

# **THE VALUE OF ECONOMIC STUDIES TO STATE SUBSTANCE ABUSE AGENCIES**

For Presentation to

The SJR 318 Joint Subcommittee Studying Strategies and  
Models for Substance Abuse Treatment and Prevention

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## **GREAT INTEREST IN THE ECONOMICS OF SUBSTANCE ABUSE & SAT BY STATES**

- ✘ National economic studies are often cited in policy venues and media, finding:
  - + Alcohol & drug abuse are among costliest diseases
  - + SAT produces savings 4 to 10 times > cost of care
- ✘ Various state cost studies since 1980s
- ✘ California: first “cost-offset” study in 1993, followed by Oregon and Ohio, & others
- ✘ In recent years Washington State has done a number of well-regarded economic studies

# CURRENT COST ESTIMATES

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## ✘ Alcohol (in 2006)

- + US : \$243 billion; \$13,000/abuser; \$800/citizen
- + Virginia: \$6.0 billion; \$770/citizen
  - ✘ State/local government \$1.1 billion (18%)

## ✘ Illicit Drugs (in 2002)

- + US: \$181 billion; \$25,000/abuser; \$630/citizen
- + Virginia: \$3.5 billion; \$480/citizen
  - ✘ State/local government \$1.1 billion (24%)

# ECONOMIC COSTS OF ALCOHOL ABUSE<sup>1</sup>

- ✘ \$184.6 B in 1998; \$670 per capita; 2.1% of GDP
- ✘ Specialty alcohol services \$7.5
- ✘ Medical consequences, other \$16.0
- ✘ Medical consequences of FAS \$2.9
- ✘ Lost earnings due to FAS \$1.2
- ✘ Lost earnings, mortality \$36.5
- ✘ Lost earnings, morbidity \$86.4
- ✘ Lost earnings, crime/victims \$10.1
- ✘ Crashes, fires, justice \$24.1

<sup>1</sup> Source: Harwood, H. *Updating Estimates of the Economic Costs of Alcohol Abuse in the United States: Estimates, Update Methods, and Data*. Report prepared by The Lewin Group for the National Institute on Alcohol Abuse and Alcoholism, 2000. Available at <http://www.niaaa.nih.gov>.

# ECONOMIC COSTS OF DRUG ABUSE<sup>1</sup>

✘	\$180.8 B in 2002; \$628 per capita; 1.7% of GDP	
✘	Specialty drug services	\$9.0
✘	Medical consequences, other	\$6.8
✘	Lost earnings, mortality	\$24.6
✘	Lost earnings, morbidity	\$35.4
✘	Lost earnings, crime/victims	\$1.8
✘	Crime careers, incarceration	\$66.7
✘	Crashes, fires, justice	\$35.3
✘	Other (legal, property, welfare)	\$1.1

<sup>1</sup> Source: Harwood, H. *The Economic Costs of Drug Abuse in the United States: Estimates, 1992-2002*  
Report prepared by The Lewin Group for the Office of National Drug Control Policy, 2004.

Available at <http://www.whitehousedrugpolicy.gov>.

## **COST OFFSETS/BENEFITS**

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- ✘ Economic return from investment in treatment and/or prevention
- ✘ Compares cost of service with the “savings” realized in other parts of governments
- ✘ Can the expenditure “pay for itself”
- ✘ Identifies where and how these savings are realized—most are from avoided crime, although sometimes health savings achieved and increases in earnings

# 18 STATES HAVE DONE OR ARE DOING SAT COST-OFFSET STUDIES (AND COUNTING)

California	Michigan	Tennessee**
Florida**	New York*	Texas
Hawaii*	Ohio	Utah
Kentucky	Oklahoma	Virginia
Louisiana	Oregon	Washington
Maine	South Dakota	Wisconsin

\* State has done secondary calculations for policy; \*\* study in progress or planning

# MAJOR TYPES OF IMPACTS/SAVINGS

AVOIDED OR REDUCED IMPACTS = SAVINGS

Police protection	Outpatient care
Prosecution	Inpatient care
Courts	Emergency room
Community corrections (prob/parole)	Outpatient mental health
Incarcerations (jail/prison)	Inpatient mental health
Victim losses	Loss of legal earnings
Theft losses	Welfare and disability “transfers”



# COST-OFFSET CALCULATIONS

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- ✘ Data from State administrative sources (Medicaid, Justice, Unemployment) , State MH/SA, client self-report
- ✘ Costs from “pre-treatment” period compared to costs “during” and “post” treatment or to “similar” untreated SAs.
- ✘ Majority of clients have major reductions in costs during and post treatment relative to the pre-treatment period: treatment often “pays for itself” on the day it is delivered.
- ✘ Studies use different time periods for comparisons. Longer time periods (a year or more) are preferred for pre and post periods.
- ✘ A successful TX episode yields many years of benefits, so most cost-offset studies are conservative estimates!

