The Pew-MacArthur Results First Initiative works with states to implement an evidence-based policymaking approach that helps them invest in policies and programs that are proven to work. The California State Association of Counties (CSAC) has incorporated this approach into their toolbox to assist counties in meeting the challenges of California’s landmark criminal justice reform effort – the Public Safety Realignment Act (commonly known as Realignment). Realignment altered the landscape of the state’s criminal justice system by transferring responsibility for more than 60,000 offenders from the California Department of Corrections & Rehabilitation (CDCR) to California’s 58 counties, thus requiring county governments to develop facilities, policies and programs to serve this population.

In late 2018, Yolo County became the eighth county to partner with CSAC in their Results First Initiative which provides tools and training to select counties as they engage in evidence-based policymaking related to their criminal justice programming. These counties are now using rigorous evidence to assess their current strategies and monetize the benefits of a given program expected to reduce recidivism (re-offense), ultimately to inform funding and policy decisions to support safer communities.

With support from CSAC, this report is the culmination of a collaborative effort between a number of Yolo County departments, including County Administration, District Attorney, Health & Human Services, Information Technology, Probation, Public Defender and Sheriff. Their efforts have resulted in a Recidivism Study, Program Inventory and Cost-Benefit Analysis. The purpose, methodology and results of each of these components of the Results First approach are described in this report. Collectively, the results will help Yolo County leaders improve public outcomes, reduce costs and increase accountability by ensuring that resources are directed toward effective and cost-beneficial programs. It is anticipated that Yolo County will continue to collect data and evolve its Results First approach in an effort to further enhance the tool, and thereby, strengthen its public safety system.

**YOLO COUNTY’S RESULTS FIRST INITIATIVE**

The Yolo County Results First approach estimates that each avoided recidivist results in nearly $120,000 in total benefits as a result of greater than $86,000 in avoided taxpayer costs and $33,000 in avoided costs to crime victims. This estimate, in conjunction with a catalog of recidivism-reducing programs, backed by research and described further in this report, will be utilized to determine where funding for criminal justice programming might be best directed in the future. Furthermore, County staff gleaned the following from the Results First effort:

- Collaboration among County departments, data sharing and holistic program analysis facilitates system-wide communication and understanding, coordinated client care and strategic decision-making.
- The County would benefit from further discussion concerning criminal justice data collection and analysis to develop a consistent methodology, and thus, a common understanding of the results.

For more information, read the report to follow and visit: [www.YoloCounty.org/CCP](http://www.YoloCounty.org/CCP) (select Results First link)
RECIDIVISM STUDY

The purpose of the Recidivism Study was to develop a baseline recidivism rate for Yolo County for comparing the impact of programmatic or policy changes on recidivism, ultimately to help leaders make effective and fiscally prudent decisions.

COHORT SELECTION

To measure recidivism, the State considers new convictions in 1-, 2- and 3-year intervals for adult offenders released from CDCR. In order to capture the longer-term impacts of recidivism, Yolo County went further and examined recidivism in intervals up to 6 years. Starting with a cohort of 530 unique individuals with new felony probations who came into County supervision in 2012, Yolo County’s Recidivism Study also considered bookings and charges based on new crimes and violations of probation.

The 2012 starting date captures several important factors, including the first full year of data after passage of the Public Safety Realignment Act and the acquisition of new County databases with the ability to track recidivism. The year 2012 is considered the pilot year for tracking this data and will be the baseline for future data analysis.

DATA COLLECTION

The County utilized several databases to develop the Recidivism Study, including the Probation Department’s Law Suite system, the Sheriff’s Tiburon system and the District Attorney’s Law Suite system. The 2012 cohort originated from Probation’s system and was matched with the Sheriff’s and District Attorney’s through the use of Person Identification Numbers. County staff then developed queries for all new charges (cases), convictions and sentencings. These queries were subsequently combined into a single query that includes all factors.

DATA CHALLENGES

A significant limitation throughout the process was the inability to capture out-of-county recidivism data. The Recidivism Study only captures recidivating events in Yolo County because out-of-county information is not readily available in an easy-to-use format.

Another data challenge was in the case in which multiple convictions or sentencings for an individual occurred on the same day which resulted in a data pull of multiple unique events. As the model is unable to accommodate multiple cases on a single date, staff manually identified the most severe case for consideration.

