User-Friendly Tools for Improving Criminal Justice Outcomes

User-Friendly Tools for Improving Criminal Justice Outcomes

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Overview

- Tools for building local capacity to improve public safety and manage costs
  - General local criminal justice cost-benefit model
  - Pretrial cost-benefit model
  - Projections and strategy model for the jail population

What is cost-benefit analysis?

- An approach to policymaking

- A systematic tool for monetizing public policy

- A method to weigh options

- A way for finding out what will achieve the greatest results at the lowest cost

CBA use in criminal justice

- Pew-MacArthur Results First Initiative
  - Working with jurisdictions to implement a cost-benefit approach to invest in policies and programs that are proven to work

- Vera Institute's Cost-Benefit Knowledge Bank
  - Resources for understanding cost-benefit analysis within the criminal justice system

- MW Consulting
  - Creation of local cost-benefit models through the Justice Reinvestment Initiative
  - Completed pretrial cost-benefit model

CBA Framework

- Use standard economic tools that have been developed to monetize crime
  - Criminal justice system costs
    - Marginal costs compared to average costs
  - Victimization costs
  - Mapping a jurisdiction's resource use for individuals going through the criminal justice system
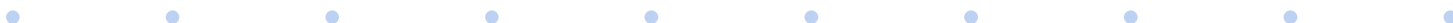
System costs

- Average Cost is the total program/agency cost divided by the number of individuals served

- Marginal Cost is the change in the total cost from incremental changes in the number of individuals served

  – Example: When a small number of inmates are added to the jail, certain variable food and service costs increase immediately; however, new staff are not typically hired right away
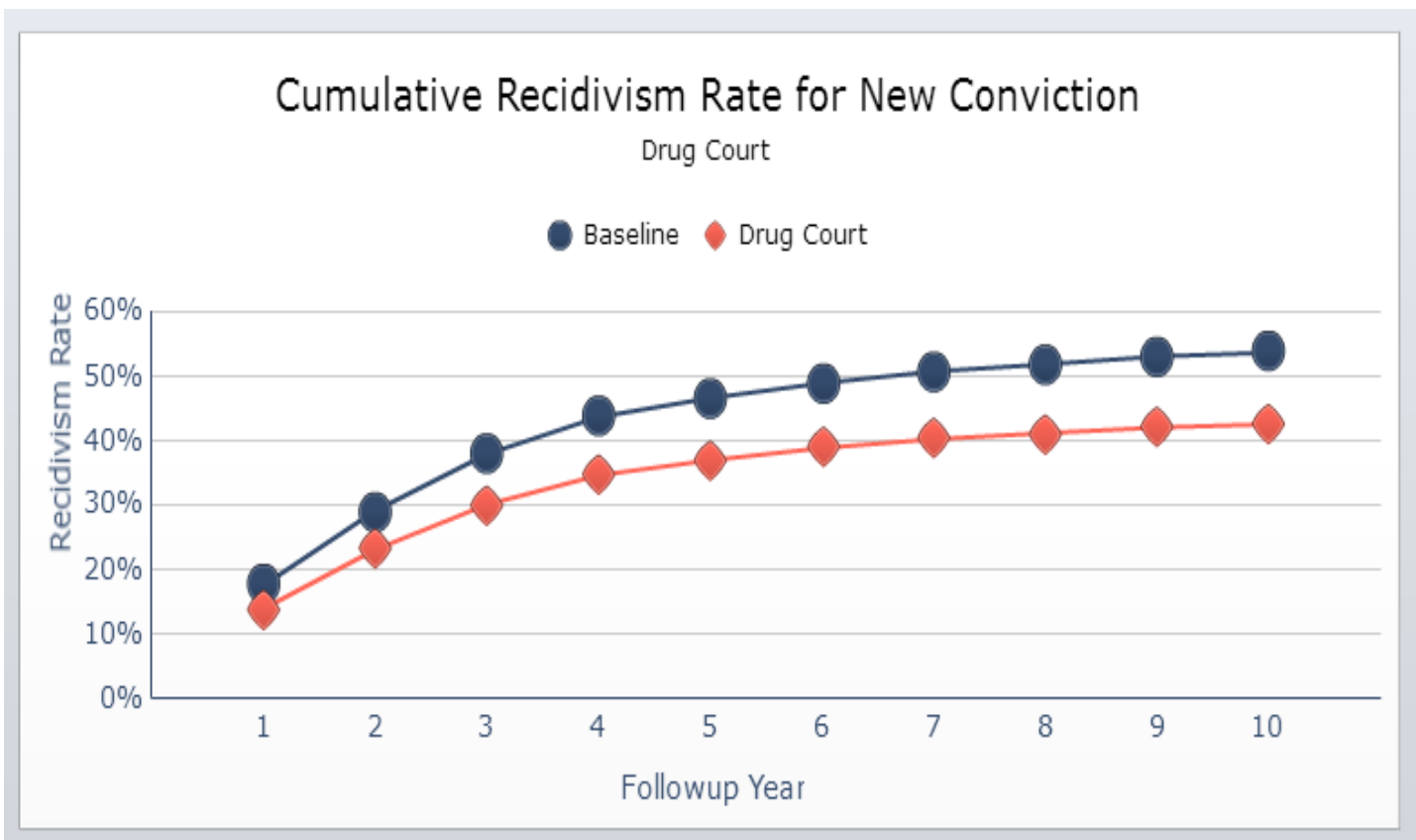
Cost-benefit analysis of programs

