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Re-Arrest Among 16 Year-Olds Arrested In The First Year Of Raise The Age

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IN THE FIRST YEAR OF RAISE THE AGE

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SUMMARY

The goal of this research is to assess whether the implementation of New York State's Raise the Age (RTA) Law served to reduce recidivism among Adolescent Offenders (AOs). The law, which went into effect for 16-year-olds on October 1, 2018, and for 17-year-olds on October 1, 2019, raised the age of criminal responsibility in the State and changed how young offenders are processed. This report focuses on RTA-eligible 16-year-olds arrested during the first year of RTA and compares their re-arrest rates to those for youths who were ineligible for RTA, including 17-year-olds arrested during the same period (October 2018-September 2019) and to those of 16- and 17-year-olds processed the previous year (October 2017-September 2018).

RTA Re-Arrests

- Nearly half of 16-year-olds arrested in the first year of RTA were re-arrested as of January 31, 2020 (48%), including more than a third (35%) who were re-arrested for a felony and more than a quarter (27%) who were re-arrested for a VFO. These rates of re-arrest are higher than the re-arrest rates for 16-year-olds arrested in the comparison period and higher than those for 17-year-olds in either period: 38% to 40% were re-arrested, 25% to 28% were re-arrested for a felony, and 16% to 19% were re-arrested for a VFO, as of January 31 of the year following the October to September arrest period.

Multivariate Analyses

- To identify factors associated with re-arrest, a series of Cox regressions were performed in which many possible explanatory variables were tested as potential predictors. This type of survival analysis was selected specifically because cases that vary in time at risk can be included. The analysis examines how factors affect the rate of "failure" (re-arrest) over time.

- Cox regression, rather than the more familiar logistic regression, was used in this research because this type of proportional hazards analysis can estimate the relative speed with which re-arrest occurred while logistic regression can only address whether a youth was re-arrested.

- Two sets of models were developed: One set assessed the length of time without re-arrest, felony re-arrest, or VFO re-arrest among all arrests regardless of the prosecution status and the second set of models examined the length of time to first, first felony and first VFO re-arrest for only those youths who were arraigned in the adult court. The "arraigned" models only include youths charged with felonies because in accordance with RTA no youths charged with misdemeanors are processed in the adult court.

- The models reached the highest levels of statistical significance based on the overall chi-square statistic (which tests the hypothesis that all regression coefficients for the variables in the model are identically zero), which was statistically significant at $p \le .001$ in all six models.

- The six models are very similar to one another with nearly the same variables predicting survival without re-arrest over time. The predictor variables include gender,

race, severity of the arrest charge, having more than one arrest stemming from the arrest event, assault charge at arrest, and, in the 'arraigned' models, having any open cases.

- The Cox multivariate survival analysis indicates that the RTA age/year is a statistically significant predictor of re-arrest over time in both sets of models after accounting for the other included variables. Youths aged 16 arrested during the first year of RTA were at significantly greater risk of re-arrest, felony re-arrest and VFO re-arrest than were 17-year-olds arrested that year, as well as 16- or 17-year-olds arrested the previous year. In the 'arraigned' models, 16-year-olds arraigned in adult court for a felony-level offense in the first year of RTA were at a significantly greater risk for re-arrest, felony re-arrest and VFO re-arrest than were 17-year-olds arraigned on felony charges that year or the previous year but were not at a significantly greater risk for any re-arrest than were 16-year-olds arraigned on felony charges the previous year.

INTRODUCTION

The goal of this research is to assess whether the implementation of New York State's Raise the Age (RTA) Law served to reduce recidivism among Adolescent Offenders (AOs). The RTA Law, which took effect for 16-year-olds on October 1, 2018, but not until October 1, 2019 for 17-year-olds, raised the age of criminal responsibility in the State and changed how these AOs are processed. If the arrest charge is a Penal Law misdemeanor, youths aged 16 and 17 are now brought directly to Family Court by the New York Police Department (NYPD) for intake by the Department of Probation. If the charge is a felony[1], the youth is now brought to the adult court for arraignment. The case is removed to Family Court if the District Attorney (DA) consents or does not oppose removal. If the DA moves within 30 days to keep the case in the adult court, it will stay in adult court. The DA's motion to retain the case within the adult court must meet certain evidentiary standards in support of retention, depending on whether the felony is non-violent or violent. More than eight of every ten AO cases in adult court in the first year of RTA were removed to Family Court, including nine of every ten with violent felony charges.[2]

This report focuses on 16-year-olds arrested during the first year of their eligibility for RTA, from October 2018 through September 2019, and compares their re-arrest rates to those of 17-year-olds arrested during the same period and to those of 16- and 17-year-olds processed the previous year, from October 2017 through September 2018. The RTA legislation, particularly the processing of all misdemeanor and most felony cases for youths in Family Court, was intended to provide appropriate support for adolescents and thereby decrease recidivism[3]. Each arrest for youths arrested in the first year was tracked

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[1] Arrests for violations, infractions, and offenses within the Vehicle and Traffic Law remain under the jurisdiction of the adult court.

[2] Gewirtz, Marian J. 2019. *The First Year Of Raise The Age, And A Comparison To Similar Cases In October 2017 Through September 2018.* New York: New York City Criminal Justice Agency, Inc.

[3] The New York City Bar Association, for example, in their Statement on Raise the Age, wrote of their support for "raising the age of criminal responsibility to 18 years old for all crimes because that change will protect the well-being of our youth, reduce recidivism and improve public safety.

from the date of the arrest through January 31, 2020[4], so arrests in October 2018 were tracked for 16 months while arrests in September 2019 were tracked for only four months. Each arrest for youths arrested during the comparison period was tracked through January 31, 2019, so they, too, were tracked for between four and 16 months. Subsequent arrests are tallied as re-arrests only if the incident date was after the arrest date for the arrest being tracked. That is, the arrest is not tallied as a re-arrest if the subsequent arrest arose, for example, from clearing prior offenses that were not initially associated with the youth.

The report first presents rates of re-arrest, felony re-arrest, and violent felony (VFO) re-arrest, separately for misdemeanor arrests, felony arrests and VFO arrests. After the re-arrest rates are presented for every arrest in both time periods, then, in an attempt to address the differences in length of tracking time, the tracking time is curtailed at four months for every arrest. The third exhibit shows rates of re-arrest solely for the most severe arrest charge associated with an arrest event, as a single arrest event may be associated with multiple charges and the most severe charge typically dictates how the case is processed.[5] The fourth is restricted to arraigned arrests in order to examine re-arrest solely for felony-level cases processed in adult court.

