

THE CHANGES IN THE PATTERN AND COST OF THE CRIME AMONG JUVENILES PRESENTING TO JUVENILE TREATMENT DRUG COURTS

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Presentation at the Society of Adolescent Substance Abuse Treatment Effectiveness (SASATE) Workshop on Juvenile Justice Treatment , College on Problems of Drug Dependence (CPDD), San Diego, CA, June 17th 2013.. Supported by the Reclaiming Futures/Juvenile Drug Court Evaluation under Library of Congress contract no. LCFRD11C0007 to University of Arizona Southwest Institute for Research on Women, Chestnut Health Systems & Carnevale Associates The development of this presentation is funded by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) through an interagency agreement with the Library of Congress – contract number LCFRD11C0007. The views expressed here are the authors and do not necessarily represent the official policies of OJJDP or the Library of Congress; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. There are no conflicts of interest to declare.



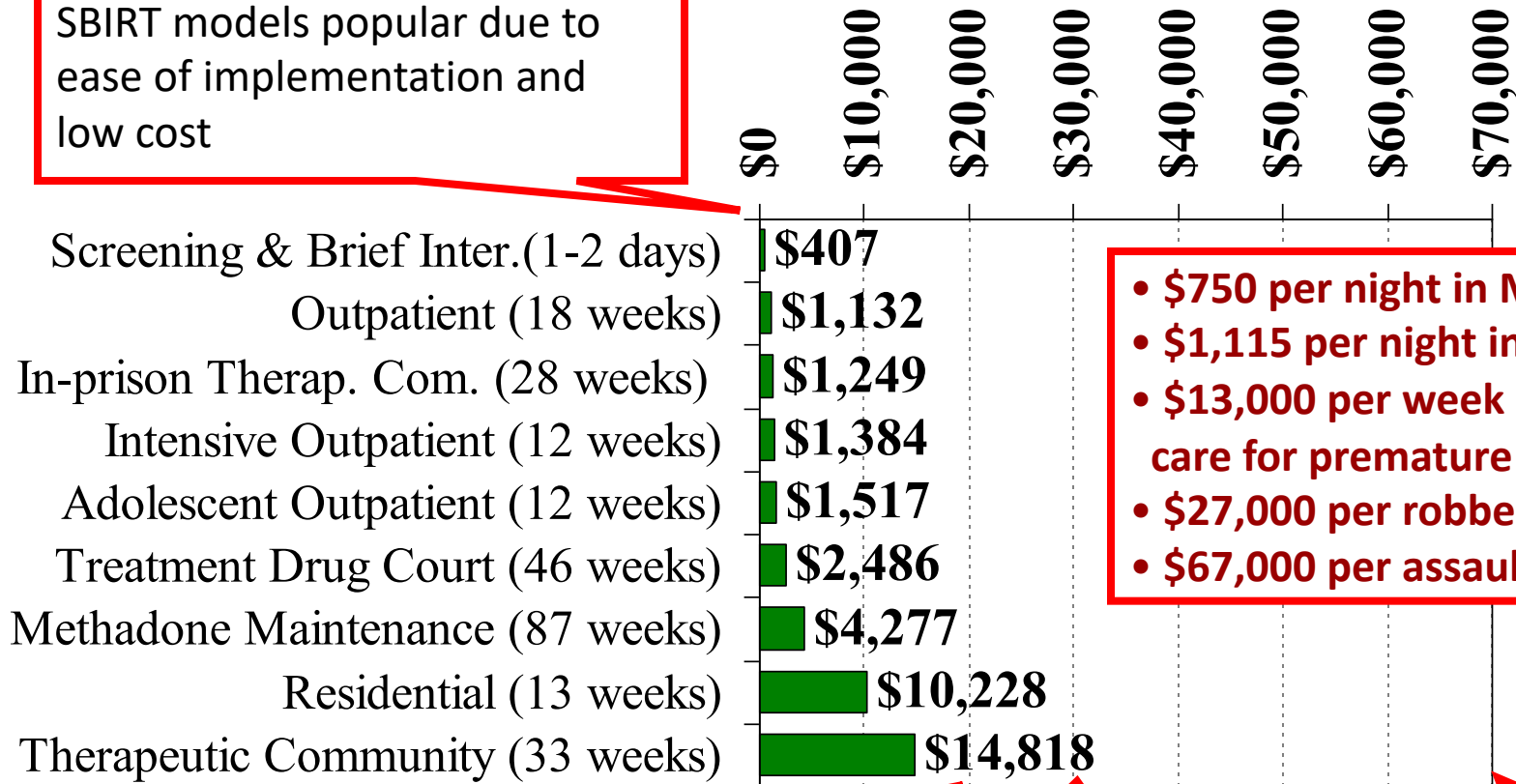
Purpose

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1. Review what we know about the costs of adolescent treatment and its return on investment
2. Expand on Nissen's presentation just before this to compare JTDC to JTDC with Reclaiming Futures version in terms of its impact on crime and the cost of crime to society.

The Cost of Treatment (and unmet need)

SBIRT models popular due to ease of implementation and low cost



- \$750 per night in Medical Detox
- \$1,115 per night in hospital
- \$13,000 per week in intensive care for premature baby
- \$27,000 per robbery
- \$67,000 per assault

\$22,000 / year to incarcerate an adult

\$30,000/ child-year in foster care

\$70,000/year to keep a child in detention

Return on Investment (ROI)

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- Substance abuse treatment has been shown to have a ROI within the year of between \$1.28 to \$7.26 per dollar invested.
- GAO's recent review of 11 drug court studies found that the net benefit ranged from positive \$47,852 to negative \$7,108 per participant.
- Best estimates are that Treatment Drug Courts have an average ROI of \$2.14 to \$3.69 per dollar invested when considering only service costs.