- Baseline recidivism rates
- Measurements of program effectiveness
  - Own evaluation
  - Washington State Institute for Public Policy meta-analysis
- Cost of programs

Program recidivism reduction

Cumulative Recidivism Rate for New Conviction
Drug Court

Pretrial cost-benefit analysis

- Validated risk assessment
- Pretrial outcomes by risk
  - FTA likelihood
  - New crime likelihood
 - Likelihood of pretrial supervision
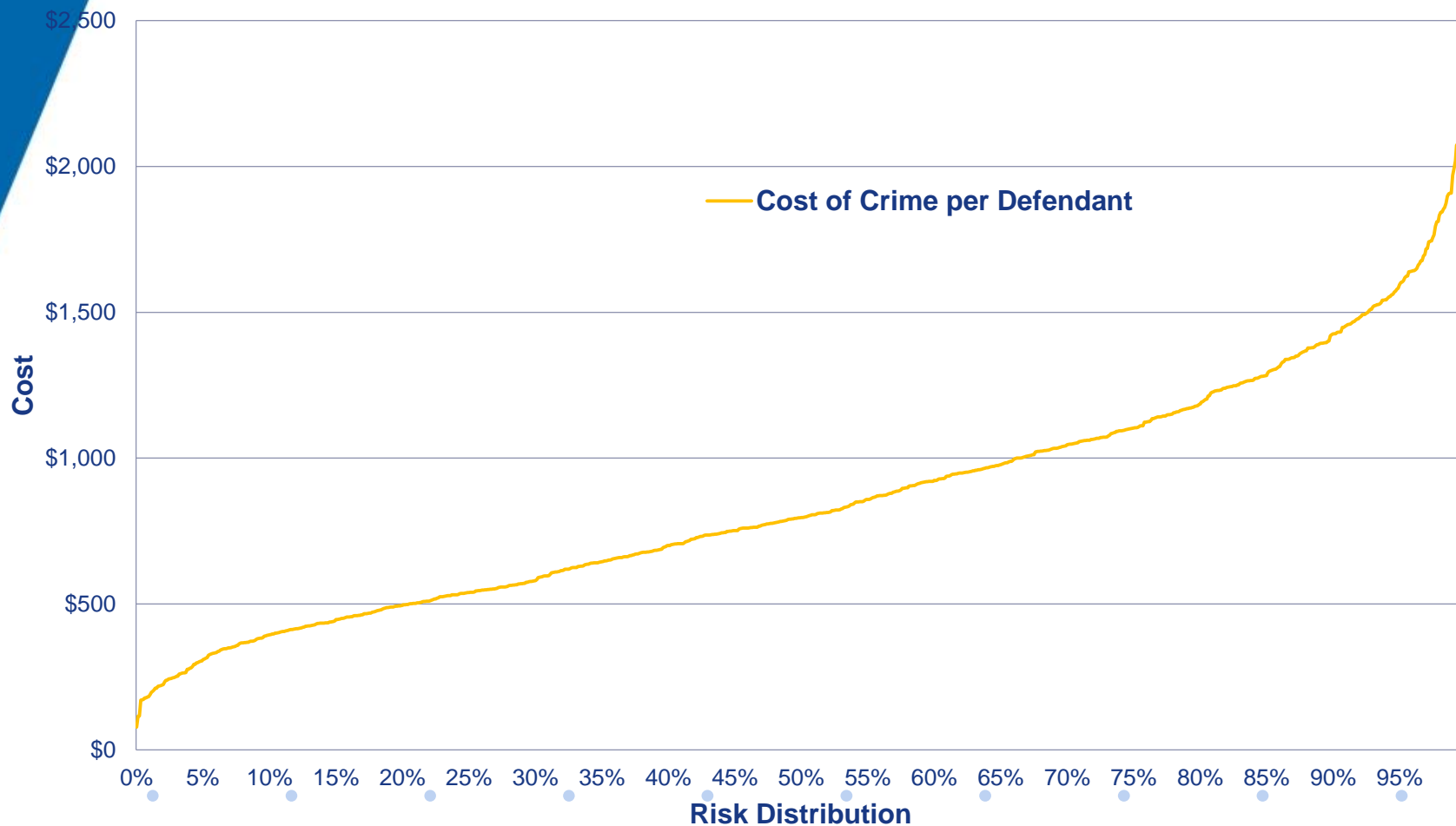
Pretrial cost-benefit analysis

