



Risk Level Classification Drift

Washington Offender Needs Evaluation

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Executive Summary

This report is a review of the Washington Offender Needs Evaluation (WAONE), which serves as the risk assessment tool for the Washington State Department of Corrections (WADOC). Analyses in this report focus on individuals with changes in risk level classification (RLC) and items most frequently affecting change, as well as operational impacts of WAONE's performance.

The WAONE is a risk and needs tool that assesses individuals' likelihood of felony recidivism. Operationally, the WAONE informs program recommendations and referrals, and contact standards. After the initial contact RLC is established, individuals will continue to receive reassessments throughout their involvement with WADOC. During the norming period, the initial contact RLC is used operationally even if an individual is reassessed – given that the criteria for a new contact RLC are not met (e.g., new criminal conviction record entry). Reassessments that result in a different risk level than the initial contact RLC are referred to in this report as *drift*.

The number of individuals with RLC drift has grown to 12.8% of the field population and 17.4% of the prison population. In other words, operational responses to assessed risk are misaligned for one in 10 individuals on community supervision and one in five individuals in prison. Continued operational use of the initial RLC increases risk to WADOC and could be interpreted as a misuse of resources for individuals who are reassessed to a lower risk level than their initial contact, and not providing enough resources for individuals who are reassessed to a higher risk level. For instance, in the field population, individuals whose reassessed risk was higher than their initial contact risk were more likely to recidivate than those whose reassessed risk was lower than their initial contact risk. In the prison population, individuals whose reassessed risk increased over their initial contact risk were more likely to be involved in violent misconduct than those whose reassessed risk level was lower than their initial contact risk.

Where reassessed risk may increase or decrease relative to initial contact risk, the direction of drift varies significantly by race and ethnicity. For instance, Black and Hispanic populations are more likely to be reassessed to higher risk levels while incarcerated. Consequently, when the norming period ends, these populations will see an increase in the number of individuals identified as high risk that is disproportionate to other racial groups. These disparities are affected by WAONE items identified in the report that likely capture implicit bias and societal inequities.

Background

The Washington Offender Needs Evaluation (WAONE) is a dynamic risk and needs assessment used by the Washington State Department of Corrections (WADOC) that was designed to assess the likelihood of an individual having a felony recidivating event. A risk level is assigned to each individual based on their risk and needs domains. The WAONE has a significant influence on the corrections system as risk assessments are used for a variety of purposes. The WAONE is currently used to partially determine contact standards, programming, and program prioritization based on assessed need.

When the WAONE was first implemented at the end of calendar year 2017, a norming period was issued with a minimum duration of two years.¹ The norming period was provided to help facilitate a stable transition by continuing to use the initial risk assessment for operational purposes and disregarding changes to risk level on any reassessments. This operational risk assessment is referred to as the contact, or initial contact, risk level classification (RLC). After the norming period ends, the WAONE will become dynamic, meaning that each reassessment could result in a new contact RLC. Since the norming period is still in-effect, this initial assessment continues to be their contact RLC even after they are reassessed.

Receiving a new contact RLC during the norming period

Individuals can only receive a new contact RLC during the norming period when there is a new entry on their criminal conviction record (including felonies, gross misdemeanors, and misdemeanors). Individuals also receive a new contact RLC when they initially enter or re-enter WADOC jurisdiction.

RLC drift – What is it, When can it happen, and Why does it matter?

When someone is reassessed and does not receive a new contact RLC, it is referred to as their reassessed RLC. If their reassessed RLC is different than their initial contact RLC, this report refers to this difference as *drift*. The initial contact RLC is still the risk level that is used operationally but now there are two RLCs – each telling us something different.

When the reassessed RLC is lower than the initial contact RLC, it could be interpreted as the department using more resources than necessary. Conversely, a reassessed RLC that is higher than the initial contact RLC could be considered risk to the agency for not providing enough resources for the individual.

There are three primary ways that RLC drift can end, returning an individual to having no difference between the initial contact and reassessed risk levels. These include:

- 1) Establishing a new contact risk level.
- 2) Receiving a new assessment that results in a reassessed risk level that is the same as the initial contact risk level.
- 3) Exiting WADOC jurisdiction.