This also means that for every dollar treatment is cut, it costs society more money than was saved within the same year.

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Methods

Matching with Propensity Score Weights

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- A comparison of 63 intake characteristics found that 26 (41%) differed significantly between JTDC and RF-JTDC.
- To make a stronger quasi-experimental comparisons of the groups, we controlled for these differences by using them to create propensity score that reflected how similar the people in the JTDC comparison group were to those in the RF-JTDC.
- After propensity score weighting of the JTDC group, 19 (73%) of the of the original 26 differences were eliminated
- 6 (23%) were reduced but still statistically significant (having high count of multi-morbidity*, high health problems*, prior mental health treatment*, 1 + year behind in school**, Hispanic**, Caucasian*), and
- 1 (4%) was slightly enlarged (Expelled or dropped out of school*)

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*RF-JTDC higher **JTDC higher

- **Number of Crimes** based on the self reported frequency of committing crimes (e.g., property crime, interpersonal crime, drug/other crime) in the 12 months before and after intake
- **Costs of Crime (tangible & intangible)** based on the frequency of committing crimes in the 12 months before and after intake valued on tangible and intangible costs by economists (McCollister et al., 2010), adjusted for inflation to 2010 dollars and summed.

Cost of Crime (tangible & intangible)

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<u>Offense</u>	<u>Tangible\</u> a	<u>Intangible\</u> b	<u>Total\</u> c
Murder	\$1,340,409	\$8,851,318	\$9,418,451
Rape/sexual assault	\$43,247	\$209,322	\$252,450
Aggravated assault	\$20,484	\$99,630	\$112,209
Robbery	\$22,436	\$23,670	\$44,361
Arson	\$17,225	\$5,382	\$22,126
Motor vehicle theft	\$11,045	\$275	\$11,294
Household burglary	\$6,469	\$337	\$6,775
Larceny/theft	\$3,694	\$10	\$3,703
Stolen property	\$8,361	\$ -	\$8,361
Vandalism	\$5,096	\$ -	\$5,096
Forgery/counterfeit	\$5,520	\$ -	\$5,520
Embezzlement	\$5,746	\$ -	\$5,746
Fraud	\$5,276	\$ -	\$5,276

\a Including the 2011 est. cost to the victim, justice system, and criminal career.

\b Including the 2011 est. cost of pain & suffering, prorated risk of homicide.

