

# **CALCULATING AND UTILIZING RECIDIVISM RATES**

Texas Juvenile Justice Department  
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Chara Heskett  
Research Specialist  
[chara.heskett@tjjd.texas.gov](mailto:chara.heskett@tjjd.texas.gov)

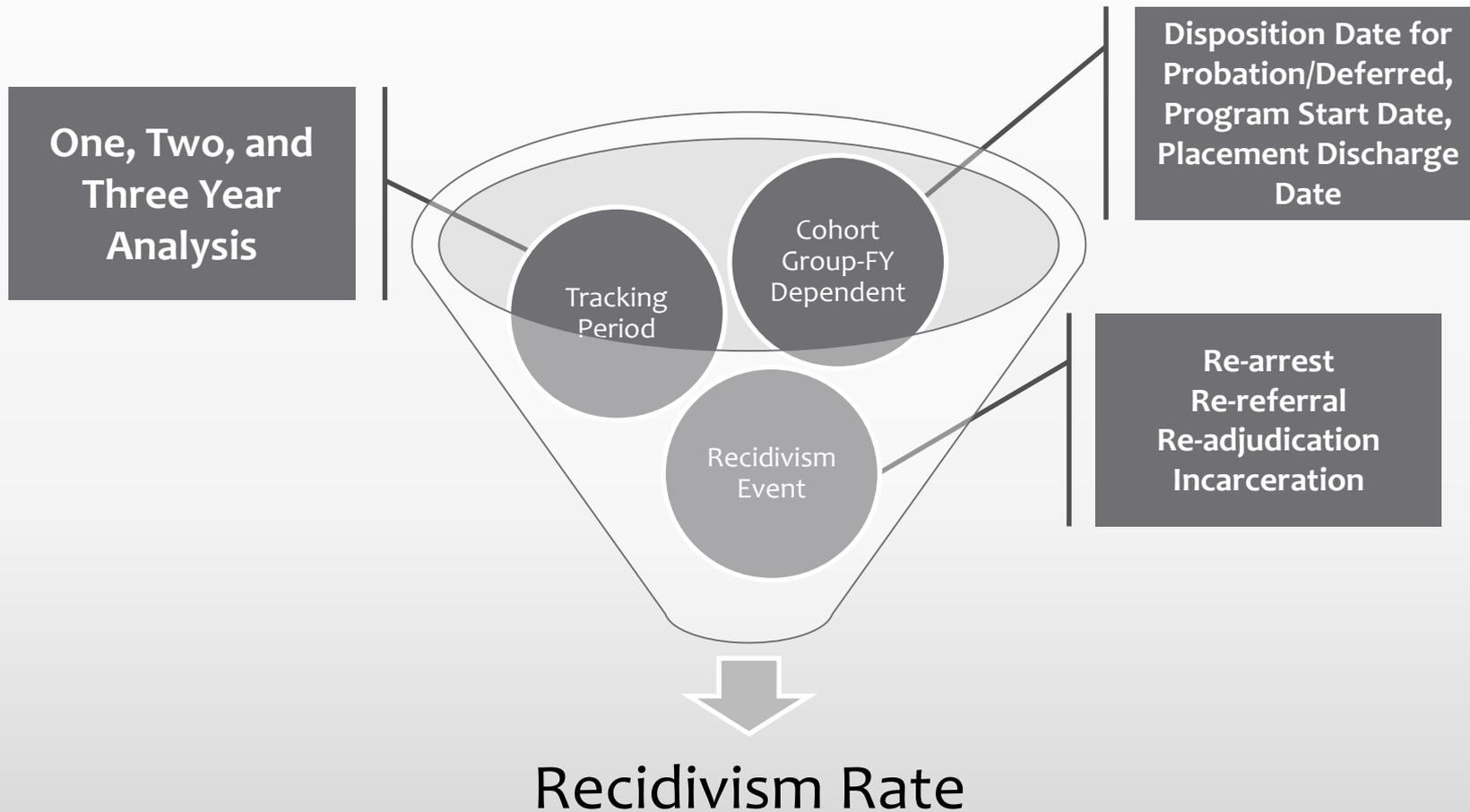
# ROAD MAP

- Definitions
- How we use recidivism
- How we calculate recidivism
- Conducting your own analysis

## BASIC RECIDIVISM DEFINITION

- “A tendency to relapse into a previous condition or mode of behavior; especially: relapse into criminal behavior”
  - Key word: relapse

# COMPONENTS OF TJJD RESEARCH RECIDIVISM DEFINITION



## EXAMPLE:

“Of juveniles adjudicated to probation in FY 2011, 50%  
Cohort Recidivism  
Rate  
were re-arrested in three years.”  
Event Tracking  
Period

## WHY THIS DEFINITION?

- This methodology/definition matches the methodology adopted and used by the LBB
- Same basic methodology used by TDCJ
- Use of disposition date for probation and deferred supervision allows us to quantify recidivism events that occur before end of supervision
- Allows other jurisdictions to evaluate our rates in comparison to theirs

