor, defense counsel, and service provider who each participated in all phases of the program ($n = 6$). The other programs mix and match various levels of participation by the attorneys and service providers.

Programs that include service providers had higher overall revocation rates, as did those that feature full teams.

E. Implementation Features

In eight programs, participants were to earn their way through progressively less restrictive phases of supervision by participating actively and achieving goals. The number of phases ranged from 2 to 4.³⁹ The programs also varied as to how often the program team met with offenders, and how much time was set aside for the court sessions and the team meetings to prepare for these sessions.

Programs with multiple phases, and those that met more frequently with offenders and set aside more time for team preparatory and court sessions were associated with higher revocation rates.

39. Programs that end the judge-involved segment after 12 months and then require an additional year of success under traditional supervision before granting or considering the early termination award are not considered "phased" for this analysis.

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VI. DISCUSSION

The analyses comparing offenders who participated in judge-involved supervision programs with similarly situated offenders indicate that, in the aggregate, the programs generated more intensive supervision. Since the two groups of offenders are matched on many of the risk and need factors for which current federal supervision policy dictates the level and type of supervision, it may be that the value added by judge-involved supervision programs is the enhanced delivery of supervision interventions.

This finding is not unexpected, but it does raise several questions:

- Is the enhanced level of supervision an appropriate allocation of resources given the risks and needs of the non-program population?
- What is the impact of closer supervision on supervision outcomes, and how does this relate to program goals?
- What is the relationship between supervision outcomes and public safety?

A. Resource Allocation

Community corrections research has consistently confirmed the importance of ensuring that high-resource programs such as those examined here target the higher risk/higher need offenders who have been shown to benefit the most from intensive supervision interventions.⁴⁰

Although the results discussed in Part III *supra* indicate that the programs in the aggregate are serving a riskier population, each individual program should closely review its own numbers to see if its focus could be improved to more effectively and efficiently allocate supervision resources. For example, the tables prepared for each program's individual use show eight programs for which the median RPI score of participants was the same or within one point of that of the general supervision population in the offices where the program operates.

B. Supervision Outcomes

In the aggregate, after 18 months of supervision, program participants had their supervision revoked more frequently for technical violations than did offenders in the comparison group. While it is not surprising that more intensive supervision finds more noncompliant behavior, the frequency with which this results in revocation for participants is disappointing given that judge-involved supervision programs are designed to help shape an offender's behavior *in the community* and prevent his or her return to prison for technical violations.

The programs' theoretical focus on community-based sanctions comports well with the principle of conserving criminal justice resources and with the underlying philosophy of what is, after all, supposed to be a determinate sentencing system.⁴¹ Within this con-

40. See sources cited at *supra* note 21.

41. The original version of the Sentencing Reform Act of 1984, which established the framework for the current federal sentencing system, had no provision for revoking terms of supervised release. Rather, in keeping with the philosophy of determinate sentencing that (according to the legislative history) envisioned that any new criminal conduct would be prosecuted on its own merit and punished accordingly, it provided only the rights-laden avenue of "criminal contempt" as an alternative to re-incarcerating an offender who

text, the stated goal of post-conviction supervision in the federal system is “the successful completion of the term of supervision during which the offender commits no new crimes, is held accountable for victim, family, community, and other court-imposed responsibilities; and prepares for continued success through improvements in his or her conduct and condition.”⁴² While difficult to achieve, it is this goal of successful reintegration that distinguishes the role of community corrections in the criminal justice system.

All of the programs included in this study place an emphasis on graduated sanctions, and many have also built in less formal procedures for responding to technical violations. It appears, though, that these design elements aimed at reducing revocations for technical violations are often more than counterbalanced by the “look more, see more, revoke” supervision effect that results from the closer supervision of program participants coupled with a traditional reliance on revocation as a sanction.

Of the 12 programs that contributed at least 20 participants to this study, half exhibited the pattern of generating both more intensive supervision and higher rates of supervision revocation for technical violations. In 3 of these programs, participants were neither supervised more intensely nor had their supervision revoked for technical violations more often than offenders in the comparison group; and—most interesting for this discussion—for 3 other programs, closer supervision of participants was associated with *lower* rates of revocation for technical violations. These 3 programs were examined more closely and asked what they thought contributed to their ability to combine intensive supervision with lower rates of revocation for technical violations.

The only design feature that the three programs have in common is that all are voluntary. Beyond that, two of the three are “risk management” and one is a drug court. One utilizes a full team; the others do not involve service providers. Two require offenders to express a “willingness to change” to be eligible; the third does not.

Unique to one program is the granting of early termination immediately after an offender successfully completes (the equivalent of) 12 months of the program.⁴³ This feature provides a strong and clear incentive to comply with program rules and to graduate, and, regardless, would be expected to lead to a lower 18-month technical violation rate because the participants would not be under supervision for as long as the non-participants.⁴⁴

One of the other programs emphasizes the importance of incorporating cognitive behavioral therapy as a core component to facilitate the early identification of potential noncompliance issues, and to help create a group norm and dynamic where offenders provide mutual support to each other for positive behavior.

had already done his or her time in prison for the original crime without a new criminal conviction. For a discussion of how this evolved, see Barbara Vincent, *Supervised Release: Looking for a Place in a Determinate Sentencing System*, 6 Federal Sentencing Reporter 4 (1994).

42. Admin. Office of the U.S. Courts, *supra* note 27, § 150.

43. In this and a number of other programs, offenders earn credits for successful months of participation, and graduation is based on 12 credits that may be earned over a longer number of months.

