

Providing Evidence-Based Programs With Fidelity in Washington State Juvenile Courts: Cost Analysis

Robert Barnoski

December 2009



*Washington State
Institute for
Public Policy*

Providing Evidence-Based Programs With Fidelity in Washington State Juvenile Courts: Cost Analysis

Robert Barnoski

December 2009

Washington State Institute for Public Policy
110 Fifth Avenue Southeast
PO Box 40999
Olympia, Washington 98504-0999

(360) 586-2677
www.wsipp.wa.gov

Document Number 09-12-1201

Washington State Institute For Public Policy

Mission

The Washington Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs the Institute, hires the director, and guides the development of all activities.

The Institute's mission is to carry out research, at legislative direction, on issues of importance to Washington State. The Institute conducts research activities using its own policy analysts, academic specialists from universities, and consultants. New activities grow out of requests from the Washington legislature and executive branch agencies, often directed through legislation. Institute staff work closely with legislators, as well as legislative, executive, and state agency staff to define and conduct research on appropriate state public policy topics.

Current assignments include projects in welfare reform, criminal justice, education, youth violence, and social services.

Board of Directors

Senator Karen Fraser
Senator Jeanne Kohl-Welles
Senator Pam Roach
Senator Mark Schoesler
Representative Glenn Anderson
Representative Mary Lou Dickerson
Representative Phyllis Gutierrez Kenney
Representative Skip Priest

Ken Conte, House Office of Program Research
Richard Rodger, Senate Committee Services
Robin Arnold-Williams, Governor's Executive Policy Office
Victor Moore, Office of Financial Management
Sandra Archibald, University of Washington
James Gaudino, Central Washington University
Thomas L. "Les" Purce, The Evergreen State College
Robert Rosenman, Washington State University

Contents

Background	1
Description of Service Delivery for each evidence-based program	2
Summary of Cost per Youth for Washington State Juvenile court Evidence-Based Programs	3
Assessment System.....	4
Direct Service Delivery	5
Program Quality Assurance	6
Administrative Overhead	7
Transportation Costs	7
Additional Court Services Costs	8
Evidence-Based Oversight.....	8
Program Referral/Coordination.....	9
Assessment Oversight	11
Assessment System Software.....	11
Assessment Costs.....	12
Case Management and Assessment Process Quality Assurance Costs.....	12
Appendices	
Appendix A: State-Funded Evidence-Based Program Descriptions.....	15
Appendix B: Recommended Quality control Standards for Washington State Juvenile Justice Programs	17
Appendix C: Evidence-Based Program Eligibility Criteria	21
Appendix D: Evidence-Based Program Costs.....	23

Acknowledgements

The Washington State Institute for Public Policy would like to thank the following individuals for their contributions to this report and especially acknowledge the work by Cory Redman of the Juvenile Rehabilitation Administration.

Barbara Carr	Jefferson County Juvenile Court Administrator and Chair of the Community Juvenile Accountability Act Committee,
Shelly Maluo	Pierce County Juvenile Court Administrator and Chair of the Assessment Quality Assurance Committee
Sharon Paradis	Benton/Franklin County Juvenile Court Administrator
Ken Trull	Yakima County Juvenile Court Administrator and Community Juvenile Accountability Act Committee member
Tori Peterson	Spokane County Juvenile Court and Community Juvenile Accountability Act Committee member
Chris Hayes	Washington State A.R.T. Quality Assurance Specialist
Jeff Patnode	Washington State FFT Quality Assurance Specialist
Jack McGibbon	Assessment Quality Assurance Specialist, Administrative Office of the Courts
Michael Stafford	Kittitas County Juvenile Court
Mark Wirschem	King County Juvenile Court
Mike Irons	Snohomish County Juvenile Court
Cory Redman	Juvenile Rehabilitation Administration and subcommittee staff
Cheryl Sullivan-Colglazier	Juvenile Rehabilitation Administration and Community Juvenile Accountability Act Committee member
Lisa McAllister	Juvenile Rehabilitation Administration
Nancy Fairbanks	Director of Prevention Services and the WayOut program at the Cocoon House in Snohomish County
Keller Struthers	MST Services
Eric Trupin	Evidenced-Based Practice Institute at the University of Washington
Lindsey Vorderstrasse	Evidenced-Based Practice Institute at the University of Washington
Josh Leblang	Evidenced-Based Practice Institute at the University of Washington

For further information, please contact:

Elizabeth Drake at ekdrake@wsipp.wa.gov or (360) 586-2767

Background

The Washington State Legislature has been funding evidence-based programs in the Washington State juvenile courts since 1999. This funding has three sources: the Community Juvenile Accountability Act (CJAA),¹ Reinvesting in Youth Act,² and the Evidence-Based Expansion operating budget proviso.³ The Washington State Institute for Public Policy (Institute) has published reports on the costs and benefits of these evidence-based programs.⁴ These evidence-based program costs were estimated from the research literature, as well as communications with program developers and program administrators. They included the direct cost of delivering the program, quality assurance, and some indirect costs, such as transportation.

In 2009, the Legislature directed the Institute to “conduct an analysis of the costs per participant of evidence-based programs by the juvenile courts.”⁵

This report describes a detailed analysis of fiscal year 2008 costs associated with providing state-funded evidence-based programs in the Washington State juvenile courts. Appendix A contains a description of each state-funded evidence-based programs examined in this study.⁶ These programs are:

- Aggression Replacement Training (ART),
- Coordination of Services (COS),
- Functional Family Therapy (FFT),
- Family Integrated Transitions (FIT), and
- Multi-Systemic Therapy (MST).

The Institute worked with the Community Juvenile Accountability Act (CJAA) Committee, the Juvenile Rehabilitation Administration (JRA), and the Administrative Office of the Courts (AOC) to determine the requirements for delivering these programs. The CJAA Committee is the juvenile court committee responsible for managing the implementation of evidence-based programs.

Two sources of information are employed to estimate program costs: a 2008 survey of costs from the juvenile courts and the JRA, and a cost analysis based on the evidence-based program models. The survey was conducted by JRA; the program cost models were jointly developed by the CJAA Committee and the Institute. The program models take into account the number of service hours, clinical supervision hours, mileage, and hourly service provider rates.

The results are statewide average costs; however there are variations in costs across the state resulting from differing salary rates and geographic distances. The average costs can be used to estimate the number of youth who can be served for a given amount of funding.

The first two exhibits in this report summarize the cost of implementing evidence-based programs in Washington State juvenile courts during fiscal year 2008. The remainder of the report provides more detailed analyses of these costs.

¹ RCW 13.40.500–540

² RCW 13.40.462

³ ESHB 1244, Sec. 203(5), Chapter 564, Laws of 2009

⁴ S. Aos, M. Miller, & E. Drake (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates*. Olympia: Washington State Institute for Public Policy, Document No. 06-10-1201; and E. Drake (2007). *Evidence-based juvenile offender programs: Program description, quality assurance, and cost*. Olympia: Washington State Institute for Public Policy, Document No. 07-06-1201.

⁵ ESHB 1244, Section 203(7)(c), Chapter 564, Laws of 2009

⁶ Victim Offender Mediation (VOM) program is not included because its implementation in 2008 does not provide enough information about costs.

Description of Service Delivery for Each Evidence-Based Program

The following are brief descriptions of how each evidence-based program is delivered. These provide a basis for understanding direct service costs. The juvenile courts incur additional costs to assess, assign, and manage the youth provided these services. Appendix A provides more detail.

Aggression Replacement Training (ART)

ART is a 10-week, 30-hour intervention administered to groups of ten moderate- to high-risk youth three times per week. There is an instructor and co-instructor for each ART group. The courts have found that paying a youth's transportation to ART or having ART groups meet in locations other than the juvenile court is needed to maintain ART class attendance.

Washington State has its own ART specialist who oversees training and quality assurance, and ART consultants who work with groups of ART instructors to maintain program fidelity. In addition, ART trainers teach new ART instructors. ART is provided by court probation staff or private contractors. Courts often have their probation counselors attend ART training so they have a thorough understanding of the program.

Coordination of Services (COS)

COS provides 13 hours of educational classes to groups of 10 low risk juvenile offenders and their parents. The program also has a community outreach component to enable coordination of the various community juvenile justice and service providers. There are few transportation costs since the youth's parents also attend.