Finally, when running the data set, age ranges required some adjustment because many individuals are charged at a different age than when the case occurred, and in some cases moved to a new age range.

STUDY RESULTS

A brief summary of the results is provided in this report. To further explore the data and results of the Recidivism study, visit: www.YoloCounty.org/CCP (select Results First link).

Yolo County’s recidivism data is analyzed in multiple ways, including by: crime type; charges filed; booked into the jail; and conviction. All data can also be broken out by new offense and violation of probation. Long-term tracking and analysis of the Recidivism Study cohort will allow Yolo County to better understand the nature of its recidivism and the cost to the
taxpayer as the County will be able to understand when recidivism happened within the six-year post-release timeframe, the severity of the crimes committed, the charges filed and the outcomes of convictions for each individual and incident.

The results of the Recidivism Study provide a frame of reference to measure the success of programs and policy, ultimately to inform prevention and treatment-related decision making. When reviewing the results, it is important to look at the recidivism data holistically (i.e. the spectrum of crimes) and to consider changes over time in variables such as the law (i.e. Proposition 47), demographics (i.e. changes in population) and the economy (i.e. funding declines).

One result that initially concerned staff was that conviction recidivism rates appear to be higher than booking rates. This can be explained in that individuals can be convicted yet not booked. For example, someone can be considered “fail-to-appear”, but are not booked at the jail. In other cases, individuals can be arrested and convicted but only cited rather than booked. Both examples would be considered a recidivating event under convictions, but not under booking.

The results of this process lay the foundation for future data collection and analysis should the County proceed with updating the Results First approach. Staff would then develop additional analysis and narratives providing insight into those comparisons and how they might impact policy or programmatic decision-making.

The Cumulative Recidivism Rate by Year chart compares cumulative recidivism data between the State of California and Yolo County. The cumulative rate shows the additional annual increases in recidivism each year. For example, in Yolo County, nearly 24% recidivated in the first year and an additional 13% recidivated in the second year with a cumulative rate of 37%.

The Recidivism Event Types chart identifies the broad categories of recidivism events that occurred within this cohort.
PROGRAM INVENTORY

Ultimately, the Results First approach produces a program inventory and Cost-Benefit Analysis. This analysis utilizes an inventory of the County’s funded, evidence-based programs to provide policymakers with information on the interventions currently operating in the county, as well as gaps and duplications in services. The program inventory includes information related to program design (including purpose and method), cost, capacity and populations served.

Once programs are identified and catalogued, they are matched to the Results First Clearinghouse Database (www.pewtrusts.org/en/research-and-analysis/data-visualizations/2015/results-first-clearinghouse-database). This database is an online collection of information on the effectiveness of social policy programs from nine national clearinghouses that conduct independent, transparent, systematic and rigorous reviews of available research. The matching process provides an indicator of a given program’s effectiveness based on national evaluations that categorize how well programs achieve their desired outcomes (reduction in recidivism).

YOLO COUNTY PROGRAM INVENTORY

The Yolo County Program Inventory includes programs employed by the Probation Department, the Health & Human Services Agency, and the Sheriff’s Office. Each program was thoroughly vetted by County and CSAC staff, and matched to the Results First Clearinghouse data. For each program in the inventory, the Results First Clearinghouse rating system is used which is defined as follows:

- **Highest Rated**
  - The program had a positive impact based on the most rigorous evidence.

- **Second-Highest Rated**
  - The program had a positive impact based on high-quality evidence.

- **Mixed Effects**
  - The program had inconsistent impacts based on high-quality evidence. That is, study findings showed a mix of positive impact, no impact, and/or negative impact.

- **Insufficient Evidence**
  - The program’s current research base does not have adequate methodological rigor to determine impact.

- **No Effects**
  - The program had no impact based on high-quality evidence. That is, there was no difference in outcomes between program participants and those in the comparison group.

- **Negative Effects**
  - The program had a negative impact based on high-quality evidence.

For some programs, multiple ratings were assigned due to the Results First Clearinghouse being built upon multiple national clearinghouses, as described above, and a variance in their findings.