44. This study is limited to an 18-month follow-up, but it would be very informative to revisit the arrest numbers for this program in particular when two years of follow-up are available to answer the question: What happened during that second year when program participants were no longer under supervision and offenders in the comparison group were?

What the three programs do share is a team commitment to early identification of problems, followed by swift, proactive, community-based responses designed to bring offenders back into compliance rather than send them back to prison. In some cases, this mind-set appears to be anchored in a long-standing supervision office culture built around early detection and graduated sanctions; in others, the program (or a particular judge) was the catalyst for rethinking traditional responses.

The reliance on supervision revocation as the usual response to “looking more” and “seeing more” behaviors that are (or are likely to lead to) technical violations appears to be more an issue of program implementation and local culture than of program design. The correlational analysis of program characteristics and revocation (see *supra* Part V) found that longer periods of program operation are correlated with lower overall revocation rates. It may well be that the revocation response to increased detection of technical violations dissipates over time as programs mature, learn what works (and what does not), and gain confidence in the effectiveness of community-based sanctions for responding to technical violations and minor criminal conduct.

C. Supervision Outcomes and Public Safety

Some will argue that achieving higher rates of re-incarceration for technical violations is a positive outcome for the utilitarian sentencing purpose of community safety. The key issue from this perspective is whether removing the offender from the community for a technical violation prevents new criminal conduct. This issue is inherently unknowable in the short term, since offenders whose supervision has been revoked are not at risk of committing a new crime in the community during their incarceration, but it can be informed by a comparison of the arrest outcomes of program participants with those of similarly situated offenders.

The results of this study indicate that program participants are arrested for a new crime slightly less frequently—by 1.5 percentage points—than offenders in a comparison group, whereas the participants’ terms of supervision were revoked for a technical violation more frequently—by 5 percentage points—than offenders in the comparison group.

The comparison of revocation and arrest measures over the same time period is, however, problematic. The discrepancy between the rates of revocation for new criminal conduct and the rates of arrest for new criminal conduct (see Table 7) suggests that the reporting of revocations may lag significantly behind the reporting of arrests. This means that the findings from studies such as this that have a relatively short follow-up period do not shed much light on the relationship between supervision outcomes and public safety (as measured here by arrests).

To better understand the effectiveness, costs, and benefits of the technical revocation tool, future research should track the supervision and arrest patterns for these groups over many years to assess how revocations affect criminal behavior and incarceration costs in the long term.

D. Ongoing Evaluation

The experimental prong of this research should be able to provide a more definitive picture of whether and how judge-involved supervision programs contribute in the short and long runs to more successful supervision outcomes, better community safety, and more

efficient expenditure of supervision and prison resources. Such rigorous and ongoing evaluation of programs and practices *as they have been implemented* in the federal system is critical for achieving the Federal Probation and Pretrial Services System's goal of becoming a results-based organization.

Building on approaches that have worked in other contexts, such as drug and reentry courts, is a good start, but it is only a start. As is evident from this study, programs will be customized to accommodate the environment into which they are introduced. Only those that can be shown to be effective in furthering federal sentencing and supervision goals, within the federal system's organizational framework, can be considered "evidence-based" for federal policy development. The necessity of customizing programs to their environments calls for a closer examination of how the evidence-based "fidelity" principle should be defined. The principle's current focus on adhering to a protocol or program model developed elsewhere can detract from the harder tasks of assessing precisely what problems a new program should be designed to address, identifying the core elements of other programs that have had success addressing the same problems, and adapting these elements to meet the new program's purposes within local restraints and opportunities.

APPENDIX A. CONSTRUCTING THE POOL OF POTENTIAL MATCHES FOR THE COMPARISON GROUP

The Federal Judicial Center constructed an initial pool of potential matches from the NPR population data by applying the following general constraints—regardless of program—that were necessary to implement a standardized follow-up period with known outcomes:

- The supervision term began before April 1, 2011.
- The supervision term was at least 24 months.
- There were no transfers in.
- There was no “transfer/death/other” termination within the first 18 months for supervisions that started on or before September 30, 2010, or within the first 12 months for supervisions that started from October 1, 2010, through March 31, 2011.

To better ensure that all potential matches would be “program eligible” based on the empirical data in NPR, each program’s match pool was further customized to reflect the key criteria required to participate in each program and the actual characteristics of each program’s participant analysis sample.

The Center’s survey of chief U.S. probation officers conducted in October 2010 was used to establish the programs’ general participant selection criteria.⁴⁵ The characteristics of the program participant sample were then reviewed to determine how to apply the customization.

1. The pool was constrained to the supervision offices included in the analysis sample. Program contacts advised the Center on how best to match participants who were outside of the program’s normal operating area.
2. Regardless of formal program selection criteria, the pool was limited to
 - supervised releasees if there were no probationers in the program sample; and/or
 - offenders with RPI scores equal to or greater than the lowest RPI score among the participant sample.
3. The matching pools of programs that require participants to have a history of substance abuse were constrained to offenders with evidence of a substance abuse history in NPR.
4. The pool excluded the following types of offenders if either the program’s selection criteria specifically exclude such offenders or the participant sample did not include any such offenders:
 - sex offenders;
 - violent offenders;
 - weapons offenders;

45. The Center survey was administered about a month after the cutoff date for two of the three samples used for this study, so it provides as good an indication as any snapshot could of the practices in effect for most of the sample participants. However, many of the programs have altered their eligibility criteria and operating procedures over time, so no static picture of “the program” will be accurate for each participant.

- illegal immigrants; and
- career offenders.