These exhibits account for only a few factors that might affect rates of re-arrest. These factors were chosen because they might vary across age-group and time periods and thereby cloud findings about how the implementation of RTA affects re-arrest. In order to account for the impact of many factors that might differ across time and age, we conducted a multivariate analysis. Cox survival analysis was selected for its ability to analyze how time relates to specific outcomes, and because cases that vary in length of time at "risk" of a certain outcome can be included.

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[4] January 2020 was the close of data collection for RTA arrests because that is the last complete month of data prior to court closure as a consequence of the Covid-19 pandemic. While most arrest and court data are current in the CJA database, more time was needed to correctly link arrest and court data for AOs.

[5] A single arrest may result in more than one arrest number, reflecting arrests for prior incidents or arrests that involved more than one victim or more than one date.

I. RE-ARREST EXHIBITS

Exhibit 1 shows rates of re-arrest for 16- and 17- year-old for each arrest during the first year of RTA and the prior year. When youths have more than one arrest, re-arrest is tracked for all of the arrests so a particular youth can be in more than one age group/time period category. For example, 127 of the 2,380 arrests of 16-year-olds in the first year of RTA had an arrest in the prior year as a 16-year-old so their re-arrests are tracked in both the RTA age 16 and the comparison group age 16 categories. There were 111 RTA 16-year-olds who also had an arrest during the first year of RTA after they turned 17. Among the 3,541 arrests of 17-year-olds during the first year of RTA when 16-year-olds were eligible, 639 had an arrest in the previous year when they were 16-years-olds and 111, as mentioned above, had an arrest as a 16-year-old during the first year of RTA.

The findings show that nearly half of 16-year-olds arrested in the first year of RTA were re-arrested as of January 31, 2020 (48%), including more than a third (35%) who were re-arrested for a felony and more than a quarter (27%) who were re-arrested for a VFO (Exhibit 1). These rates of re-arrest are higher than the re-arrest rates for 16-year-olds in the comparison period and higher than those for 17-year-olds in either comparison period: 38% to 40% were re-arrested, 25% to 28% were re-arrested for a felony, and 16% to 19% were re-arrested for a VFO.

One of the early findings concerning the impact of RTA's implementation was the decrease in the volume of arrests of 16-year-olds when they first became eligible, especially a dramatic decrease in the volume of arrests for misdemeanor-level offenses.[6] There was also a decrease in the volume of 17-year-olds arrested in October 2018 to September 2019 compared to the prior year, but the decrease was smaller and likely reflects changes in NYPD policies and procedures. However, when re-arrest rates are compared within charge severity categories, the re-arrest rates are higher for the 16-year-olds charged with a VFO or a misdemeanor under RTA than in the previous year, but the rates varied little for those with non-violent felony charges. Fifty percent of 16-year-olds

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[6] Gewirtz, Marian J. 2019. *The First Year Of Raise The Age, And A Comparison To Similar Cases In October 2017 Through September 2018.* New York: New York City Criminal Justice Agency, Inc.

arrested for a VFO and 47% of those arrested for a misdemeanor during RTA were re-arrested compared to 44% and 34%, respectively, for 16-year-olds arrested during the prior year. Rates of re-arrest for any felony and for any VFO were about 10 percentage points higher for 16-year-olds charged with a VFO or a misdemeanor at arrest during RTA than during the comparison period. Furthermore, re-arrest rates for 17-year-olds did not increase for those arrested in October 2018 to September 2019, regardless of charge severity, compared to the previous year and were much lower than for 16-year-olds during the first year of RTA.

Exhibit 1. Re-Arrests of 16- and 17-Year-Olds by Severity of Arrest Charge*

ARREST CHARGE SEVERITY	RTA Year One October 2018–September 2019				Comparison Period October 2017-September 2018			
	Violent Felony	Non-Violent Felony	Misdem	TOTAL	Violent Felony	Non-Violent Felony	Misdem	TOTAL
AGE 16	%	%	%	%	%	%	%	%
Any Re-arrest	50.3	47.0	47.4	48.3	44.0	50.7	34.2	39.2
Any Felony	37.6	38.3	32.2	35.1	28.5	38.5	21.0	25.7
Any VFO	31.2	28.6	23.9	27.2	21.3	25.8	14.1	17.7
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
(# of Cases)	**(789)**	**(447)**	**(1,144)**	**(2,380)**	**(855)**	**(613)**	**(2,211)**	**(3,679)**
AGE 17	%	%	%	%	%	%	%	%
Any Re-arrest	41.6	50.4	35.7	40.4	42.3	48.4	33.2	37.8
Any Felony	28.7	37.0	23.4	27.7	28.7	35.2	20.4	24.8
Any VFO	21.0	24.0	15.2	18.6	20.6	18.7	13.0	15.6
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
(# of Cases)	**(930)**	**(746)**	**(1,865)**	**(3,541)**	**(889)**	**(765)**	**(2,597)**	**(4,251)**

It is tempting to attempt to assess the impact of RTA on re-arrest by tallying the numbers of youths re-arrested before and after implementation of the law. There were, in fact, fewer 16-year-olds arrested during RTA who were re-arrested than 16-year-olds arrested during the prior year. However, there were more than 1,000 fewer 16-year-olds arrested for misdemeanor charges during the first year of RTA than in the prior year, which, of course, means that many fewer youths were tracked for re-arrest. Instead, it is possible to pursue this approach for youths with VFO charges at arrest because there was little year-to-year change in the number of arrests for a VFO (a decrease from 855 to 789)

and any policing or other policy changes are least likely to affect VFO arrests.   Here we find 397 RTA year one youths charged with a VFO with any re-arrest compared to 376 for their counterparts arrested the previous year, 297 with any non-violent felony re-arrest, up from 244 the previous year, and 246 with any VFO re-arrest, up from 182 for those arrested in the previous year.

The rates of re-arrest may differ across age and time period for reasons other than the implementation of RTA. For example, the arrests may have taken place earlier for one age/year than another which would allow a longer tracking period for more of those arrests and perhaps more re-arrests. To address this concern, Exhibit 2 presents re-arrest rates by severity of arrest charge when re-arrest is tracked for only four months after arrest. The findings are consistent with the findings for all re-arrests. A third of 16-year-olds arrested during the first year of RTA were re-arrested within four months compared to 22% to 25% of 16-year-olds arrested the previous year and 17-year-olds arrested during either period. The increase occurred for those arrested for VFOs or misdemeanors, but not for those arrested with non-violent felony charges.