\c Total is the sum of 2011 est. cost less any uncorrected risk-of-homicide crime victim cost

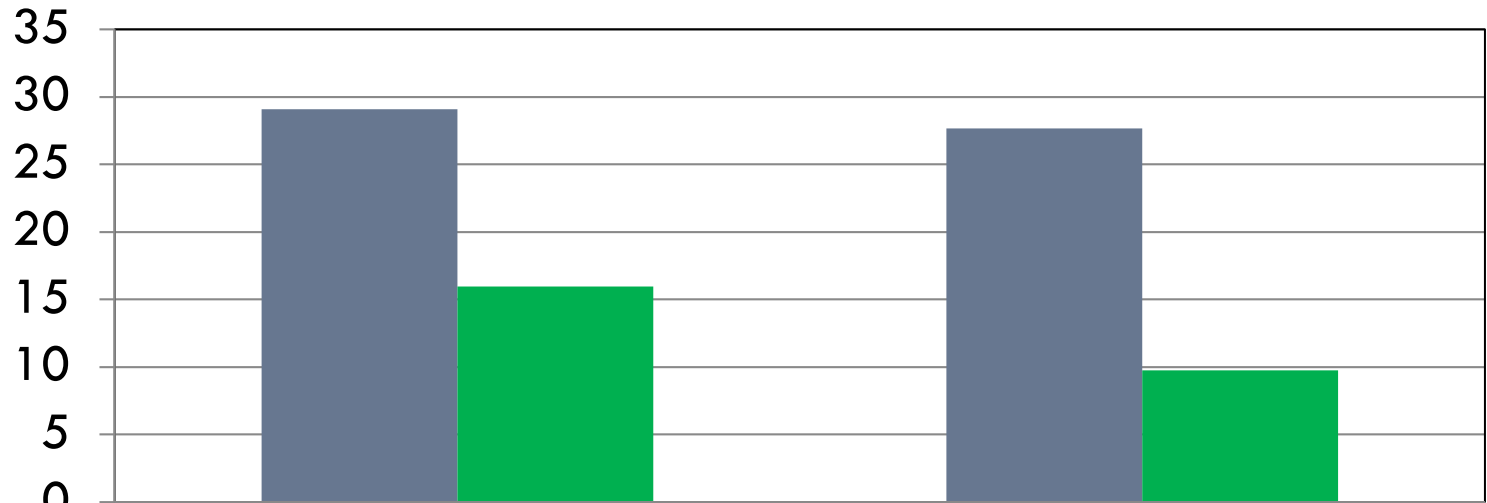
SOURCE: McCollister, K. E., French, M. T., & Fang, F. (2010).

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Results

Change in Number of Crimes Reported ^{\a}

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	Juvenile Treatment Drug Court \b	Reclaiming Futures JTDC\b, c
■ Year Prior	29	28
■ Year After	16	10
Raw Change	-13	-18
% Change	-45%	-65%

