

# Measuring re-offending with court data: Proposed Tier 1 specification

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## Summary

This paper is a proposed specification for a Tier 1 measure of re-offending using reconviction data as recommended by the 2009 Review of Crime and Criminal Justice Statistics (Statistics New Zealand, 2009). Tier 1 statistics are the most important statistics for understanding how well New Zealand is performing. The specification mainly consists of a list of options for measuring re-offending and our recommended choices between these options for a Tier 1 measure. We consider measures using court data only, not complementary measures possible using NZ Police or Corrections data.

We are publishing this proposed specification before releasing an experimental Tier 1 measure through Statistics New Zealand because of the increasing number of analysts using courts data. Wider use of courts data is occurring because the data is accessible not just to analysts within the Ministry but also through the Integrated Data Infrastructure (IDI) at Statistics New Zealand.<sup>1</sup> Other analysts with other purposes will often choose options different to those we recommend here for Tier 1 purposes, and rightly so. But the issues/options listed here need to be considered by all such analysts for sound measures of re-offending and our discussion of pros and cons will help them to make informed choices. In addition, this paper serves to document the SAS code we have provided for other IDI analysts as a starting point for measuring re-offending. It also introduces IDI analysts to key issues/options for measuring offending proven in court (as opposed to re-offending).

Main features of the proposed specification for a Tier 1 re-offending measure are:

- Measuring **proven offences** (ie conviction, discharge without conviction and adult diversion)
- Measuring re-offending within **2 years** of first conviction date (ie 2 years between charge outcome date, and recorded date of subsequent offence)
- Reporting for **adults** only (17 years or over at time of offence)
- **Excluding** breaches of custodial or community-based orders (ANZSOC<sup>2</sup> subdivisions 151 and 152), and excluding non-imprisonable offences
- No adjustment for **imprisonment** (that is, we allow the re-offending measure to reflect the incapacitation effect of prison rather than measuring offending after release)
- Estimating the **percentage** of people who re-offend rather than volume of offending
- A **waiting period** of 6 months (to allow time for crimes to be detected and processed).

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<sup>1</sup> [stats.govt.nz/browse\\_for\\_stats/snapshots-of-nz/integrated-data-infrastructure.aspx](http://stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure.aspx)

<sup>2</sup> ANZSOC = Australian and New Zealand Standard Offence Classification

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## Context: International precedents

### Sources used

The main international sources we used as a guide to relevant issues were:

- England & Scotland official re-offending/reconviction reports, as used by Justice policy analysts for reconviction analysis (Ministry of Justice [UK], 2010; The Scottish Government, 2010)
- Australian Institute of Criminology report (surprisingly limited, perhaps because of inconsistency between states) (Payne, 2007)
- Dutch Recidivism Monitor (Wartna, Blom, & Tollenaar, 2011a)
- UK National Audit Office report on international comparison of Justice statistics. (National Audit Office [UK], 2012)

### Broad conclusions from international precedents

In short, the main use of considering international precedents is to identify a comprehensive set of issues for considering rather than to closely specify a measure in the expectation of reaching good international comparability.

There is common agreement internationally that different re-offending measures should cover all three broad areas covering Police, Courts, and Corrections, that is, re-apprehension/re-arrest, reconviction, re-imprisonment. Furthermore, there are some basics of method and terminology we should be consistent with rather than reinvent; for example, clearly defining the 'index' offence (the offence committed which causes an offender to enter the cohort used for analysing re-offending).

But there is a great deal of inconsistency between countries in details of measurement. For example, some countries may measure re-offending from **completion** of a community sentence and others measure from the **start**. In some cases this may be due to using the data available rather than for considered theoretical reasons. New Zealand is in a good position in terms of data availability for use compared to many other countries (particularly those with both state and federal systems).

Hence, in contrast to development of many other Tier 1 statistics, we do not expect to use international precedents for detailed specification of measurement nor to emphasise comparability

with established international standards much in choosing between options. Good summaries from a UK and New Zealand perspective are:

Even reconviction rates are too methodologically different to allow international comparisons to be made. As the Ministry of Justice rightly pointed out in a 2010 compendium statistical report, “...reoffending rates between countries should not be directly compared [because of the] range of underlying differences in the justice systems and the methods of calculation”. (National Audit Office [UK], 2012, para 2.55)

Countries differ markedly in how criminal justice data are **handled**: reconviction and re-imprisonment rates are influenced **by** legislation, sentencing practices, resource levels of criminal justice sector agencies, as well as volumes of crimes committed and rates of detection and resolution. Consequently, comparisons of reconviction or re-imprisonment rates between countries are usually a fraught exercise. (Nadesu, 2009b, p5)

## Options and recommendations

Option/issue	Recommendation	Background
What to measure (1): re-arrest, reconviction, re-imprisonment?	Reconviction (or similar) only	<p>The Ministry of Justice focus is on measures using court data. Police and Corrections are responsible for measures using their data. No measure stands out internationally as cutting across these operational boundaries. “Every known measure of reoffending has its drawbacks” (Ministry of Justice [UK], 2010, p. 47).</p> <p>Reconviction measures are used by several similar countries (National Audit Office [UK], 2012, p. 32). Though note that Australia reports reappearances in court in addition to reconviction.</p>
What to measure (2): Convictions only or wider?	<p><b>Proven offences</b> (ie Conviction, Discharge without conviction, Adult diversion).</p> <p>If not limited to adult offenders, would also include Youth Court proved, Youth Court discharge</p>	<p>A formal conviction is not the only court outcome that indicates offending has been proven (eg a discharge without conviction requires that the offender was found guilty or pleads guilty). Hence a broader measure is appropriate, and the ‘proven offence’ rather than conviction is appropriate (the terms ‘proven re-offending’ and ‘proven re-offence’ are already in use in England/Wales for analyses of re-offending).</p> <p>Also, for Tier 1 purposes, we would like to maximise comparability over time. To maximise comparability between recent years and future ones, it seems safer to use the broader concept of proven offence rather than focusing narrowly on convictions only (because counts of proven offences can remain relatively constant regardless of whether current process is weighted more to conviction or to alternatives such as diversion).</p> <p>Charge outcomes excluded from ‘proven offences’ are those typically grouped for Justice analysis as ‘Not proven’ or ‘Other’.</p> <ul style="list-style-type: none"> <li>• Not proven: 21% of all charges recorded 2010–12 (the most common of these outcomes being <i>Withdrawn by</i></li> </ul>

Option/issue	Recommendation	Background
		<p><i>leave; Not proceeded with; and Dismissed)</i></p> <ul style="list-style-type: none"> <li>Other: 0.3% of all charges recorded 2010–12 (the most common of these relatively rare outcomes being <i>Stay of proceedings; unfit to stand trial</i>).</li> </ul>
<p>Include all offence types or exclude some?</p>	<p>Exclude non-imprisonable offences and breaches of custodial or community-based orders (option R3).</p> <p>Recommendation on method detail: Exclude breaches by excluding ANZSOC subdivisions 151 &amp; 152.</p>	<p>Main options we considered were:</p> <ul style="list-style-type: none"> <li>R1, all criminal offences</li> <li>R2, criminal offences excluding breaches of custodial or community-based orders.</li> <li>R3, excluding non-imprisonable offences (as well as the breaches excluded from R2).</li> </ul> <p>R1 is the obvious starting point for a measure, with the widest possible coverage of proven offences. However, such reconviction analyses are then often strongly affected by legislative changes which add or remove/decriminalise offences, and large numbers of reconvictions for offences such as breaches of community service orders, parole, or probation. These offence types can be problematic because:</p> <ul style="list-style-type: none"> <li>trends can be very misleading because major changes in the number of convictions for breaches over the years can happen because of changes in justice processes (eg number of conditions imposed by a court, or whether Corrections choose to handle breaches by prosecution rather than other means) rather than changes in offender behaviour</li> <li>numbers of reconvictions for breaches of community-based orders are substantial: over 22,000 charges were convicted for such breaches in 2014 (compared with a total of 162,000 charges convicted in total that year).<sup>3</sup></li> <li>these types of offence are probably excluded from what many users would think of as actual re-offending.</li> <li>offence type composition is non-comparable to that for first-time offenders who by definition cannot commit such offences.</li> </ul> <p>There are precedents for excluding breaches from analyses of re-offending:</p> <ul style="list-style-type: none"> <li>For their recidivism index, Corrections noted: ‘As is also common internationally with measures of this type, the figures exclude re-convictions for administrative offences</li> </ul>