Exhibit 2. Four-Month Re-Arrests of 16- and 17-Year-Olds by Severity of Arrest Charge*

	RTA Year One October 2018–September 2019				Comparison Period October 2017-September 2018			
ARREST CHARGE SEVERITY	**Violent Felony**	**Non-Violent Felony**	**Misdem**	**TOTAL**	**Violent Felony**	**Non-Violent Felony**	**Misdem**	**TOTAL**
AGE 16	%	%	%	%	%	%	%	%
Any Re-arrest	35.2	32.4	32.1	33.2	26.8	33.6	20.2	24.0
Any Felony	25.9	22.8	17.8	21.4	16.6	24.1	10.9	14.5
Any VFO	20.7	16.9	11.8	15.5	11.2	12.6	6.3	8.5
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
(# of Cases)	(789)	(447)	(1,144)	(2,380)	(855)	(613)	(2,211)	(3,679)
AGE 17	%	%	%	%	%	%	%	%
Any Re-arrest	25.8	32.6	22.3	25.4	21.8	32.3	19.2	22.1
Any Felony	16.7	24.3	13.6	16.7	13.4	21.3	10.8	13.2
Any VFO	11.8	13.0	8.4	10.3	8.9	8.9	6.3	7.3
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
(# of Cases)	(930)	(746)	(1,865)	(3,544)	(889)	(765)	(2,597)	(4,251)

We were also concerned that the findings might be impacted by the greater portion of cases with more than one arrest arising from a single arrest event during the first year of RTA than for 16-year-olds in the prior year or 17-year-olds in either year (reflecting arrests for prior incidents or arrests that involved more than one victim or more than one date).[7] Exhibit 3 presents re-arrest rates only for the most severe arrest for each youth associated with an arrest event. Again, the findings are consistent with the re-arrest rates for all cases for 16- or 17-year-olds in both years.

Exhibit 3. Re-Arrests of 16- and 17-Year-Olds by Severity of Arrest Charge: Includes Only the Most Severe Arrest For Each Youth Per Arrest Event

	RTA Year One October 2018–September 2019				Comparison Period October 2017-September 2018			
ARREST CHARGE SEVERITY	Violent Felony	Non-Violent Felony	Misdem	TOTAL	Violent Felony	Non-Violent Felony	Misdem	TOTAL
AGE 16	%	%	%	%	%	%	%	%
Any Re-arrest	50.1	45.8	45.9	47.2	43.4	50.1	36.0	39.9
Any Felony	37.5	36.2	26.8	34.0	28.4	37.8	22.2	26.1
Any VFO	30.6	26.8	22.8	26.0	21.1	26.0	15.0	18.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(# of Cases)	(682)	(384)	(1,072)	(2,138)	(768)	(569)	(2,145)	(3,482)
AGE 17	%	%	%	%	%	%	%	%
Any Re-arrest	41.3	47.9	36.4	39.9	41.5	47.4	34.9	38.4
Any Felony	28.8	35.9	23.8	27.5	28.0	34.2	21.2	24.8
Any VFO	21.3	24.1	15.5	18.7	20.1	18.9	13.3	15.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(# of Cases)	(841)	(663)	(1,779)	(3,283)	(829)	(705)	(2,528)	(4,062)

Exhibit 4 shows rates of re-arrest for arraigned cases. Misdemeanor-level cases are excluded here because, in accordance with RTA, no misdemeanor-level cases are brought to the adult court. This exhibit is included here to provide context for the multivariate analyses: while the first set of models pertain to the most severe arrest per arrest event, the second set of models pertain solely to arraigned arrests. The rate of re-arrest for youths in arraigned cases was higher for RTA 16-year-olds than for their 16-year-

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[7] Gewirtz, Marian J. 2019. *The First Year Of Raise The Age, And A Comparison To Similar Cases In October 2017 Through September 2018.* New York: New York City Criminal Justice Agency, Inc.

old counterparts arrested in the comparison period only for those charged with VFOs (49% compared to 42%) but not for those with non-violent felony charges (46% compared to 50%), while re-arrest rates differed little from year-to-year for 17-year-olds. The pattern was similar for rates of felony and VFO re-arrests: The re-arrest rates were higher for RTA 16-year-olds with VFO charges but not for those with non-violent felony charges and higher for RTA 16-year-olds than for 17-year-olds arrested in either year.

Exhibit 4. Re-Arrests of 16- and 17-Year-Olds by Severity of Arrest Charge: Includes Only the Most Severe Arraigned Arrest For Each Youth Per Arrest Event

ARREST CHARGE SEVERITY	RTA Year One October 2018–September 2019				Comparison Period October 2017-September 2018			
	Violent Felony	Non-Violent Felony	Misdem NA	TOTAL	Violent Felony	Non-Violent Felony	Misdem NA	TOTAL
AGE 16	%	%	%	%	%	%	%	%
Any Re-arrest	48.8	45.7	-	47.7	42.1	49.8	-	45.5
Any Felony	37.5	36.2	-	36.6	27.3	38.0	-	32.0
Any VFO	30.6	26.8	-	28.8	20.1	26.5	-	22.9
TOTAL	**100.0**	**100.0**	**-**	**100.0**	**100.0**	**100.0**	**-**	**100.0**
(# of Cases)	**(615)**	**(335)**	**-**	**(950)**	**(681)**	**(524)**	**-**	**(1,205)**
AGE 17	%	%	%	%	%	%	%	%
Any Re-arrest	42.1	49.8	-	42.9	40.8	46.0	-	43.2
Any Felony	28.3	34.7	-	31.1	27.1	32.8	-	29.7
Any VFO	20.9	23.5	-	22.1	19.4	17.9	-	18.8
TOTAL	**100.0**	**100.0**	**-**	**100.0**	**100.0**	**100.0**	**-**	**100.0**
(# of Cases)	**(746)**	**(582)**	**-**	**(1,328)**	**(767)**	**(641)**	**-**	**(1,408)**

These exhibits consistently show higher rates of re-arrest among 16-year-olds arrested in the first year of RTA but the two age groups and two time periods likely differ from each other in many ways, not just in the distribution of charge severity, length of tracking period, or how frequently the youths had more than one arrest number assigned on a given arrest date. As mentioned earlier, for example, the volume of arrests of 16-year-olds during the first year of RTA was dramatically lower than during the previous year, especially for misdemeanor-level charges which decreased by more than half. A handful of charges account for much of the decrease in misdemeanor arrests. The largest decrease was for petit larceny, followed by criminal trespass, possession of marijuana, as

well as trespass and theft of services. The decline in misdemeanor arrests also occurred for 17-year-olds, but the decrease was not as steep as for 16-year-olds. The decrease likely reflects a change in NYPD policy that affected both age groups, as well as the impact of implementation of RTA and other factors. These differences and other differences affect the composition of the age/year groups in ways that might be related to recidivism and thereby cloud assessment of the effect of RTA on re-arrest. Multivariate analyses were performed to take account of factors associated with recidivism that might vary across the age/year groups. Cox regression, rather than the more familiar logistic regression, was used in this research because this type of proportional hazards analysis can estimate the relative speed with which re-arrest occurred while logistic regression can only address whether a youth was re-arrested.