Table A-1 shows how these constraints were applied to each program's matching pool, and the Glossary provides definitions for each of the characteristics.

Table A-1. Match Pool Constraints by District

(See the Glossary for definitions)

District/ Program	Start Date	# in Pool	TSR Only (Sample)	RPI		Substance Abuse History (Criteria)	No Sex Offender (Criteria or Sample)	No Career Offender (Criteria or Sample)	Citizenship (Criteria or Sample)		No Violent Offender (Criteria or Sample)	No Weapons Offender (Criteria or Sample)
				Sample	Criteria				U.S.	U.S. or Legal		
1	3/1/2010	107		> = 3	3-9	✓	✓		✓			
2	4/1/2010	508	✓	> = 4	4-8	✓	✓		✓			
3	4/1/2008	264		> = 5	6-9		✓		✓			
4	2/1/2009	293	✓	> = 2	4-9	✓	✓			✓		
5	5/1/2006	192		> = 1	–	✓	✓		✓			
6	3/4/2009	704	✓	> = 5	5-9		✓					
7	10/1/2005	867		> = 2	6-9		✓		✓			
8	1/1/2010	158	✓	> = 2	4-7	✓	✓	✓	✓		✓	✓
9	6/1/2005	148	✓	> = 2	4-9	✓	✓		✓		✓	
10	7/1/2009	181		–	6-9	✓		✓	✓			
11	12/1/2002	1,584		> = 1	–	✓	✓	✓		✓		
12	12/1/2008	306	✓	> = 4	5-9		✓	✓	✓			
13	3/1/2009	640		> = 4	6-9		✓		✓			
14	4/1/2005	362		> = 1	–	✓	✓		✓		✓	✓ ^a
15	9/1/2007	1,593	✓	> = 2	5-7					✓		
16	9/1/2008	241	✓	> = 4	5-9		✓	✓	✓			
17	8/31/2008	786	✓	> = 2	–	✓	✓					
18	3/1/2008	900	✓	> = 2	4-9	✓				✓		
19	9/1/2009	65	✓	> = 4	–	✓	✓	✓	✓			
20	7/1/2007	163		> = 4	7-9	✓	✓	✓		✓	✓	

a. Although excluded by policy, there were three otherwise unmatched participants with violent or weapons offenses who were matched to pool offenders with the same type of offense.

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APPENDIX B. PROPENSITY SCORE MATCHING

Propensity score matching is a data reduction technique that allows participants to be matched with non-participants on a large number of characteristics using a single measure—the propensity score. The propensity score represents the likelihood of an offender being selected for and participating in a judge-involved supervision program.⁴⁶ By matching offenders on the propensity score, we can construct a comparison group of “similarly situated” offenders which closely matches the program participant group on an array of demographic factors, program selection criteria, and sentencing and officer risk/need assessment items that are typically correlated with recidivism outcomes.

Constructing the Comparison Pool

We used NPR data for the full supervision population to construct the pool of offenders used to identify propensity score comparison candidates, and we screened these data only by the study’s methodological requirements:

- The supervision term began before April 1, 2011.
- The supervision term was at least 24 months.
- There were no transfers in.
- There was no “transfer/death/other” termination within the first 18 months for supervisions that started on or before September 30, 2010, or within the first 12 months for supervisions that started from October 1, 2010, through March 31, 2011.

This pool was not further constrained on the basis of individual program criteria (e.g., type of supervision, risk score, substance abuse history, offense type, immigration status). Rather, these criteria—along with other offender demographic and risk factors—were taken into account during estimation of the propensity scores on the aggregated data.

Calculating Propensity Scores⁴⁷

The propensity scores were estimated from a logistic regression model with data obtained from NPR. Guided by the program selection criteria reported on the Federal Judicial Center’s 2010 survey of chief U.S. probation officers (see *supra* Part II.A) and prior recidivism research, we selected offender characteristics for the model that fell into three general categories: offender demographics, frequently used program selection criteria, and risk-related assessment items.

Preliminary analyses examined the relationship between the likelihood of being selected for and participating in a judge-involved supervision program and those offender characteristics of interest that were available from NPR. For some of these items—most notably substance abuse assessment and marital status—large amounts of data were

46. Although the true propensity score cannot be determined because not every offender characteristic related to program selection and participation is observable, an estimated propensity score can be obtained with a multivariate statistical method using observable characteristics.

47. For more technical detail, please contact Federal Judicial Center Research Associate Patricia Breen at pbreen@fjc.gov.

missing. In such cases, alternative measures or composites of multiple items were used to represent the risk/need domain.⁴⁸

The variables included in the final logistic regression model are those that, in combination, resulted in the best prediction of whether an offender was selected for and participated in a program. These variables are shown in Table B-1 and defined in the Glossary.

Matching Participants with Non-Participants

Table B-1 contains the descriptive statistics on the key observable characteristics used in the propensity score model. After calculating the propensity scores for program participants and their potential matches, we used one-to-one “nearest neighbor” matching to create the group of similarly situated offenders. That is, each participant was matched to one non-participant within the same probation office or district who had the nearest propensity score.⁴⁹ One-to-one matching as opposed to many-to-one matching was used to reduce potential bias as much as possible.

Thirty-one participants (4%) could not be matched because their propensity scores were outside the distribution of values where the two groups’ scores overlap with one another.⁵⁰ The matching process resulted in 765 pairs for the propensity score 12-month follow-up analyses⁵¹ and 597 pairs for the 18-month analyses.