<sup>3</sup> <http://nzdotstat.stats.govt.nz>, Justice section, Charges prosecuted against adults by offence type calendar year

Option/issue	Recommendation	Background
		<p>(for example, breaches of parole, failure to complete community work).’ (Department of Corrections, 2005, p36). Corrections have subsequently clarified that their exclusions cover about 179 offence codes, many rarely used.<sup>4</sup></p> <ul style="list-style-type: none"> <li>• NSW recently excluded ANZSOC codes 1511 – 1529 “due to the fact that breaches can be related both to policing activity and to the penalty imposed for the index offence, and may therefore less accurately reflect a new offending episode.” (Snowball &amp; Bartels, 2013, p3)</li> <li>• England also excludes many breaches from major measure of re-offending (Ministry of Justice [UK], 2012) both when identifying index offences and when counting subsequent re-offending.<sup>5</sup></li> </ul> <p>Given the above, a measure like R2 excluding breaches seems clearly preferably to simply including all offences (as in R1).</p> <p>The question is then which breaches to exclude and precisely how to do that. Note that we do not suggest excluding all Against justice offences (ANZSOC division 15) because some of the offence types in that division are clearly separate to earlier offences and clearly likely to be perceived by users as real offences that should be counted (eg resisting arrest). We considered two options for R2:</p> <ul style="list-style-type: none"> <li>• Excluding ANZSOC subdivisions 151 and 152 (as recently done in an NSW re-offending analysis; Snowball &amp; Bartels, 2013)</li> <li>• Excluding the same offences as Corrections already does for the recidivism index (by specifying 170+ offence codes).</li> </ul> <p>Appendix 2 shows that these two options largely exclude the same offences in practice and so the choice of method for identifying minor offences against justice has little influence on the results. Hence we recommend using the ANZSOC criterion because it is simpler for both data processing and explanation/documentation. In particular, attempting to have consistency with established Corrections practice would require establishing a process to maintain consistency in offence codes excluded between Corrections and the Ministry of Justice sector group (and the IDI) over time. We would also need from Corrections documentation of the</p>

<sup>4</sup> Specifically, `dwretail.offence_dim.minor_justice_offence_flag = 'Y'`, and also any sentences (any offence) of `type cps_sent_order_type_code = '5474'` -- post detention condition.

<sup>5</sup> ‘Breach proceedings, where a further penalty is imposed but no further offence has been committed, will also be excluded.’ (HM Treasury, 2007, p. 40)

Option/issue	Recommendation	Background
		<p>reasons why these particular codes are excluded and others in ANZSOC subdivisions 151, 152 are not.</p> <p>With respect to possibly excluding Traffic and regulatory offences as is done in some countries</p> <ul style="list-style-type: none"> <li>• They are a high proportion of convictions (around 38,000 people convicted for such offences in 2012 compared with a total of 81,000).</li> <li>• They are also generally of low seriousness. But a small number are serious and lead to a substantial number of prison sentences.</li> <li>• The Netherlands exclude ‘minor offences’ as a rule, but include traffic offences if the focus of the analysis is traffic offending (Wartna et al., 2011, p13). The ‘minor offences’ category includes offences that carry a maximum custodial sentence of less than 4 years and where pre-trial detention may not be imposed.</li> <li>• England/Wales and Scotland both have major reconviction measures that appear to ignore most traffic offences (this is not stated explicitly, but seems apparent from the breakdown of offence types). Separately, England/Wales and the Netherlands both publish reconviction measures focused on ‘serious’ offences (which would exclude all or nearly all of the Traffic and regulatory offences).</li> </ul> <p>Given the above, we put forward as the most attractive alternative option to R2, the measure R3. R3 includes imprisonable crimes<sup>6</sup> only and excludes breaches, so it focuses on more serious offences. This seems an easily communicable option to:</p> <ul style="list-style-type: none"> <li>• exclude minor offences (which will exclude many traffic offences)</li> <li>• be consistent with existing analysis of re-offending by Justice policy group for Drivers of Crime work that focused on imprisonable crimes only.</li> </ul> <p>With both R2 and R3 we would consistently exclude the same offence types both from the initial index offences selected as well as subsequent re-offending.</p>
Recidivism subtypes or not?	All reconvictions (not subgrouped by severity etc. as done in England or the Netherlands), but	All reconvictions (‘general’ recidivism using Dutch labels) is the usual focus internationally. That kind of focus and simplicity seems appropriate for Tier 1 releases.

<sup>6</sup> In practice, defined in ISIS (Integrated Sector Intelligence System) by the Offence\_Code table which has a variable "is\_imprisonable".

Option/issue	Recommendation	Background
	with some exclusions by offence type discussed above (eg breaches).	<p>In contrast however, England/Wales routinely present ‘severity rate’: number of proven serious offences (murder, sexual assault, serious assault etc) per 100 offenders.</p> <p>Also, the Dutch recidivism monitor (Wartna et al., 2011a) shows several types:</p> <ul style="list-style-type: none"> <li>• <b>General</b> recidivism—any crime</li> <li>• By seriousness. <b>Serious</b> recidivism: Reconvictions in relation to any crime that carries a minimum sentence of 4 years. <b>Very serious recidivism</b>: Reconvictions in relation to any crime that carries a minimum sentence of 8 years. <b>Ovs (unconditional prison sentence) recidivism</b>: Reconvictions in relation to any crime punished with a (partly) unconditional prison sentence.</li> <li>• <b>Special</b> recidivism. Reconvictions in relation to the same type of crime as in the index case (eg another traffic offence).</li> <li>• <b>Specific</b> recidivism. Reconvictions in relation to the same crime as in the index case (eg another drink-driving offence).</li> </ul> <p>We see the distinctions made between special and specific recidivism as useful for more detailed analysis of re-offending (eg in measuring extent to which different types of offenders ‘specialise’), but not for Tier 1 use. The measure R3 proposed above (imprisonable offences only) is one option considering for restricting analysis to more serious offences only.</p> <p>We have recommended a single measure of proven re-offending only, partly to avoid the confusion between numbers that multiple measures for similar concepts often causes, but also because the extra data processing to produce multiple measures would be non-trivial.</p>
Who to include?	Report adults (17+ only).  (ie exclude children & young people, and corporations)	<p>Nearly all offending by children and much of the offending by young people that comes to the attention of the Police is diverted from formal prosecution and the proportion of young people diverted has changed substantially in recent years. Hence Police offending/re-offending data is more appropriate than courts data for analysing recidivism rates for children and young people.</p> <p>If re-offending measures for children and young people were reported in Tier 1 statistics, then we would need to warn of limitations and changes associated with court data about children and young people (and point to the relevance of Police data for them). Reporting adult data only seems sensible for Tier 1 purposes, and consistent with the split between adult and youth data already in many conviction and sentencing tables on NZ.Stat.</p>