The statewide quality assurance plan for COS is currently being developed; until recently few courts provided COS. The cost estimates for COS in this report are based on the Snohomish County WayOut program, which is provided by the Cocoon House social service agency. This COS program was evaluated by the Institute in 2004; it was found to reduce recidivism.⁷ Probation counselors deliver COS in other courts.

Functional Family Therapy (FFT)

FFT is a structured home-based family intervention for moderate- to high-risk youth. Trained FFT therapists have a caseload of ten to 12 families, and the intervention involves 12 visits during a 12-week period. Therapists travel to the family's residence to provide FFT.

Washington State has its own FFT specialist who oversees training and quality assurance, and FFT consultants who work with groups of FFT therapists to maintain program fidelity. FFT, LLC is the organization that developed FFT and it also provides therapist training and consultation services. Juvenile court personnel and private contractors provide FFT services.

Family Integrated Transitions for Probation Youth (FIT)

FIT is a structured home-based family intervention for high-risk youth with co-occurring mental illness and chemical dependency disorders. FIT therapists have caseloads of four to six families for a 20-week period and are available 24 hours per day, seven days per week. Each FIT therapist participates on a team of four masters-level clinicians, a psychiatrist, a half-time supervisor, and part-time administrative assistant.

FIT is provided through contracts with the Community Psychiatric Clinic at the University of Washington, which also provides statewide training and consultation for FIT.

Multi-Systemic Therapy (MST)

MST is a structured home-based family intervention for high-risk youth. MST therapists have caseloads of four to six families for a 16-week period and are available 24 hours per day, seven days per week. Each MST therapist participates on a team of four masters-level clinicians, a half-time supervisor, and part-time administrative assistant. The MST therapists are employed by community mental health agencies that contract with a consultant employed at the Division of Public Behavioral Health and Justice Policy (PBHJP) at the University of Washington for MST training and consultation services. The PBHJP is a licensed MST Network Partner.

⁷ R. Barnoski (2004). *Outcome evaluation of Washington State's research-based programs for juvenile offenders*. Olympia: Washington State Institute for Public Policy, Document No. 04-01-1201.

Summary of Cost per Youth for Washington State Juvenile Court Evidence-Based Programs

Exhibit 1 summarizes our analyses of the cost per youth for each component of Washington State juvenile court evidence-based programs. The direct service costs include service delivery, quality assurance, administrative overhead, and transportation. The courts incur costs for statewide oversight, referring and coordinating youth program assignment, and managing the case. Exhibit 2 describes the costs of the assessment system used to screen youth for program eligibility.

The principal factors that drive differences in cost of service delivery among these programs are the hours of service and the service rate per youth. ART and COS are group programs that have lower service rates per youth than family-oriented programs. Among the family oriented programs, the hours of service are driven by the program length: 12, 20, and 16 weeks for FFT, FIT, and MST respectively. Service complexity drives quality assurance.

For example, the estimated cost of providing ART to a youth in 2008 is \$785 for total direct service costs and \$663 in additional court services, for a total of \$1,449. In the Institute's 2007 report, the \$952 service cost of ART is comparable to the \$785 direct services cost in the exhibit.⁸ ART is the only program with an estimated cost of service that is less than the previous cost estimate. The benefits continue to considerably outweigh the costs. Exhibits 3 – 10 present a detailed analysis for these costs.

Exhibit 1
Costs per Youth for Evidence-Based Programs and Case Management
Fiscal Year 2008

Evidence-based Program	ART	COS	FFT	FIT*	MST	Exhibit**
Number of Youth Served	1,908	481	913	40	95	
Service Costs per Youth						
Service Delivery Hours per Youth	100	41	49	184	144	
Hourly Service Delivery Cost per Youth	\$3.82	\$3.90	\$36.71	\$41.75	\$34.19	Exhibit 3
Service Cost per Youth	\$382	\$158	\$1,842	\$7,625	\$4,992	
Quality Assurance Cost per Youth	\$148	\$24	\$250	\$1,000	\$437	Exhibit 4
Administrative Overhead per Youth***	\$32	\$11	\$126	\$517	\$326	Exhibit 5
Transportation Costs	\$128	\$4	\$330	\$583	\$440	Exhibit 6
Additional Court Services Costs	\$96	\$31	\$61	\$213	\$219	Exhibit 7
Total Service Cost per Youth	\$785	\$229	\$2,609	\$9,938	\$6,416	
Previous Cost Estimates ⁹	\$952	\$218	\$2,468	\$10,258	\$4,526	
Benefits****	\$16,511	\$5,722	\$36,241	\$46,055	\$23,856	
Additional Court Costs per Youth						
Oversight per Youth	\$36	\$36	\$36	\$36	\$36	Exhibit 8
Court Referral/Coordination per Youth	\$199	\$95	\$119	\$119	\$119	Exhibit 9
Case Management Costs per Youth	\$429	\$19	\$370	\$702	\$507	Exhibit 10
Total Additional Court Costs per Youth	\$663	\$151	\$525	\$857	\$662	
Total Service and Court Costs per Youth	\$1,449	\$379	\$3,134	\$10,795	\$7,076	

* Number of FIT youth served is pro-rated from the six months of execution in FY 2008.

** Indicates the exhibit number within this report containing a detailed cost analysis.

*** 6 percent of the total for Program Service Delivery and Program Quality Assurance.

**** Drake, 2007; converted to 2008 dollars. The Institute is currently updating its benefit-cost model, which will be published in 2010.

⁸ The 2007 report costs have been adjusted to 2008 dollars in this report.

⁹ Drake, 2007; converted to 2008 dollars.

Assessment System

The juvenile courts have integrated the Washington State Juvenile Court Assessment¹⁰ into daily court operations since its implementation in 1999 as part of the Community Juvenile Accountability Act.¹¹ One purpose of the assessment system is to determine which evidence-based program, if any, is appropriate for a youth.¹² This is a legislative requirement to ensure that only youth for whom a program is appropriate are provided the program. The assessment is also used to guide case management for all youth, including the Chemical Dependency Disposition Alternatives, Sex Offender Disposition Alternatives, and Consolidated Juvenile Services youth.

The assessment process is two-staged. A “pre-screen” is administered to all youth to determine level of risk (low, moderate, or high). The pre-screen takes about one hour to complete and record.

Only youth assessed as moderate or high risk are given an “initial assessment” to identify the youth’s risk and protective factors. This involves a motivational interview with the youth and the youth’s family by a juvenile probation counselor to obtain the assessment information. The initial assessment is intended to initiate the rehabilitation process by motivating the youth and family to examine the path that led the youth to juvenile court. The initial assessment takes three hours to complete and record.

When the youth completes probation, a “final assessment” is administered to measure changes in dynamic risk and protective factors that are targeted for change. The final assessment takes one hour to complete.

Assessment data are recorded in Back-On-Track, the automated assessment system programmed to determine which youth are eligible for and assigned to an appropriate program (see Appendix C). The juvenile court Assessment Quality Assurance Committee has established training and protocols to maintain assessment reliability and validity as part of the Case Management and Assessment Process.

Exhibit 2 summarizes the cost of the case management and assessment system needed to support the assignment of youth to the appropriate evidence-based program. The total assessment system cost for 2008 was \$1,846,352, or \$89 per assessment. Exhibits 10 – 14 present a detailed analysis for these assessment system costs.

Exhibit 2
Case Management and Assessment Process (CMAP) Costs for 2008

Cost Component	2008 Cost	Exhibit*
Case Management and Assessment Oversight	\$59,216	Exhibit 11
Assessment Software	\$57,725	Exhibit 12
Cost of Conducting Assessments	\$1,380,109	Exhibit 13
Assessment Quality Assurance	\$349,302	Exhibit 14
Total Assessment System Cost	\$1,846,352	Exhibit 10
Number of Assessments Conducted in 2008	20,727	Exhibit 10
Average Cost per Assessment	\$89	

* Indicates the exhibit number within this report containing a detailed cost analysis.

The remainder of this report presents a detailed analysis of each cost component associated with implementing and maintaining evidence-based programs in Washington State juvenile courts.

¹⁰ R. Barnoski (2004). *Washington state juvenile court assessment manual, version 2.1*. Olympia: Washington State Institute for Public Policy, Document No. 04-03-1203.