To follow, are a listing of the programs that matched with the Results First Clearinghouse Database. To view the full Program Inventory, before the matching process, visit: [www.YoloCounty.org/CCP](http://www.YoloCounty.org/CCP) (select Results First link)
**Probation Programs**

Two Probation Department programs that matched with the Results First Clearinghouse Database were analyzed under the Results First program inventory process. While other programs were analyzed, only these two come directly out of the Probation Department’s budget.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Cost</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swift, Certain and Fair</td>
<td>Swift – timely responses to case events</td>
<td>$309,625</td>
<td>Second-Highest rated</td>
</tr>
<tr>
<td></td>
<td>Certain – consistent responses across departments to event types</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair – ensuring the response is proportional to the behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Positioning System (GPS)</td>
<td>A self-contained GPS tracking device designed to continuously monitor the offender’s location at varying levels of intensity while in the community receiving services and supervision</td>
<td>$22,680</td>
<td>Second-Highest rated</td>
</tr>
</tbody>
</table>

**Health & Human Services Agency Programs**

Fifteen Health & Human Services Agency (HHSA) programs that matched with the Results First Clearinghouse Database were analyzed under the Results First program inventory process. The cost per participant for each program was derived as follows: hours per week for each program, divided by total hours of all programs per provider to get a percentage. That percentage was used to calculate the number of clients served, cost and budget for each program. Cost per participant was calculated using program cost, divided by clients served in that program. Capacity was calculated using budget, divided by cost per client.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Cost</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beyond Trauma</td>
<td>Trauma-specific interventions are designed specifically to address the consequences of trauma in the individual and to facilitate healing</td>
<td>$31,915</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Courage to Change</td>
<td>Group facilitated, CBT</td>
<td>$124,455</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Cognitive Behavioral Therapy (CBT)</td>
<td>Counseling utilizing CBT</td>
<td>$43,728</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Thinking for Change</td>
<td>Group facilitated, CBT</td>
<td>$103,731</td>
<td>Second-Highest rated</td>
</tr>
<tr>
<td>Dimensions of Change</td>
<td>Group facilitated, CBT, Motivational Interviewing, self-directed journaling</td>
<td>$82,970</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Cognitive Distortions</td>
<td>Group facilitated, CBT, MI, self-directed journaling</td>
<td>$20,743</td>
<td>Highest rated</td>
</tr>
<tr>
<td>Seeking Safety (Pregnant/Parenting Women)</td>
<td>Trauma focused intervention for Substance Abusing clients</td>
<td>$141,634</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Stephanie Covington – Helping Men Recover</td>
<td>Gender responsive approach emphasizing trauma and spirituality using a strengths based approach</td>
<td>$42,490</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Program</td>
<td>Description</td>
<td>Cost</td>
<td>Rating</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Seeking Safety (Adults with co-occurring Substance Use Disorder [SUD])</td>
<td>Trauma focused intervention for Substance Abusing clients</td>
<td>$42,490</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Stephanie Covington – Helping Women Recover</td>
<td>Gender responsive approach emphasizing trauma and spirituality using a strengths based approach</td>
<td>$42,490</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Moral Recognition Therapy</td>
<td>CBT designed for criminal offenders to enhance/develop moral reasoning and decision making</td>
<td>$42,490</td>
<td>Second-Highest rated</td>
</tr>
<tr>
<td>Seeking Safety (High Risk)</td>
<td>Trauma focused intervention for Substance Abusing clients</td>
<td>$113,308</td>
<td>Highest rated, Second-Highest rated</td>
</tr>
<tr>
<td>Addiction Intervention Court (Drug Court)</td>
<td>A collaborative, specialized, treatment-oriented, problem-solving court that diverts substance using offenders away from the criminal justice system and into court-mandated, community-based treatment programs. Currently serves up to 15 participants at a time with representation from HHSA, Courts, Probation, District Attorney, and Public Defender. Meets twice/month for court and twice/month for staff briefings.</td>
<td>$190,582</td>
<td>Highest rated</td>
</tr>
<tr>
<td>Mental Health Court</td>
<td>A collaborative, specialized, treatment-oriented, problem-solving court that diverts substance using offenders away from the criminal justice system and into court-mandated, community-based treatment programs. Currently serves up to 15 participants at a time with representation from HHSA, Courts, Probation, District Attorney, and Public Defender. Meets twice/month for court and twice/month for staff briefings.</td>
<td>$315,533</td>
<td>Second-Highest rated</td>
</tr>
<tr>
<td>Transitional Living</td>
<td>Recovery Residences for individuals with SUD issues needing temporary housing while engaging in outpatient or other SUD services</td>
<td>$101,980</td>
<td>Not rated</td>
</tr>
</tbody>
</table>