II.   MULTIVARIATE ANALYSES

In this section, we present multivariate analyses of the factors that are associated with re-arrest in an attempt to account for their effects and assess if there is a relationship between RTA and recidivism. The rationale for undertaking multivariate analyses is that, unlike the descriptive comparisons presented above, multivariate analyses yield information about the impact on recidivism of all the variables in the models.

The multivariate analyses were performed using Cox proportional hazard regression[8]. This type of survival analysis examines how variables affect the rate, or "hazard," of failure over time. In the context of this research, "failure" refers to re-arrest, where adolescents who are not re-arrested during the analysis timespan are "survivors." In survival analysis terminology, these "survivors" are also referred to as "censored" cases, which occur when a case does not experience a "failure" during the time period of analysis. Thus, these censored cases in which youths do not experience re-arrest provide information about the factors that are associated with a lower hazard of re-arrest. The hazard of re-arrest is a measure that reflects both the fact of recidivism as well as how

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[8] See Gewirtz, Marian J. 2016. *Post-Disposition Re-Arrests of Juvenile Offenders*. New York: New York City Criminal Justice Agency, Inc. which includes a discussion of the type of survival analysis (Cox proportional hazard regression) used in this research as Appendix B: Statistical Procedures, by Mary T. Phillips, Ph.D.

quickly the re-arrest took place. Separate models examined the time to the first re-arrest, the first felony re-arrest, and the first VFO re-arrest among all arrests and a second set of models examined the time to first, first felony and first VFO re-arrest only for youths arraigned in the adult court. Only the most severe arrest arising from an arrest event is tracked for re-arrest in the multivariate analyses.

To identify factors associated with re-arrest, a series of Cox regressions was performed in which many possible explanatory variables were included as potential predictors. The borough of arrest, for example, was not an important predictor of re-arrest. Many variations of the type of charge were evaluated, ranging from theft of services, petit larceny, criminal trespass and possession of marijuana to more serious drug charges, weapons charges (possession, most severe, etc.) and robbery, but only an assault charge at arrest was a significant predictor and that was important in only five of the six models. A release status variable, which was available only for arraigned cases (and that means only felony-level RTA cases) was a significant predictor only for the small number of youths released under supervision in the adult court and not for those released on recognizance or bail, those held on bail, or those remanded with no bail set, and it did not alter the finding concerning RTA and re-arrest.

Five variables were statistically significant predictors in all three arrest models (Exhibit 5) and all three arraigned models (Exhibit 6): Gender, race, the severity of the arrest charge (VFO, non-violent felony, misdemeanor for the arrest models but only VFO or non-violent felony for the arraigned models), more than one arrest for the arrest event, and the RTA period (RTA 16-year-olds, comparison group 16-year-olds and 17-year-olds separately in each period). As mentioned above, an assault charge at arrest was a significant predictor in five or the six models. Finally, whether there were any open cases at the time of the initial arrest was a strong predictor in the arraigned models (very few youths had any convictions). This variable could not be included in the arrest models because it is not available for arrests that were not brought to adult court for processing, and this includes every RTA arrest with misdemeanor-level charges.

A. <u>Multivariate Models</u>

All of the models reached the highest levels of statistical significance (p≤.001) based on the overall chi-square statistic (which tests the hypothesis that all regression coefficients for the variables in the model are identically zero). Indicator contrasts were used for all of the predictor variables so that the hazard of re-arrest for youths in a particular category could be compared to the hazard for the youths in the selected reference category.

Exhibits 5 and 6 display the hazard ratio for each value of each predictor in the "all arrests" and "arraigned arrests" models, respectively. The hazard ratio expresses the relative odds of a youth in that group being re-arrested more quickly than a youth in the reference group, which is assigned a hazard ratio of 1.000. For example, the hazard ratio for any re-arrest for males is 1.898, indicating that males are re-arrested at nearly twice the rate of their female counterparts for a given length of time (i.e., males are re-arrested faster). In other words, the odds of males "surviving" without re-arrest are nearly 1:2 compared to females, and vice versa.

The models are very similar to one another. The "gender" and "race" variables are statistically significant at the highest level in all models. Females are at a reduced hazard of re-arrest compared to males, as were white, Latinx and Asian adolescents compared to their Black counterparts. The "more than one arrest from the arrest event" indicator variable was also statistically significant at the highest level in the models for all arrests but was marginally weaker in the models for arraigned arrests only, indicating that those with multiple arrests stemming from a given arrest are at greater hazard of re-arrest than those with only one. Among all arrests, the "arrest severity" variable was also statistically significant at the highest level, with adolescents charged with a violent or non-violent felony at an increased hazard of re-arrest compared to those with misdemeanor-level charges at arrest. In the arraigned arrests models, which exclude misdemeanor arrests because only felony cases are brought to the adult court under RTA, youths with non-violent felony charges were at a significantly greater risk of any re-arrest and any felony re-arrest than were their counterparts with VFO charges. However, arrest severity was not a significant predictor of VFO re-arrest among arraigned arrests. The "arraigned

arrests" models also include an "any open cases" variable, a predictor that was not available for non-arraigned cases. Those with any open case had a significantly greater hazard of re-arrest, even though having more than one arrest stemming from the arrest event is also a statistically significant predictor in the model.[9] The weakest predictor included in the models is the "assault" variable. Adolescents charged with assault at arrest were at a significantly lower risk of re-arrest in the "all arrests" models, but not at the highest level. In the "arraigned arrests" models, those charged with assault were at significantly lower hazards for a felony re-arrest and for a VFO re-arrest, but the hazard of any re-arrest was just below statistical significance.