- Estimate the system costs of detaining individuals

- Estimate the crime avoidance/increase and failure to appear avoidance/increase of detaining individuals
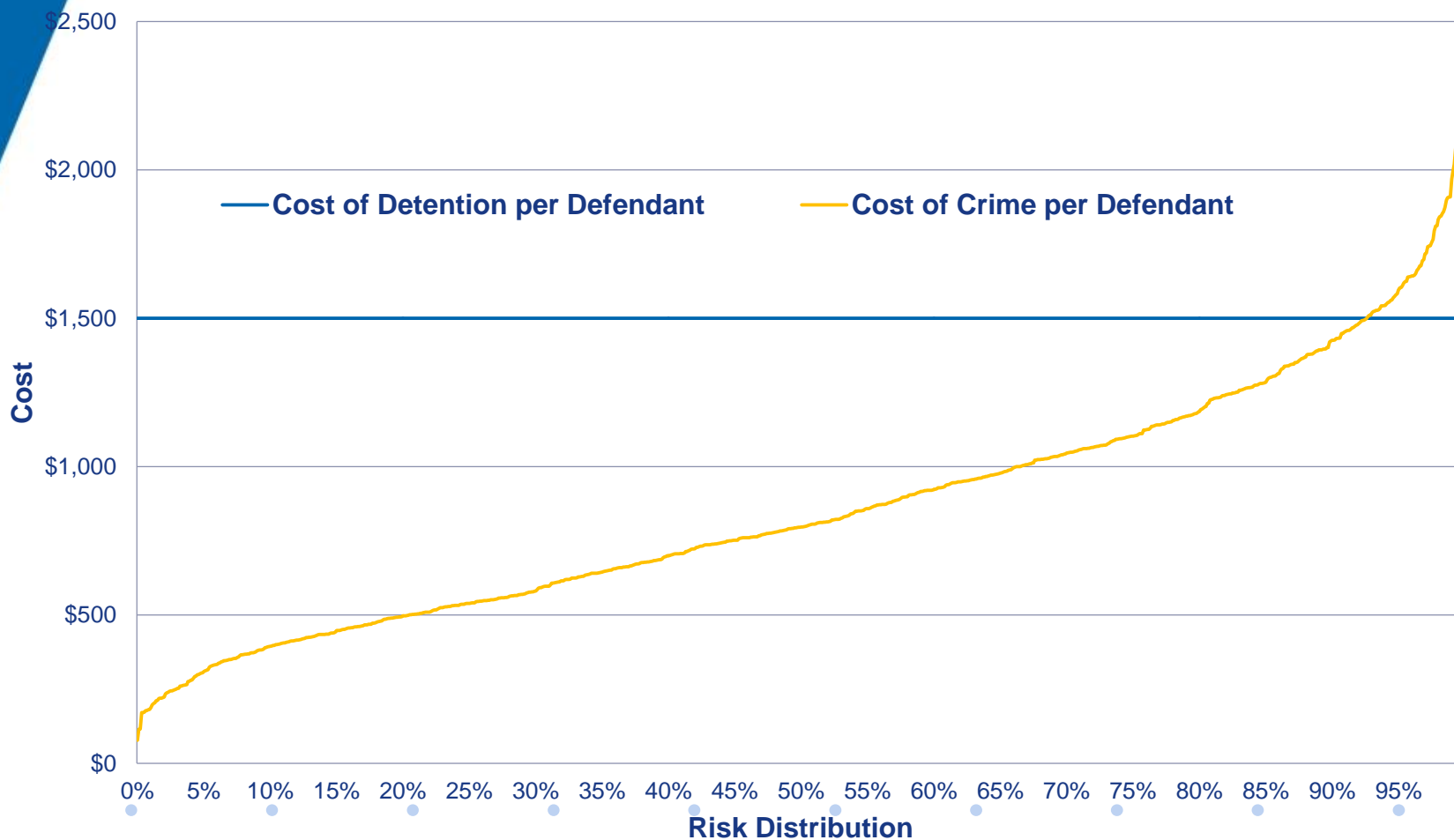 - Monetize the additional/reduced crime and failure to appear