¹ *The Washington ONE Norming Period*. Washington State Department of Corrections. (2017, December). Retrieved December 2021, from <https://www.doc.wa.gov/docs/publications/400-BR011.pdf>

Data and Methods

Data sources for this project are WADOC OMNI population, sentencing and WAONE assessment data. This report includes individuals in the prison and field populations who have RLC drift during end-of-month snapshot data (point in time), for calendar years 2018-2021. The prison population includes all individuals in total and partial confinement who are not violators. The field population includes both active and inactive individuals assigned to a field office as well as violators.

The WAONE features six risk levels that are used to classify an individual's likelihood to reoffend, including: High Violent Property and Drug (HVPD),² High Violent (HV), High Property (HP), High Drug (HD), Moderate (MOD), and Lower (LOW). For this analysis, three RLC hierarchies (All Separate, High Diverse, and Violent Combined) were created from the six risk levels to measure RLC drift. The All Separate hierarchy is the primary measure used throughout the report for both the prison and field populations. The High Diverse and Violent Combined RLC hierarchies were also assessed but most findings are not included in this report due to their similarities with the All Separate hierarchy results, unless stated otherwise.

The three RLC hierarchies are defined below, including the risk levels in rank order from highest to lowest risk.

- All Separate:
 - 1) High Violent Property and Drug
 - 2) High Violent
 - 3) High Property
 - 4) High Drug
 - 5) Moderate
 - 6) Lower
- High Diverse:
 - 1) High Violent Property and Drug
 - 2) High Violent; High Property; High Drug
 - 3) Moderate
 - 4) Lower
- Violent Combined:
 - 1) High Violent Property and Drug; High Violent
 - 2) High Property, High Drug
 - 3) Moderate
 - 4) Lower

² The HVPD risk level is generally referred to as "High Diverse." The term "High Diverse" is also used to refer to a grouping hierarchy that differentiates HVPD from other high risk levels (i.e., HV, HP, and HD).

Results

The results of the report were separated by the field and prison population because of differences in how the tool is used operationally. For both populations, results include:

- 1) A description of the percentage of the reassessed population affected by drift.
- 2) The drift type (e.g., reassessed risk is greater than initial contact risk, or reassessed risk is lower than initial contact risk).
- 3) Demographics of the population affected by drift.
- 4) Assessment items impacting drift and the drift population.
- 5) Relative frequency of recidivism or serious violent infractions in the population affected by drift.

The size of the RLC drift population may continue growing in the field and prison, but there are early signs that it is plateauing. Individuals with longer periods of incarceration and supervision are expected to make up a larger portion of the drift population.

The prison and field populations with drift produce slightly different results when examining drift across race. For the prison population, there is significant variance in RLC drift. The White population is reassessed to a lower RLC at higher rates than other racial groups while the Black and Hispanic populations are more likely to be reassessed to higher risk levels. The field population displays little variance with both the American Indian/Alaska Native and White populations most likely to be reassessed to a lower RLC. These results evaluated whether the drift in RLC tended to be higher or lower than the initial contact RLC by racial group. Subsequent analyses looked at the different risk level hierarchies (i.e., All Separate, High Diverse, Violent Combined), all of which produced similar results.

There are assessment items that contribute to drift more frequently than others. An increase or decrease in protective and risk responses can affect changes to a higher or lower risk level differently for the prison and field population. There is also a significant association between race and the probability of a change in response for several assessment items. The frequency and race associations of items affecting drift help us understand what may be driving changes in WAONE risk levels as well as items affecting higher or lower risk across race.

The reassessed RLC appears to be more accurate at predicting first-year post release recidivism than the initial contact RLC, as well as other non-standard definitions of recidivism. It is important to consider that differences between drift type group's conditions of supervision could also affect outcomes. In the prison population, the reassessed RLC appears to be more accurate at predicting the likelihood of serious violent infractions. Although the tool was not designed to assess the likelihood of prison misconduct, we can use it as a proxy for the prison population to assess violent misconduct.

