



Estimating ADP

AN ANALYSIS OF THE IMPACTS OF RAISING THE AGE

Purpose

- ▶ To explain how TJJD estimated the impact of proposed legislation on its average daily population (ADP)
- ▶ To encourage others to do their own estimates and projections
- ▶ To solicit feedback and suggestions for future iterations

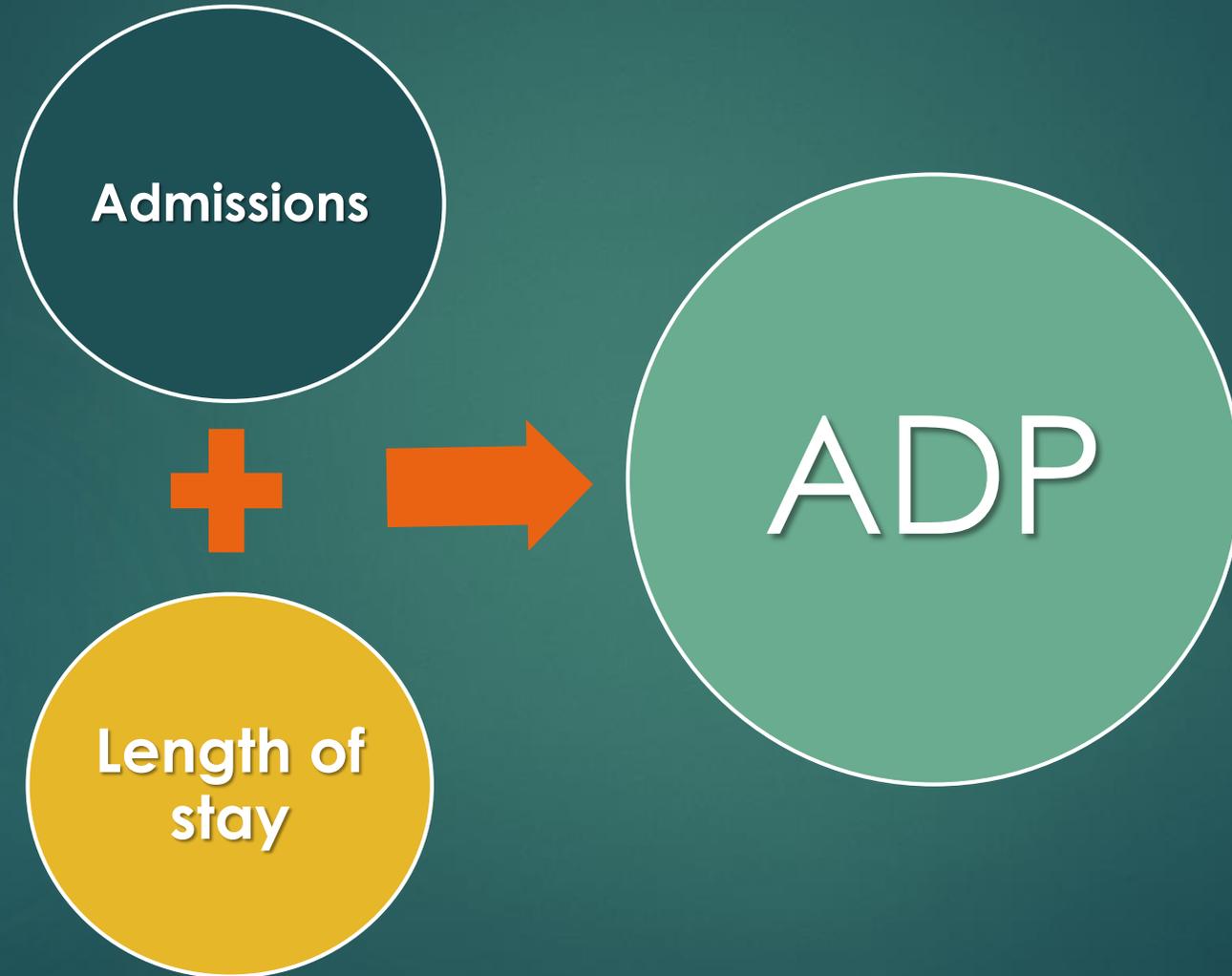
Background

- ▶ During the 84th Texas State Legislature, five bills sought to increase the age of juvenile jurisdiction by one year. All proposed:
 - ▶ Raising the age of criminal (adult) prosecution to 18
 - ▶ Extending juvenile court jurisdiction for youth on probation supervision to 19 (indeterminate) or 20 (determinate)
 - ▶ Raising TJJD's maximum age of jurisdiction to 20
- ▶ These changes apply to offenses committed on or after the effective date



So.....how do we get started???

Average Daily Population



Two-Part Impact Analysis

- ▶ An estimate of the impact of additional admissions