Pretrial CBA Example: Likelihood of Crime by Risk Score Distribution
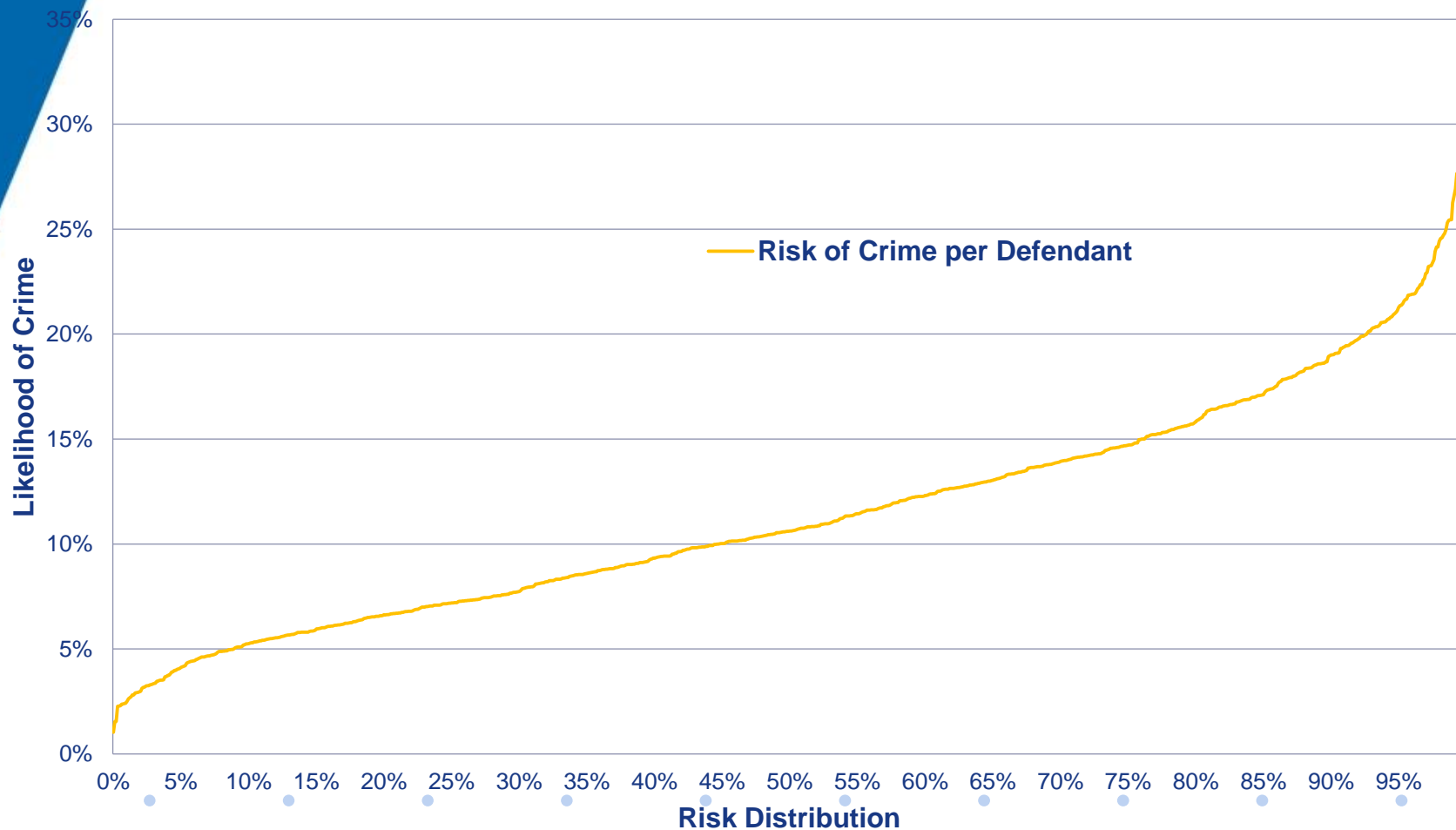