The Cox multivariate survival analysis indicates that the RTA age/year is a statistically significant predictor of re-arrest over time in both sets of models after accounting for the effects of the other factors that are included. Youths aged 16 arrested during the first year of RTA were at significantly greater hazard of re-arrest, felony re-arrest, and VFO re-arrest than were 17-year-olds arrested that year and 16- or 17-year-olds arrested the previous year. In the arraigned arrests models, 16-year-olds arraigned in adult court for a felony-level offense in the first year of RTA were at a significantly greater hazard for re-arrest, felony re-arrest, and VFO re-arrest than were 17-year-olds arraigned on felony charges that year or the previous year. The 16-year-old RTA youths were also at greater risk for a felony re-arrest or a VFO re-arrest than were 16-year-olds arraigned for a felony the prior year. However, the 16-year-old RTA youths were not at a significantly greater hazard for any re-arrest than were 16-year-olds arraigned on felony charges the previous year.

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[9] If an additional arrest stemming from the arrest event is processed in adult court before the case in the arraigned arrests model, that arrest may also be tallied as an open case.

EXHIBIT 5: COX PROPORTIONAL HAZARD REGRESSION MODELS OF TIME TO FIRST, FIRST FELONY, AND FIRST VFO RE-ARREST: <u>All</u> Arrests

Re-Arrest Tracked for the Most Severe Arrest Per Arrest Event for <u>All Arrestees</u>
Ages 16 and 17 (N=12,951)

PREDICTOR VARIABLES:	N of Cases	First Re-Arrest		First Felony Re-Arrest		First VFO Re-Arrest	
		B	Hazard Ratio	B	Hazard Ratio	B	Hazard Ratio
GENDER			***		***		***
Male	10,040	.641	1.898***	.861	2.366***	.889	2.433***
Female	2,911	ref	1.000	ref	1.000	ref	1.000
RTA AGE/YEAR			***		***		***
Age 16 – RTA Year 1	2,134	ref	1.000	ref	1.000	ref	1.000
Age 17 – Year 1 (not eligible)	3,278	-.223	.800***	-.229	.796***	-.349	.706***
Age 16 – Prior Year	3,481	-.206	.814***	-.254	.775***	-.349	.705***
Age 17 – Prior Year	4.058	-.274	.760***	-.334	.716***	-.508	.602***
RACE			***		***		***
Black	7,215	ref	1.000	ref	1.000	ref	1.000
White	706	-.712	.491***	-.808	.446***	-1.020	.361***
Latinx	4,518	-.302	.739***	-.411	.663***	-.429	.651***
Asian	512	-.686	.504***	-.800	.449***	-.981	.375***
ASSAULT CHARGE			**		**		*
Yes	3,183	ref	1.000	ref	1.000	ref	1.000
No	9,768	-.098	.907**	-.121	.886**	-.130	.878*
MORE THAN ONE ARREST FROM ARREST EVENT			***		***		***
One	11,564	ref	1.000	ref	1.000	ref	1.000
More than one	1,387	.384	1.468***	.357	1.428***	.358	1.431***
ARREST SEVERITY			***		***		***
Misdemeanor	7,521	ref	1.000	ref	1.000	ref	1.000
Non-Violent Felony	2,315	.276	1.318***	.412	1.509***	.327	1.387***
VFO	3,115	.120	1.128***	.192	1.212***	.304	1.356***
RE-ARREST RATE	12,951	40%		27%		19%	

* p ≤ .05   ****** p ≤ .005   ******* p ≤ .001   ns = not statistically significant

NOTES: A positive coefficient means that the hazard of re-arrest is higher for adolescents with that value. "Ref" denotes the reference category. Adolescents in the other categories are compared to those in the reference category.

EXHIBIT 6: COX PROPORTIONAL HAZARD REGRESSION MODELS OF TIME TO FIRST, FIRST FELONY, AND FIRST VFO RE-ARREST: <u>Arraigned</u> Arrests

Re-Arrest Tracked for the Most Severe <u>Arraigned</u> Arrest Per Arrest Event For Arrestees Ages 16 and 17 (N=4,891)

<u>PREDICTOR VARIABLES</u>:	N of Cases	First Re-Arrest		First Felony Re-Arrest		First VFO Re-Arrest	
		B	Hazard Ratio	B	Hazard Ratio	B	Hazard Ratio
GENDER			***		***		***
Male	4,125	.480	1.616***1	.633	1.882***1	.625	1.868***1
Female	766	ref	.000	ref	.000	ref	.000
RTA AGE/YEAR			***		***		***
Age 16 – RTA Year 1	950	ref	1.000	ref	1.000	ref	1.000
Age 17 – Year 1 (not eligible)	1,328	-.248	.781***	-.296	.744***	-.406	.667***
Age 16 – Prior Year	1,205	-.121	ns	-.202	.817**	-.303	.738***
Age 17 – Prior Year	1,408	-.229	.795***	-.342	.710***	-.574	.563***
RACE			***		***		***
Black	2,887	ref	1.000	ref	1.000	ref	1.000
White	226	-.571	.565***	-.786	.456***	-.962	.382***
Latinx	1,620	-.169	.844***	-.266	.767***	-.291	.747***
Asian	158	-.503	.605***	-.627	.534***	-.946	.388***
ASSAULT CHARGE			ns		*		*
Yes	856	ref	1.000	ref	1.000	ref	1.000
No	4,035	-.122	ns	-.190	.827*	-.199	.820*
MORE THAN ONE ARREST FROM ARREST EVENT			***		**		**
One	4,448	ref	1.000	ref	1.000	ref	1.000
More than one	443	.262	1,299***	.223	1.250**	.243	1.275**
ARREST SEVERITY			**		***		ns
Non-Violent Felony	2,082	.136	1.146**	.203	1.225***	.018	ns
VFO	2,809	ref	1.000	ref	1.000	ref	1.000
ANY OPEN CASES			***		***		***
Yes	1,292	.622	1.862***	.630	1.878***	.559	1.820***
No	3,599	ref	1.000	ref	1.000	ref	1.000
RE-ARREST RATE	4,891	45%		32%		23%	

* p ≤ .05   ****** p ≤ .005   ******* p ≤ .001   ns = not statistically significant

NOTES: A positive coefficient means that the hazard of re-arrest is higher for adolescents with that value. "Ref" denotes the reference category. Adolescents in the other categories are compared to those in the reference category.