 - ▶ Direct commitments of 17 year olds
 - ▶ Probation revocations of 17, 18, or 19 year olds
- ▶ An estimate of the impact of longer lengths of stay for some youth of all ages

Assumptions

- ▶ Everything, except the maximum age of jurisdiction, will stay constant
 - ▶ The minimum age of juvenile jurisdiction will remain at 10
 - ▶ Law enforcement arrests of 17-year-olds will remain at the same level
 - ▶ The behavior of youth, law enforcement, juvenile court judges, JPD, and TJJD staff will remain constant with regard to:
 - ▶ Arrests
 - ▶ Referral dispositions
 - ▶ Determinate sentencing
 - ▶ Transitions between secure and non-secure TJJD locations
 - ▶ Discharge

More Assumptions

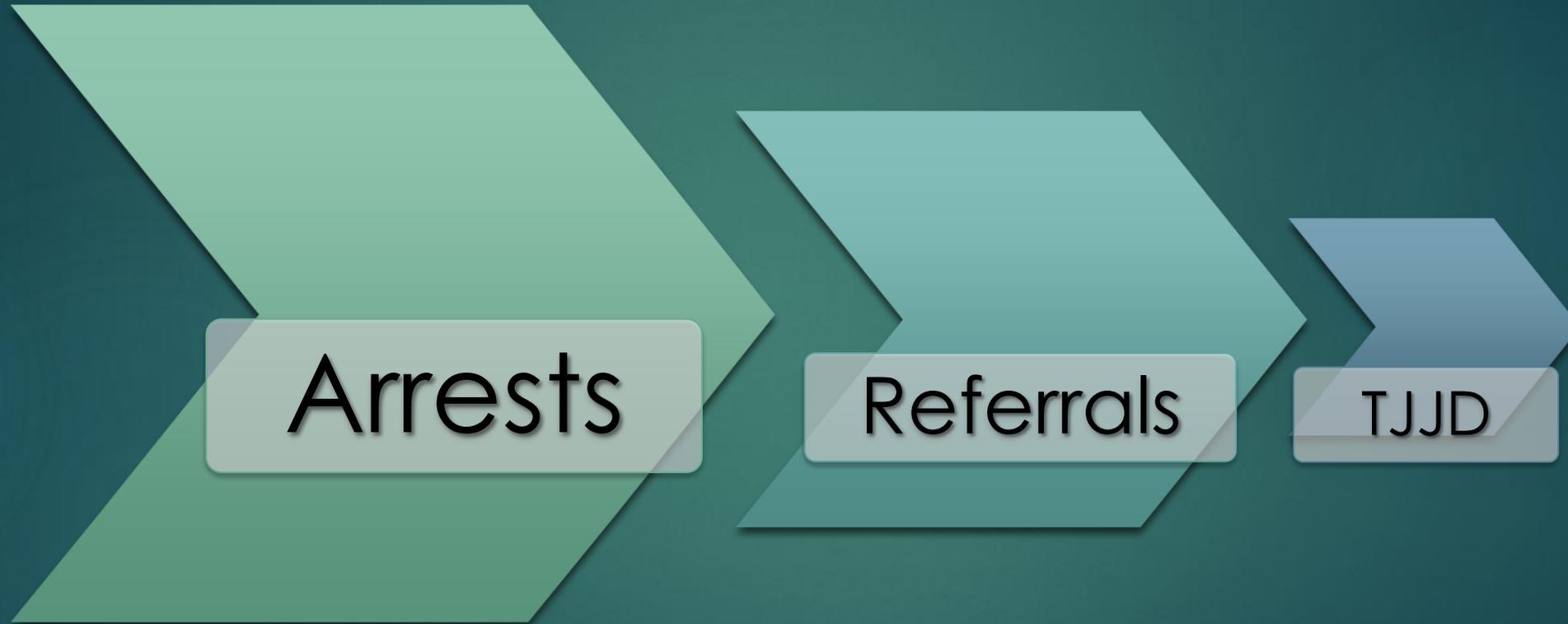
- ▶ New 17-year-old admissions will look like 16-year-old admissions have in the past
 - ▶ Referral dispositions will look the same
 - ▶ Same average length of stay in each location type
 - ▶ Same percentage will be determinate sentence offenders