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Field Population

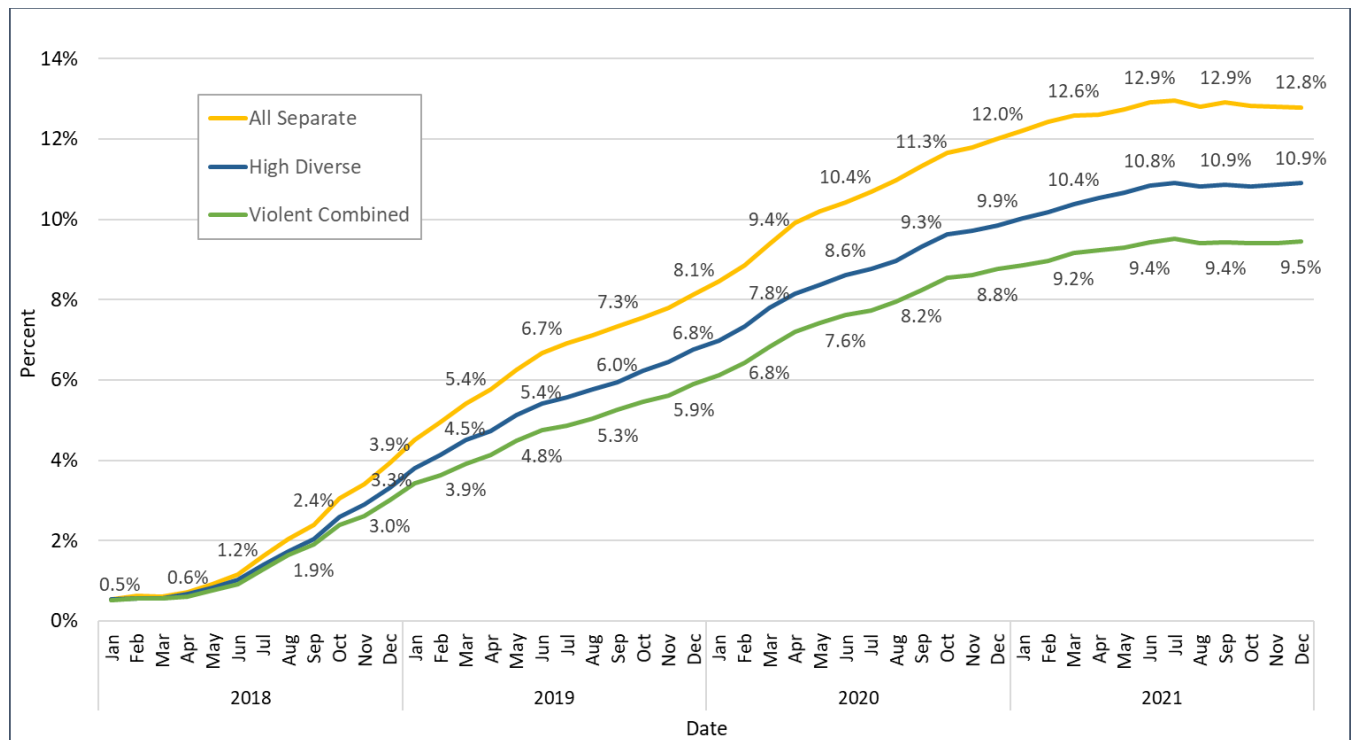
RLC Drift Growth

The percentage of the field population with RLC drift has been growing since the WAONE was first implemented in 2017, but the growth has recently begun showing signs of slowing. Each reassessment brings an opportunity for an individual to either begin new RLC drift, have no change in RLC, or return to having a reassessed RLC that is the same as their initial contact RLC.

All three of the RLC hierarchies follow a similar trend, with the drift for All Separate in the current field population approaching 13% in the most recent period (Figure 1). In the field population with drift, most people have a lower reassessed risk level, meaning that individuals with drift have a lower risk for a future felony recidivating event. In recent months, the growth in the percentage of people reassessed with lower risk levels has slowed while the percentage of those with higher reassessed risk levels has remained consistent with limited growth (Figure 2).

Analyses of the High Diverse and Violent Combined hierarchies were also conducted. These hierarchies had trends identical to the All Separate hierarchy across higher reassessed and lower reassessed RLC types. Additionally, there is little difference in drift across active and inactive field populations, but this will likely change if the norming period remains in effect long term.