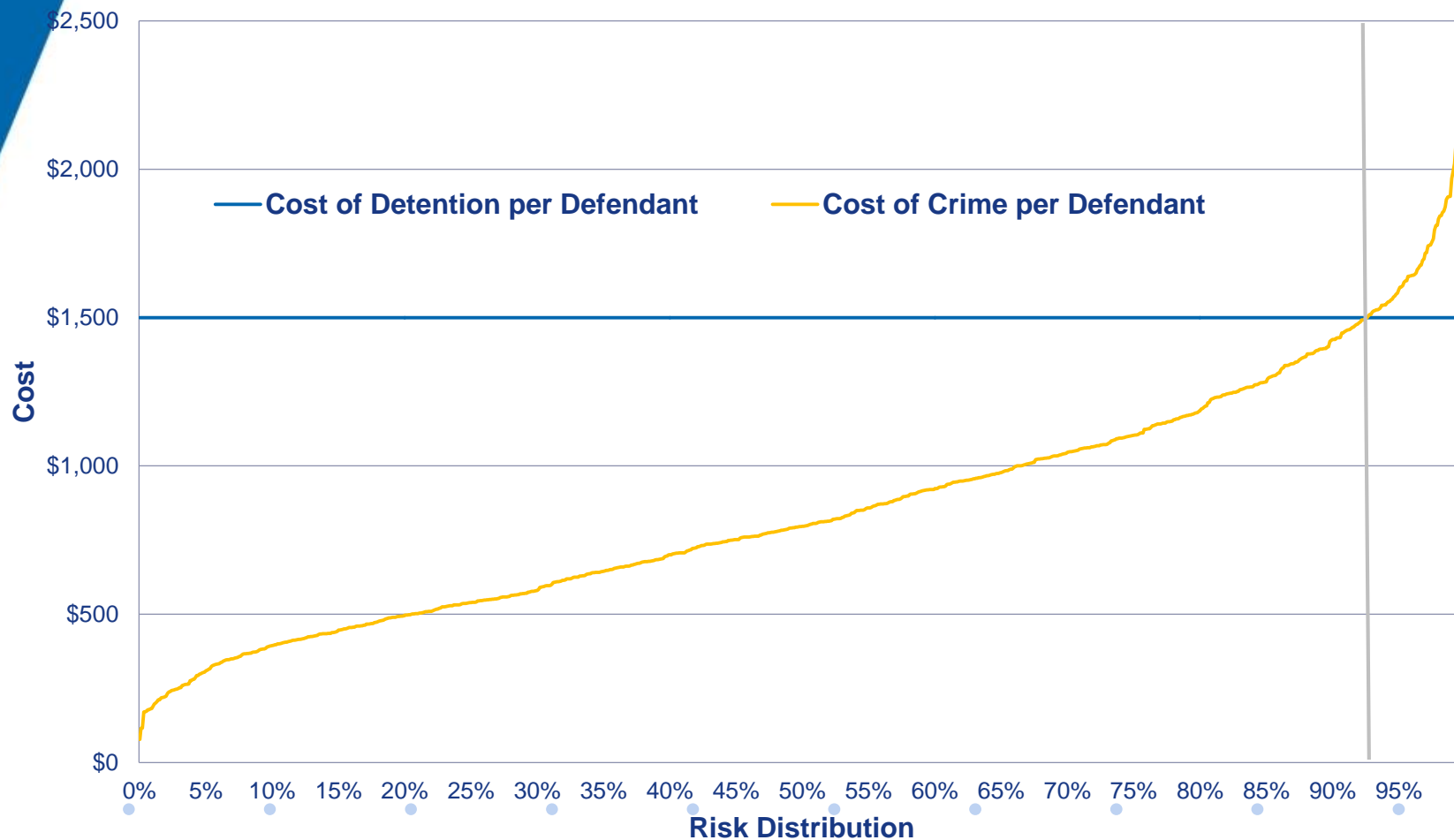
Pretrial CBA Example:
Crime Costs by Risk Score Distribution