¹¹ RCW 13.40.510(4)(b). RCW includes assessment methods to determine services, programs, and intervention strategies most likely to change behaviors and norms of juvenile offenders.

¹² Appendix C describes the program eligibility requirements.

Direct Service Delivery

All evidence-based program service providers must be trained and assessed as competent to deliver the program. The service provider is responsible for delivering the service with model fidelity and for working with the juvenile court staff. Some courts have regularly scheduled meetings between the program coordinators and service providers to discuss cases and administrative issues. Service providers are either juvenile court employees or private contractors.

The cost of delivering an evidence-based service includes the following activities:

- Service provider preparation time and time spent with youth,
- Clinical supervision,
- Administrative tasks, and
- Transportation.

Exhibit 3 presents a summary of the cost per youth for each service delivery activity. The salary and benefits per hour per youth is lower for ART and COS than FFT, FIT, and MST because the ART and COS programs are for groups of 10 youth. The other programs work with youth individually. Multiplying the “per hour per youth” rate by 10 youth per group yields a provider rate of \$38.20 and \$39.00 per hour for ART and COS respectively.

Neither ART nor COS incurs service supervision costs, but do incur quality assurance costs, which are presented next. These programs are not therapies requiring clinical supervision, but educational and training programs (see Appendix D a more detailed breakdown of service delivery costs for each program).

Exhibit 3
Evidence-Based Program Direct Service Delivery Costs for 2008

	ART	COS	FFT	FIT	MST
Direct Service Provider Hours per Youth	100.0	40.6	48.0	164.0	128.0
Direct Service Provider Salary and Benefits per Youth per Hour	\$3.82	\$3.90	\$36.71	\$41.75	\$34.19
Direct Service Cost per Youth	\$382	\$158	\$1,762	\$6,847	\$4,376
Service Supervision Hours per Youth	0.0	0.0	0.9	20	16
Service Supervision Salary and Benefits per Hour	n/a	n/a	\$87.85	\$38.90	\$38.50
Service Supervision Cost per Youth	\$0	\$0	\$80	\$778	\$616
Total Clinical Service Hours per Youth	100	41	49	184	144
Total Clinical Service Cost per Youth	\$382	\$158	\$1,842	\$7,625	\$4,992

Evidence-Based Program Service Delivery Summary:

- ART is a ten-week, three times per week, intervention for groups of ten youth.
- COS provides educational classes for groups of ten low-risk youth and their parents, plus community outreach.
- FFT therapists have a caseload of ten families for 12 weeks.
- FIT therapists have caseloads of five families for a 20-week period and are available 24 hours per day, seven days per week. A psychiatrist and a clinical supervisor are on a FIT team for four FIT therapists.
- MST therapists have caseloads of five families for a 16-week period and are available 24 hours per day, seven days per week. A clinical supervisor is on an MST team for four MST therapists.

Program Quality Assurance

Maintaining program fidelity and competent service delivery is an ongoing process of training, monitoring, and feedback to individual program providers, the CJAA Committee, and juvenile court administrators. The necessity for maintaining program fidelity and competent delivery of evidence-based programs is demonstrated in the Institute's 2004 outcome evaluation report.¹³ Only when an evidence-based program is implemented with fidelity to the treatment model does the program reduce recidivism. In addition, when a program does not adhere to the treatment model, recidivism may increase.

Quality assurance for ART and FFT is provided by Washington State specialists, while quality assurance for FIT and MST is provided by the University of Washington Evidence-Based Practice Institute. Quality assurance for COS is being developed. The Cocoon House provided both the direct services and the quality assurance for the WayOut in Snohomish County Juvenile Court. A state-wide quality assurance plan for COS is being developed by the CJAA Committee.

Quality assurance for each program includes:

- Initial program provider training,
- Consultation services,
- Quality assurance specialists to monitor program fidelity,
- Ongoing provider training and education, and
- Feedback to service providers, the CJAA Committee, and the juvenile court administrators.

Appendix D contains a more detailed breakdown of the quality assurance costs for each program.

Exhibit 4 displays the cost details for maintaining program fidelity and quality. For example, it costs \$148 to provide quality assurance for each youth receiving ART.

Exhibit 4
Evidence-Based Program Quality Assurance Costs for 2008

	ART	COS*	FFT	FIT	MST
Number of Youth Served in 2008	1,908	481	913	40	95
Training, Materials and Licenses	\$123,023	n/a	\$52,500	\$9,500	\$15,500
Consultation Services	\$46,990	n/a	\$73,880	\$30,500	\$26,000
Statewide Quality Assurance Specialist	\$111,955	n/a	\$102,021	\$0	\$0
Quality Assurance Total 2008 Cost	\$281,968	n/a	\$228,401	\$40,000	\$41,500
Quality Assurance Cost per Youth	\$148	\$24	\$250	\$1,000	\$437

*COS quality assurance from WayOut program at the Cocoon House in Snohomish County for 2008.
Source: Accounting of 2008 expenditures by quality assurance specialists and Juvenile Rehabilitation Administration.

¹³ Barnoski, 2004, Document No. 04-01-1201.

Administrative Overhead

Some courts contract with private service providers, while other courts use their staff to deliver evidence-based programs. In either case, there is a certain amount of administration involved. The Institute estimates a 6 percent overhead rate based on the administrative overhead for the Institute and the University of Washington's Community Psychiatric Clinic. The 6 percent administrative overhead is applied to the total costs for program service delivery and program quality assurance.

Exhibit 5 displays the 6 percent administrative overhead calculations. A higher cost for service delivery means a higher administrative overhead.

Exhibit 5
Evidence-Based Program Administrative Overhead Cost Estimates per Youth

Evidence-based Program	ART	COS	FFT	FIT	MST
Service Cost per Youth	\$382	\$158	\$1,842	\$7,625	\$4,992
Quality Assurance Cost per Youth	\$148	\$24	\$250	\$1,000	\$437
Total Direct Service	\$530	\$182	\$2,093	\$8,625	\$5,429
Administrative Overhead (6%)*	\$32	\$11	\$126	\$517	\$326

* The 6 percent overhead rate is the Institute's estimate based on administrative costs of the Institute and the University of Washington's Community Psychiatric Clinic

Transportation Costs

Transportation costs are incurred by either the court providing transportation for youth to attend a program or by the therapist driving to and from home-based family-oriented programs. The courts have found that providing a youth's transportation to ART, or having ART groups meet in locations other than juvenile court, is needed to ensure ART class attendance. There are few transportation expenses for COS, since the youth's parents also attend the classes and provide their own transportation.

FFT, FIT, and MST are structured home-based family interventions that require the therapists to travel. The number of miles per youth is different for FFT, FIT, and MST principally because of the differences in the number of weeks of service.

Exhibit 6 summarized the transportation costs for each evidence-based program. Appendix D contains a more detailed breakdown of the transportation costs for each program.

Exhibit 6
Evidence-Based Program Administrative Transportation Costs per Youth

	ART*	COS*	FFT	FIT	MST
Therapists Miles per Youth	n/a	n/a	600	1,060	800
Mile Rate	n/a	n/a	\$0.55	\$0.55	\$0.55
Transportation Costs per Youth	\$128	\$4	\$330	\$583	\$440

*ART youth transportation can include public transit or court-provided transportation as well as the ART instructor's travel to satellite locations. As a result, mileage per youth is not applicable (n/a). ART and COS costs are from the 2008 court survey, and FFT, FIT, and MST costs are based on the program-cost models.

Additional Court Services Costs

The following additional court expenses are often necessary to support evidence-based programs (EBP):

- Interpreter services,
- Participant incentives,
- Rent, and
- Supplies.

Exhibit 7 summarizes the additional court services' costs for each evidence-based program. Appendix D contains a more detailed breakdown of these expenses for each program. The family-oriented programs more often require interpreter services, because adult family members may not speak English.