Figure 1. Percent of the field population with RLC drift by RLC hierarchy.

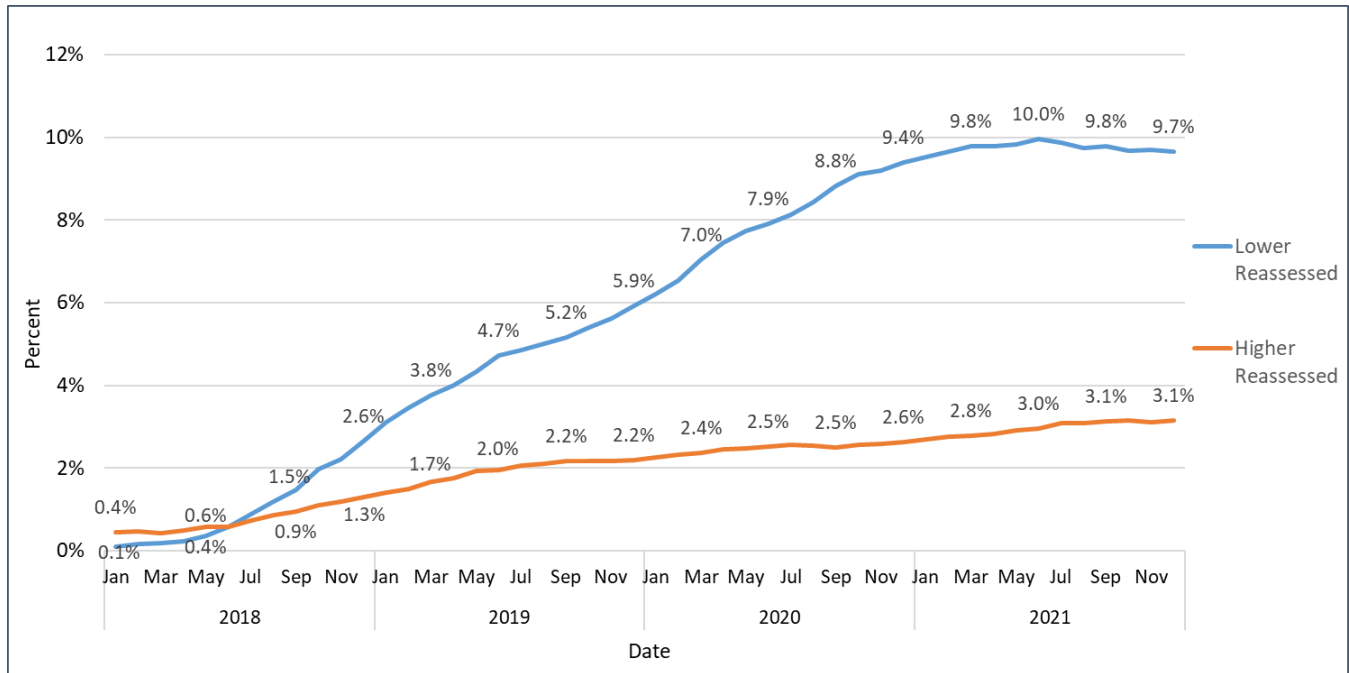


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Figure 2. Percent of the field population with RLC drift by drift type (All Separate RLC Hierarchy).



Length of RLC Drift

The length of drift varies across the field population. Drift only ends if an individual establishes a new contact risk level, they are reassessed and have a risk level that is the same as their initial contact RLC, or they exit WADOC jurisdiction. People with longer periods of supervision have the potential to stay active with RLC drift for longer periods of time. This means that there may continue to be a gradual increase in the field population with drift over time.

On average, 65-70% of people with drift will have a drift length between 0-24 months (Figure 4). The highest frequency drift length is currently seen at the six-month mark. This is also the recommended interval between assessments for the field population but is not required by policy.

The start dates for drift in the current field population (as of 12/31/2021) vary widely. Most of these individuals have drift beginning during calendar years 2020 and 2021 (Figure 3). This is likely due to a combination of the average length of drift while in the field population (Figure 5) as well as the average length of community supervision.