Option/issue	Recommendation	Background
Numbers to report: % and/or rate per 100 offenders and/or volume?	% only for Tier 1	<p>Reporting the percentage of offenders who re-offended within 1-4 years is the most common reporting practice internationally (National Audit Office [UK], 2012). This is simpler/safer to calculate consistently with our data than rates involving number of offences (=cases?, charges?). Also, current Corrections and MSD reporting focuses on the percentage re-offending.</p> <p>In addition to the % re-offending, some countries also report the number of offences per 100 offenders and/or total volume of re-offences. There are good reasons for this because they can better measure the amount of harm from re-offenders and/or success in reducing the level of re-offending (beyond purely avoiding a first re-offence). On the other hand, such measures may be more sensitive to misleading changes because of either large numbers of offences by a small number of offenders, or changes in how the numbers of offences are counted (eg combinations of charges handled within a single case).</p> <ul style="list-style-type: none"> <li>• England/Wales headline figure for their PSA (=our BPS) target is 'frequency' (offences per 100 offenders) with % reported as a secondary measure.</li> <li>• Dutch recidivism monitor tracks 'prevalence' (%), 'frequency' (average number of reconvictions), and 'volume' (total number of reconvictions)</li> <li>• As well as the percentage re-offending, Insights MSD also reports the percentage of individuals who reduce the frequency and seriousness of their offending. This compares the 12 months before an intervention, with the 12 months after the intervention ends for each individual.</li> </ul> <p>Although not proposing the number of re-offenders as a Tier 1 measure, it will help interpretation of trends in the rate if the relevant numbers of re-offenders used to calculate the % rate are also shown. Also, if the Tier 1 measure is to be released via a system like NZ.Stat, then counts of re-offenders (and non-reoffenders from same cohort) may be the base data that needs to be delivered.</p>
What to count if frequency or volume measures wanted: cases or charges?	Charges	<p>The main reconviction numbers we expect to report, % offenders with proven re-offending as discussed above, counts offenders.</p> <p>However, given that analyses of frequency or volume are reported in some parallel statistics releases overseas</p>

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		<p>(including the headline rate for re-offending in England/Wales<sup>7</sup>), we include a recommendation on this issue in case it becomes relevant. Such measures of frequency can usefully show changes in volume of offending even if complete desistance has not occurred.</p> <p>One option would be to count cases<sup>8</sup> rather than charges. Cases often have more than one charge. Some types of offending (eg fraud) typically have cases with many charges, and this can cause clear differences between analyses based on charges rather than cases. Analysing by case rather than charge might help avoid analyses of frequency of re-offending being overly influenced by offence types where cases often involve large numbers of charges. However, charges rather than cases are already presented in Tier 1 statistics, and the Ministry moved away from analysis of cases some years ago because of inconsistencies over the years in how charges were combined into cases. In addition, more detailed analyses of re-offending must consider charges (eg if interested in the extent to which people specialise in certain types of offence).</p>

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<sup>7</sup> “The actual proven frequency rate is produced by calculating the number of proven offences per 100 offenders in the cohort” (Ministry of Justice [UK], 2010, p7)

<sup>8</sup> In practice, cases would be approximated by selecting charges disposed for the same individual on the same day rather than trying to use exactly the same case classification as used by courts (which has many splits and joins over time).

Option/issue	Recommendation	Background
Follow-up duration (for occurrence of later offence)	<p>2-year rates.</p> <p>Consider showing both 1-year and 2-year rates (but remember possible confusion that can result from multiple measures of the ‘same thing’).</p> <p>Appendix 1 shows a comparison of 1 year and 2 year rates.</p>	<p>Different durations are appropriate for different purposes. Shorter durations than our recommendation might often be chosen for analysis of interventions (either because of an urgent need for evidence or because of concerns that attributing any change found to the effect of the intervention may get increasingly questionable the longer the duration).</p> <p>For Tier 1 purposes we focused particularly on delivering a stable time series and minimising conflicts with other reporting. Key points from the international literature are:</p> <ul style="list-style-type: none"> <li>• No clear international consensus/standardisation about measuring in terms of time (eg 1 year versus 2 year follow-up). Both commonly done; some countries report 3-year or 4-year rates. If producing one, then easy to produce another.</li> <li>• UK study shows 80% of re-offending in two years after release from prison/community work happened in first 12 months (National Audit Office [UK], 2012, p. 33)</li> </ul> <p>However there seems to be a growing consensus that follow-up durations must be longer than 12 months for robust evaluation of intervention effectiveness (eg, for studies to be included in Campbell Collaboration reviews). For example:</p> <p><i>Experts in the field of recidivism have always insisted that one year or less was too short an observation period, and that the minimal observation period ought to be 36 months at least. (Villettaz et al., 2015, p53)</i></p> <p><i>The 2-year window of outcome assessment for offending effects is selected in accord with the recommendations of the Coalition for Evidence-Based Policy, the National Research Council, and the U.S. Office of Management and Budget. (Sherman, Strang, Mayo-Wilson, Woods, &amp; Ariel, 2014, p6)</i></p> <p>Trade-off: timeliness versus thoroughness. The 2-year rate inevitably takes longer after the reference offence to produce (than 1-year rate), but 1- year rate may be more affected by process changes that speed up rate of detection and/or conviction (eg perhaps implementation of the Criminal Procedure Act or changes in court disposal time will do this in next year or so).</p> <ul style="list-style-type: none"> <li>• Hence although 2-year rates seem a prudent emphasis for Tier 1 reporting, those interested in detecting possible impact of interventions as soon as possible will</li> </ul>

Option/issue	Recommendation	Background
		<p>probably favour 1-year rates for other purposes. Corrections currently focuses on 1-year rates, and there may need to be consistency with that. But in making such a choice, remember that inconsistency also has advantages (eg, because then timely release of figures for policy use is not constrained by Tier 1 reporting protocols/embargo procedures). Given this, we have recommended a 2-year rate for Tier 1 purposes.</p> <p>Figure 5 in Appendix 1 shows that trends are very similar (but at a different level) for 1-year and 2-year rates. The two-year re-offending rate was higher than the 1-year rate, as you would expect, but was disproportionately higher for sexual offending and robbery.</p>
<p>Start point (or index date)<sup>9</sup></p>	<p>Date when index charge proven (<i>Charge_outcome_date</i>)</p>	<p>The choice of start point for re-offending analyses should always depend on the purpose of the analysis. For example, analyses of interventions will wish to use dates related to implementation of the intervention (eg analysis of restorative justice impact used the date of the restorative justice conference as the starting date; Triggs, 2005). Hence we do not recommend that others use the start point recommended here as the start point for re-offending analyses in general.</p> <p>Main options considered for Tier 1 measurement purposes were:</p> <ul style="list-style-type: none"> <li>• Date of offence occurrence (<i>offence_from_date</i>)</li> <li>• Date when charges laid for the index charge (<i>Charge_laid_date</i>)</li> <li>• Date charges are proved (<i>Charge_outcome_date</i>).</li> </ul> <p>Using the <b>date of offence</b> occurrence as the starting point could be tried. However, some awkward effects on the resulting data series arise from: ambiguities around timing because offence dates are often only approximate, and problems with offences not classified as proven or not within the timeframe allowed for analysis (because many years sometimes elapse between the offence date and charges being reported or discovered and laid/filed in court, eg for sexual offending). Furthermore, the current measure is being designed as part of a group of measures where Police already plan to handle earlier parts of the offending process through measuring apprehensions.</p> <p>Using <b>Charge_laid_date</b> definitely has some conceptual appeal because it captures all subsequent re-offending after initial contact with the court system (and so will capture re-</p>

<sup>9</sup> These terms taken from Ministry of Justice [UK] (2011).