Even More Assumptions

- ▶ The number of youth aged 15 to 19 at first admission who are discharged at the new age of majority (20) will mirror the number of youth aged 14 to 18 at first admission who were discharged at 19 last year
- ▶ Youth discharged at the new age of majority will have the same average length of stay in each location type as youth one year younger, who were discharged at the current age of majority (19) in recent years

Admissions Estimate

Admissions Estimate





To build an admissions estimate,
we'll need estimates of....

- ▶ Number of arrests
- ▶ Law enforcement referral rate (% of youth referred to JPDs following an arrest)
- ▶ Additional referrals from other sources (e.g. youth referred by JPDs when probation is violated)
- ▶ Disposition rate (% of youth disposed to TJJD)

Admissions Estimate

Arrests \times Referral Rate =

Law Enforcement Referrals

Admissions Estimate

Law Enforcement Referrals 

Other Referrals 

Total Referrals

Admissions Estimate

$$\text{Total Referrals} \times \text{TJJD} \\ \text{Disposition Rate} =$$

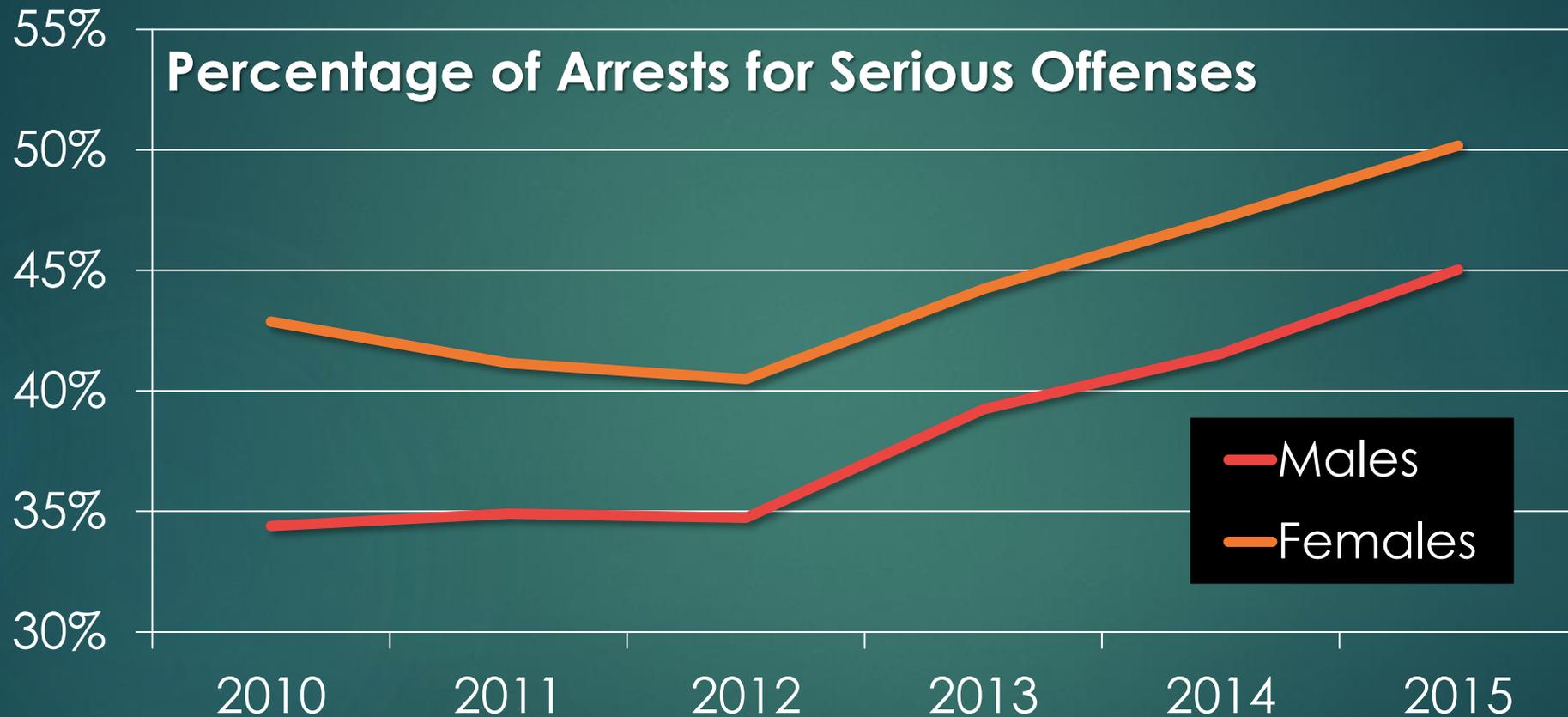
TJJD Admissions

Arrests and Referrals - 16 Year Olds

Year	Arrests 16 Yr Olds (All Offenses)	Referrals to Probation Depts (Law Enforcement)	Percentage of 16 Yr Olds Referred