# CALIFORNIA

- ✘ 1993 CALDATA: representative sample of 2,000 from public SA treatment system **Cost-offset of 7 to 1 → \$10,000 client/yr benefits**, sustained up to 2 years after TX. Avoided crime made up 90% of benefits.

- ✘ "Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA)". Gerstein et al., for California Department of Alcohol and Drug Programs, 1994)

- ✘ 2007 replication of CALDATA treatment cost \$1,583, with a monetary benefit of \$11,487: a **7+:1 ratio of benefits to costs**. Benefits primarily from reduced costs of crime and increased employment earnings.

- ✘ "California Treatment Outcome Project," Ettner, Huang, Evans et al. for the California Department of Drug and Alcohol Programs, the Center for Substance Abuse Treatment, and the Robert Wood Johnson Foundation ), 2008.

- ✘ • 2008: Proposition 36 diverted 1<sup>st</sup> & 2<sup>nd</sup> drug offenders (nonviolent) away from prison to SA TX. Over a 42 month period a benefit-cost ratio of nearly 2 to 1. In other words, **\$2 was saved for every \$1** invested.

- ✘ "The Proposition 36 (Substance Abuse Crime Prevention Act) 2008 Evaluation Report," Urada, Hawken, et al., for the Department of Alcohol and Drug Programs California Health and Human Services Agency, 2008.

# OREGON

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- ✘ Treatment completers, matched w. drop-outs; State agency databases; 2 yrs prior and 3 yrs after
- ✘ Treatment completers savings: \$83,147,187  
+ (two and a half years following treatment)
- ✘ OR cost for treating all adults was \$14,879,128
- ✘ Every tax dollar produced \$5.60 in avoided costs
  - ✘ “Societal Outcomes and Cost Savings of Drug and Alcohol Treatment in the State of Oregon”. Finigan, M. for Office of Alcohol and Drug Abuse Programs, Oregon Department of Human Resource, 1996.

# WASHINGTON: A LEADER IN FIELD

- ✘ 1997: 557 indigent clients; those that got SAT had Medicaid expenses \$4,500 less than similar untreated individuals, vs. \$2,300 TX cost. Savings consistent over 5 years (Luchansky & Longhi)
- ✘ 1997: analyzed impact of SAT on Medicaid, and public assistance for 12 months after SAT. On average, cost of SAT = \$1,779 vs. a benefit of \$692 or **\$0.38 on the dollar. Higher returns (\$0.67 per \$1)** with high risk clients (Wickizer and Longhi).
- ✘ 2008: Analyzed impact of \$21 million treatment expansions in FYs 2005-07. Medicaid saved \$17.8 million (Mancuso & Nordlund).
- ✘ <http://www1.dshs.wa.gov/dasa/services/research/reports.shtml#Cost%20offsets%20of%20Treatment>

# UTAH: SALT LAKE COUNTY DRUG COURT

- ✘ Cost-benefit return: \$4.29 on every dollar invested due to reduced recidivism
- ✘ Benefit includes both reduced costs to the taxpayer (for corrections) and the reduced costs to potential victims.
- ✘ “ Evaluation of the Salt Lake County Adult Felony Drug Court Final Report,” Van Vleet, Hickert, & Becker, Criminal and Juvenile Justice Consortium, College of Social Work, University of Utah, for Salt Lake County Criminal Justice Services, 2005.  
[http://www.law.utah.edu/\\_studyfiles/1/1.pdf](http://www.law.utah.edu/_studyfiles/1/1.pdf)

# TEXAS DRUG COURT STUDY

- ✘ • This study finds the Benefit-Cost ratio associated with the DIVERT Court program over a 40 month follow-up period to be 9.43:1. That is, on average, for every dollar spent on upgrading drug treatment from the Control group (traditional adjudication) to drug treatment through DIVERT Court, \$9.43 of costs can be saved by society over a 40 month post-treatment period.
- ✘ Even though this Benefit-Cost ratio is quite substantial, it is still a conservative estimate of the benefits forthcoming from the DIVERT Court program for reasons detailed in the report.
- ✘ “DIVERT Court of Dallas County: Cost Benefit Analysis,” Thomas B. Fomby and Vasudha Rangaprasad, Department of Economics, Southern Methodist University, Aug. 31, 2002  
<http://faculty.smu.edu/tfomby/DivertFinal.pdf>

# SOUTH DAKOTA

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- ✘ Five areas of savings/benefits assessed: days worked, days of lost work, criminal justice-arrests, criminal justice-prison, and healthcare costs.
- ✘ The cost of treatment (\$1,382) was significantly less than the benefits (\$11,653), resulting in a very favorable cost-benefit ratio over 12 months post SAT.
- ✘ The cost benefit in this study was \$8.43 for every dollar invested.
- ✘ The cost offset data is done every year. Years prior to 2006 are archived on the website <http://dhs.sd.gov/ada/>
- ✘ "Substance Abuse Treatment Produces Savings in South Dakota," Gary Leonardson, Mountain Plains Research, for Division of Alcohol and Drug Abuse State of South Dakota , Dec, 2005. <http://dhs.sd.gov/ada/Publications/SDImpactTreatment3.pdf>