Option/issue	Recommendation	Background
		<p>offending while on bail which would not be captured if we measured from the time of conviction/when charges proved). It also seems consistent with the Dutch definition (Wartna et al. 2011) which uses as the starting date when the involvement of the Ministry of Security and Justice starts (registration of the case with the Public Prosecutions Service for them). Advantages include:</p> <ul style="list-style-type: none"> <li>• Includes offending while on bail and could show impact of changes over time in use of remand (Note though that offenders on bail may be more likely to have offences brought to Police attentions as bail checks etc are conducted).</li> <li>• Could incorporate possible impact of changes over time in response to planned reductions in time taken for courts to dispose cases</li> <li>• At a conceptual level it can be seen as consistent with the Corrections approach in the sense that it measures re-offending from the point courts first deal with the offender (parallel to the way Corrections measures re-offending from the time when community sentences start with them).</li> </ul> <p>Using when <b>charges are proved</b> for the start point also has some international precedents (eg England and Wales often use the date of conviction for non-custodial sentences; (Ministry of Justice [UK], 2012). It offers some contrasting advantages to the date when charges are laid:</p> <ul style="list-style-type: none"> <li>• Enables simpler communication of the results as reconviction, that is, offending after conviction.</li> <li>• Results in the court-based measures consistent with Corrections measures for community sentence starts (though note from above that <i>charge_laid_date</i> can be seen as consistent at a conceptual level).</li> </ul> <p>Avoids some index charges not being classified as proven or not because they had not been disposed within the follow-up duration and waiting period (15-36 months depending on options chosen), which could happen with the other options.</p>
Closing date definition	Recorded date of offence	For a new offence to be included as a re-offence in the follow-up period, its <i>Offence_from_date</i> must fall in the 1-2 years after the <i>charge_proven_date</i> of the original index offence.
Adjust start point to reflect prison?	No adjustment	<p>This is an awkward issue to decide. Options for adjusting court-related data include:</p> <ol style="list-style-type: none"> <li>excluding a duration for all those imprisoned that is estimated from legislation and trends known for actual</li> </ol>

Option/issue	Recommendation	Background
		<p>versus imposed sentences (which can be done purely from courts data)</p> <p>b. Treating discharges from custody as akin to non-custodial sentences when selecting a starting date for identifying a cohort of offenders; this requires use of Corrections data in addition to courts data.</p> <p>The first option is not attractive for use here because: such adjusted estimates are not in current use within the Ministry (eg by the forecasting group); the adjustments would often be quite imprecise (eg because of lengthy periods of remand); and because they are relatively complex to describe for users of Tier 1 statistics and to maintain as an ongoing system for producing statistics. Nevertheless such methods are used (eg probably in Scotland, The Scottish Government, 2013).</p> <p>The second option is more appealing conceptually and consistent with some current Corrections measures (eg re-imprisonment rate of released prisoners).</p> <p>However, for Tier 1 purposes we recommend against such complications. First, this complicates the calculation and explanation of the statistics (simplicity in both is preferable for Tier 1). Second, excluding the time when people are imprisoned tacitly removes the incapacitation effect of prison. This has been criticised as misleading when comparing reconviction rates for prison sentences versus non-custodial sentences.<sup>10</sup> For overall measures of recidivism “Findings from the literature are divided on the importance of free time adjustment” (Payne, 2007, p47). Third, offences resulting in prison are a relatively small proportion of the total proven offences disposed by courts in a year (and so building in complicated adjustments associated with prison sentences would probably have relatively little effect on the resulting numbers). Fourth, the impact of prison can be shown by explicitly including prison sentences (eg prison 2+ years, prison up to 2 years) as a dimension in the Tier 1 release table.</p> <p>Such adjustments can be vital for sound evaluation of interventions and it is entirely sensible for Corrections to measure re-offending after release from custody. But for Tier 1 purposes describing all offenders (not just those released from prison), we believe no adjustment is preferable. The downside is that the proven re-offending rates will be distinctively low for offence types where long periods of imprisonment are common because of the incapacitation effect. Hence we see these courts-based</p>

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<sup>10</sup> [www.civitas.org.uk/crime/CommunitySentencingAug2010.pdf](http://www.civitas.org.uk/crime/CommunitySentencingAug2010.pdf)

Option/issue	Recommendation	Background
		<p>measures as complemented by Corrections measures that measure re-offending found after release from custody.</p> <hr/> <p>'Waiting period' (after duration allowed for offence)</p> <p>6 months (This is a minimum; the main alternative to consider is 12 months)</p> <p>There needs to be some allowance for crimes to be detected and processed (convicted) <b>after</b> the follow-up duration of interest. Otherwise measures may be non-comparable because of changes in speed of police/courts processing.</p> <p>In terms of local precedents: Corrections currently uses 3 months (eg, in BPS re-offending measure); MSD favoured 6 months as does Ministry of Justice Policy (they use that for their restorative justice re-offending analysis).</p> <p>Overseas, 6 months is used by England/Wales for their PSA (= our BPS) re-offending measure.</p> <p>To help with this decision, we did some analysis of re-offending following initial index offences in 2005:</p> <ul style="list-style-type: none"> <li>• A 3- month waiting period captured 86% of offences occurring during the 12 months after the index offence (where the total of 100% reflects all offences proven by end of 2012)</li> <li>• 6-month waiting period captured 91%</li> <li>• 12-month waiting period captured 96%.</li> </ul> <p>Some major differences between offence types lurk behind these totals. In particular, the 3-month waiting period captured much lower proportions of proven re-offences for homicide and related offences (29%), sexual offending (46%), robbery (66%), and fraud (63%). We suggest that these proportions are unacceptable for Tier 1 purposes. Increasing the waiting period to 12 months increases proportions for these four ANZSOC divisions up to 68%–90% (where the 68% is for sexual offending).</p> <p>Inconsistency with BPS re-offending seems acceptable both because the BPS measure has a greater need for timeliness and because inconsistency between the measures ensures that timeliness of BPS reporting can stay unaffected by Tier 1 release protocols.</p>
Multiple offences in index year	Select only the first proven offence for any offender in the index year	Some offenders will have multiple offences in any period used to select a cohort for measuring re-offending. Here we select the first proven offence in the year used for selecting the cohort (similar to The Scottish Government, 2013; Ministry of Justice [UK], 2012; and Dutch analysis of adult offenders sanctioned by court, Wartna, Blom, & Tollenaar, 2011). Studies of re-offending by in New South Wales also commonly include one index court finalisation per offender (usually the first finalisation within a period of interest, or a

Option/issue	Recommendation	Background
		<p>finalisation selected at random, Ringland, 2013).</p> <p>Where multiple charges are proven on the same date for an offender, we select the most serious one (as indicated by <i>rank_all</i> in the Ministry of Justice Tier 1 dataset).</p> <p>Alternative options include:</p> <ul style="list-style-type: none"> <li>• Selecting one offence at random from all cases finalised</li> <li>• Selecting the most serious offence for a person from the index year</li> <li>• Analysing all cases finalised in the index year.</li> </ul> <p>We do not have strong arguments against any of these options, but have chosen a simple option consistent with the general consensus in overseas jurisdictions.</p> <p>Selecting the most serious proven offence for each person in the index year may be preferable for some purposes because it will be consistent with the existing Tier 1 person-based court statistics.</p>
Release date	Around 2¾ years after the year of the index offences (assuming follow-up duration of 2 years and waiting period of 6 months).	<p>When finalising the decision about ‘waiting period’ (see above), we must also consider impact of that on release dates. Other things to consider with release dates include: likely Corrections/Police release dates of related re-offending data, and also whether a delayed release date for such Tier 1 data might constrain public release of related data (eg BPS re-offending results).</p> <p>As an illustration of the impact of recommendations above, consider release date for re-offending relating to charges proven in 2013: a 24-month follow-up duration + 6-month waiting period would result in a release date in late 2016 (potentially the same time as 2015/16 conviction and sentencing data is already planned to be published).</p> <p>One cosmetic issue is that re-offending statistics can look distinctly dated at time of release if presented in terms of the date of the index offence. If this is felt to be a problem, an option is to follow BPS practice and present in terms of re-offending up to a current date. However, for Tier 1 purposes, we suggest the greater clarity from presenting in terms of index date/start point (when cohort is selected) is preferable (and that is what the UK and Scottish re-offending reports typically do; Ministry of Justice [UK], 2010; The Scottish Government, 2010).</p>