After matching, there were no significant differences between the program participant and comparison groups, indicating that the matching process was successful in developing equivalent groups on those observable characteristics.⁵²

48. For example, the RPI item “Living with Spouse and/or Children” was used to represent the family domain. A “substance abuse issue” variable was created and set to “yes” if either the officer had assessed that substance abuse was an issue or there was a substance abuse treatment condition. (See the Glossary for more details.)

49. For proper estimation of the propensity score model, the match was performed at the district level rather than the office level for four programs: New York Eastern, Michigan Western, Utah, and Florida Northern. Thus, some of the non-participant matches were supervised in another office but located in the same district.

50. “Common support” occurs when the distribution of each group’s propensity scores overlap. “Off support” cases tend to be potential comparison cases that have a very low probability of being selected for a program or participants with a very high probability of being selected for a program.

51. This compares with 761 pairs constructed using the one-to-one matching protocol described in *supra* Part II.D. The two matched sets contain 716 of the same participants. The propensity score method found a match for 49 participants not matched using the one-to-one protocol and did not find a match for 45 of the one-to-one matched participants.

52. Because of the large number of analyses performed, the .01 level of significance is used to report a difference. To evaluate bias reduction, we calculated standardized bias (SB) statistics before and after the propensity score matching. According to conventional standards, a SB value of 20 or more is an indicator that bias is large. After matching, the SB on all characteristics was less than 10.

Table B-1. Descriptive Statistics on the Matched Pairs of Program Participants and Comparison Group Members Before and After Propensity Score Matching

Offender Characteristic ^a	Program Participants (n = 765)	Before-Matching Comparison Candidates (n = 21,583) ^b	After-Matching Comparison Group (n = 765)
Mean RPI Score ^c	5.8	3.7 **	5.8
Male	87.2%	84.6%*	88.2%
Black	46.4%	36.7%**	48.1%
Hispanic	12.4%	17.9%**	13.8%
Mean Age	35.2	38.9 **	34.9
U.S. Citizen	98.8%	92.6%**	99.3%
College Degree	2.9%	9.5%**	2.9%
Instant Offense			
Drugs	44.4%	36.7%**	47.8%
Property	15.7%	27.8%**	14.5%
Violent	8.4%	10.2%	7.2%
Weapons	27.6%	15.7%**	26.8%
Immigration/Other	3.9%	9.6%**	3.7%
Supervised Release	93.2%	83.3%**	94.1%
Sex Offender	1.3%	3.8%**	1.0%
Career Offender	3.0%	2.2%	1.8%
Unstable Employment	52.2%	42.1%**	51.2%
Willingness to Change	45.2%	34.4%**	44.1%
Residence Issue	10.1%	8.0%	10.1%
Living with Spouse and/or Children	18.3%	35.5%**	17.5%
Violence Issue	35.7%	26.2%**	35.6%
Criminal Associations	22.7%	20.4%	23.9%
Lacks Community Associations	11.8%	5.6%**	12.0%
Mental Health Treatment Condition	30.7%	23.2%**	30.0%
Location Monitoring Condition	17.8%	14.2%*	18.6%
Substance Abuse Issue	89.8%	63.5%**	88.5%

a. Included in the model, but not shown in the table, are 25 dichotomous variables indicating the probation office or district in which the offender was supervised.

b. The total number of candidates available for comparison included offenders with missing data on some of the offender characteristics.

c. The other actuarial risk prediction score, the PCRA, is correlated with recidivism outcomes, but was not included in the propensity score model because none of the programs used PCRA as a selection tool during the period of study and PCRA scores were available for only 60% of the offenders in the sample.

* $p < .05$.

** $p < .01$.

Tables B-2 through B-5 present the results of the comparative analyses using the propensity score-matched groups, and replicate the information in Tables 2 through 5 in Part IV of the report. The numbers from the two sets of analyses are quite similar, and the conclusions from the two are the same.

Table B-2. Controlling Strategies

	During the First 12 Months of Supervision (<i>n</i> = 765)		During the First 18 Months of Supervision (<i>n</i> = 597)	
	Program Participants	Comparison Group	Program Participants	Comparison Group
All Contacts with Offender ^a				
Median Per Month	2.50	1.50	2.27	1.39
% More Than 1 Per Month	91.2%	69.5%	88.9%	67.5%
In-Person Field Contacts				
Median Per Month	0.58	0.33	0.56	0.33
% More Than 1 Per Month	25.2%	8.8%	21.8%	9.2%
In-Person Office Contacts				
Median Per Month	0.83	0.50	0.67	0.44
% More Than 1 Per Month	35.8%	21.2%	31.3%	18.8%
Telephone Contacts ^b				
Median Per Month	0.75	0.42	0.72	0.39
% More Than 1 Per Month	37.4%	19.7%	35.3%	16.4%
Contacts with Collateral Sources				
Median Per Month	1.25	0.50	1.22	0.50
% More Than 1 Per Month	55.3%	29.2%	54.4%	29.1%
Known Drug Tests				
Median Per Month	0.67	0.33	0.61	0.28
% More Than 1 Per Month	42.1%	28.0%	36.3%	23.5%
% Referred for Location Monitoring	9.5%	7.6%	11.4%	9.7%

a. This and all of the contact strategies include only completed contacts. The numbers are based on chronological record codes either entered by officers or, in the case of drug tests, imported from the substance abuse testing module within PACTS. Drug tests, in particular, are likely to be underreported, as the extent to which tests done by outside vendors are recorded in the system is not known.

b. Excludes voice mail messages.