**SHERIFF PROGRAMS**

Two Sheriff’s Office programs were designated for analysis under the Results First program inventory process for the Sheriff’s Office.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Cost</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy Training (General Education Development)</td>
<td>Literacy training for the inmates at the Monroe Center. Includes GED materials, training, testing, and certification.</td>
<td>$47,842</td>
<td>Second-Highest rated</td>
</tr>
<tr>
<td>Electronic Monitoring</td>
<td>An alternative to custody where inmates serve their time with a GPS anklet at either their own residence or at our Transitional Housing Unit</td>
<td>$734,055</td>
<td>Second-Highest rated</td>
</tr>
</tbody>
</table>
RESOURCES COST

The Cost-Benefit Model uses county-specific marginal costs, where available, to calculate the benefits of avoided crimes from reduced recidivism related to effective programs and policies. Included in this modeling are the following costs at the county level:

- Cost of a conviction
- Cost of an arrest (statewide estimate)
- Marginal cost of jail (per day)
- Marginal cost of probation
- Marginal cost of prison and parole (based on state level data)
- Victimization costs (based on peer reviewed national studies)

The following describes the methodology behind developing the Resource Cost for each Yolo County department.

PROBATION

The Resource Cost for Probation was established utilizing fiscal year 2017-18 data and considered all adult felony cases and warrants, but excluded misdemeanors. It should be noted that Results First traditionally breaks down Probation costs by Post-Release Community Supervision (or PRCS) and activities not associated with PRCS. Yolo County Probation’s data, however, is not currently available in this manner. It should also be noted that costs typically borne by Health & Human Services are embedded in the Resource Cost for Probation.

SHERIFF’S OFFICE

The model requires the marginal cost of a day in jail. This has been calculated by identifying the direct annual costs for jail (see list of costs to follow) and dividing by the number of jail bed days used. The data includes costs that will vary with small to medium changes in the population like food, linens, transportation, medical and correctional officers’ wages and benefits. The Sheriff’s Resource Cost excludes administrative or fixed costs that do not go into the direct supervision and care of individuals in the jail.

The Resource Cost of jail was established utilizing fiscal year 2017-18 data which include the following:

- Salaries & benefits of correctional officers, deputy sheriffs working at or transporting to the jail
- Training and travel related to training
- Food cost, less the cost of food service provided to Juvenile Detention
- Laundry services
- Inmates clothing and personal items
- General supplies for inmates and staff, medical/lab/dental supplies, law enforcement supplies
- Interpreter services, postage (by usage), printing (jail forms)
- Various minor equipment for staff to use for jail and/or inmates
- Travel to courts and mental health facilities
- Medical, dental and behavioral health services contract through HHSA

PUBLIC DEFENDER, DISTRICT ATTORNEY AND COURTS

As Yolo County was unable to gather all components of the data required by the model for these agencies, the Resource Costs related to the Public Defender, District Attorney and Courts were estimated utilizing an average of data from eight other California counties that have completed the Results First process. This represents a caveat within Yolo County’s results that County staff will continue to address as this model is further utilized.
The Cost-Benefit Model considers the probability of sentencing outcomes resulting from felony and misdemeanor convictions as a result of recidivating events. Specifically, the model requires information about the percent of misdemeanor and felony convictions that result in the following sentences: probation; jail only; jail and probation post-release; prison; and community supervision following release from prison. This data is utilized to effectively project how a defendant moves through the criminal justice system (see example below). Yolo County utilized a hybrid approach in calculating the Resource Use. This included utilizing CDCR data to calculate the likelihood of parole/PRCS, length of time in prison, and length of time in jail prior to prison. The rest of the information was taken from a nine-county average.