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Pretrial CBA Example:
Crime Costs by Risk Score Distribution

www.m-w-consulting.org

Projection and Strategy Models – Jail

- Projects 10 year jail population based on the jurisdiction's historical data
- Allows the jurisdiction to model the impact of policy changes on the jail population
- Web-based tool
  – Dynamic
  – Transparent
  – Easy to use

Model demonstration
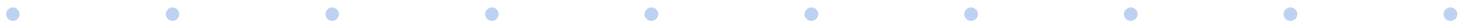
Resources

- Criminal Justice Cost-Benefit Model
  - www.m-w-consulting.org/cj-cost-benefit-model
- Pretrial Cost-Benefit Model
  - www.m-w-consulting.org/pretrial-cost-benefit-model

Contact information

- Michael Wilson, Economist and Research Consultant
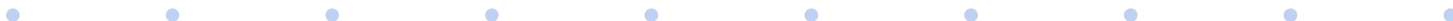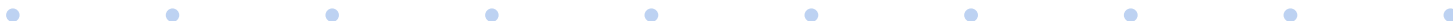 - Mike@m-w-consulting.org
  - 503-949-8702

Cost/Benefit Modeling

July 24, 2016

About the Department of Human Services

- **Assistance for older persons with/without disabilities**

- **Child protective services**

- **Mental health services (including 24-hour crisis counseling)**

- **Drug and alcohol services**

- **Services for individuals with a diagnosis of intellectual disability**

- **Emergency shelters and housing for the homeless**

- **Non-emergency medical transportation**

- **Job training/placement for older adults and adults on TANF/SNAP.**

- **Family support**

- **After school and summer programs for children**

- **At-risk child development and early education**

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PERFORMANCE MANAGEMENT SYSTEMS

Cost/Benefit Tools

- Simplifies decision-making
- Allows policymakers ability to understand cost drivers
- Assists in making funding recommendations
- Ties conclusions to program, not provider
- Provides rich dataset

Performance Based Contracting

- Majority of services are contracted – we need to maximize the return on those investments
- Ties accountability of the government and the provider
- Aligns outcomes and incentives