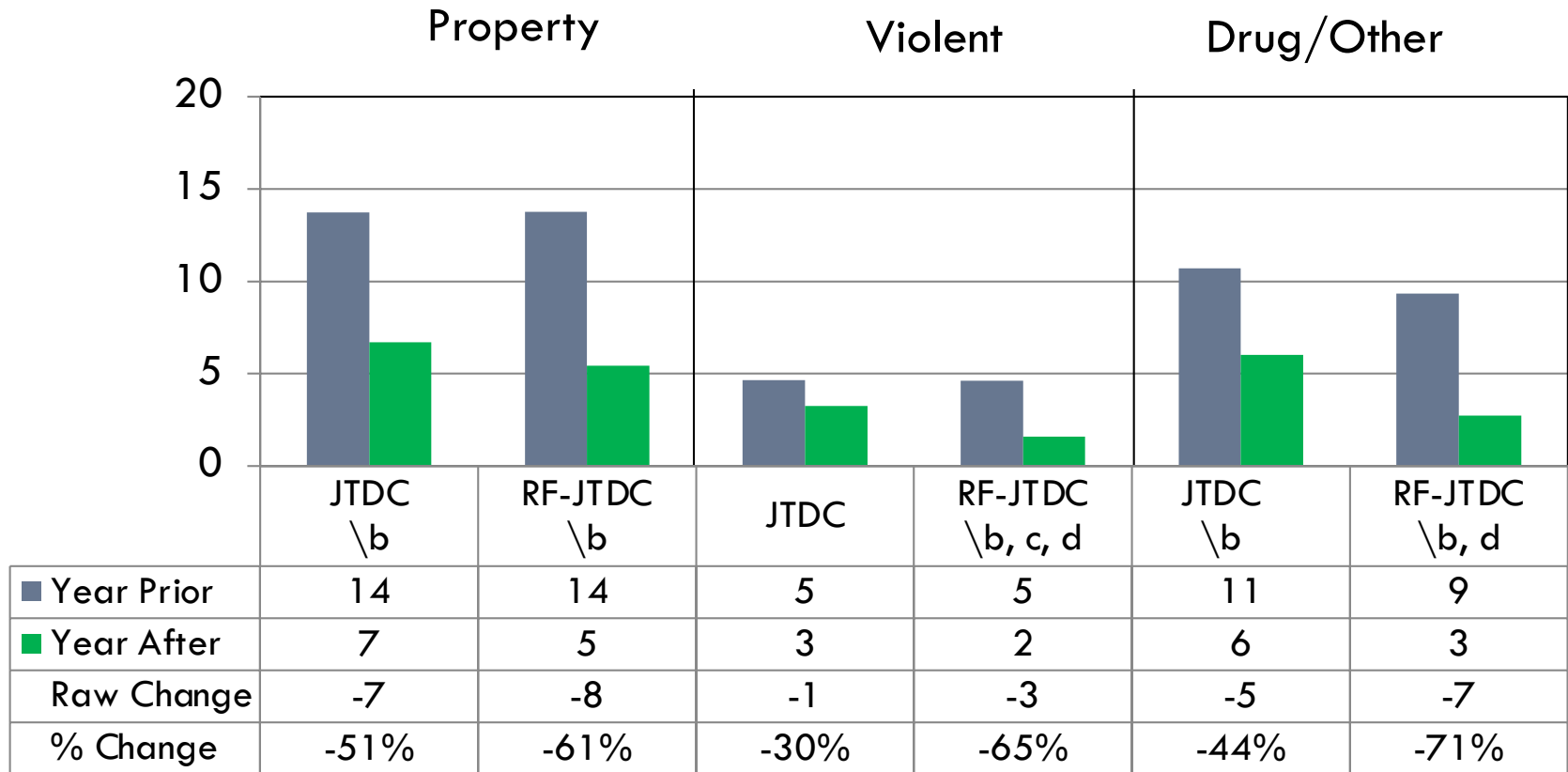
\a sum of the number of crimes in the past year

\b Change within condition is statistically & clinically significant for both JTDC and RF-JTDC

\c Amount of change is significantly **better** for RF-JTDC than JTDC

Source: JTDC vs. RF-JTDC (weighted n=1112)

Change in Number of Crimes by Type ^{\a}



\a Sum of all crimes reported within type.