If an individual was incarcerated in a WADOC facility prior to supervision, their RLC drift may have carried into the field population. In this case, their drift start date would be the first snapshot date with RLC drift in the prison population. Subsequent analyses looking at field start dates for individuals with carryover drift from prison and individuals whose drift started while in the field all showed similar trends.

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Figure 3. Distribution of the current field population with RLC drift by drift start date (as of 12/31/2021).

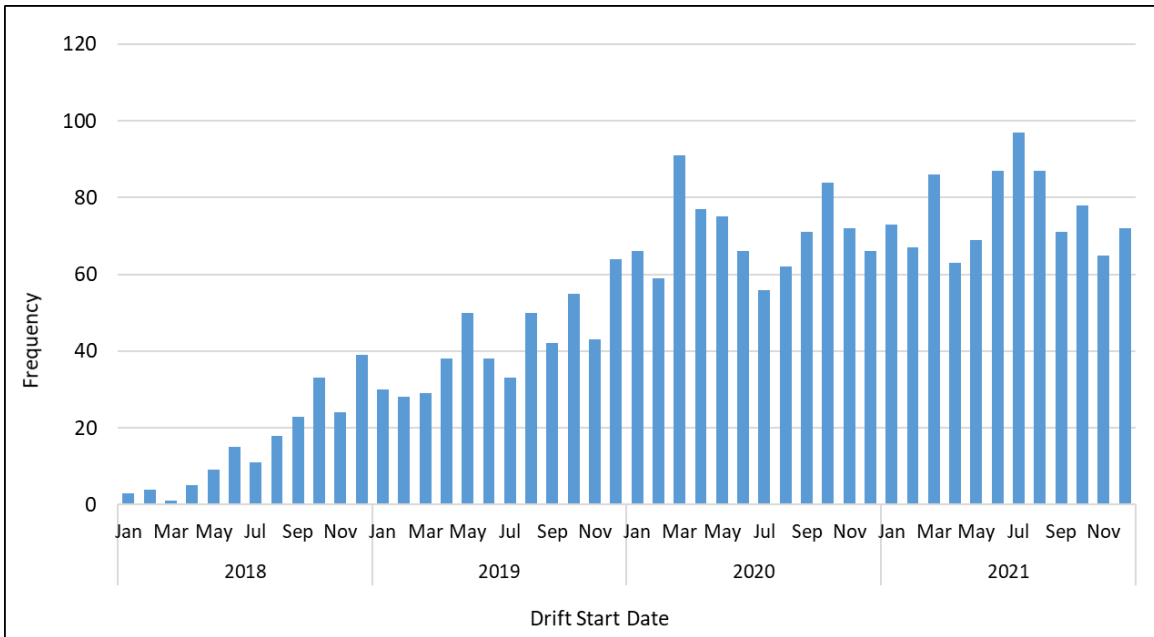
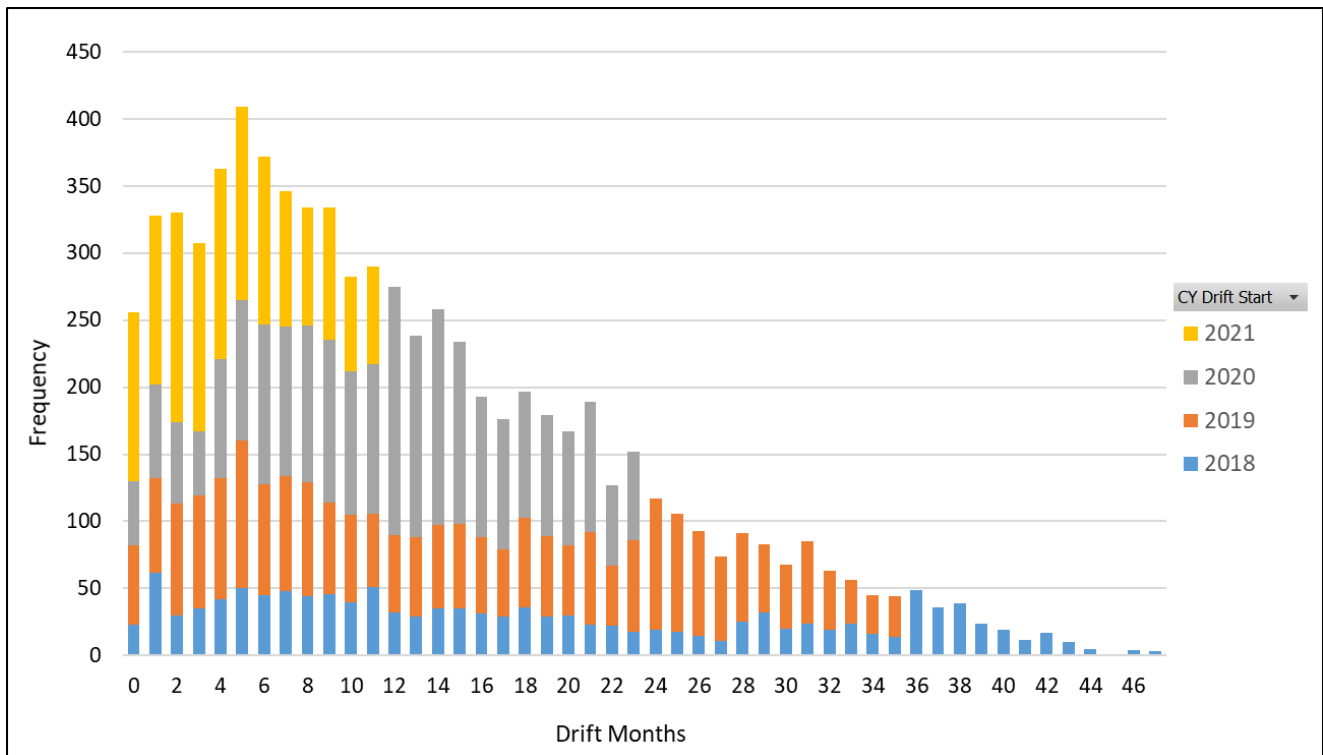