**Cost-Benefit Model Resource Use Probability Tree Example (Felony Conviction)**

![Cost-Benefit Model Resource Use Probability Tree Example (Felony Conviction)](image)

**Note:** probabilities under Sentenced to Prison are marked red because they do not need to be calculated by counties.
Cost-Benefit Analysis

As previously outlined, the Cost-Benefit Analysis projects the return on investment of a program based on the impact of recidivism. Yolo County’s Cost-Benefit Analysis resulted in the below slate of programs that matched to programs proven to reduce recidivism. The matching process allows for the model to illustrate an estimated level of effectiveness by program.

The below Cost-Benefit results, coupled with estimates that each avoided recidivist realizes nearly $120,000 in total benefits, is a powerful tool that can now be utilized to determine where best to direct funding for criminal justice programs.

Yolo County Cost-Benefit Results

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Benefits per Participant</th>
<th>Costs per Participant</th>
<th>Benefit to Cost Ratio</th>
<th>Recidivism Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Behavioral Therapy</td>
<td>$5,759</td>
<td>$1,229</td>
<td>$4.69</td>
<td>-9%</td>
</tr>
<tr>
<td>Drug Court</td>
<td>$13,332</td>
<td>$12,485</td>
<td>$1.07</td>
<td>-21%</td>
</tr>
<tr>
<td>Electronic Monitoring (PRCS)</td>
<td>$587</td>
<td>$653</td>
<td>$0.90</td>
<td>-6%</td>
</tr>
<tr>
<td>Electronic Monitoring Sheriff</td>
<td>$7,249</td>
<td>$906</td>
<td>$8.00</td>
<td>-13%</td>
</tr>
<tr>
<td>Literacy Training</td>
<td>$6,004</td>
<td>$465</td>
<td>$12.92</td>
<td>-9%</td>
</tr>
<tr>
<td>Mental Health Court</td>
<td>$8,874</td>
<td>$20,936</td>
<td>$0.42</td>
<td>-14%</td>
</tr>
<tr>
<td>Swift Certain and Fair</td>
<td>$2,480</td>
<td>$2,434</td>
<td>$1.02</td>
<td>-4%</td>
</tr>
</tbody>
</table>

Definitions

**Benefits per Participant**: The program’s monetary impact for reducing recidivism

**Program Cost**: The operational cost to provide the program

**Cost-Benefit Ratio**: The amount of benefits for every dollar in costs invested. A value greater than one means the benefits exceed the costs.

**Recidivism Reduction**: The estimated recidivism reduction based on Yolo County’s baseline recidivism rate, and the level of program effectiveness based on research from around the world.

Of Note

- As noted above, Yolo County relied on averages from other counties for the costs of the court, public defender and district attorney, as well as how offenders move through the criminal justice system. Criminal justice system usage and sentencing practices often vary considerably between counties so it will be important to update these numbers in the future. The overall monetary benefits of the programs listed above will be impacted by relying on the County averages.
• The benefits of electronic monitoring are estimated to last for one year instead of the six-year impacts from other programs. This is because electronic monitoring is expected to reduce recidivism initially but does not address longer term criminogenic needs. The benefits of electronic monitoring by the Sheriff and Probation’s pretrial population also include reduced costs of incarcerating individuals. Since the costs of electronic monitoring are much lower than the cost of a jail bed, this results in substantially higher benefits.

• Many programs fall under a broad category such as Cognitive Behavioral Therapy. To view the full Program Inventory before the matching process, which includes subsets of broad categories, visit: www.YoloCounty.org/CCP (select Results First link).

CONCLUSIONS

• Collaboration among County departments, data sharing and holistic program analysis facilitates system-wide communication and understanding, coordinated client care and strategic decision-making.

• The County would benefit from further discussion concerning criminal justice data collection and analysis to develop a consistent methodology, and thus, a common understanding of the results.

RECOMMENDATIONS

• Develop a countywide Evidence-Based Practice (EBP) definition and approve and develop a framework for interpreting research studies.

• Create a team of research and evaluation staff from each agency to coordinate further data analysis.

• Develop a countywide set of performance metrics connected to EBPs and work on refining how contracts are monitored related to performance metrics.

• Build capacity to monitor and respond to program fidelity issues and help build capacity of providers to monitor fidelity of their programs.