# OKLAHOMA

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- ✘ Compared the cost of sending 1,666 to drug court instead of prison. Also compared drug court to standard probation.
- If all 1,666 offenders served sentence in prison, the overall 4-year cost savings of drug court versus prison was \$46,646,178
- If all 1,666 offenders had served standard probation sentences, the 4-year costs of drug court were \$4,369,129 more than the costs for standard probation
- ✘ “Analysis of Oklahoma Drug Courts: Fiscal Years 2002 – 2003,” Oklahoma Criminal Justice Resource Center, for the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS), 2004.
- ✘ <http://www.ocjrc.net/pubFiles/Drug%20Court/DCreport0203.pdf>



# NEW YORK

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- ✘ The New York State Commission on Drugs and the Courts, “Confronting the Cycle of Addiction and Recidivism”
- ✘ Drug courts in NY had a one-year retention rate of over 60 percent and a one-year re-arrest rate of less than 15 percent –
  - + “far below the one year recidivism rates of drug offenders on probation and drug offenders released from prison, which are generally about 34 to 35 percent”
- ✘ The report noted cost of \$29,000 to \$47,000 a year to incarcerate versus cost of \$18,400 per year for residential drug treatment and \$5,100 for an outpatient program.
- ✘ “The Future of Drug Courts: How States are Mainstreaming the Drug Court Model,” Center for Court Innovation, New York State Court System, 2004.
- ✘ [http://www.courtinnovation.org/\\_uploads/documents/futureofdrugcourts.pdf](http://www.courtinnovation.org/_uploads/documents/futureofdrugcourts.pdf)

# LOUISIANA

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- ✘ From the point of view of government, for each dollar the state puts into SAT, it will reduce future expenditures on criminal justice, medical care, and public assistance by \$3.83 (over 3 years)
- ✘ From the point of view of society, for each dollar the state puts into SAT society enjoys a reduction in future crime and health care costs of \$3.69 to \$5.19 (over 3 years).
- ✘ POTENTIAL COST SAVINGS TO THE STATE OF LOUISIANA FROM THE EXPANSION OF SUBSTANCE ABUSE TREATMENT PROGRAMS Report Prepared for Department of Health and Hospitals Office for Addictive Disorders Prepared by Loren Scott & Associates, Inc. 2003.

# KENTUCKY

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- ✘ Kentucky Treatment Outcome Study is used with the legislators, etc because it gives cost offset, reduced criminal recidivism, increased employment, cost of services, etc. Baseline data collected at admission and final follow-up is a telephonic contact 12 months post-discharge.
- ✘ The reductions in self-reported arrests for Kentucky clients, combined with cost estimates for their crimes and increased earnings and tax revenues, suggest **Kentucky saved \$4.98 for every dollar** spent on treatment during fiscal year 2006.
- ✘ KENTUCKY SUBSTANCE ABUSE TREATMENT OUTCOME STUDY FY 2006 FOLLOW-UP FINDINGS. ROBERT WALKER, ALLISON MATEYOKE-SCRIVNER, JENNIFER COLE, TK LOGAN, ERIN STEVENSON, CARL LEUKEFELD, TOM JACKSON. JUNE 2008
- ✘ <http://cdar.uky.edu/ktos/downloads/report/Section%20Four.pdf>

# TENNESSEE

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- ✘ “As a result of Tennessee's participation with Colorado at last month's NCSL Addictions Policy Institute, our legislators are asking for (1) a cost study for our state ASAP (2) information on other state studies, including what the studies themselves cost.”
- ✘ Communication from Division of Alcohol and Drug Abuse Services Tennessee Department of Mental Health and Developmental Disabilities

# VIRGINIA JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION, 2008

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- ✘ Substance abuse cost S/L governments \$613 million in 2006, primarily public safety. State and localities spent \$102 million providing substance abuse services.
  
- ✘ • Most SAT populations evaluated for this study imposed lower net costs on the State and localities; the majority had better recidivism and employment outcomes than similar clients who did not enter or complete treatment.
  
- ✘ • The benefits of SAT not maximized because many who need SAT
  - + (1) do not seek them,
  - + (2) cannot access them due to cost or logistical barriers,
  - + (3) do not receive the most appropriate treatment because of capacity constraints and service gaps, or
  - + (4) receive services that do not adequately follow proven practices.
  
- ✘ **“Mitigating the Costs of Substance Abuse in Virginia,”** Virginia Joint Legislative Audit and Review Commission, 2008  
<http://jlarc.state.va.us/Reports/Rpt372.pdf>

# THANKS

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- ✘ To the staff of the respective State substance abuse agencies that assisted in identification of these studies.
- ✘ Please send further studies (citations and web URLs) which you know of to the attention of NASADAD.