2010	37,346	20,048	53.7%
2011	31,468	17,670	56.2%
2012	29,462	17,032	57.8%
2013	23,139	15,298	66.1%
2014	19,530	14,991	76.8%
Average of Annual Referral Rates			62.1%

Source, arrest data: TX Department Public Safety
Source, referral data: TJJD Juvenile Case Extract

Juvenile Arrests for Serious Offenses



Source: TX Department of Public Safety

Arrests and Referrals - 17 Year Olds

Year	Estimated Arrests 17 Yr Olds (All Offenses)	Estimated Percentage of 17 Yr Olds Referred	Estimated Referrals to Probation Depts (Law Enforcement)
Year 1	22,656	 62.1%	 14,069
Year 2	22,656	62.1%	14,069
Year 3	22,656	62.1%	14,069

Source, 2015 arrest data: TX Department of Public Safety

Estimated Referrals to Probation Depts

	Estimated Referrals 17 Yr Olds (Law Enforcement)	Estimated Referrals 17 Yr Olds (All Sources) + 27%	Total Estimated Referrals 17 Yr Olds - 3,000	Total Dispositions to TJJD
Year 1	14,069	17,867	14,867	✘ 1.1% = 163
Year 2	14,069	17,867	14,867	163
Year 3	14,069	17,867	14,867	163

Estimated Determinate and Indeterminate Commitments

- ▶ We estimate 163 new commitments of 17-year-olds per year.
 - ▶ Based on FY2015-2016, we assume 15% will receive determinate sentences.
 - ▶ Therefore we assume 139 indeterminate commitments and 24 determinate commitments of 17 year olds.