Option/issue	Recommendation	Background
Start of time series	2004	<p>The courts data was more consistent from this date than in earlier years because the current court database system (CMS) was introduced around that time.<sup>11</sup></p> <p>If re-offending is measured before 2004 there will be a series break in 2003/04 also because Adult Diversion counts as final outcomes only started then.<sup>12</sup> But a clear break is apparent more generally then with total outcomes increasing around 20% between 2003 and 2004, associated with the introduction of CMS.</p> <p>Alternative start dates for a Tier 1 time series are:</p> <ul style="list-style-type: none"> <li>• 1980. Tier 1 conviction and sentencing data supplied to Statistics New Zealand begins then. However, in the earliest years, more than 30% of the charges lack dates for the occurrence of the offence. Furthermore, there is a dramatic fall in number of charges prosecuted from 1981 to 1982 (from 300k to 240k) reflecting more use of infringements; hence showing trends from 1980 would not provide a stable start to the time series.</li> <li>• 1992. Nearly all charges have dates for the offence (<i>offence_from_date</i>) from 1992 whereas that was missing very frequently in earlier years. Dates of the offences are vital in re-offending analysis to ensure that the offences analysed occur <b>after</b> the start point chosen for analysis, rather than being earlier offences.</li> </ul>
Pseudo-reconvictions	Exclude these (by making sensible use of offence date data).	<p>Pseudo-reconvictions are convictions which occur after the index conviction, but relate to offences committed prior to the index conviction (The Scottish Government, 2010). They can arise in cases where there are several sets of proceedings in train against an individual for offences committed on a range of dates. They could have the following effects:</p> <ul style="list-style-type: none"> <li>• They would exaggerate the rate of “real” reconvictions</li> </ul>

<sup>11</sup> Court data was recorded in the Law Enforcement System (commonly known as the Wanganui Computer) up to 2003. Since 2004, it has been recorded in the Ministry of Justice’s Case Management System (CMS).

<sup>12</sup> It was suggested this series break might be softened by using the Withdrawn charge outcome together with guilty plea as an early proxy for Adult diversion. But a brief exploration of the charges data suggests that this is not a reliable proxy. First, despite annual numbers (3k-4k per year) of the proxy diversions being similar to numbers of adult diversions when formal recording of these introduced, the numbers for the proposed proxy increased after 2003 rather than falling when the formal Diversion code was introduced. Second, it is difficult to be sure which codes to use to cover Guilty pleas before 2004; the pattern of numbers over time suggests that around 200,000 charges with plea codes of X (Not Recorded) in years before 2004 may have been recorded as G (Guilty) in the years after 2004. Besides, creating a complication for this seems pointless given the clear series break occurring around 2003/2004 for all court statistics because of computer systems changes then.

Option/issue	Recommendation	Background
		<p>to some extent</p> <ul style="list-style-type: none"> <li>• They would have a greater impact on reconviction rates with shorter follow-up periods</li> <li>• They would also tend to be more significant when considering reconviction rates for groups of offenders with a relatively high frequency of offending.</li> </ul>
<p>Adjust for age, ethnicity, etc?</p>	<p>Unadjusted (for Tier 1) But must add warnings if any breakdowns for subgroups such as ethnicity.</p>	<p>For Tier 1 purposes, robust descriptive measures using methods unlikely to change for several years (and where changes can be explained relatively simply) are preferable to ones highly reliant on complex modelling (eg the Ministry Policy group’s risk adjusted model of re-offending appears to trial 50+ predictor variables). Complex models tend to require more regular change over time and to be more difficult to maintain in the face of changes in operations. Explaining the changes and likely impacts to diverse users of Tier 1 statistics would be awkward if we based releases on complex models.</p> <p>Contrary to this argument, note that some countries do seem to present adjusted rates fairly prominently.</p> <ul style="list-style-type: none"> <li>• England/Wales include in Executive Summary of Statistics Bulletin on re-offending the % change in re-offending adjusted for changes in offender characteristics (based on a logistic regression with 30+ predictors covering demographics and offending history)</li> <li>• The Dutch use ‘predictive models’ (survival analysis and logistic regression to adjust recidivism results)</li> </ul> <p>For analytical comparisons of different groups within the Ministry of Justice, rates adjusted for age etc should be used. For example, it can be dangerous to compare re-offending rates for ethnicities without adjusting for age first (because re-offending rate is highly sensitive to age here and internationally). But for Tier 1 purposes, we feel simpler description is preferable.</p>
<p>Adjust for death, migration</p>	<p>Not for Tier 1 (but IDI users will often want to do so)</p>	<p>Tier 1 statistics should calculate the rates without death and migration adjustments. This is because such calculations can be done at the Ministry and Tier 1 delivery would not be dependent on any delays occurring in supply of data to the IDI or the IDI refresh cycle.</p> <p>However, for IDI analyses of re-offending where linked death and migration data is readily available (eg other projects on our horizon are the life course modelling for the investment approach, propensity score matching for analysis of impact, etc) then the adjustment for death and migration seems more crucial. For example, it will help avoid modelling for people that have not re-offended simply because they have</p>

Option/issue	Recommendation	Background
		<p>died or migrated.</p> <p>An internal Ministry of Justice analysis shows that effects of adjusting for death and migration on broad estimates of re-offending rates are generally small (eg about 1 percentage point for total adult re-offending within 2 years). Effects of adjustment are somewhat greater for the 20–24 year age-group and for those recorded as being Asian (Horspool, 2015)</p> <p>The Ministry will make available SAS code for the IDI that generates re-offending following recommendations in this paper,<sup>13</sup> and also code enabling adjustment for death and migration.</p>
<p>Dimensions for Tier 1 table on NZ.Stat</p>	<p>Main offence, age group, gender and ethnicity</p> <p>(with each of these being defined exactly as in existing NZ.Stat table for Adults convicted in court by sentence type - most serious offence)</p>	<p>We considered simplifying ethnicity to Māori vs non-Māori only given the clear possibilities of misunderstanding re-offending statistics by ethnic group (eg if ignoring impact of different age distributions or the greater impact of migration on the 'Asian' group). But for the experimental Tier 1 series, we recommend initially use the very same ethnicity approach already in use for other Tier 1 adult tables (not least because this enables the code generating the cube to stay consistent with existing code).</p>

## Corrections measures as a base: how closely should we follow?

### Conclusions

Corrections measures of recidivism, as reflected both in formal annual reports (Department of Corrections, 2005, 2012) and also in detailed analyses of re-offending (Nadesu, 2009b; Nadesu, 2009a), do not appear to provide a model we should follow rigidly at a conceptual level (the focus of this paper). In particular, their reconviction analysis excludes convictions not resulting in sentences administered by Corrections; such narrowing is inappropriate for reconviction figures released by the Ministry.

However, when we move to considering detailed specification (eg at SAS code or SQL-query level) we have compared closely with existing Corrections recidivism analysis to maximise consistency and incorporate any learnings embedded within their code (eg what offence codes to exclude). We also

<sup>13</sup> In the IDI, a further choice is whether to calculate re-offending based on justice sector person identifiers or Statistics NZ identifiers (which collapse together many of the duplicate identities in the justice sector data). Levels of re-offending calculated using the Statistics NZ identifiers are consistently a little higher (and correctly so) because they collapse the duplicate identities.

aim to maximise ease and clarity of communication across the sector by standardising terminology such as 'follow-up duration', 'index offence' etc.

### Useful details from Corrections for informing choices

Follow-up duration:

- Corrections annual reports focus on **12-month** follow-up periods (albeit backed by more detailed reports with follow-ups as long as 5 years).