\b Change within condition is statistically & clinically significant

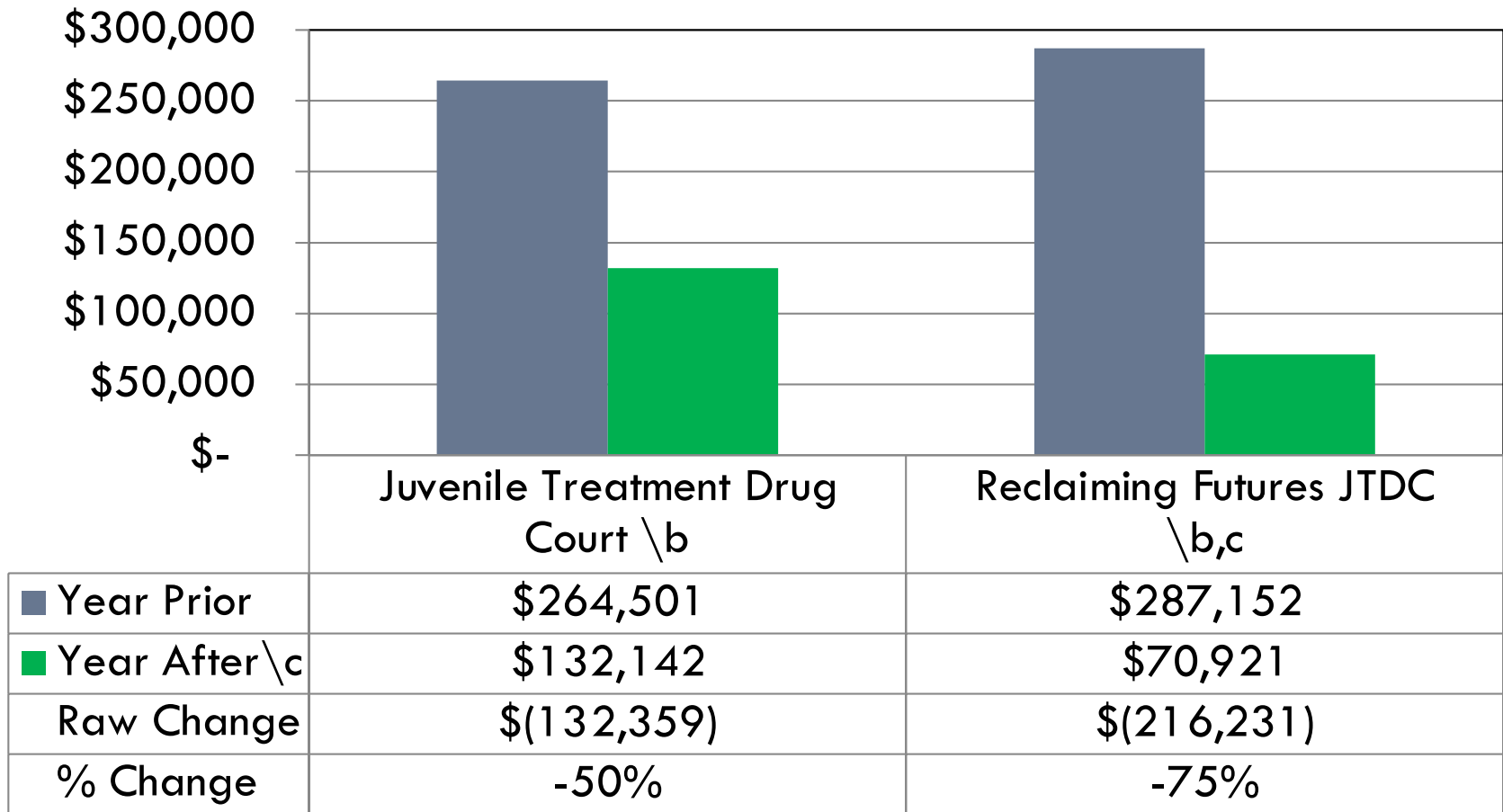
\c Amount of change is significantly better for RF-JTDC than JTDC

\d In the year after, significantly lower for RF-JTDC than JTDC

Source: JTDC vs. RF-JTDC (weighted n=1112)

Change in Cost of Crime to Society ^{\a}

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\a Based on the frequency of crime (crimes capped at 99th percentile to minimize the impact of outliers) times the average cost to society of that crime estimated by McCollister, et al., (2010) in 2011 dollars.

\b Year after is significantly **lower** than year before .