Figure 4. Distribution of the field population with RLC drift by cumulative drift length (months).

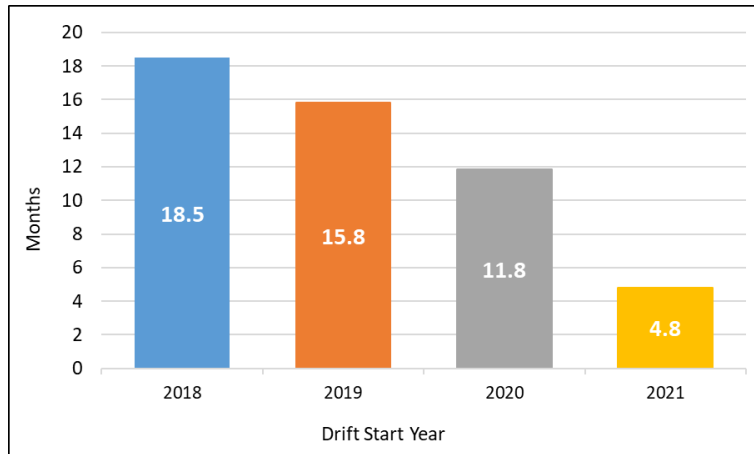


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Figure 5. Average drift length by drift start year.



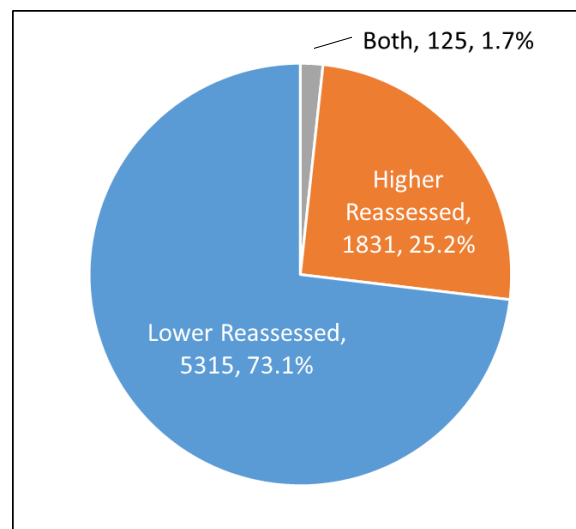
Characteristics of the Affected Population

The Characteristics of the Affected Population section looks at all individuals with RLC drift while in the field population. Individuals who have had both a lower reassessed risk level and a higher reassessed risk level are categorized as having both.