B. Graphs of Multivariate Models

Figures 1–3 illustrate survival curves generated by the Cox regression models. The survival function presented in Figure 1 graphically illustrates the proportion of adolescents in the study surviving without failure (re-arrest) by the number of days tracked, separately by gender. The impact of all other covariates included in the model is reflected in the survival curves. At time equal to zero, a full 100 percent of both the males and females survive, that is, have not yet been re-arrested. If there were no re-arrests, the line would remain straight across the tracking time. As time elapses, the predicted probability of surviving without re-arrest declines to below 70 percent for females (the upper line) and declines more steeply to below 50 percent for males (the lower line) by the end of the analysis period.

Figure 1. Probability of Surviving Without Re-Arrest, By Gender: All Arrests
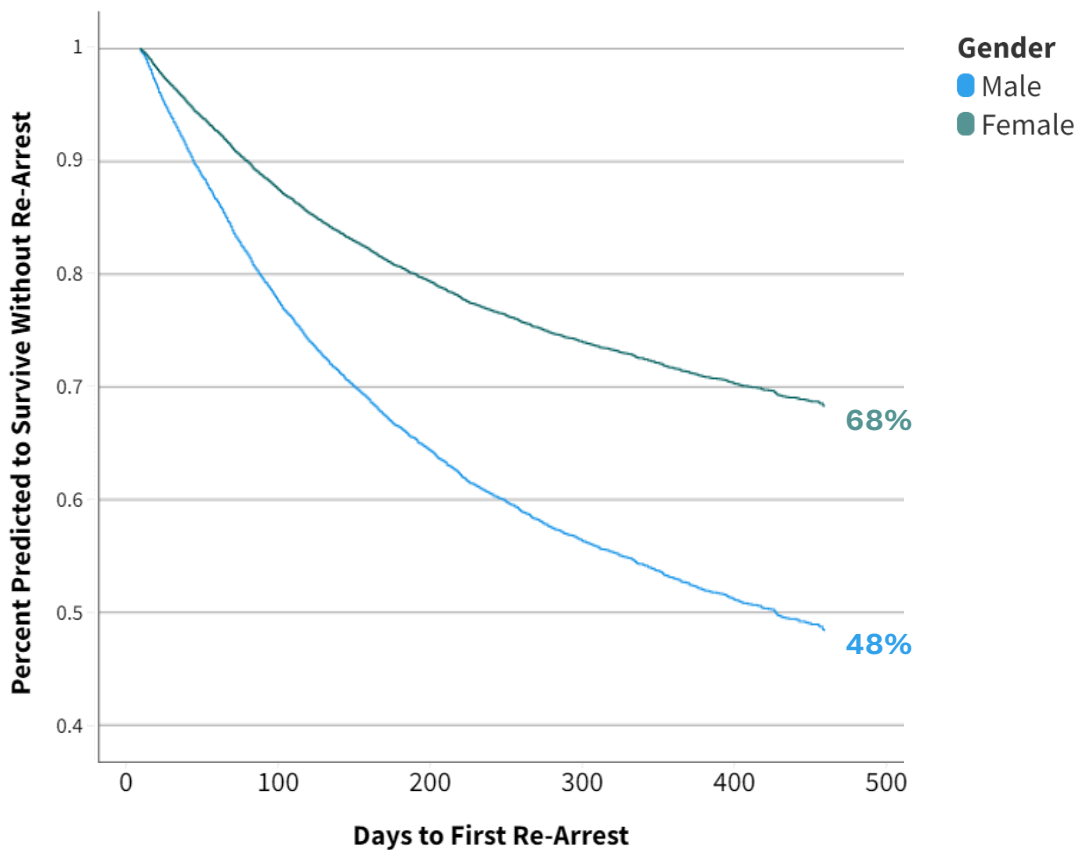

Figure 2 illustrates the effect of the RTA age/year on the hazard of re-arrest among all arrests, after accounting for the effects of the other variables included in the model. In

this graph, the lowest survival curve depicts the reduced survival over time without re-arrest for 16-year-olds arrested in the first year of RTA. Their probability of surviving without re-arrest declined to about 46% by the end of their sixteen-month analysis period (January 2020). The top line represents 17-year-olds arrested in the year prior to the implementation of RTA for 16-year-olds, whose probability of surviving without re-arrest declined to about 56% by the end of their sixteen-month analysis period (January 2019). The two lines between the lowest line and the top line represent 16-year-olds arrested in the year prior to implementation of RTA and 17-year-olds arrested during the first year of RTA when they were not yet eligible. Their probabilities of surviving without re-arrest is significantly higher than the probability for 16-year-olds arrested during RTA year 1 but do not differ from each other significantly.