## COMMON USES OF RECIDIVISM DATA

- Examine impact of policy or budget changes
- Evaluate new programs and/or practices
- Evaluation against prior performance
- Comparing different offender groups
- Program Evaluation
- Cost-benefit analysis

# HOW TJJD USES RECIDIVISM DATA

- *LBB Statewide Criminal & Juvenile Justice Recidivism and Revocation Rates*
  - Three year recidivism rates for juveniles who:
    - Disposed to deferred prosecution supervision
    - Disposed to probation supervision
    - Exited secure placement
- “December 1 Report”
  - *Community Juvenile Justice Appropriations, Riders and Special Diversion Programs*
- Quarterly Performance Measures to LBB

# HOW TJJD USES RECIDIVISM DATA

- Evaluate overall program effectiveness in achieving objectives
  - Process → development, implementation, and operation of a program
  - Outcome → effect of a program (recidivism)
  - Main goal of all juvenile justice programs is to reduce recidivism
- Compare program outcomes
  - Program A recidivism = 75%
  - Program B recidivism = 40%

**Which program appears to be doing a better job?**

- Program A = Violent, chronic offenders
- Program B = First time offenders

# HOW TJJD USES RECIDIVISM DATA

- Compare supervision outcomes (one year)
  - Deferred Supervision Recidivism = 30%
  - Probation Supervision Recidivism = 50%
- Visualize trend in recidivism over time
  - One Year Probation Recidivism 2013 = 50%
  - One Year Probation Recidivism 2012 = 55%
  - One Year Probation Recidivism 2011 = 60%

# HOW WE CALCULATE RECIDIVISM: DPS DATA

- Send to DPS any juvenile in our time frame:
  - Referred or disposed
  - Supervision
  - Placement
  - Program

Example:

LAST, FIRST MIDDLE



Name

SRYYYYMMDD



Sex Race DOB

0000000099999999



DPS SID

SSN

XXXXXXXXXX



Agency identifier

# HOW WE CALCULATE RECIDIVISM: DPS DATA

- File sent to DPS includes variation of names
  - E.g. Last, First, Middle AND Last, First
- Total of 516, 344 records sent for FY 2009 – FY 2014 matching
- DPS sends back:
  - Identification: name, unique identifies, and demographic information
  - Charges: arrest dates, offense information, unique identifier
  - Court: arrest/disposition dates, sentence, unique identifier

## DPS MATCHING

- Match DPS identification table with our Child table to remove any false matches
- Add DPS charges and court records with TJJD referral data
  - Match based on SID number
- Clean and remove any exact duplicate records

# DPS MATCHING-DATA QUALITY

- Match with child table first on TJJD number
- Calculate best match based on SID, SSN, DOB, Name, TJJD number
  - If any of these are missing on either file, the record will not match
  - If the information is incorrect, could lead to a mismatch in data
- Important to ensure unique identifying variables are entered correctly and in a timely manner
  - EXAMPLE:  
DPS file name=Doe,John  
Extract child table name=DoeJr.,John

## TDCJ DATA

- Send cleaned and matched file of DPS/TJJD data to TDCJ
- TDCJ matches incarceration records based on unique identifiers (DPS SID)
- TDCJ sends back any incarceration records that match our records based on unique identifiers

# CALCULATING SUPERVISION RECIDIVISM

- Supervision cohorts selected for given fiscal year based on start of tracking period
  - Only select those with a match to DPS file
  - Disposed to probation or deferred prosecution supervision
- EXCEPTION:
  - Juveniles on supervision for a Class C offense OR
  - Juveniles referred to the department by someone other than law enforcement

# CALCULATING SUPERVISION RECIDIVISM

- One year analysis:

Supervision Disposition Date

9/1/2013-8/31/2014

Tracked for recidivism event prior to

9/1/2014-8/31/2015



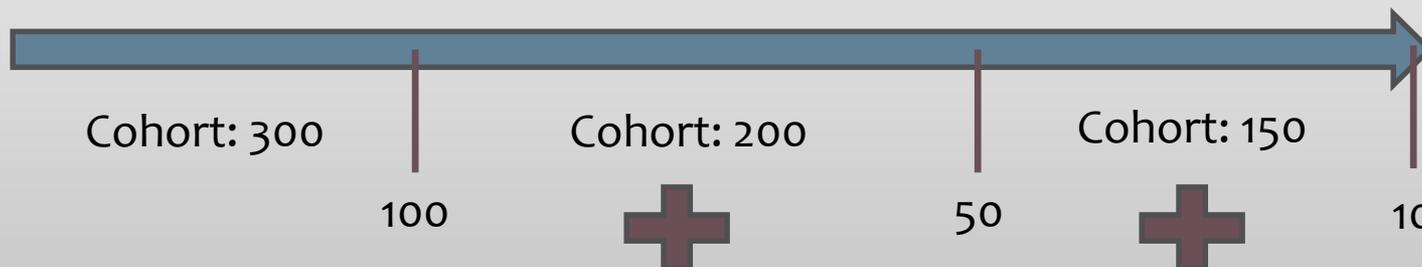
- Three year analysis:

Supervision Disposition Date

9/1/2011-8/31/2012

Tracked for recidivism event prior to

9/1/2014-8/31/2015



# CALCULATING SUPERVISION RECIDIVISM

## Example:

We have 300 juveniles who started probation supervision in FY 2014, 50 were re-referred or re-arrested for a Misdemeanor B offense or higher within one year of their disposition to supervision. The equation will look something like this:

$$\frac{50}{300} = 0.16667 \times 100 = 16.7\%$$

$$=(D11/D12)*100$$

## OF NOTE

- All juveniles in cohort **MUST** have complete data for the **ENTIRE** study period
  - E.g. if do not have DPS/adult data, juveniles older than 16 must be excluded for one year analysis
- Using incomplete or incorrect data may skew your rate to appear lower

# STATEWIDE RE-OFFENSE RESULTS

## One Year Analysis

<b>All Offenses</b>	<b>FY 2011 Cohort</b>	<b>FY 2012 Cohort</b>	<b>FY 2013 Cohort</b>
Deferred	28.2%	27.9%	27.6%
Probation	55.9%	57.2%	56.9%
<b>Misd B &amp; Higher</b>	<b>FY 2011 Cohort</b>	<b>FY 2012 Cohort</b>	<b>FY 2013 Cohort</b>
Deferred	23.2%	22.5%	22.8%
Probation	34.8%	35.1%	35.5%

## Cohort Total Recidivism

<b>All Offenses</b>	<b>FY 2011-Three Year</b>	<b>FY 2012-Two Year</b>	<b>FY 2013-One Year</b>
Deferred	50.7%	41.4%	27.6%
Probation	76.3%	70.0%	56.9%
<b>Misd B &amp; Higher</b>	<b>FY 2011-Three Year</b>	<b>FY 2012-Two Year</b>	<b>FY 2013-One Year</b>
Deferred	46.0%	36.1%	22.8%
Probation	54.6%	54.4%	35.5%

# PROGRAM RECIDIVISM

- Calculated the same way as supervision recidivism
- Additional information useful to program recidivism:
  - Average Risk and Needs level of cohort
  - Average number of prior referrals for program cohort
  - Proportion of program cohort with a prior violent or assaultive referral
  - Proportion of program cohort with prior violation of probation
  - Majority offense type of program cohort
  - Re-offense type

# PROGRAM RECIDIVISM EXAMPLE- ONE YEAR ANALYSIS

Program*	N	Re Offend in One Year	1 yr Re-Offense Rate**	Average # of Prior Referrals	Prior Violent/Assaultive Referral	Prior VOP	Majority Offense Type***
Grant S	324	16	4.9%	0.16	0.6%	0.0%	Crisis Intervention
No Drugs	97	30	30.9%	1.51	16.5%	9.3%	Misd. Assaultive

Program*	N	1 yr Re-Offense Assaultive	1 yr Re-Offense Drug	1 yr Re-Offense Property	1 yr Re-Offense Other**
Grant S	324	1.5%	0.6%	2.5%	0.9%
No Drugs	97	9.3%	9.3%	13.4%	8.2%

# CONDUCTING YOUR OWN ANALYSIS

What are my cohort characteristics?

Disposed to supervision  
Starting a program  
Exiting placement

What am I considering as a recidivism event?

Re-arrest  
Re-referral  
Re-adjudication  
Re-commitment  
Incarceration

What is my time frame?

6 months  
1 year  
3 years  
5 years

# CONDUCTING YOUR OWN ANALYSIS

- Important considerations before analysis:
  - All juveniles in your cohort **MUST** have complete data for the entire study period
  - For a one year analysis **ONLY** include juveniles aged 16 and younger if relying only on own data
  - For a three year analysis **ONLY** include juveniles 14 and younger if relying only on own data
- The rate you find may differ from the rate provided by TJJD due to limitations in data available to you
  - TJJD matches with DPS and TDCJ, allowing for a more comprehensive analysis

# DEFINING YOUR RECIDIVISM EVENT AND COHORT-SUPERVISION

- Choose the first disposition for each juvenile in your time frame
  - E.g. First disposition to probation in FY 2013
- One year cohort recidivism event:
  - Juveniles with re-referral or re-arrest for a Misd B or higher offense within 1 year of disposition to supervision
  - Dependent upon unique disposition date per juvenile

# DEFINING YOUR RECIDIVISM EVENT AND COHORT-PROGRAMMING

- Program Cohort Dependent upon Program Begin Date for each juvenile
  - E.g. All juveniles starting a program in FY 2013
  - Separate by Program Type or specific Program Name
  - Program must have MINIMUM 10 or more participants
- One year cohort recidivism event
  - Re-referral or re-adjudication for Misd. B or higher
    - Prior Violation of Probation can be used as risk factor
    - Highlight re-offense type

# CALCULATING YOUR RECIDIVISM IN EXCEL

- Refer to handouts provided for work within Excel
- If future questions on this handout, contact me
  - [Chara.heskett@tjjd.texas.gov](mailto:Chara.heskett@tjjd.texas.gov)
  - 512-490-7941



# QUESTIONS?