\c At follow-up RF-JTDC is significantly **lower** than JTDC

Source: JTDC vs. RF-JTDC (weighted n=1112)

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Discussion

Reprise – Impact on Crime

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- Participation in JTDC was associated with significant reductions in total crime, property crime and drug related crime.
- Participation in Reclaiming Futures JTDC was also associated with reduced violent crime
- Relative to JTDC, the Reclaiming Futures JTDC generated significantly larger reductions in the number of
 - ▣ total crimes (-45% vs. -65%),
 - ▣ property crimes (-51% vs. -61%)
 - ▣ violent crimes (-30% vs. -65%)
 - ▣ substance related crimes (- 44% vs. -71%)

Reprise – Impact on Cost of Crime

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- Participation in JTDC was associated with significant reductions in the average annual cost of crime for both JTDC (\$ -132,359; -50%) and Reclaiming Futures JTDC (\$ -216,231; -75%)
- Relative to youth in JTDC, youth in Reclaiming Futures JTDC had significantly lower costs of crime in the year after intake (\$132,142 vs. \$70,921 per youth).
- Reductions in the cost of crime are far greater than the reduction in services that have often been the focus on past economic analyses.

Some Important Limitations

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- This analysis is based on self-reported data.
- There was data missing due to attrition (11% to 21%), so outcomes had to be estimated based on the average of the observed waves.
- No formal cost analyses of JTDC or Reclaiming Futures JTDC were done so cost estimates here are likely to be lower bound estimates.
- The cost of crime was based on estimates developed for adults (McCollister et al., 2010) that have been applied here to youth.
- The cost of crime estimates have very large variance and there are also subgroups with changes going in both directions – limiting the power of the statistical tests that could be done.

Next Steps

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- Running by site to verify and better understand the findings.
- Will work to publish these findings
- OJJDP has just funded another round of Reclaiming Futures JTDC that will hopefully improve mental health and family services
- University of Arizona has just been funded to conduct a more formal evaluation of the RF-JTDC model and how it compares to other JTDC that will include
 - ▣ More formal measures of court operations and the 16 strategies
 - ▣ Include more formal costs estimates
 - ▣ Include more quantitative and qualitative data
 - ▣ Examining health disparities by gender and race

Questions?

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- Poster available from www.chestnut.org/li/posters
- For questions about **this presentation**, please contact Michael Dennis at 309-451-7801 or mdennis@chestnut.org.
- For questions about **Reclaiming Futures**, please contact Susan Richardson at (503) 725-8914 or susan.richardson@pdx.edu
- For questions on the **National Cross-Site Evaluation**, contact Monica Davis, Evaluation Coordinator at 520-295-9339 x211 or midavis@email.arizona.edu

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Acknowledgement & Disclaimer

- The development of this presentation was funded by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) through an interagency agreement with the Library of Congress (LOC) and contract number LCFRD11C0007 to the University of Arizona's (UA) Southwest Institute for Research on Women (SIROW).
- The presentation builds on earlier analyses done under Substance Abuse and Mental Health Services Administration (SAMHSA) contract 270-07-0191 and uses data provided by 27 Juvenile Treatment Drug Court (JTDC) grantees funded by OJJDP & SAMHSA's Center for Substance Abuse Treatment (CSAT): T117433, T117434, T117446, T117475, T117484, T117476, T117486, T117490, T117517, T117523, T117535; 655371, 655372, 655373, (T122838, T122856, T122874, T122907, T123025, T123037, T120921, T120925, T120920, T120924, T120938, T120941.
- The Reclaiming Futures National Program Office received direct support from OJJDP to work with a subset of the grantees to implement their model in the context of Juvenile Treatment Drug Courts (see www.reclaimingfutures.org)
- The presenter and the SIROW wish to acknowledge the contributions of the Reclaiming Futures National Program Office , our evaluation team partners (UA SIROW, Chestnut Health Systems , Carnevale Associates, Randy Muck), the OJJDP & SAMHSA project officers, grantees and their participants for agreeing to share their data to support this secondary analysis and several individuals who have assisted with preparing or providing feedback on the presentation including: Jimmy Carlton, John Carnevale, Monica Davis, Michael Dennis, Barbara Estrada, Michael French, Mark Fulop, Lori Howell, Pamela Ihnes, Melissa Ives, Nora Jones, Raanan Kagan, Josephine Korchmaros, Rachel Kohlbecker, Kathryn McCollister, Rachel Meckley, Daniel Merrigan, Kate Moritz, Randy Muck, Laura Nissen, Scott Olsen, Erika Ostlie, Mac Prichard, Susan Richardson and ., Sally Stevens, Liz Wu.
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