Starting date definition

- Corrections measures from time of release from prison or start of new community sentence. Justice figures will differ if they ignore or approximate imprisonment after a court sentence.
  - 'Figures indicate rate of reconviction/reimprisonment within the subsequent 12-month period amongst all offenders released from prison or commencing a new community sentence between 1 April 2010 and 31 March 2011.' Annual Report 2011/12

Sentence types included:

- 'Recidivism figures exclude reconvictions which do not result in sentences administered by the Department (fines, convicted and discharged, etc).' (Nadesu, 2009b, p. 4). This exclusion seems inappropriate for courts-related sector Tier 1 reconviction estimates (while appropriate for Corrections purposes).

Offence types included:

- Some Corrections reconviction analyses exclude sentences for breaches of community sentences (eg Nadesu, 2009a, p2 and the Recidivism Index). As outlined on page 5, one option is excluding the very same offence types that Corrections excludes.

Raw rates vs statistically adjusted:

- Corrections reports (Nadesu, 2009a, 2009b) include unadjusted comparisons of reconviction rate by age, gender, ethnicity, most serious offence.

## Offending on bail: related but separate

Discussion of offending on bail is the subject of a separate analysis.

## Works cited

- Department of Corrections. (2005). *Annual Report*. Wellington: Department of Corrections.
- Department of Corrections. (2012). *Annual Report*. Wellington: Department of Corrections.
- HM Treasury. (2007). *PSA Delivery Agreement 23: Make communities safer*. London: HM Treasury.  
Retrieved from [http://www.hm-treasury.gov.uk/d/pbr\\_csr07\\_psa23.pdf](http://www.hm-treasury.gov.uk/d/pbr_csr07_psa23.pdf)
- Horspool, N. (2015). *Impact of death and migration on re-offending statistics*. Wellington: Ministry of Justice.
- Ministry of Justice [UK]. (2010). *Reoffending of adults: results from the 2008 cohort (England and Wales)*. London: Ministry of Justice. Retrieved from [www.justice.gov.uk/downloads/statistics/mojstats/re-offending-stats/reoffending-adults-2008-cohort.pdf](http://www.justice.gov.uk/downloads/statistics/mojstats/re-offending-stats/reoffending-adults-2008-cohort.pdf)
- Ministry of Justice [UK]. (2012). *Proven re-offending statistics: definitions and measurement*. London: Ministry of Justice [UK]. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/192407/proven-reoffending-definitions-measurement.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192407/proven-reoffending-definitions-measurement.pdf)
- Nadesu, A. (2009a). *Reconviction patterns of offenders managed in the community: A 60-months follow-up analysis*. Wellington: Department of Corrections. Retrieved from [http://www.corrections.govt.nz/\\_\\_data/assets/pdf\\_file/0005/439025/Reconviction\\_Report\\_2009\\_Community\\_Sentences.pdf](http://www.corrections.govt.nz/__data/assets/pdf_file/0005/439025/Reconviction_Report_2009_Community_Sentences.pdf)
- Nadesu, A. (2009b). *Reconviction patterns of released prisoners: A 60-months follow-up analysis*. Wellington: Department of Corrections. Retrieved from [www.corrections.govt.nz/research/reconviction-patterns-of-released-prisoners-a-60-months-follow-up-analysis2.html](http://www.corrections.govt.nz/research/reconviction-patterns-of-released-prisoners-a-60-months-follow-up-analysis2.html)
- National Audit Office [UK]. (2012). *Comparing international criminal justice systems*. National Audit Office. Retrieved from [www.nao.org.uk/report/nao-briefing-comparing-international-criminal-justice-systems/](http://www.nao.org.uk/report/nao-briefing-comparing-international-criminal-justice-systems/)
- Payne, J. (2007). *Recidivism in Australia: findings and future research*. Canberra: Australian Institute of Criminology. Retrieved from [www.aic.gov.au/publications/current%20series/rpp/61-80/rpp80.html](http://www.aic.gov.au/publications/current%20series/rpp/61-80/rpp80.html)
- Ringland, C. (2013). *Measuring recidivism: Police versus court data*. Sydney: NSW Bureau of Crime Statistics and Research. Retrieved from <http://www.bocsar.nsw.gov.au/Documents/CJB/cjb175.pdf>
- Snowball, L., & Bartels, L. (2013). *Community Service Orders and Bonds: A comparison of reoffending* (Crime & Justice Bulletin No. 171). Sydney: NSW Bureau of Crime Statistics and Research. Retrieved from <http://www.bocsar.nsw.gov.au/Documents/CJB/cjb171.pdf>
- Statistics New Zealand. (2009). *Review of crime and criminal justice statistics report 2009*. Wellington: Author. Retrieved from [http://www.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/crime\\_and\\_justice/review-of-crime-and-criminal-justice-statistics.aspx](http://www.stats.govt.nz/browse_for_stats/people_and_communities/crime_and_justice/review-of-crime-and-criminal-justice-statistics.aspx)
- The Scottish Government. (2010). *Reconviction rates in Scotland: 2007-07 and 2007-08 offender cohorts*. Edinburgh: The Scottish Government. Retrieved from [www.scotland.gov.uk/Resource/Doc/322680/0103823.pdf](http://www.scotland.gov.uk/Resource/Doc/322680/0103823.pdf)
- The Scottish Government. (2013). *Reconviction rates in Scotland: 2010-11 offender cohort* (Statistical Bulletin). Edinburgh. Retrieved from <http://www.scotland.gov.uk/Resource/0043/00433504.pdf>

- Triggs, S. (2005). *New Zealand court-referred restorative justice pilot: Two year follow-up of reoffending*. Wellington: Ministry of Justice. Retrieved from <http://www.justice.govt.nz/publications/global-publications/n/new-zealand-court-referred-restorative-justice-pilot-two-year-follow-up-of-reoffending-december-2005>
- Villettaz, P., Gilliéron, G., Killias, M., Villettaz, P., Gilliéron, G., & Killias, M. (2015). The Effects on Re-offending of Custodial vs. Non-custodial Sanctions: An Updated Systematic Review of the State of Knowledge. *Campbell Systematic Reviews*, 11(1). Retrieved from <http://campbellcollaboration.org/lib/project/22/>
- Wartna, B., Blom, M., & Tollenaar, N. (2011). *The Dutch Recidivism Monitor; 4th, Revised edition*. Ministry of Security and Justice [Netherlands]. Retrieved from [http://english.wodc.nl/images/Nemorandum%202011-3a\\_The%20Dutch%20Recidivism%20Monitor%202011\\_tcm45-373211.pdf](http://english.wodc.nl/images/Nemorandum%202011-3a_The%20Dutch%20Recidivism%20Monitor%202011_tcm45-373211.pdf)

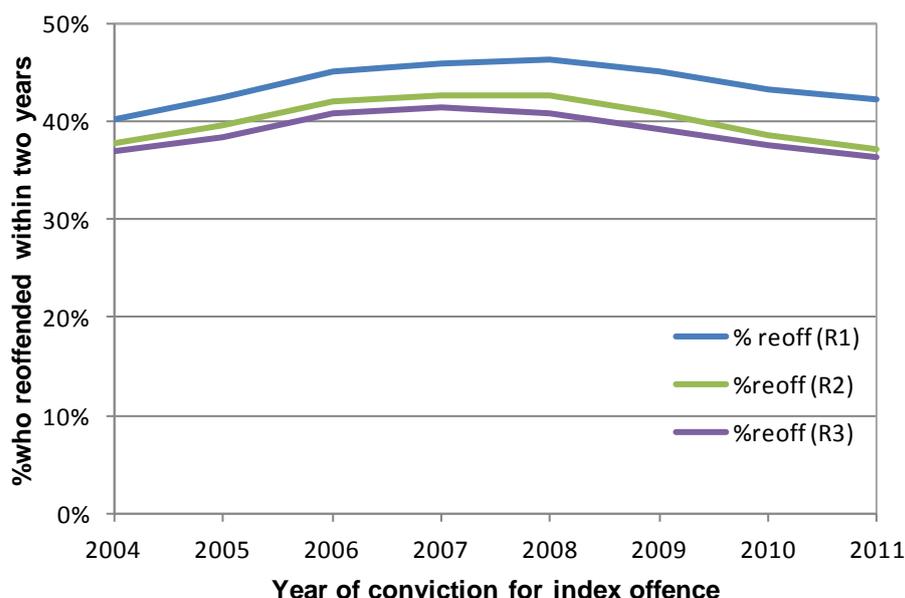
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# Appendix 1: Illustrative proven re-offending measures

Comparing R1 (all offences), R2 (excludes breaches of bail and community-based orders<sup>14</sup>), R3 (imprisonable offences only)

Figure 1: Percentage of convicted offenders who re-offended within two years of conviction



Comparisons of age, gender and ethnicity-specific rates under R1, R2 and R3 did not reveal any patterns of concern.