Length of Stay Estimate

Average Length of Stay – 16 Yr Olds

Sentence Type	Location	ALOS Year 1	ALOS Year 2	ALOS Year 3
Indeterminate	SECURE FACILITIES	102.1	174.1	44.8
	PAROLE	1.6	100.2	127.7
Determinate	SECURE FACILITIES	143.4	354.2	249.0
	PAROLE	0.0	1.5	11.7

Source: TJJDC Correctional Care System

ADP Calculation

$$(\text{Youth} \times \text{Days}) \div 365$$

A note about ADP calculations

- ▶ All ADP calculations assume youth days are distributed evenly across the days in a year.
- ▶ 1 youth admitted halfway through the year contributes .5 to the ADP for that year.

$$1 \text{ youth } \times .5 \text{ year } = .5 \text{ ADP}$$

ADP Adjustments – 17 Yr Old New Admissions

	Year 1
Indeterminate Cmnts	139
Additional Youth Days	
Secure Facilities	14,192
Parole	222
Additional ADP	
Secure Facilities	38.9
Parole	.6

	Year 1
Determinate Cmnts	24
Additional Youth Days	
Secure Facilities	3,442
Parole	0
Additional ADP	
Secure Facilities	9.4
Parole	.0

Source: TJJDC Correctional Care System



Longer Lengths of Stay

YOUTH DISCHARGED AT NEW AGE OF MAJORITY

A note about length of stay

Age at Admission	Location Type	ALOS in Days
13	Secure Facilities	796.8
	Parole	553.8
14	Secure Facilities	632.8
	Parole	456.8
15	Secure Facilities	447.3
	Parole	376.7

Source: TJJD Correctional Care System



To estimate longer lengths of stay,
we'll need estimates of....

- ▶ The number of youth who will be discharged after age 19
- ▶ An estimate of the additional days
 - ▶ Average length of stay for youth at a given age, discharged at age 19
 - ▶ Average length of stay for youth one year younger, discharged at age 19

Additional Length of Stay Calculation

ALOS 1 Yr Younger – ALOS = Difference in Days

Youth × Difference in Days = Additional Days

Discharges at 19 – FY 2015

	Sentenced Offender		Total
	NO	YES	
Age at First Admission			
12	1	.	1
13	9	1	10
14	19	5	24
15	52	9	61
16	112	22	134
17	117	17	134
18	10	4	14
All	320	58	378

Source: TJJJ Correctional Care System

Average Length of Stay – 14/15 Yr Olds

Age at First Admission	Sentenced Offender	Location Type	ALOS Year 1	ALOS Year 2	ALOS Year 3
14 yrs	No	SECURE FACILITIES	133.7	258.7	187.3
		PAROLE	1.4	54.0	117.2
	Yes	SECURE FACILITIES	149.0	332.6	332.4
		PAROLE	0.00	24.0	22.0
15 yrs	No	SECURE FACILITIES	111.0	230.9	130.6
		PAROLE	0.8	69.4	157.9
	Yes	SECURE FACILITIES	136.1	342.4	330.5
		PAROLE	0.9	10.1	27.7

Source: TJJD Correctional Care System

ADP Adjustments – 15 Yr Olds Longer Lengths of Stay

	Year 1
Indeterminate Cmnts	19
Additional Youth Days	
Secure Facilities	431
Parole	11
Additional ADP	
Secure Facilities	1.2
Parole	.03

	Year 1
Determinate Cmnts	5
Additional Youth Days	
Secure Facilities	65
Parole	-4.5
Additional ADP	
Secure Facilities	.2
Parole	-.01

Source: TJJDC Correctional Care System

Summary – New Admissions

- ▶ Estimated new 17-year-old admissions
 - ▶ Began with arrests of 17 year olds.
 - ▶ Multiplied arrests by the referral rate for 16 year olds (62.1%) to get law enforcement referrals. Added referrals from other sources for total referrals.
 - ▶ Then multiplied total referrals by the disposition rate (1.1%) to get TJJD dispositions.
- ▶ Estimated ADP impact of new 17-year-old admissions
 - ▶ Multiplied estimated new TJJD admissions by the average length of stay for 16 year olds to get additional youth days.
 - ▶ Divided additional youth days by 365 to get additional ADP.

Summary – Longer Lengths of Stay

- ▶ Assumed number of youth discharged at the new age of majority would mirror the number of youth one year younger discharged at current age of majority.
- ▶ Calculated the additional days by subtracting the average length of stay from the average length of stay for youth one year younger.



Questions??????

Freya Gaertner

Research and Planning Specialist

freya.gaertner@tjtd.texas.gov

512-490-7932