Table B-3. Known Service Referrals

% Referred for:	During the First 12 Months of Supervision (<i>n</i> = 765)		During the First 18 Months of Supervision (<i>n</i> = 597)	
	Program Participants	Comparison Group	Program Participants	Comparison Group
Any Referral ^a	68.5%	41.8%	71.0%	44.6%
Substance Abuse Treatment ^b	61.2%	34.1%	62.6%	35.7%
Mental Health ^c	21.6%	14.6%	24.3%	16.4%
Other Referrals ^a	3.3%	0.9%	4.7%	1.7%
Employment	2.7%	0.5%	4.2%	1.2%
Education	0.1%	0.0%	0.2%	0.0%
Life Skills	0.5%	0.5%	0.8%	0.7%

a. The percentages in the unshaded areas will not add to those in the shaded areas, since an individual offender can be referred for more than one type of service.

b. Excludes referrals for testing only.

c. Includes the one participant and two comparison group offenders referred for sex offender treatment.

Table B-4. Changes in Offender Assessment After 18 Months of Supervision (*n* = 597)^a

Assessment Area	Program Participants		Comparison Group	
	Percentage with Change	Net Change	Percentage with Change	Net Change
Substance Abuse	6.4%	+3.0%	4.9%	+1.5%
Mental Health	7.7%	-0.3%	6.0%	-0.3%
Unemployment	17.1%	+10.1%	17.3%	+7.2%
Underemployment	9.2%	-0.8%	8.4%	+2.0%
Education/Skills	3.5%	+1.2%	2.8%	+0.8%
Residence	6.7%	+4.0%	6.4%	+1.0%
Family	5.7%	+2.0%	7.0%	+0.3%
Criminal Associations	5.7%	+0.3%	4.5%	+0.8%
Lack of Pro-social Associations	5.7%	+2.0%	3.9%	+1.8%
Community Support	15.1%	+4.0%	9.9%	+1.2%
Motivation to Change	19.9%	+1.8%	13.9%	-0.5%

a. The follow-up data for the propensity score analyses were collected in July, two months after the data used for the one-to-one match analyses. This difference in timing meant that more “18-month” supervision plans were available to compare with the initial plans and, thus, more “change” was detected when compared with the data in Table 4 in the body of the report. The conclusions from the two sets of data are, however, the same.

**Table B-5a. Supervision Status After 12 Months of Supervision for Offenders
Received for Supervision on or Before March 31, 2011 (*n* = 765)**

	Participant Sample	Comparison Group
% Remaining Active	86.7%	88.1%
% Terminated		
% Expiration of Term	0.4%	0.0%
% Early Termination	0.1%	0.1%
% Revoked	12.8%	11.6%
% Technical Violations	10.5%	8.6%
% New Minor Criminal Conduct	1.0%	0.8%
% New Major Criminal Conduct	1.3%	2.2%

**Table B-5b. Supervision Status After 18 Months of Supervision for Offenders
Received for Supervision on or Before September 30, 2010 (*n* = 597)**

	Participant Sample	Comparison Group
% Remaining Active	66.8%	79.4%
% Terminated		
% Expiration of Term	1.3%	0.0%
% Early Termination	9.0%	1.7%
% Revoked	22.8%	18.9%
% Technical Violations	18.1%	13.9%
% New Minor Criminal Conduct	1.7%	1.8%
% New Major Criminal Conduct	3.0%	3.2%

APPENDIX C. TECHNICAL APPENDIX

Table C-1. Summary of Selection of Analysis Samples

Table C-2. Match Pool Constraints by District

Table C-3. Characteristics of the One-to-One Comparison Group Matches

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Table C-1. Summary of Selection of Analysis Samples

District	All Participants	No NPR Information		Methodology Restraints					Sample to be Matched
		Sealed Records	No Timely Match ^a	Program Start More Than 6 Months After Start of Supervision	“Other” Supervision	No Risk Score	Supervision Began After 3/11	Not Available for 1-Year Follow-up ^b	
1	22	0	7	6	0	0	2	0	7
2	19	0	0	9	0	0	2	0	8
3	36	0	0	4	0	0	5	1	26
4	27	0	0	11	0	0	2	0	14
5 & 6	120	0	2	36	0	0	11	0	71
7	89	0	0	10	0	0	0	0	79
8	29	0	0	0	0	0	8	0	21
9	141	0	9	65	1	0	0	4	62
10	18	0	0	8	0	0	2	0	8
11	113	0	1	41	0	0	7	0	64
12	29	0	0	2	0	0	0	0	27
13	37	0	0	2	0	0	8	0	27
14	199	2	9	85	0	1	7	0	95
15	144	3	2	8	4	0	15	1	111
16	22	0	0	1	0	0	5	0	16
17	24	1	0	3	0	0	4	0	16
18	68	1	1	18	0	0	0	0	48
19	14	0	0	2	0	1	0	0	11
20	148	2	2	50	0	0	9	0	85
TOTAL	1,299	9	33	361	5	2	87	6	796

a. Program start precedes start of supervision. b. Supervision terminated by transfer, death, or “other” within 1 year of the start of supervision.