Exhibit 7
Evidence-Based Programs' Additional Court Services Costs per Youth

	ART	COS	FFT	FIT	MST
Additional Costs per Youth					
Interpreter Services	\$6	\$6	\$47	\$88	\$68
Incentives	\$48	\$6	\$0	\$100	\$101
Rent	\$19	\$7	\$0	\$0	\$0
Supplies	\$22	\$12	\$14	\$25	\$50
Total Additional Costs	\$96	\$31	\$61	\$213	\$219

Source: 2008 juvenile court survey

Evidence-Based Oversight

The 2003 Legislature directed the Institute to develop adherence and outcome standards to ensure quality implementation of juvenile justice evidence-based programs. The legislation stated:

The standards shall include methods for measuring competent delivery of interventions as well as success factors following treatment. The standards shall include, but not be limited to hiring, training and retaining qualified providers, managing and overseeing the delivery of treatment services, and developing quality assurance measures. The department shall utilize these standards to assess program effectiveness. The courts shall also utilize these standards in determining their continued use of these alternatives. The courts shall not continue to use programs that do not comply with these standards.¹⁴

The Institute's findings recommended the creation of an oversight committee as the primary vehicle for ensuring competent service delivery.¹⁵ The report makes detailed recommendations for standards of treatment services. The standards include managing and overseeing program delivery, and selecting, training, and retaining qualified providers. The tasks associated with these recommendations are included in this cost analysis. Appendix B contains the 2003 report recommendations.

The CJAA Committee provides the required evidence-based program oversight. The committee includes 16 members, and holds four-hour quarterly meetings.

¹⁴ ESSB 5903, Section 7, Chapter 378, Laws of 2003

¹⁵ R. Barnoski, S. Aos & R. Lieb Recommended Quality Control Standards: Washington State Research-Based Juvenile Offender Programs December 2003 Document ID: (03-12-1203)

Exhibit 8 displays the costs for this oversight for fiscal year 2008. The total CJAA Committee annual cost was divided by the number of youth served in evidence-based programs during 2008 to yield a cost per-youth. There were 3,437 evidence-based program participants in 2008, yielding a rate of \$36 per youth.

Exhibit 8
CJAA Oversight Committee Expenditures for 2008¹⁶

EBP Oversight Administration	
CJAA Committee Members	16
Committee Meetings per Year	4
Committee Meeting Length in Hours	4
CJAA Committee Member Hours	256
CJAA Committee Member Average Rate	\$50.40
CJAA Committee-Member Meeting Costs	\$12,902
JRA FTEs	1.0
JRA 2008 Cost	\$110,124
Total CJAA Committee Annual Costs	\$123,026
Number of Evidence-Based Program Participants	3,437
CJAA Committee Cost per Youth	\$36

Source: Hours are based on 2008 meeting schedule, hourly rate is from survey of Committee members, and staff rate from Juvenile Rehabilitation Administration

Program Referral/Coordination

The program coordinator’s task involves notifying and discussing the youth’s eligibility for a program with the juvenile’s probation counselor, and assigning the youth to the program. For programs provided to groups of youth, the task also involves coordinating service providers, facilities, transportation, and other logistical issues needed to schedule and establish the group. Finally, the program coordinator records the referral, assignment, start, and completion dates for youth assigned to an evidence-based program. Program referral/coordination costs vary by evidence-based program. Programs involving groups of youth involve more coordination and planning activity than individual and family oriented programs. The hours are from the program model as defined by the quality assurance specialist.

Exhibit 9 presents the juvenile court costs for coordinating the delivery of each evidence-based program. The statewide average rate is based on the salary and benefits of the person performing this function in 2008. The hourly salary and benefits rate of \$39.71 is from the 2008 court survey of court staff performing this function. This rate is slightly higher than the average juvenile probation counselor’s hourly salary and benefits.

¹⁶ Meeting travels costs for committee member are not included.

Exhibit 9
2008 EBP Referral/Coordination Costs

	ART	COS	FFT	FIT	MST
	50 Hours per group of 10 youth	24 Hours per group of 10 Youth	3 Hours per Family	3 Hours per Family	3 Hours per Family
Referral/Coordination Hours per Youth	5.0	2.4	3.0	3.0	3.0
Statewide Average Rate	\$39.71	\$39.71	\$39.71	\$39.71	\$39.71
Per Youth Costs	\$199	\$95	\$119	\$119	\$119

Source: Hours are based on program model as defined by quality assurance specialist. Rates are based on 2008 survey of juvenile courts.

Juvenile Probation Counselor Case Management Costs

Washington State juvenile court case management and assessment process defines the following juvenile probation counselor activities intended to guide a youth's rehabilitation. The juvenile probation counselor:

- Participates in the program selection and referral process,
- Motivates and engages the family and youth to participate in the program,
- Provides feedback and coordination with service providers,
- Supports program participation, and
- Helps the youth to generalize program principles to individual life circumstances.

Exhibit 10 displays the number of hours and cost per youth for a juvenile probation counselor to manage an evidence-based program case. The hours needed to perform each CMAP task are estimates by the Quality Assurance Committee. The probation counselor's salary and benefit rate is based on the 2008 court survey. Each court's rate is weighted by the number of assessment completed by the court in calculating the statewide rate of \$38.99.

For example, CMAP involves 11 hours of probation counselor time for a youth in ART which costs \$429 using the \$38.99 salary and benefit rate.

Exhibit 10
2008 Evidence-Based Program Juvenile Probation Counselor Case Management Costs

Hours per Youth for Case Management and Assessment Process	ART	COS	FFT	FIT	MST
Selection and Referral Process	0.5	0.5	0.5	3	1
Motivation and Engagement	0.5	0	2	3	2
Feedback and Provider Coordination	3	0	3	8	6
Support of EBP Principles	2	0	1	1	1
Re-assessments	1	0	1	1	1
Generalization of EBP Principles	4	0	2	2	2
Total CMAP Hours per Youth	11	0.5	9.5	18	13
Total CMAP Cost per Participant	\$429	\$19	\$370	\$702	\$507

Source: Hours based on Assessment Quality Assurance Committee estimates and a \$38.99 probation counselor salary and benefit rate based on 2008 juvenile court survey.

Assessment Oversight

Parallel to the CJAA Committee is the Assessment Quality Assurance Committee, which is responsible for managing the case management and assessment process. This committee has 18 members and holds quarterly four-hour meetings which cost \$59,216 per year. Administrative support for the committee is provided by the Washington State Administrative Office of the Courts (AOC).

Exhibit 11 presents the Assessment Quality Assurance Committee costs for fiscal Year 2008.

Exhibit 11
Assessment Quality Assurance Committee Fiscal Year 2008 Expenditures

Number of Assessment Committee Members Excluding Staff	18
Committee Meetings per Year	4
Hours per Committee Meeting	4
Hours for Four Quarterly Assessment Committee Meetings	288
Assessment Committee Member Average Rate	\$52.45
Assessment Committee Meeting Costs	\$15,106
AOC .5 FTE Administrative Support Hours	960
AOC .5 FTE Administrative Support Rate	\$41.67
AOC Oversight Support Cost	\$40,003
AOC Administrative Fee	\$4,107
Committee Annual Costs	\$59,216

Source: Hours are based on 2008 meeting schedule, hourly rate is from survey of Committee members and staff rate from the Administrative Office of the Courts

Assessment System Software

Exhibit 12 shows annual costs for leasing and enhancing the Back-On-Track assessment software. The enhancements include developing customized reports and making minor improvements to the software. These costs are borne by the Administrative Office of the Courts.

Exhibit 12
2008 Assessment Software Costs

Assessment Software Annual Lease	\$37,725
Assessment Software Enhancement Hours	200
Assessment Software Enhancement Hourly Rate	\$100
Assessment Software Enhancement Cost	\$20,000
Assessment Annual Costs	\$57,725

Source: Administrative Office of the Courts

Assessment Costs

Assessments are performed by juvenile court probation counselors. The average probation counselor salary and benefits in 2008 was \$38.99 based on the 2008 juvenile court survey. The state-wide salary is weighted across the courts by the number of assessments administered during 2008 in each court.

Exhibit 13 shows the number of pre-screens and initial and final assessments completed during 2008 based on records in the Back-On-Track computer system.¹⁷ The costs are based on the \$38.99 statewide hourly probation counselor rate and the length of time for the three types of assessments. The total cost for assessing youth in 2008 was \$1,380,109.

Exhibit 13
2008 Assessment Costs

	Number of Assessments	Hours per Assessment	Total Cost
Pre-Screen	6,157	1	\$240,031
Initial	7,337	3	\$858,100
Final	7,233	1	\$281,979
Total	20,727		\$1,380,109

Source: Number of assessments is from the Back-On-Track computer system, the hours per assessment are based on Quality Assurance Committee estimates, and cost is based on statewide probation counselor rate from 2008 survey of the courts.