MEASURING PERFORMANCE

Performance Based Contracting

State

County

Provider Agency

Intervention

Client
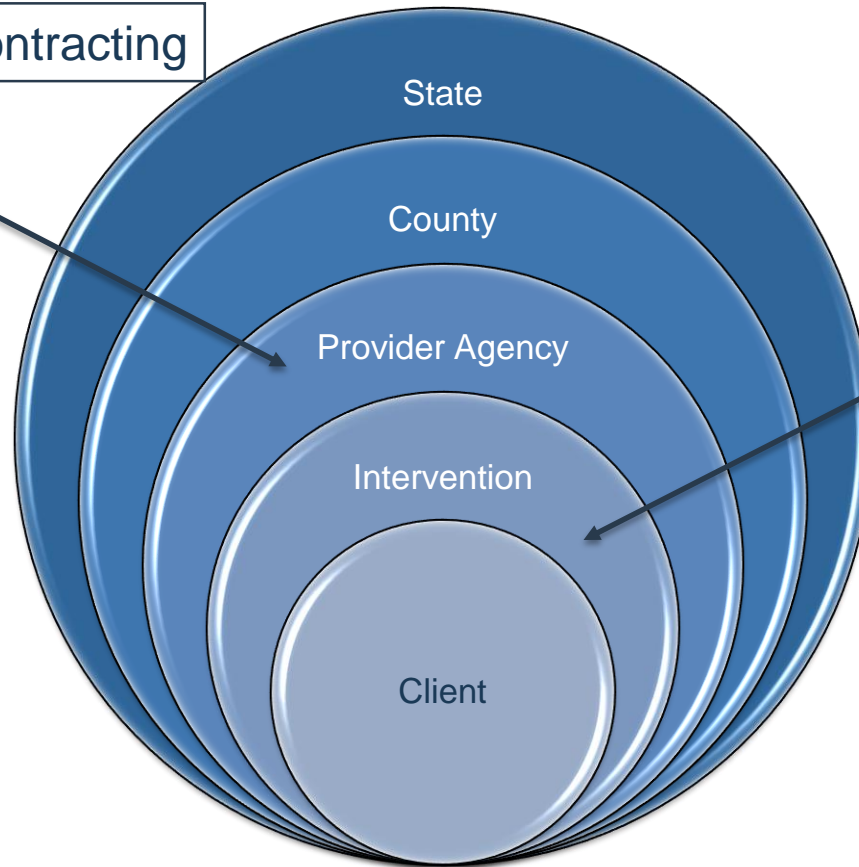
Cost/Benefit Analyses

Cost/Benefit Application

- ACDHS applied it to programming decision-making
- Through this process we pulled significant data on costs that we previously did not have
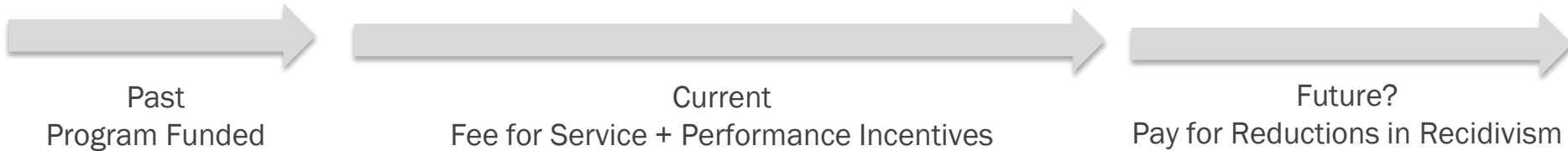- Studied specific pieces in a systematic fashion to create a master cost database
- Use the tool to study multiple programs across departments
- Provides internal and external stakeholders with alternative measure of program effectiveness

Jail Collaborative

Past
Program Funded

Current
Fee for Service + Performance Incentives

Future?
Pay for Reductions in Recidivism
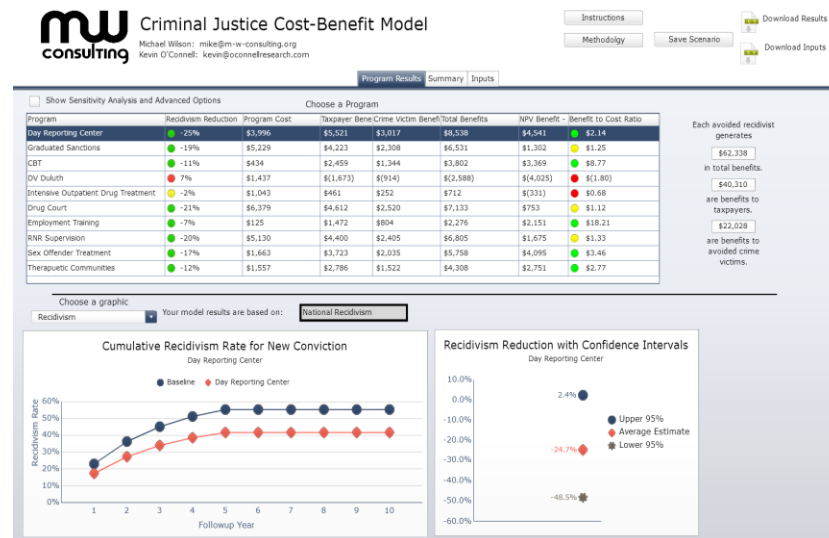
Current Model: Providers invoice for an **enrollment fee** and **performance incentive** when service-specific outcomes are achieved. Rates are set using the following 4 elements:

1. Target number of clients to be served
2. Cost to run the program (provider submitted budget)
3. Enrollment vs. Incentive breakdown – for year one 70%/30% was chosen
4. Target successful completion rate

Chart: Total Payment vs. Completion Rate. Y-axis: Total Payment from $205,000 to $235,000. X-axis: Completion Rate from 20% to 70%. Annotated point: $220,000 (Payment at target completion rate of 45%).
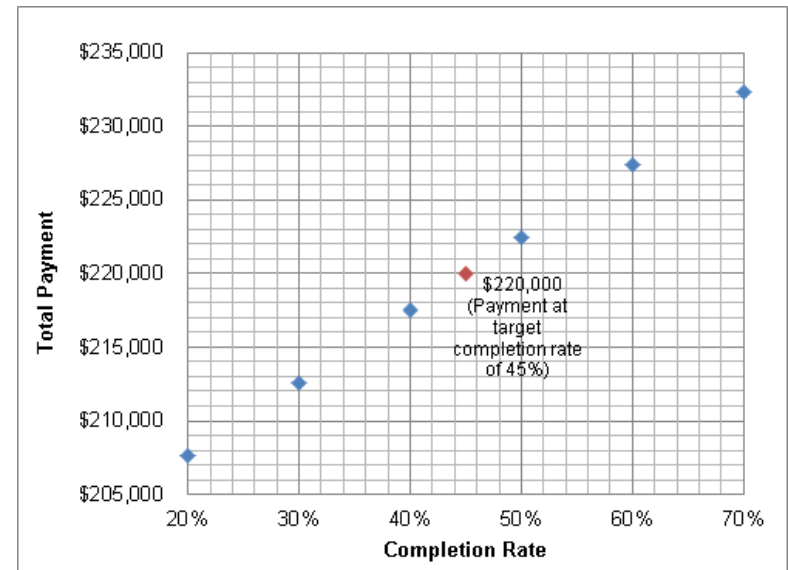
Jail Collaborative – Quarterly Performance Reviews

- Led to more frequent and better problem solving discussions
- Put pressure on providers and DHS/Jail staff to meet enrollment and performance targets

Date Range: 7/1/2014 - 12/31/2014

Service	Enrollment		Incentive 1				Budget Utilization	6-month recidivism rate
	Target	% of target served	Incentive 1	Target	Actual	Difference		
Service 1	20	50%	Class Completion	47%	46%	-1%	51%	
Service 2	40	69%	Class Completion	31%	20%	-11%	70%	
Service 3	20	67%	Class Completion	38%	0%	-38%	61%	
Service 4	60	43%	Class Completion	35%	53%	18%	44%	
Service 5	122	44%	Class Completion	57%	38%	-19%	41%	
Service 6	110	35%	Class Completion	33%	34%	1%	36%	
Service 7	248	58%	Class Completion	64%	81%	17%	60%	
Service 8	165	60%	Service Completion	45%	68%	23%	63%	
Service 9	170	41%	Service Completion	60%	20%	-40%	37%	
Service 10	80	33%	Job Placement	50%	29%	-21%	33%	
Service 11	175	90%	Job Placement	50%	41%	-9%	83%	
Service 12	50	12%	Training Completion	70%	60%	-10%	9%	

Key Takeaways

- Engage stakeholders

- Make sure the numbers work

- Expect the models to evolve over time

- Create infrastructure to provide data quickly

- Create a process to review interim results

- Reliance on administrative data

- Involve Fiscal staff

- Partner with external cost/benefit experts

- Publish your final findings

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Where is ACDHS Headed?

- Expanding cost/benefit analyses into Child Welfare
  - Partnering with Results First
- Pennsylvania created a bill to implement Results First across the state (still waiting on Senate approval)
- Collecting better data to assist cost/benefit tools
- Using similar tools to increase confidence in program recommendations
- Supporting provider agencies in the use of data/analytics
- Quantifying program impacts

RESOURCES

- Calculating Unit Costs in Allegheny County, October 2014
- Introducing Performance-Based Contracting: A Comparison of Implementation Models

http://www.alleghenycounty.us/dhs/research.aspx