Table C-2. Match Pool Constraints by District

District/ Program	Start Date	# in Pool	TSR Only (Sample)	RPI		Substance Abuse History (Criteria)	No Sex Offender (Criteria or Sample)	No Career Offender (Criteria or Sample)	Citizenship (Criteria or Sample)		No Violent Offender (Criteria or Sample)	No Weapons Offender (Criteria or Sample)
				Sample	Criteria				U.S.	U.S. or Legal		
1	3/1/2010	107		> = 3	3-9	✓	✓		✓			
2	4/1/2010	508	✓	> = 4	4-8	✓	✓		✓			
3	4/1/2008	264		> = 5	6-9		✓		✓			
4	2/1/2009	293	✓	> = 2	4-9	✓	✓			✓		
5	5/1/2006	192		> = 1	–	✓	✓		✓			
6	3/4/2009	704	✓	> = 5	5-9		✓					
7	10/1/2005	867		> = 2	6-9		✓		✓			
8	1/1/2010	158	✓	> = 2	4-7	✓	✓	✓	✓		✓	✓
9	6/1/2005	148	✓	> = 2	4-9	✓	✓		✓		✓	
10	7/1/2009	181		–	6-9	✓		✓	✓			
11	12/1/2002	1,584		> = 1	–	✓	✓	✓		✓		
12	12/1/2008	306	✓	> = 4	5-9		✓	✓	✓			
13	3/1/2009	640		> = 4	6-9		✓		✓			
14	4/1/2005	362		> = 1	–	✓	✓		✓		✓	✓ ^a
15	9/1/2007	1,593	✓	> = 2	5-7					✓		
16	9/1/2008	241	✓	> = 4	5-9		✓	✓	✓			
17	8/31/2008	786	✓	> = 2		✓	✓					
18	3/1/2008	900	✓	> = 2	4-9	✓				✓		
19	9/1/2009	65	✓	> = 4	–	✓	✓	✓	✓			
20	7/1/2007	163		> = 4	7-9	✓	✓	✓		✓	✓	

a. Although excluded by policy, there were three otherwise unmatched participants with violent or weapons offenses who were matched to pool offenders with the same type of offense.

Table C-3. Characteristics of the One-to-One Comparison Group Matches

Start Time Difference	12-Month Supervision Follow-up: 761 (96%)				18-Month Supervision Follow-up: 662 (97%)			
	PCRA Category	RPI Score		Total	PCRA Category	RPI Score		Total
		Exact	Within 1			Exact	Within 1	
< 3 months	487	158	34	679 89.2%	474	98	21	593 89.6%
4–6 months	30	28	15	73 9.6%	30	23	10	63 9.5%
7–9 months	3	4	2	9 1.1%	3	1	2	6 0.9%
Total	520 68.3%	190 25.0%	51 6.7%	761	507 76.6%	122 18.4%	33 5.0%	662

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GLOSSARY

This Glossary describes terms used in the report. Following the definition of each term in parentheses is the name of the table and/or analyses in which the term was used.

18-month case plan: The supervision case plan prepared from 12 to 24 months after the start of supervision that was dated closest to the 18-month mark of supervision. (See Table 4.)

Age: Age at the start of supervision, as calculated for the Initial Case Plan RPI. (Table 1; Propensity Score Analysis.)

Career offender: Defined by the U.S. Sentencing Commission at guideline §4B1.1 as an offender who (1) was at least 18 years old at the time he or she committed the instant offense of conviction; (2) has an instant offense of conviction for a felony that is either a crime of violence or a controlled substance offense; and (3) has at least two prior felony convictions for either a crime of violence or a controlled substance offense. Scored 0 = no, 1 = yes. (One-to-One Match Comparison Pool Construction; Propensity Score Analysis.)

Collateral contacts: The count of chronological record entries with the following codes that flag completed in-person or telephone contacts between an officer and collateral sources. Voice mail and “inquiry” codes are excluded. (Table 2.)

National Codes: CC, C-CCC, C-CS-REF, C-CS-VER, CE, C-EDU, CH, C-LE, CO, CT, C-TREAT, LMP-CC, C-HC (exclude those with “Attempt” flag)⁵³

Local Exclusions: CO-EMAIL, CRE, CRE1, CRES, CRES1, AEC, AP⁵⁴

Local Codes: C-RRC, AG, C-VIC (exclude those with “Attempt” flag)⁵⁵

College degree: “College Degree” as scored for the Initial Case Plan RPI. Scored 0 = no, 1 = yes. (Table 1; Propensity Score Analysis.)

53. “National Codes” are those available in all of the districts’ PACTS systems. “Local Codes” are codes added by a particular district or office that are mapped in the local PACTS system to a national code. Contacts for the analyses were counted based on the national codes as modified by excluding or adding local codes as appropriate. We developed the counting scheme by reviewing all of the chronological record codes in use at the various program sites and following up with the district to discern the proper categorization of various local codes.

54. “Local Exclusions” are local codes that are mapped to one of the listed National Codes for the contacts count but do not meet the definition of the item for this study (e.g., an attempted rather than a completed contact). They were excluded from the count.

55. “Local Codes” are local codes that meet the definition of the item for this study but were not mapped to one of the listed national contact codes. They were added to the count.

Criminal associations: Officer assessment of whether “Criminal Associations” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments. The Propensity Score Analysis was based on the initial plan assessment.)

Early termination: The court terminated supervision before the originally imposed term was to expire either because the offender had achieved all supervision goals or for compassionate reasons.⁵⁶ (Table 5.)

Education: The NPR client profile “Education” item at the start of supervision, collapsed into the following categories: (Table 1.)

- Less than high school or GED (GE = GED, LH = Less Than High School)
- High school diploma (AD = Associate Degree, HD = High School Diploma, SC = Some College, SV = Some Vocational, VC = Vocational/Apprentice Grad)
- College or above (CG = College Graduate, MD = Masters, PD = Doctorate)

Employment issue: Officer assessment for the initial case plan of whether the offender was either unemployed or underemployed, or had an unstable/poor work history. Scored 0 = no, 1 = yes. (Propensity Score Analysis.)