Case Management and Assessment Process Quality Assurance Costs

The Assessment Quality Assurance Committee established an infrastructure to maintain the quality of the Case Management and Assessment Process.

Exhibit 14 describes the costs associated with this effort.

¹⁷ If the youth was previously assessed as moderate or high risk, the probation counselor only administers an initial assessment, which also produces a risk level.

Exhibit 14
2008 Case Management Assessment Process (CMAP) Quality Assurance Costs

Case Management and Assessment Quality Assurance	Total Costs
CMAP Statewide Quality Assurance Specialist Salary and Benefits	\$90,972
CMAP Statewide Quality Assurance Specialist Travel	\$18,500
CMAP Consultant Salary and Benefits	\$10,000
CMAP Consultant Travel	\$0
CMAP Trainer Salary And Benefits	\$79,040
CMAP Trainer Travel	\$10,000
Initial Training Time of New Juvenile Probation Counselors	\$62,856
Travel Costs for Initial Juvenile Probation Counselor Training	\$12,888
Ongoing Juvenile Probation Counselors Training and Education	\$16,074
Ongoing Juvenile Probation Counselors Consultation by Trainers	\$26,486
Quality Assurance Training for Regional Training	\$17,286
Background, Training, and Education Materials	\$5,200
Total	\$349,302

Source: Accounting by the Administrative Office of the Courts
Travel costs include mileage, per diem, and lodging

Appendix A: State-Funded Evidence-Based Program Descriptions

Aggression Replacement Training (ART)

ART employs repetitive learning techniques to enable development of skills to control anger and to use more appropriate behaviors. In addition, ART uses guided group discussion to correct anti-social thinking that can otherwise get a youth into trouble.

ART is a 10-week, 30-hour intervention administered to groups of eight to 12 juvenile offenders three times per week. It can be implemented by court probation staff or private contractors, after they receive formal ART training. A juvenile offender is eligible for ART if it is determined—from the results of the formal assessment tool administered by the juvenile courts—the youth has a moderate to high risk for re-offense and is aggressive, or has social skills or attitudes and beliefs that lead to anti-social behavior. Washington has its own ART quality assurance specialist who oversees training and quality assurance.

The following 29 juvenile courts provide ART during 2008: Adams, Asotin/Garfield, Benton/Franklin, Chelan, Clallam, Clark, Columbia/Walla Walla, Cowlitz, Douglas, Grant, Grays Harbor, Island, Jefferson, King, Kitsap, Kittitas, Lewis, Lincoln, Mason, Okanogan, Pacific/Wahkiakum, Pierce, Snohomish, Spokane, Stevens/Pend Oreille/Ferry, Thurston, Whatcom, Whitman, and Yakima.

Coordination of Services (COS)

COS involves youth and their parents in a class setting that describes the consequences of continued delinquent behavior, stimulates goal setting, reviews the strengths of the youth and family, and explains what resources are available for helping to achieve a positive pro-social future for the youth. COS was originally designed by Dr. Tolan.¹⁸ The COS model implemented in the Snohomish County Juvenile Court, the “WayOut” program, was evaluated by the Institute in the 2004 outcome study. The study found that reduced felony recidivism.

COS provides 13 hours of educational classes to groups of 10 low-risk juvenile offenders and their parents. WayOut also includes a community outreach component to enable coordination about the various community juvenile justice and service providers. In addition to the juvenile court, several community groups participate in the program: YMCA, WSU Cooperative Extension, Compass Health, 4-H, Snohomish Police, CORE Teen Seminars, and Snohomish County Health Communities Task Force.

The following 5 juvenile courts provided COS during 2008: Cowlitz, Snohomish, Spokane, Whatcom, and Yakima.

Functional Family Therapy (FFT)

FFT is a structured family-based intervention that uses a multi-step approach of engagement and motivation to achieve specific, obtainable changes by youth and families. Functional Family Therapy is a Blueprint program identified by the University of Colorado’s Center for the Study and Prevention of Violence.¹⁹ Trained FFT therapists have a caseload of ten to 12 families, and the intervention involves 12 visits during a 12-week period.

FFT includes a quality assurance process to ensure that the FFT therapists adhere to the model as it was originally developed. The quality assurance process includes ongoing consultation and training of

¹⁸ P. Tolan, M. S. Perry, & T. Jones (1987). Delinquency prevention: An example of consultation in rural community mental health, *Journal of Community Psychology*, 15: 43-50.

¹⁹ <http://www.colorado.edu/cspv/blueprints/>

therapists. To achieve this goal, FFT therapists participate in weekly one-hour phone consultations. Each work group consists of three to eight therapists and their assigned Washington State FFT consultant. The Washington State FFT model also assumes each therapist spends one hour per week in informal consultations with each other or the state consultant.

There are six FFT Washington State FFT Consultants. Two of these consultants are state employees and four have a contract with the state. In order to ensure that the Washington State FFT consultant maintains model adherence, the six Washington State FFT Consultants participate in a weekly one-hour phone consultation with the consultant from FFT, LLC. FFT, LLC is the organization that owns the intervention, trains the therapists, and provides clinical guidance to FFT consultants. The Washington State FFT Quality Assurance Specialist also participates in these calls.

The following 26 juvenile courts provided FFT during 2008: Benton/Franklin, Chelan, Clallam, Clark, Cowlitz, Grant, Grays Harbor, Island, Jefferson, King, Kitsap, Kittitas, Klickitat, Lewis, Lincoln, Mason, Pierce, San Juan, Skagit, Skamania, Snohomish, Spokane, Stevens/Ferry/Pend Oreille, Thurston, Whatcom, and Yakima.

Family Integrated Transitions for Probation Youth (FIT)

FIT is a structured family-based intervention that integrates the strengths of three existing interventions—Multi-Systemic Therapy, Motivational Enhancement Therapy, Relapse Prevention, and Dialectical Behavior Therapy.²⁰ The program was designed and implemented by Eric Trupin, Ph.D., and David Stewart, Ph.D., from the University of Washington. The program is intended for high-risk juvenile offenders with co-occurring disorders of mental illness and chemical dependency. Youth receive intensive family and community-based treatment targeted at the multiple determinants of serious antisocial behavior. The first and most important task of the family-based intervention is to engage the family in treatment. The program strives to promote behavioral change in the youth's home environment, emphasizing the systemic strengths of family, peers, school, and neighborhoods to facilitate the change.

FIT therapists have caseloads of four to six families for a 20-week period and are available 24 hours per day, seven days per week. Each FIT team has four masters-level clinicians, a psychiatrist, and a half-time supervisor. Parole/probation staff works closely with the contracted therapists and the participating families.

King County juvenile court provided FIT during 2008.

Multi-Systemic Therapy (MST)

MST is a structured family-oriented intervention that focuses on improving the family's capacity to overcome the known causes of juvenile delinquency. It promotes the parent's ability to monitor and discipline their children and replace deviant peer relationships with pro-social friendships. MST is a Blueprint program identified by the University of Colorado's Center for the Study and Prevention of Violence. Trained MST therapists, working in teams consisting of a half-time Ph.D./Masters level supervisor and two to four masters-level clinicians, have a caseload of four to six families. The intervention typically lasts between three to six months. The MST therapists are employed by community mental health agencies that contract to receive MST training and consultation services.

King and Thurston juvenile courts provided MST during 2008.

²⁰ S. Aos (2004). *Washington state's family integrated transitions program for juvenile offenders: Outcome evaluation and benefit-cost analysis*. Olympia: Washington State Institute for Public Policy, Document No. 04-12-1201.

Appendix B: Recommended Quality Control Standards for Washington State Juvenile Justice Programs

Washington State Institute for Public Policy
December 2003 Document No. 03-12-1203

The first standards address treatment services; these are followed by standards for measuring outcomes.

I. Standards for Treatment Services

An oversight committee is the primary vehicle for ensuring competent service delivery. The committee is to include experts for each program under the committee's management, as well as representatives of the organizations responsible for funding and management decisions. Since these quality control standards affect programs run by the courts and Juvenile Rehabilitation Administration (JRA), it is the responsibility of the juvenile courts and the JRA to determine if one oversight committee is needed or whether two separate committees are advisable.