Nearly three-quarters of the total field population with drift is reassessed to a lower risk level than their initial contact RLC. This may indicate that people are less likely to display behaviors that exhibit risk over time.

The racial composition of the field RLC drift population is nearly identical to that of the field population during the same timeframe. Figure 7 displays little variance in the field drift population across racial groups. The lower reassessed drift type tells us who is more likely to have reassessed risk that is lower than initial contact risk. There does not appear to be significant evidence of variance across race. The American Indian/Alaska Native and White populations may be slightly less likely to be reassessed to higher risk levels.

Figure 6. Distribution of the field population with RLC drift by drift type.

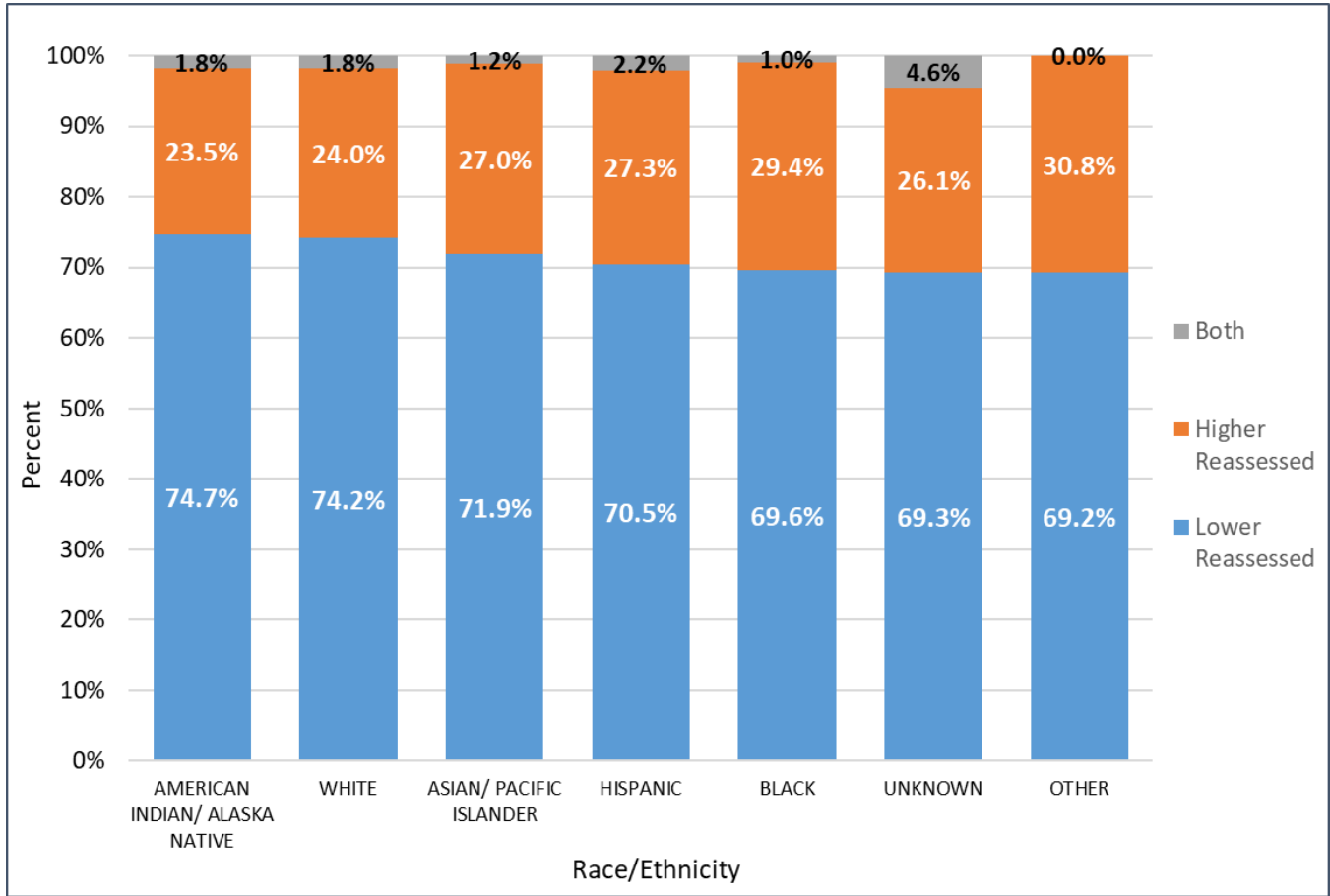


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Figure 7. Distribution of drift type for the field population with RLC drift by race/ethnicity.



Assessment Items

A person’s assessed risk at any given time reflects their selection of responses from a pool of roughly 700 possible responses over 106 items. Changes in risk indicate that a person had a change in response through reassessment. Risk can increase either by gaining positively weighted risk responses or losing negatively weighted protective responses. Alternatively, risk decreases when negatively weighted protective responses are gained, or positively weighted risk responses are lost in reassessment.

This section 1) identifies the changes in responses that have most often affected a change in assessed risk, and 2) describes the relationship between race and ethnicity and response selections affecting change in risk.

Field – Higher Reassessed

Items most frequently associated with increased risk while in the field population are shown in Table 1. Item weights are the magnitude of change affected by response averaged across the WAONE’s multiple risk scales. To illustrate how response changes affect changes in assessed risk, three scenarios based on “Annual prison visitations,” “Type of drug problem,” and “Participated in prison vocational program” are described below.

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Table 1. Most frequent items affecting an increase in reassessed risk (e.g., reassessed risk is higher than initial contact risk) while under field supervision (n = 1,393).

Item with New Response	Frequency	Percent	Average Weight
Annual prison visitations	590	42.3%	+11
Type of drug problem	514	36.9%	+42
Participated in prison vocational program	450	32.3%	+23
Completed prison offender change program	447	32.1%	+24
Current pro-social support in neighborhood	414	29.7%	+8