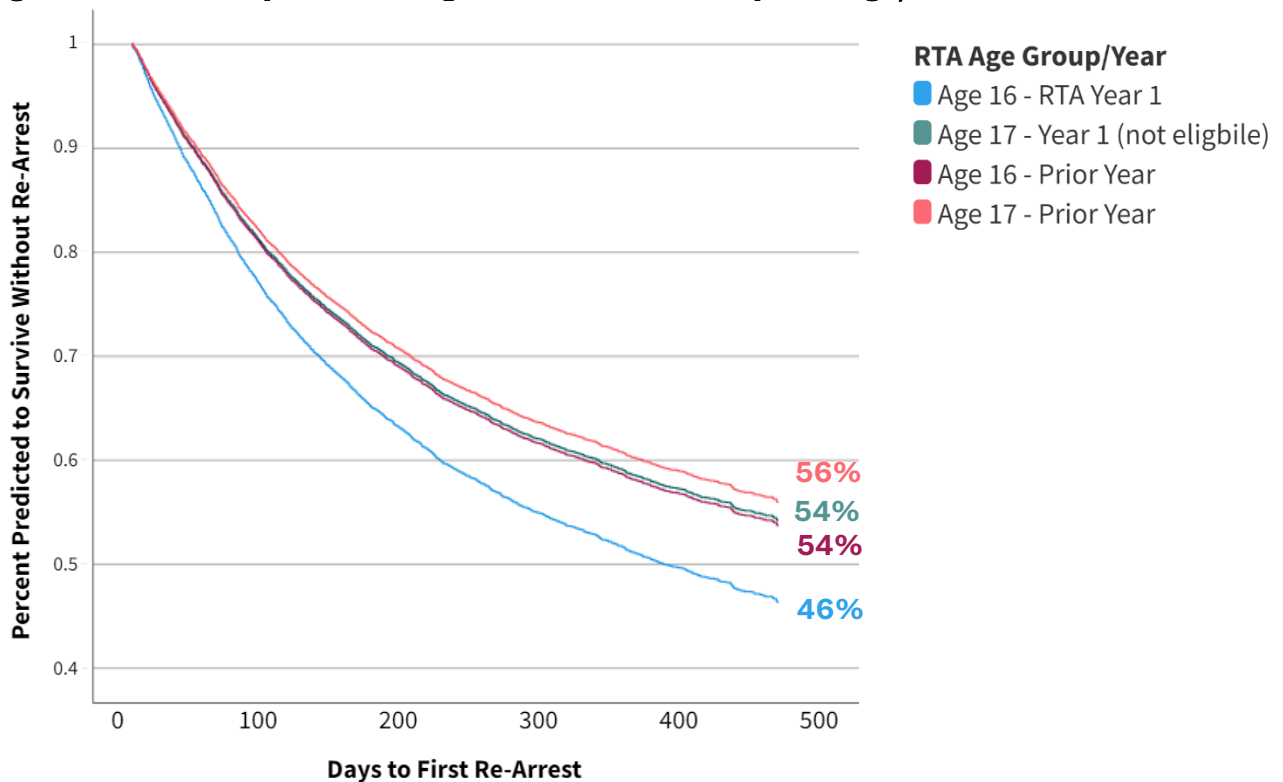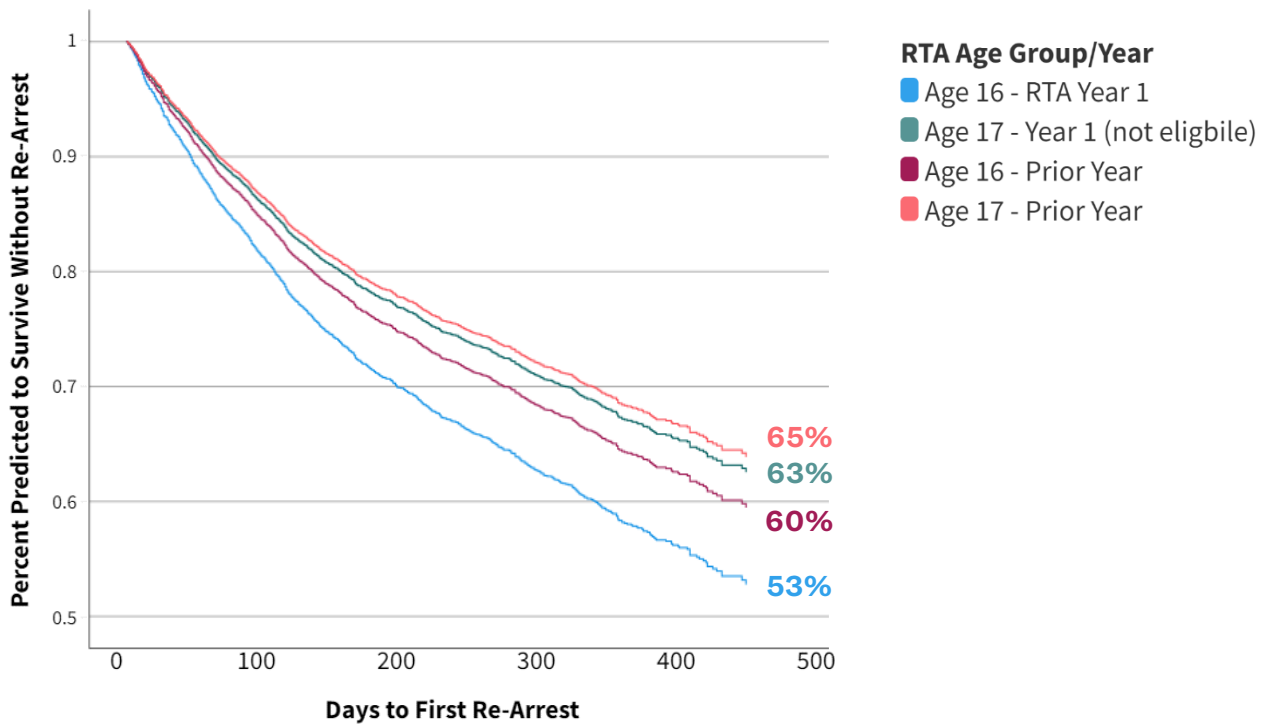**Figure 2. Probability of Surviving Without Re-Arrest by RTA Age/Year: All Arrests**

Figure 3 also compares predicted survival by RTA age/year, but this time only for arraigned arrests, and predicting the risk of re-arrest solely for a felony-level offense. In this graph, the curve for 16-year-olds arrested during the first year of RTA is again the

lowest curve, depicting the lowest probability for these youths surviving the analysis period without a felony-level re-arrest. The next lowest line is for 16-year-olds in the prior year. The highest curve is for 17-year-olds arrested in the prior year, followed by 17-year-olds arrested in the first year of RTA when only 16-year-olds were eligible.

Figure 3. Probability of Surviving Without Re-Arrest For a Felony by RTA Age/Year: Arraigned Arrests

Graphic depictions of the Cox findings are not presented here for all of the multivariate analyses since the patterns remain largely the same across the three arrest models and the three arraigned models: The 16-year-olds arrested during the first year of RTA have the lowest likelihood of surviving without any re-arrest, felony re-arrest and VFO re-arrest, compared to the three other RTA age/year groups. The 16-year-old RTA youths were significantly less likely to survive than the youths in the other groups, with the exception of the 16-year-olds in the year prior to RTA, who did not differ significantly from the RTA 16-year-olds in the probability of any re-arrest among arraigned youth.

III. DISCUSSION OF FINDINGS

The strongest predictors for re-arrest were gender, race, and severity of arrest charge, which were statistically significant in all of the models. The hazard ratios for these predictors suggest that males compared to females, Black youths compared to youths of other races, and youths charged with non-violent felonies compared to those charged with either misdemeanors or VFOs are all associated with a greater risk of recidivism at any point over the given analysis period. Having any open cases was also a strong predictor in the arraigned models, even given the impact of the "more than one arrest from the arrest event" variable and, as mentioned earlier, an additional arrest stemming from a single arrest event may also be an open case.