A. Managing and Overseeing Program Delivery: The following practices are necessary for delivering research-based programs:

- The management of each program includes the involvement of a statewide program specialist and, as needed, program trainers and regional program specialists. These individuals are responsible for ensuring that each program's principles are followed and the service is competently delivered. Specialists will visit program sites to consult with staff and assist with program delivery problems.
- The program specialist is responsible for developing a quality control manual that describes the specific standards for the hiring, training, and retention of qualified providers, and the management and oversight of delivery of treatment services. The oversight committee reviews and approves the manual.
- A representative of each service provider organization attends regularly held workshops, scheduled by the program specialist, to review and clarify program best practices. For programs operating in locations across the state, regional workshops may be necessary.
- Each person providing a program is assessed at least annually by a program specialist. The reviews include direct observation, or video/audio recording of service delivery, and a review of the program environment. The specialist uses the structured assessment instrument specifically designed for each program. These instruments, developed under the guidance of the oversight committee, measure detailed aspects of competent program delivery. The instruments will inform the providers about their performance and provide specific areas for improvement, if needed. The responses to each assessment item are recorded in a database by the program specialist conducting the review. Each person's service delivery is assessed as (a) highly competent, b) competent, or (c) not competent. The specialist reviews the results with the service providers and court management.
- The program specialist conducts site reviews at least annually to assess the environment supporting the research-based programs. An instrument, developed under the guidance of the oversight committee, is used to assess the environmental support for the research-based programs. The instrument includes information concerning staff training, the assessment process, program participant assignment, staff engagement, and motivation of the youth and family, staff reinforcement of the program principles, and support of these efforts by court management. Each program environment is assessed as (a) highly adequate, (b) adequate, or (c) not adequate. The specialist reviews the results with the court management.
- Every two years, the validity of the program provider and environmental assessments are empirically verified under the guidance of the oversight committee.
- The statewide specialist takes corrective action when a site is not competently delivering the program. The statewide specialist notifies the oversight committee of all corrective actions.

- The oversight committee discontinues funding of any program when the corrective actions of the statewide specialist have failed to bring the program into compliance with these standards.
- The oversight committee sponsors an annual refresher training workshop for providers.

B. Selecting, Training, and Retaining Qualified Providers: following are personnel practices necessary to facilitate the selection and retention of qualified individuals capable of competently delivering treatment services.

- Each program position has a written job description that includes duties, responsibilities, minimum qualifications, and any special requirements.
- A job announcement is used to advertise and recruit candidates for an open position.
- All applicants are screened to ensure they meet the minimum position qualifications.
- The applicant's interview team includes a program specialist who assesses the candidate's qualifications.
- Explicit selection criteria are used to determine the best person for the position.
- The candidate is selected for the position on a six-month probationary basis with the understanding that the probationary period will determine if the applicant has the necessary knowledge and skills.
- Initial training and feedback are provided so the applicant can acquire necessary experience and demonstrate acceptable knowledge and skills during the probationary period. The initial training includes a written test or interview that assesses the applicant's knowledge.
- At the end of the probationary period, the applicant's skills are reviewed using the assessment instrument designed to measure competent program delivery.
- Only persons demonstrating competent delivery of the treatment service are retained after the probation period ends.
- The program specialist maintains a database of persons who have been selected and trained. The database includes written test scores and an initial assessment of the person's skills in delivering the program. This initial assessment is identical to the ongoing adherence assessments described above. This initial assessment forms the baseline for monitoring the provider's skill development.
- Each statewide program specialist maintains a quality assurance manual that documents the process for meeting these standards.

II. Standards for Measuring Outcomes

These standards define annual outcome measures that assess whether a research-based program is continuing to achieve its anticipated effectiveness.

A. Recidivism: The ultimate outcome measure for juvenile offender programs is recidivism. The recidivism measures follow the definition developed at the direction of the Legislature.

- Recidivism for the juvenile justice system is the commission of an offense after placement in the community that results in a conviction, deferred sentence, deferred prosecution, deferred disposition, or a diversion agreement as defined by Washington State statute for misdemeanors, gross misdemeanors, and felonies. A minimum of 18 months of follow-up time is necessary to reasonably measure juvenile recidivism events. An additional 12 months are necessary to allow for the criminal justice system to process these events. Juvenile offenders prosecuted in adult criminal court and juvenile offenders who turn 18 years old before the end of the follow-up period are tracked into the adult criminal justice system.
- Each research-based program has undergone a rigorous outcome evaluation. These studies provide benchmarks, or expectations, of what the recidivism rate should be if a program is working.⁷ However, it is essential to know if the program outcomes continue to meet expectations, and this knowledge must be available on a yearly basis. Fortunately, it is possible to estimate expected outcomes, based on these evaluations, for youth who received the program in a given year. These calculations adjust for

differences in key characteristics between these youth and the youth in the initial evaluation study. For example, if more females received the intervention during 2002 than in the original study, this factor is taken into account by these calculations.

- The expected outcomes are compared with the actual outcomes each year. An actual outcome that is equal to or better than the expected outcome indicates the program is continuing to work. If the actual outcome is below expectation, the program would appear not to be working. This technique avoids the necessity of forming comparison groups each year. Over time, the trend line of the expected and actual outcomes will show how well the program is working. The accuracy of the outcome estimation calculations are reviewed annually by the oversight committee.

B. Program Completion: The completion rate of youth assigned to the program is a key measure. High completion rates indicate that the courts and JRA are able to motivate and keep the youth engaged in the treatment process. Low completion rates indicate wasted resources.

- The juvenile court maintains the assessment database that identifies youth eligible for the research-based programs.
- The program providers maintain a database of youth in their program. The database includes the date the youth was assigned to the provider, the date service delivery started, a record of service contacts, the date the youth completed or was terminated from the program, and, if terminated, the reason for non-completion.
- The program completion rate is the percentage of youth initially assigned to the program who completed it. A 75 percent completion rate for each program is the standard.

C. Interim Outcomes: A major strength of research-based programs is the focus on improving specific risk and protective factors associated with particular outcomes. For example, Functional Family Therapy aims to reduce family risk factors and increase family protective factors. Theoretically, the ability of a program to change these factors is what makes it successful; these measures provide feedback on whether the program participants have changed as expected.

- The juvenile courts and JRA developed similar assessments that are specifically designed to measure changes in the dynamic risk and protective factors.
- The risk and protective factors are assessed before the youth is placed in the program and again when the youth either completes or terminates the program.
- The Institute has identified the dynamic risk and protective factors associated with the current research based programs that are to be measured. Monitoring these interim outcomes provides immediate information on program performance.
- Programs that positively influence the identified factors of interest should have better outcomes than those not able to do so. Showing an association between positive changes in those factors targeted by a program and, subsequently, successful program outcomes is a necessary condition to show that the program is working.

Appendix C: Evidence-Based Program Eligibility Criteria

Evidence-Based Program	Eligibility Criteria
ART: Aggression Replacement Training	Moderate- or high-risk, and at least one of the following: <ul style="list-style-type: none"> • score of at least 1 for a weapon, violent misdemeanor, or felony conviction; or • dynamic risk factor score of at least 2 out of 13 on aggression; or • dynamic risk factor score of at least 7 out of 28 on attitudes/behavior; or • dynamic risk factor score of at least 9 out of 36 on skills.
COS: Coordination of Services	Low-risk
FFT : Functional Family Therapy	Moderate- or high-risk and a dynamic risk factor score of at least 6 out of 24 on current family.
FIT: Family Integrated Transitions Program	High-risk and a dynamic risk factor score of at least 6 out of 24 on current family, substance abuse or dependence disorder, and one of the following: <ul style="list-style-type: none"> • any Axis 1 disorder (excluding those youth who have only a diagnosis of Conduct Disorder, Oppositional Defiant Disorder, Paraphilia, or Pedophilia); or • currently prescribed psychotropic medication; or • demonstrated suicidal behavior within last three months.
MST: Multi-Systemic Therapy	High-risk and dynamic risk factor score of at least 6 out of 24 on current family.

Appendix D: Evidence-Based Program Cost

The grayed rows in the appendix tables identify information presented in the tables within the main body of this report.