R3 originally excluded only non-imprisonable offences. Since the draft, R3 has been modified to exclude also breaches of justice procedures. Excluding breach of justice procedures made less than 1% difference in the estimated number of re-offenders.

## Exploring R3: demographics and trends

Table 1: Number of re-offences within 2 years of conviction (R3)

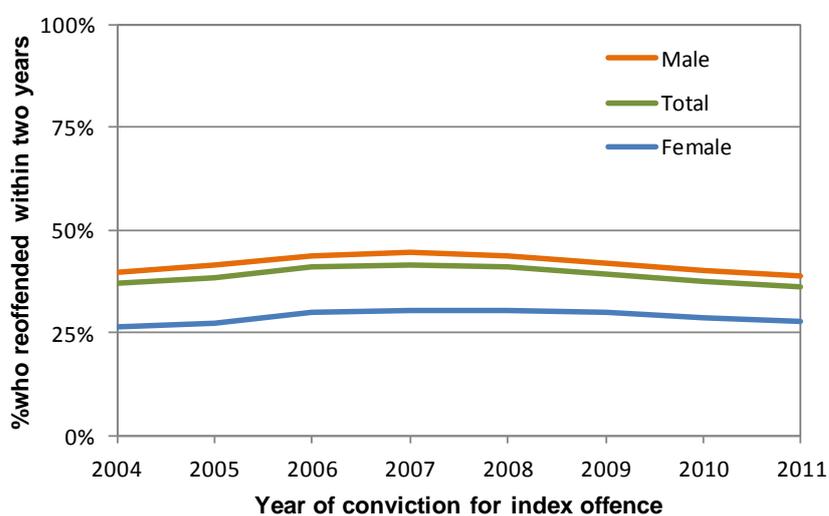
	Year of conviction for the index offence							
	2004	2005	2006	2007	2008	2009	2010	2011
<b>One or more offences</b>	37%	38%	41%	41%	41%	39%	37%	36%
<b>2 or more offences</b>	23%	24%	26%	26%	25%	23%	22%	21%
<b>3 or more offences</b>	15%	16%	17%	17%	17%	15%	14%	14%

<sup>14</sup> By excluding offences in ANZSOC subdivisions 151 & 152

**Table 2: Percentage with any offence within 2 years of conviction – demographics (R3)**

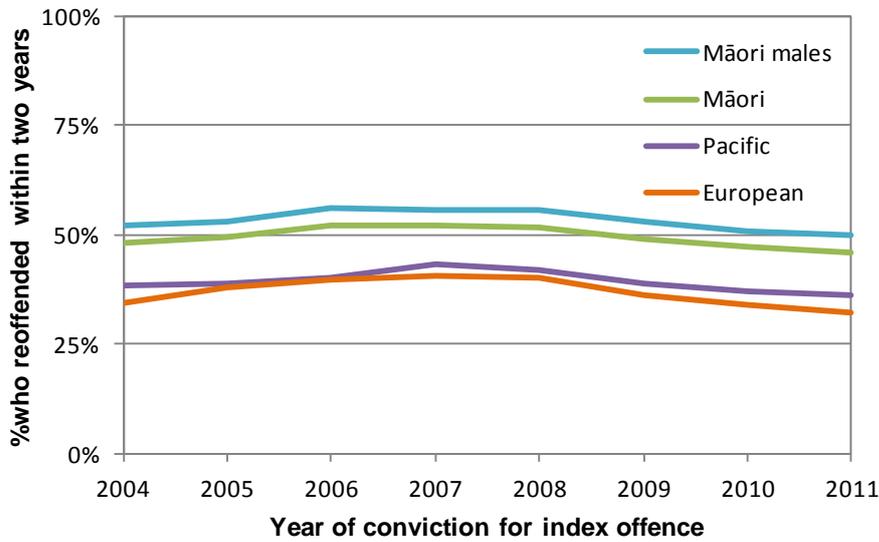
	2004	2005	2006	2007	2008	2009	2010	2011
Females	26%	27%	30%	31%	31%	30%	29%	28%
Males	40%	41%	44%	44%	44%	42%	40%	39%
European	34%	38%	40%	41%	40%	36%	34%	32%
Māori	48%	49%	52%	52%	52%	49%	47%	46%
Pacific	39%	39%	40%	43%	42%	39%	37%	36%
Māori males	52%	53%	56%	56%	56%	53%	51%	50%
Age 17-24	45%	47%	49%	50%	49%	47%	45%	43%
Age 25+	31%	32%	34%	35%	34%	33%	32%	31%

**Figure 2 Re-offending rate (R3, within two years) by sex (1992-2011)**



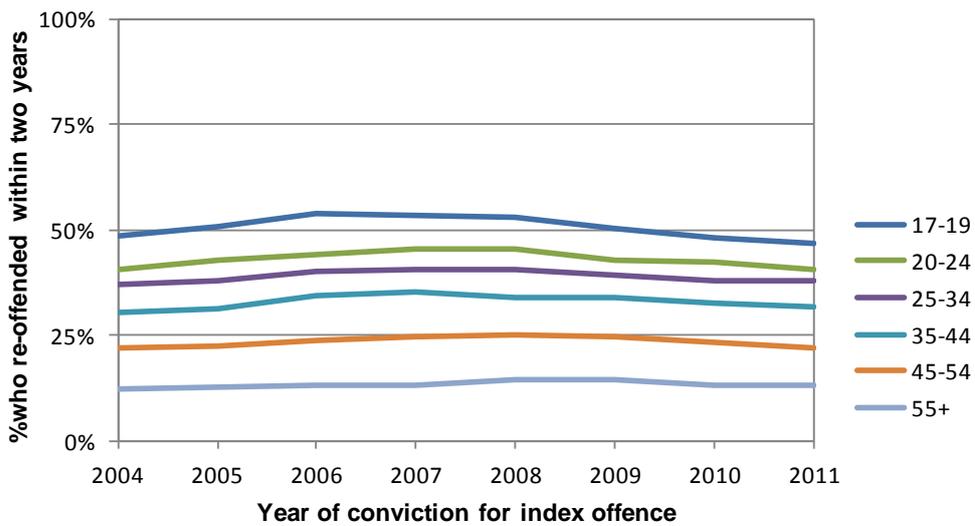
The re-offending rate has been stable over a long period and has been decreasing since 2007.

Figure 3 Percentage of those convicted who re-offended within two years, by ethnic group (R3)



Trends are similar for major ethnic groups.

Figure 4 Percentage of those convicted who re-offended within two years, by age group (R3)



### Exploring R3: Re-offending rate by ANZSOC offence type of index offence

Examining re-offending rate by offence type relies on a number of assumptions and requires an agreement on the most useful definition of 're-offending by offence type'.

We looked at re-offending by offence type in two ways:

- a. Examining the ANZSOC division of the index offence during a given year (2011) and looking at **all** offences in the following two years. This is shown in the second column of Table 3.
- b. As for a) but looking only for re-offences in the same ANZSOC division as the index offence. This is shown in the third column of Table 3.