Family situation: Officer assessment of whether “Unstable Family Situation” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments.)

Initial Case Plan: The earliest available case plan for the particular supervision.

Institutional adjustment: Officer assessment of whether “Institutional Adjustment” was a supervision issue on the Initial Case Plan. Scored 0 = no, 1 = yes. (One-to-One Matching.)

Known drug tests: The count of chronological record entries with the following codes that flag positive and negative drug tests, invalid test samples, and instances where a test was attempted, but no sample was taken. (Table 2.)

National Codes: UA-NEG, UA-POS, UA-CRDI, UA-CRSU, UA-INVALID, UA-PHAD, UA-SGDI, UA-SGSU, UA-NOTEST, UA-FTA, UA-REFUSED, UA-STALL

Lacks productive community associations: Officer assessment of whether “Lacks Productive Community Associations” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments. The Propensity Score Analysis was based on the initial plan assessment.)

56. See 18 U.S.C. §§ 3564(c) and 3583(e)(1) for the statutory authority for early termination of supervision and Admin. Office of the U.S. Courts, *supra* note 27, § 380.10 for current policies.

Living with spouse and/or children: “Living with Spouse and/or Children” as scored for the Initial Case Plan RPI. Scored 0 = no, 1 = yes. (Table 1; Propensity Score Analysis.)⁵⁷

Location monitoring condition: Whether or not a location monitoring condition had been imposed by the court before the start of supervision and activated at some point during the term. In addition to the national codes for curfew, home confinement, and location monitoring, conditions were also included if the description of the condition implied location monitoring (e.g., GPS Monitoring, Home Remote Location Monitoring).⁵⁸ (Propensity Score Analysis.)

Mental health treatment condition: Whether or not a mental health treatment condition—denoted by the “MENH” national PACTS condition code—had been imposed by the court before the start of supervision and activated at some point during the term.⁵⁹ Scored 0 = no, 1 = yes. (Table 1; Propensity Score Analysis.)

Offense type: The NPR offense codes were classified into offense type categories as follows. (Table 1; Propensity Score Analysis.)

Violence	Drugs
ARS ARSON	COCA Cocaine
ARSN Arson	HERI Heroin
ASSA Assault	MARI Marijuana
ASSU Simple Assault	METH Methamphetamine
HOMI Homicide	OPIA Opiate
KIDN Kidnapping	OTDR Other Drug
RAPE Rape—Force	
ROBB Robbery	
SEX Sex Offense	
RACK Racketeering	
Weapons	Immigration
FIRE Firearms	IMMI Immigration Law

57. The more general NPR initial client profile “Marital Status” item was not used because over half of the sample was missing the information.

58. Local conditions mapped to national codes CURF, EMON, HOME, LMO, and LMP were included. Also included were the following local codes that were not mapped to a national location monitoring code: MON, EMNF, GPSM, HCRT, VOCE, VOIC, VVM, GPS, RAM, RLAO, and SAM.

59. Local condition codes that were both mapped to the MENH national code and classified in PACTS as “treatment related” would also have been included, but there were no such local codes used by the participating districts.

Property	Other
AUTO Auto Theft	MISC Miscellaneous Offense
BURG Burglary	MISP Misprision of Felony
COUN Counterfeiting	OMIN Minor Offense
EMBZ Embezzlement	PETT Petty Theft
FORG Forgery	PERJ Perjury
FRAU Fraud	TRAF Traffic Offense
GAMB Gambling	LIQU Liquor (Tax)
INTX Income Tax	DRUN Drunk/Disorderly
LARC Larceny, Theft	DUI DUI/DWI
TRAN Transportation of Stolen Goods	ESCA Escape
MAIF Mail Fraud	FEDR Federal Statute
MAIT Mail Theft	ABSC Technical—Absconded
	GEN Technical—General Violation
	USE Technical—Use of Drugs
	NPAY Technical—Non-payment of financial condition

Personal face-to-face officer-offender contacts – field: The count of chronological record entries with the following codes that flag completed face-to-face contacts between an officer and the offender in the field. (Table 2.)

National Codes: PH, PC, PE (exclude those with “Attempt” flag)
Local Exclusions: SURV, VMT, TF, AHC, EVNC, HVNC, PO-FTA
Local Codes: PRI (exclude those with “Attempt” flag)

Personal face-to-face officer-offender contacts – office: The count of chronological record entries with the following codes that flag completed contacts between an officer and the offender in the probation office. (Table 2.)

National Codes: PO (exclude those with “Attempt” flag)
Local Exclusions: PRI, PO-FTA
Local Codes: OV, LM-PO, PO-EM (exclude those with “Attempt” flag)

Positive drug test percentage: The number of positive drug tests (defined by a chronological record code of UA-POS), divided by the number of drug tests with results (UA-POS + UA-NEG).

Post-Conviction Risk Assessment (PCRA) score: The PCRA is a fourth-generation risk assessment tool developed using data from federal offenders received for supervision from October 1, 2005, through August 13, 2009. In this sample, the scores range from 0 to 16, with 0 indicating the lowest risk. Scores are categorized as follows: 0–5 (Low), 6–9 (Low Moderate), 10–12 (Moderate), Over 12 (High). The scores were calculated based on information from the OPPS Re-arrest Analysis File, rather than as scored by a probation officer during an actual offender assessment. (One-to-One Matching.)

Race: The NPR client profile “Race” item, with Asian, Indian, and Hawaiian-Pacific Islander collapsed into the “Other” category. (Table 1; Propensity Score Analysis.)