Exhibit D-1
ART Cost Model

The model: Three one-hour ART classes per week for 10 weeks	
Sessions per group	30
Youth per ART group according to the model	10
ART Participants	
Community Juvenile Accountability Act funded	1391
Evidence-Based Expansion budget proviso funded	451
Reinvesting in Youth Act funded	66
2008 number of youth served	1908
2008 number of ART groups, assuming 10 youth per group	191
ART Group Instruction	
Instructor hours: 1 hour in class and 1 hour before and after each class	60
Co-Instructor hours: 1 hour in class and 20 extra minutes per class	40
Total service hours	100
Instructor hours per youth	6
Co-Instructor hours per youth	4
Total Service hours per youth	10
Instructor average hourly salary from survey	\$38.72
Co-instructor average hourly salary from survey	\$37.46
Service hour rate per youth	\$3.82
Service hour cost per youth	\$382
Instruction costs per group	\$3,821
ART Instruction cost per youth	\$382
ART Consultation Services	
Number of consultants	3
Consultant FTEs	0.50
Annual ART consultation hours	1,040
Annual ART consultation hours per youth	0.55
Consultant annual amount	\$46,990
Consultant rate per hour	\$45.18
Consultation cost per youth	\$25
ART 2008 Annual Transportation Expenses	
ART 2008 Annual Transportation Expenses per Youth	\$128
ART Group Additional 2008 Annual Expenses (from court survey)	
Interpreters	\$12,093
Incentives	\$92,338

Rent	\$36,047
Supplies	\$41,968
Total additional annual costs	\$182,446
ART Group Additional Cost per Youth	
Interpreters	\$6
Incentives	\$48
Rent	\$19
Supplies	\$22
Additional costs per youth	\$96
Annual ART Quality Assurance	
Statewide quality assurance specialist salary and benefits	\$99,291
Statewide quality assurance specialist travel: mileage, per diem, and lodging	\$12,664
Statewide quality assurance specialist Total	\$111,955
ART Consultation	
Annual ART consultant FTEs	0.50
ART consultant cost per hour	1,040
ART consultant salary and benefits/contract amount	\$46,990
Annual ART consultant hours	45.18
ART consultant travel (mileage, per diem, and lodging)	\$0
Initial ART consultant training	\$0
Ongoing ART provider consultant training	\$0
Consultant annual amount	\$46,990
ART Training, Materials and License	
Number of Instructors delivering during a year	80
Number of active instructors - doing a class at any point in time	60
Number of ART instructor trainers	8.0
Instructor trainers salary and benefits/contract amount (11 trainings per year for 2 trainers and 32 hrs per trainer)	\$27,256
Instructor trainers travel: mileage, per diem, and lodging (actual billing)	\$3,310
Initial training time of new instructors (40 instructors x 32 hours including travel time)	\$49,557
Travel costs for initial instructor training: mileage, per diem	\$6,375
Ongoing instructor training and education (monthly consultant calls, and refresher trainings 60 instructors for one hour per month for 12 months)	\$27,876
Background, training, and education materials (actual costs)	\$8,648
Licensing fees	\$0
Training, materials and License	\$123,023
Totals quality assurance costs	\$281,968
ART quality assurance costs per group	\$1,478
ART quality assurance costs per youth	\$148

**Exhibit D-2
COS Cost Model**

COS model: a 13 hour educational class consisting of 2 to 4 sessions for groups of 10 low-risk youth and parents. Presenters provide expertise in specific areas.	Based on 2004 Snohomish Model and Current Information
Number of 2008 COS classes	49
Number of 2008 COS youth	481
Average number of youth per class	9.8
Sessions per COS class	2
Hours per COS session	6.5
Total COS Class hours	13
Youth per COS class	10
Parents per COS class	10
COS Classes	
Number of facilitators each class	1
COS facilitator preparation/breakdown hours per session	2.5
COS facilitator documentation for court hours per session	1.5
COS-Facilitator hours per class	13
COS Facilitator preparation/breakdown hours per class	5
COS facilitator documentation for court hours per class	3
COS facilitator total hours per class	21
COS facilitator total hours per youth	2.1
Class facilitator average hourly salary and benefits	\$38.99
COS facilitator cost per class	\$819
COS facilitator cost per youth	\$82
Number of presenters for the class	9
COS total presenter hours per class	9.0
COS total presenter hours per youth	0.9
COS presenters average cost per hour from survey	\$39.00
COS presenters cost per class	\$351.00
COS presenters cost per youth	\$35
Total costs per class	\$1,170
Cumulative class cost per youth	\$117
Annual Community Outreach, Networking and Awareness	
Community outreach, networking and awareness hours per year	520
Community outreach, networking and awareness hours per class	10.6
Community outreach, networking and awareness hours per youth	1.1
Community outreach, networking and awareness Hourly rate	\$38.99
Community outreach, networking and awareness cost per class	\$413.72
Community outreach, networking and awareness cost per Youth	\$42

Total Class and Community Outreach Service Hours per Youth	
Service hours per youth	40.6
Service rate per hour	\$39.00
Service cost per hour per youth	\$3.90
Cost per youth	\$158.39
COS Additional Expenses for 2008	
COS facilitator travel	\$1,450
COS presenters travel	\$0
Interpreters	\$3,106
Rent	\$3,505
Youth transportation	\$500
Incentives	\$2,784
Supplies	\$5,589
Other expenses	\$0
Total addition expenses for 2008	\$16,934
Additional expenses per class	\$346
Transportation	\$3
COS facilitator travel	\$0
COS presenters travel	\$1
Total transportation	\$4
COS Additional Expenses per Youth	
Interpreters	\$6
Incentives	\$6
Rent	\$7
Supplies	\$12
Other expenses	\$0
Additional expenses per youth	\$31
COS Referral/Coordination per Class	
COS youth referral hours per class	15
COS presenter coordination hours per class	9.0
COS referral/coordinator average hourly cost including benefits	\$39.71
COS referral/coordination total hours per class	\$24.00
COS referral/coordination total hours per youth	\$2.40
COS referral/coordination cost per class	\$953.04
COS class coordination cost per youth	\$95
Quality Assurance Cost per Year 2008 From Snohomish	
Supervision of facilitators and program presenters	\$3,628
Training of facilitators and presenters	\$486
Total quality assurance per year	\$4,114
Total quality assurance per class	\$84
Total quality assurance per youth	\$24

**Exhibit D-3
FFT Cost Model**

FFT model: 12 weeks of therapy. Caseload of 10 families and one hour weekly consultation per therapist	
Number of Families Served in FY 2008	
Community Juvenile Accountability Act funded	517
Evidence-Based Expansion budget proviso funded	283
Reinvesting in Youth Act funded	113
Total number of families served	913
FFT Therapy	
Families in caseload	10
Weeks of therapy	12
Therapist hours per week	40
Therapist hours per family per week	4
Therapist hours per family	48
Therapist hourly rate (salaries and benefits)	\$36.71
Therapist per family cost	\$1,761.88
FFT Therapist Transportation	
FFT therapist roundtrip miles per session	50
FFT therapist roundtrip miles per family	600
Mileage rate	\$0.55
FFT therapist transportation per session	\$27.50
FFT therapist transportation cost per family	\$330.00
FFT Additional Annual Expenses for 2008	
Interpreter services	\$42,788
Incentives	\$0
Rent	\$0
Supplies	\$12,635
Total additional expenses	\$55,423
FFT Additional Expenses per Family	
Youth travel	\$0
Interpreter services	\$47
Incentives	\$0
Rent	\$0
Supplies	\$14
Additional cost per family served	\$61
FFT Quality Assurance Annual Costs	
Statewide expert salary and benefits per year (Survey 33)	\$95,711
Statewide expert travel: mileage, per diem, and lodging per year (Survey 34)	\$6,310
Statewide quality assurance specialist	\$102,021