17% of offenders were charged with another offence in the **same** ANZSOC division as their index offence, within two years. This will be heavily influenced by the penalties for each offence type, as people in prison generally have reduced opportunity to commit offences. As in other countries, the general pattern is for higher re-offending rates for offence types that are high-volume and less serious (eg traffic).

**Table 3: Re-offending by ANZSOC division of index offence, within two years (index offences in 2011, R3).**

Index offence type	Re-offence rate	
	All ANZSOC divisions	Same ANZSOC division
01 Homicide and related offences	5%	0%
02 Acts intended to cause injury	34%	14%
03 Sexual assault and related offences	9%	1%
04 Dangerous or negligent acts endangering persons	30%	4%
05 Abduction, harassment and other offences against the person	42%	8%
06 Robbery, extortion and related offences	36%	3%
07 Unlawful entry with intent/burglary, break and enter	57%	18%
08 Theft and related offences	50%	26%
09 Fraud, deception and related offences	19%	4%
10 Illicit drug offences	33%	11%
11 Prohibited and regulated weapons and explosives offences	44%	6%
12 Property damage and environmental pollution	44%	11%
13 Public order offences	48%	13%
14 Traffic and vehicle regulatory offences	32%	23%
15 Offences against government procedures, government security and government operations	44%	17%
16 Miscellaneous offences	13%	2%
Total	36%	17%

Caveats:

- i. The index offence is chosen arbitrarily as offence with the first conviction in the index year date (or if concurrent convictions, the most serious offence).

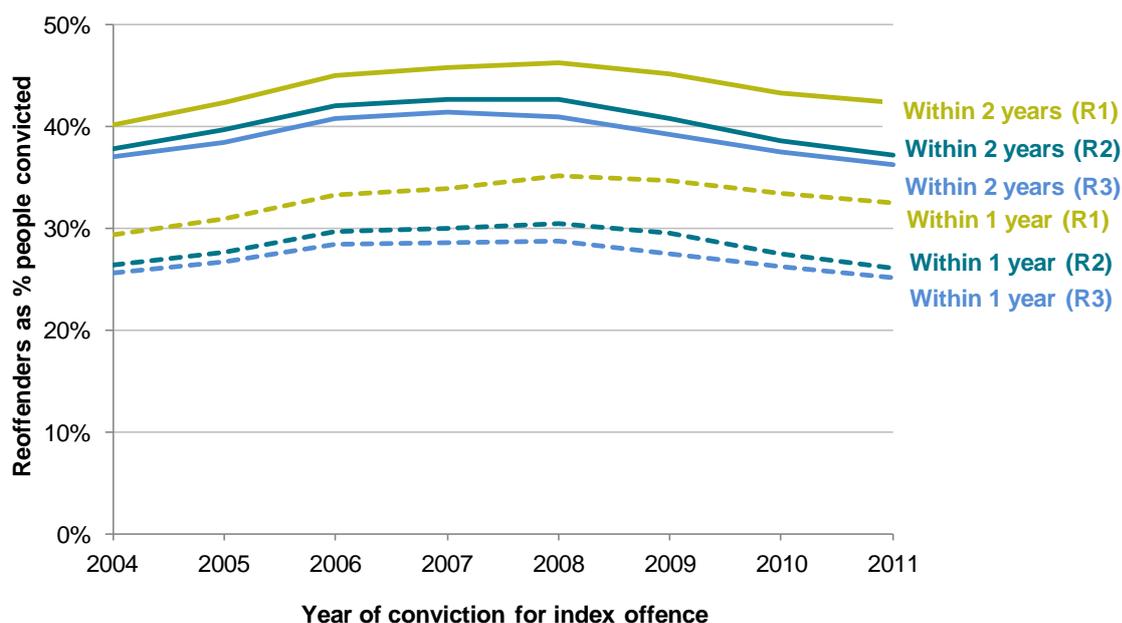
- ii. Offences with penalties of imprisonment or home detention result in less opportunity for repeat offending while the restriction is in force.
- iii. Offenders may have received a custodial or home detention sentence for an offence subsequent to the index offence. This may affect apparent re-offending rates in other offence types differentially. (For example, if a higher than average proportion of those convicted of burglary go on to commit acts of violence resulting in imprisonment, then the opportunity for repeat burglary offences is reduced even if the penalty for the index offence was not custodial).

### Effect of follow-up period (R1, R2, R3)

The above uses a follow-up period of two years. Using two years instead of one provides some insulation from random effects and mitigates in part the effect of imprisonment and electronic home detention sentences which largely remove the possibility of re-offending. (That is, offenders with short sentences of imprisonment or home detention complete those within the two-year follow-up period and are 'eligible' to commit further offences).

To investigate the effect of using a one-year follow-up period, we repeated the analysis for each of R1, R2 and R3. Results are shown in Figure 5.

Figure 5: Percentage of those convicted who re-offended within one or two years.



Using a two-year follow up period results, inevitably, in a higher percentage of re-offending (about 10 percentage points higher than using the one-year period). Trends are fairly similar, although there are some small differences in trend between the one-year and two-year methods when using R1.

The differences are not uniform across all offence types. Re-offending rates show a bigger than average increase between the one and two year follow-up period, where the index offence was robbery or sexual assault.

## Appendix 2: Comparing Corrections and ANZSOC-based methods of removing breaches

As discussed in the body of this report, for R2 we wish to exclude minor offences against justice (eg breaches of bail, breaches of community-based orders) from the analysis, and two methods of doing this have been considered. The Corrections definition removes a set of specified offences. The ANZSOC-based definition excludes all offences in ANZSOC groups 151 ('Breach of custodial order offences') and 152 ('Breach of community-based orders').

Each method was applied to 2011 data, using a two-year follow up period. The estimate of re-offending using the Corrections definition was 37.3%. The estimate using the ANZSOC definition was 37.2%. The actual number of offenders identified by one method and not the other is very small (fewer than 0.05% in 2011; see Table 4).

**Table 4: Identifying a group that excludes minor offences against justice – comparison of definitions**

People convicted in 2011 – offences meeting at least one inclusion criterion								
Corrections definition	ANZSOC-based definition			Total	Corrections definition	ANZSOC-based definition		Total
	Excluded from analysis	Included in analysis				Excluded from analysis	Included in analysis	
<b>Excluded</b>	0	27	27	<b>Excluded</b>	0.0%	0.0%	0.0%	
<b>Included</b>	236	88,318	88,554	<b>Included</b>	0.3%	99.7%	100.0%	
<b>Total</b>	236	88,345	88,581	<b>Total</b>	0.3%	99.7%	100.0%	

**Table 5: Offences that met only one criterion for exclusion (people convicted in 2011)**

Offence code	ANZSOC	offence	Excluded only if using this method	Offenders
<b>6911</b>	1529	Breach Community Detention	ANZSOC	22
<b>6913</b>	1529	Breach Detention Conditions	ANZSOC	45
<b>6915</b>	1529	Breach Condition Of Intensive Supervision	ANZSOC	39
<b>7131</b>	1511	Escape Lawful Custody/Break Penal Institution	ANZSOC	56
<b>7132</b>	1511	Assist Escape/Harbouring	ANZSOC	5
<b>7134</b>	1511	Escape/Abscond Inst (A + D Act)	ANZSOC	1
<b>7138</b>	1511	Escape From Police Custody	ANZSOC	19
<b>7193</b>	1523	Fail Answer Court Appeal/High Court/District Court Bail	ANZSOC	1
<b>7958</b>	1529	Breach Extended Supervision Order	ANZSOC	1
<b>9348</b>	1522	Breach Of Extended Supervision	ANZSOC	47
<b>7129</b>	1569	Other Offences Against Judicial Procedure	Corrections	2
<b>7149</b>	1569	Other Miscellaneous Offences Against Justice	Corrections	22
<b>7179</b>	1562	Other Breaches	Corrections	3