Referral for education: Clinical services contract and non-contract referrals for education services based on Service ID 40. Scored 0 = no, 1 = yes. (Table 3.)

Referral for electronic monitoring: Clinical services referrals for electronic monitoring based on Service IDs 61–63 and 67–69.⁶⁰ Scored 0 = no, 1 = yes. (Table 2.)

Referral for employment: Clinical services contract and non-contract referrals for employment services based on Service IDs 8–12, 59–61, and 64–66. Scored 0 = no, 1 = yes. (Table 3.)

Referral for life skills: Clinical services contract and non-contract referrals for life skill services based on Service IDs 30, 32, and 34. Scored 0 = no, 1 = yes. (Table 3.)

Referral for mental health treatment: Clinical services contract and non-contract referrals for mental health treatment based on Service IDs 13–19 and 57. (Table 3.)

Referral for sex offender treatment: Clinical services contract and non-contract referrals for sex offender treatment based on Service IDs 20–27 and 58. Scored 0 = no, 1 = yes. (Table 3.)

Referral for substance abuse treatment: Clinical services contract and non-contract referrals for substance abuse treatment based on Service IDs 41–50. Does not include referrals for testing only. Scored 0 = no, 1 = yes. (Table 3.)

Residence issue: Officer assessment of whether “Unstable Residence” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments. The Propensity Score Analysis was based on the initial plan assessment.)

Revocation: The term of supervision was revoked and the offender was returned to prison for one of the following three categories of violations. (Table 5.)

- New major criminal conduct: Involvement in or conviction for a new major offense, including absconded from custody, arrested for another charge, or convicted and sentenced to more than 90 days’ imprisonment or more than one year probation.
- New minor criminal conduct: Conviction for minor offenses, such as drunk driving, disorderly conduct, petty theft, and traffic violation, when the sentence is 90 days or less imprisonment, or one year or less probation, or a fine.

60. Service ID 69 falls under the Electronic Monitoring category in one district and a general “Administrative” category in another. The “Service ID 69” referrals for administrative services were not included.

- Noncompliance with conditions of supervision that does not involve new criminal conduct as defined above, including absconding from supervision, non-payment of fine/restitution, use of drugs, and “general.”⁶¹

Risk Prediction Index (RPI) score: The RPI is a second-generation risk assessment device developed by the Federal Judicial Center and used since 1997 by the federal probation system to determine the general risk level of offenders received for probation or supervised release supervision. Scores range from 0 to 9, with 0 indicating the lowest risk. The scores are those calculated by the probation officer for the Initial Case Plan. (Table 1; One-to-One Match Comparison Pool Construction; One-to-One Matching; Propensity Score Analysis.)

Sex offender: Whether or not the offender was a sex offender as indicated by either (1) any requirements to register as a sex offender recorded on the Initial Case Plan or (2) any conditions at the start of supervision for sex offender treatment or polygraph testing that were activated at some point during the term. Scored 0 = no, 1 = yes. (One-to-One Match Comparison Pool Construction; One-to-One Matching; Propensity Score Analysis.)

Strong social support: Officer assessment of whether “Strong Social Support” was a strength. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments. The Propensity Score Analysis was based on the initial plan assessment.)

Substance abuse history: Offenders with either (1) a “Yes” on the “History of Substance Abuse” RPI item calculated for the initial case plan or (2) a substance abuse treatment condition. (One-to-One Match; Comparison Pool Construction.)

Substance abuse issue: Offenders with either (1) an officer assessment of a substance abuse issue for the Initial Case Plan or (2) a substance abuse treatment condition. (Propensity Score Analysis.)

Substance abuse treatment condition: Whether or not a substance abuse treatment condition had been imposed by the court before the start of supervision and activated at some point during the term. In addition to the two primary national codes for substance abuse treatment (ALCO, DRUG), local condition codes were included if they were both mapped to one of the primary national codes *and* classified in PACTS as “treatment related.” Scored 0 = no, 1 = yes. (Table 1; Propensity Score Analysis.)

61. For a list of the statutory, general, and special conditions of supervision, see Admin. Office of the U.S. Courts, *supra* note 27, at ch. 2.

Telephone contacts with offender: The count of chronological record entries with the following codes that flag completed telephone contacts between an officer and the offender. Voice mail messages are excluded. (Table 2.)

National Codes: PT (exclude those with “Attempt” flag)

Local Exclusions: ATC, T

Local Codes: TF (exclude those with “Attempt” flag)

Underemployment: Officer assessment of whether “Underemployed” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments.)

Unemployment: Officer assessment of whether “Unemployed” was a supervision issue. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments.)

Violence issue: Officer assessment for the initial case plan of whether “Other Violence” or “Domestic Violence” was a supervision issue. Scored 0 = no, 1 = yes. (Propensity Score Analysis.)

Violent offender: Whether or not the offender had either (1) a violence issue or (2) an instant offense characterized as “Violent” (see Offense type). Scored 0 = no, 1 = yes. (One-to-One Match Pool Construction; One-to-One Matching.)

Weapons offender: Whether or not the offender had either (1) a “Yes” on the Initial Case Plan RPI “involvement of a weapon” item or (2) an instant offense characterized as “Weapons” (see Offense type). Scored 0 = no, 1 = yes. (One-to-One Match Pool Construction.)

Willingness to change: Officer assessment of whether “Highly Motivated to Change” was a strength. Scored 0 = no, 1 = yes. (Table 4 was based on a comparison of the Initial Case Plan and 18-Month Case Plan assessments. The Propensity Score Analysis was based on the initial plan assessment.)