FFT Annual Consultation	
Number of FFT consultants	6
Initial consultant training (Survey 42)	\$9,000
Consultant salary and benefits/contract amount per year (Survey 35)	\$54,000
Consultant travel: mileage, per diem, and lodging per year (Survey 36)	\$2,780
FFT, LLC consultation cost	\$3,600
Ongoing FFT consultant training per year	\$4,500
FFT consultation total	\$73,880
FFT consultation per family	\$81
FFT Training, Materials and License	
FFT trainer salary and benefits/contract amount per year	\$7,500
FFT trainer travel (mileage, per diem, and lodging) per year	\$0
Initial training time of new FFT trainees	\$0
Travel costs for initial FFT trainee training (mileage, per diem) per year	\$15,000
Ongoing FFT provider training and education per year	\$27,500
Background, training, and education materials per year	\$500
Licensing fees per year	\$2,000
Totals quality assurance costs per year	\$52,500
FFT training, materials and license per family	\$58
FFT total quality assurance costs	\$228,401
FFT total quality assurance costs per youth	\$250
Weekly Hours	
Hours of weekly formal consultation with FFT, LLC	1
Hours of weekly informal consultation hours	1
FFT Therapist Consultation Hours per Year	
Hours of formal consultation with state consultants per family	1.2
Hours of informal consultation hours per family	1.2
FFT Therapist Workgroups	
Number of FFT therapists in 2008	60
Number of Washington State FFT consultants	6.0
Number of FFT therapists per FFT Washington State consultant	10.0
Number of FFT therapist workgroups	10
Weekly FFT, LLC consultation hours with state consultants	1
Weekly workgroup Washington consultant hours per consultant	1.7
Weekly total consultant consultation hours per consultant	2.7
Consultant consultation hours per consultant per year	133
Total state consultation hours per year	800
Total state consultation hours per year per youth	0.9
Total state consultant cost per year	\$70,280
Washington State consultant rate per hour	\$87.85
FFT, LLC consultant salary and benefits per hour	\$100.00

FFT, LLC consultant hours per year (3 times per month/3 hours per month)	36.0
FFT, LLC consultant salary and benefits per year	\$3,600
Total FFT, LLC and state consultation hours per year	836
Total FFT, LLC and state consultation costs per year	\$73,880
Total FFT, LLC and state consultation hours per family	0.9
Total FFT, LLC and state consultation costs per family	\$81

**Exhibit D-4
FIT Cost Model**

FIT model: 20 weeks of therapy. Caseload of 5 families per therapist; and 4 therapists, 0.5 FTE supervisor, and 0.2 FTE administrative assistant per FIT team	
Number of Youth Served 2008	40
FIT Therapist Time	
Number of families per caseload	5
Weeks of therapy	20
Therapist hours per week	40
Therapist hours per family per week	8
Therapist hours per family	160
Therapist hourly rate (salaries and benefits)	\$40.00
Therapist per family cost	\$6,400.00
FIT Psychiatrist Time	
Number of families per caseload	5
Weeks of therapy	20
Psychiatrist hours per week	1
Psychiatrist hours per family per week	0.2
Psychiatrist hours per family	4
Psychiatrist hourly rate (salaries and benefits)	\$90.00
Psychiatrist per family cost	\$360.00
FIT and psychiatrist hours per family	164
Weighted hourly rate	\$41.22
FIT Therapist Teams	
Therapists in team per supervisor	4.0
Caseloads per year per therapist	2.5
Families per year per therapist	12.5
Families per team	50.0
Number of teams for 2008 youth served	1.0
FIT team supervisor FTE	0.5
FIT supervisors FTE per therapist	12.5%
FIT team supervisor hours per youth	20.0
FIT team supervisor annual salary and benefits	\$80,905
FIT team supervisor hourly salary and benefits	\$38.90
FIT supervisor costs per family	\$778
Supervisor and therapist hours per family	184
FIT therapy cost per family	\$7,538
Administrative Assistant FTE per team	0.20
Administrative Assistant per therapist	5.0%
Administrative Assistant hours per youth	8.0
Administrative Assistant hourly salary and benefits	\$18.00

Administrative assistant cost per youth	\$144.00
Total cost per family cost per youth	\$7,681.93
FIT team hourly rate	\$41.75
Therapist Transportation	
Weekly therapist mileage	250
Weekly mileage per family	50
Mileage per family	1000
Mileage rate	\$0.55
Mileage cost per family	\$550.00
Psychiatrist Transportation	
Weekly therapist mileage	15
Weekly mileage per family	3
Mileage per family	60
Mileage rate	\$0.55
Cost per family	33
Total Transportation	
Mileage per family	1,060
Mileage rate	\$0.55
Mileage cost per family	\$583.00
FIT Additional Expenses for 2008	
Interpreter services	\$3,500
Incentives	\$4,000
Rent	\$0
Supplies	\$1,000
Total additional expenses	\$8,500
FIT Additional Expenses per Family	
Interpreter services	\$88
Incentives	\$100
Rent	\$0
Supplies	\$25
Additional cost per family served	\$213
Annual FIT Quality Assurance	
Statewide expert salary and benefits per year	\$0
Statewide expert travel: mileage, per diem, and lodging per year (Survey 34)	\$0
Consultation Services Annual	
Initial consultant training (Survey 42)	\$0
Consultation and training services	\$30,500
Consultant travel: mileage, per diem, and lodging per year (Survey 36)	\$0

Total Consultation Services	\$30,500
Training, Materials, and License Annual	
FIT trainer salary and benefits/contract amount per year	\$0
FIT trainer travel (mileage, per diem, and lodging) per year	\$0
Initial training time of new FIT trainees	\$3,000
Travel costs for initial FIT trainee training (mileage, per diem) per year	\$0
Ongoing FIT provider training and education per year	\$0
Ongoing FIT provider consultant training per year	\$0
Background, training, and education materials per year	\$0
Licensing fees per year	\$6,500
Training, materials, and license total	\$9,500
Totals quality assurance costs per year	\$40,000
Quality assurance per family	\$1,000

**Exhibit D-5
MST Cost Model**

MST model: 16 weeks of therapy. Caseload of 5 families per therapist; and 4 therapists, 0.5 FTE supervisor, and .2 administrative assistant per MST team.	
Community Juvenile Accountability Act funded	38
Evidence-Based Expansion budget proviso funded	1
Reinvesting in Youth Act funded	56
Number of youth served 2008	95
MST Therapist Time	
Number of families per caseload	5
Weeks of therapy	16
Therapist hours per week	40
Therapist hours per family per week	8
Therapist hours per family	128
Therapist hourly rate (salaries and benefits)	\$32.75
Therapist per family cost	\$4,192.00
MST Therapist Teams	
Caseloads per year per therapist	3
Families per year per therapist	15.6
Families per year per team	63
Number of teams for 2008 youth served	2
MST therapists per team	4
MST team supervisor FTE per team	0.5
MST supervisors FTE per therapist	12.5%
MST team supervisor FTE hours per youth	16.0
MST team supervisor hourly salary and benefits	\$38.50
Therapist plus supervisor hours per family	144
Therapist plus supervisor cost per family	\$616.00
Total therapist and supervisor costs	\$4,808.00
Administrative Assistant FTE per team	0.20
Administrative Assistant per therapist	5.0%
Administrative Assistant hours per youth	6.4
Administrative Assistant hourly salary and benefits	\$18.00
Administrative Assistant cost per youth	\$115.20
Total cost per family cost per youth	\$4,923.20
MST team hourly rate	\$34.19
MST Therapist Transportation (Mileage)	
Weekly mileage per therapist	250
Weekly mileage per family	50
Mileage per family	800
Mileage Rate	\$0.55
Mileage cost per family	\$440

Additional 2008 Annual Court Expenses for MST	
Interpreter services (Survey 5)	\$6,480
Incentives (Survey 7)	\$9,600
Supplies (Survey 8)	\$4,733
Total additional expenses	\$20,813
Additional 2008 Annual Court Expenses per MST Family	
Interpreter services (Survey 5)	\$68
Incentives (Survey 7)	\$101
Rent	\$0
Supplies (Survey 8)	\$50
Additional Cost per family served	\$219
Annual MST Quality Assurance	
Statewide expert salary and benefits per year (Survey 33)	\$0
Statewide expert travel: mileage, per diem, and lodging per year (Survey 34)	\$0
Consultation Services	
Initial consultant training (Survey 42)	\$0
Consultation and training services contract	\$26,000
Consultant travel: mileage, per diem, and lodging per year (Survey 36)	\$0
Consultation services total	\$26,000
Training, Materials, and License	
MST trainer salary and benefits/contract amount per year	\$0
MST trainer travel (mileage, per diem, and lodging) per year	\$0
Initial training time of new MST trainees	\$3,000
Travel costs for initial MST trainee training (mileage, per diem) per year	\$6,000
Ongoing MST provider training and education per year	\$0
Ongoing MST provider consultant training per year	\$0
Background, training, and education materials per year	\$0
Licensing fees per year	\$6,500
Training, materials, and license total	\$15,500
Totals quality assurance costs per year	\$41,500
Quality assurance per family	\$437