The findings concerning the effect of RTA are challenging to interpret given the data in this study. The movement to raise the age of criminal responsibility was precipitated by the perception that youth offenders should not be treated as adults. Instead, they should be processed as juveniles, not defendants, and thus receive processing appropriate to juveniles, as is available in the Family Court but not in the adult court. Yet, as shown in Exhibit 7a, the re-arrest rates for RTA 16-year-olds with arraigned cases transferred to Family Court from adult court were similar to those for all RTA 16-year-olds with cases arraigned in adult court. This is not surprising because the transfers account for the vast majority of arraigned arrests (812 of 950) for RTA 16-year-olds (among the most severe arraigned cases stemming from the arrest event). Of course, some of the re-arrests for these youths occurred before the case was transferred, but as shown in Exhibit 7b, re-arrest rates after transfer were nearly as high. In addition, the re-arrest rate for 16-year-olds in misdemeanor-level arrests during the first year of RTA when no misdemeanor arrests were processed in adult court were 11 to 14 percentage points higher than for those in any of the comparison groups, providing further support for the finding that case processing in the Family Court does not reduce recidivism.

As shown in Exhibit 7c, re-arrest rates for RTA 16-year-olds whose cases were not transferred to Family Court were even higher. There were only 138 arraigned arrests of 16-year-olds in the first year of RTA that were not transferred to Family Court. They were

overwhelmingly charged with VFOs (113 of 138). Although the numbers are small, the rates of re-arrest are high: 60% of those arrested for a VFO were re-arrested as were 40% of the 25 arrested for a non-violent felony. The felony re-arrest rate was 40% regardless of the severity of the arrest charge. The rate of re-arrest for a VFO was 32% (31% for those arrested for a VFO and 36% for those arrested for a non-VFO charge).

Exhibit 7. Re-Arrests Among RTA 16-Year-Olds

a. Re-Arrests Among Transfers to Family Court				
ARREST CHARGE SEVERITY	**Violent Felony**	**Non-Violent Felony**	**Misdem NA**	**TOTAL**
	%	%	%	%
Any Re-arrest	46.2	45.5	-	45.9
Any Felony	36.3	35.8	-	36.1
Any VFO	29.7	26.1	-	28.3
TOTAL	**100.0**	**100.0**	**-**	**100.0**
(# of Cases Transferred)	**(502)**	**(310)**	**-**	**(812)**
b. Re-Arrests After Transfer to Family Court				
	%	%	%	%
Any Re-arrest	43.6	44.5	-	44.0
Any Felony	34.5	35.2	-	34.7
Any VFO	28.1	25.2	-	26.0
TOTAL	**100.0**	**100.0**	**-**	**100.0**
(# of Cases Transferred)	**(502)**	**(310)**	**-**	**(812)**
c. Re-Arrests Among Arraigned Youths Whose Cases Were Not Transferred to Family Court				
	%	%	%	%
Any Re-arrest	60.2	40.0	-	58.0
Any Felony	39.8	40.0	-	39.9
Any VFO	31.0	36.0	-	31.9
TOTAL	**100.0**	**100.0**	**-**	**100.0**
(# of Cases NOT Transferred)	**(113)**	**(25)**	**-**	**(138)**

We considered the possibility that the high rates of re-arrest for the RTA 16-year-olds might be a consequence of the higher rates of pretrial release at arraignment after

implementation of RTA[10]. However, when we added a release status variable (available for arraigned arrests) to the multivariate models it was a significant predictor only for the small number of youths released under supervision in the adult court and not for those released on recognizance or bail, those held on bail, or those remanded with no bail set. Since the vast majority of arraigned cases are transferred to Family Court, perhaps release status would be a stronger predictor of recidivism if data on release status from Family Court was available. We know that few youths processed in Family Court were in secure detention because we know that the number of available beds decreased dramatically when 16- and 17-year-olds were no longer legally permitted to be detained on Rikers Island. Thus, this research would be enhanced if the release status in Family Court could be included in the models and re-arrest could be tracked in terms of days from release to re-arrest. Instead, all cases were included, regardless of release status. In addition, the small number of re-arrests that occurred while the youths were in custody are also included as re-arrests.

IV. CONCLUSION

Youths arrested during the first year of RTA had higher rates of re-arrest, felony re-arrest and VFO re-arrest than did their 16-year-old counterparts arrested the previous year as well as 17-year-olds arrested during either year. Nearly half of 16-year-olds arrested in the first year of RTA were re-arrested as of January 31, 2020, the end of the sixteen-month analysis time period (48%), including more than a third (35%) who were re-arrested for a felony and more than a quarter (27%) who were re-arrested for a VFO. These rates of re-arrest are higher than the re-arrest rates for 16-year-olds arrested in the comparison period and higher than those for 17-year-olds arrested in either period: 38% to 40% were re-arrested, 25% to 28% were re-arrested for a felony, and 16% to 19% were re-arrested for a VFO, as of January 31, four to 16 months following the October to September arrest analysis period. Multivariate analyses of factors that affect re-arrest indicate that, even when controlling for race, gender, severity of arrest charge, having more than one arrest

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[10] Gewirtz, Marian J. 2019. *The First Year Of Raise The Age, And A Comparison To Similar Cases In October 2017 Through September 2018.* New York: New York City Criminal Justice Agency, Inc.

stemming from the arrest event and, for arraigned cases, having open cases, the 16-year-olds in the first year of RTA were significantly less likely to survive without re-arrest than were those in any of the comparison age/year groups.

Furthermore, these measures of recidivism understate rates of re-arrest since the tracking period ranges from four to 16 months depending on when the initial arrest event occurred between October and September of the following year. It is likely that the actual rates of re-arrest would be higher if all youths were tracked for the full 16-month time period.

The absence of information about cases in Family Court is a notable limitation of this research. We lack Family Court data regarding case processing and outcomes, which could help us understand why the 16-year-olds arrested in the first year of RTA were at greater hazard of re-arrest than those in any other groups in this research. We don't know if the re-arrests that occur after a case is transferred to Family Court occurred during the pendency of the case, nor do we know which cases were adjusted by the Department of Probation at intake, the specifics of any secure or non-secure placements, or the kind of services each youth received. These factors could potentially help to elucidate the relationship between RTA and recidivism.

While re-arrest may reflect over-policing, that does not seem to account for the high re-arrest rates for 16-year-olds during RTA. The first year of RTA coincided with a decline in misdemeanor arrests, especially for young offenders[11]. There were fewer arrests of 16- and 17-year-olds for marijuana charges, theft of services, petit larceny and criminal trespass, reflecting a change in NYPD policy that affected policing in NYC.

The current research documents extremely high rates of re-arrest among these young offenders. These youths warrant concerted attention from the NYC criminal justice and child welfare communities to address their recidivism.

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[11] Gewirtz, Marian J. 2019. *The First Year Of Raise The Age, And A Comparison To Similar Cases In October 2017 Through September 2018.* New York: New York City Criminal Justice Agency, Inc.