NOTE: average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Annual prison visitations:** An individual assigned to a community custody jail (CCJ) caseload was initially assessed as Low risk and reassessed nearly one year later as High Drug risk after multiple violations related to use of a controlled substance and failure to report. Their increased reassessed risk was due, in part, to losing the protective factor related to annual prison visitations (i.e., “Not returning from prison”) following violator facility admissions and a local custody confinement sanction.
- Type of drug problem:** The same individual described above gained multiple responses at reassessment related to drug use. Where they had only previously selected “Alcohol problem in past,” their reassessment included the following weighted responses: “Prescription drug problem in past,” and Methamphetamine and Heroin “Problem in past” and “Problem in last six months” for both.
- Participated in prison vocational program:** An individual assigned to a CCJ caseload was initially assessed as Low risk and reassessed 10 months later as High Violent risk after multiple contact with prohibited person violations. Their protective factor related to prison vocational programs (i.e., “Never incarcerated”) was lost after being admitted to a violator facility.

Responses by race and ethnicity

Items with significantly different probability to affect increased risk by race and ethnicity are shown in Table 2. Three examples of increased risk related to “Average monthly income,” “Lifetime motivation for all criminal behavior,” and “All threatening, aggressive, and violent behavior ever” are described below.

Table 2. Most frequent items affecting an increase in reassessed risk (e.g., reassessed risk is higher than initial contact risk) while under field supervision with significant association to race and ethnicity (n = 1,393).

Item with New Response	Frequency	Percent	Average Weight
Average monthly income**	304	21.8%	11
Lifetime motivation for all criminal behavior**	285	20.4%	22

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All threatening, aggressive, or violent behaviors ever*	256	18.4%	25
Lifetime motivation for all threatening, aggressive, or violent behavior**	173	12.4%	10
Lifetime pattern of social interactions and characteristics*	154	11.1%	7

** $p < .01$, * $p < .05$ significant association between race and probability of change in response. *NOTE:* average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Average monthly income:** An individual initially assessed as High Violent risk was reassessed one year later as High Diverse risk after their response to “Average monthly income” changed from “\$2,000 – \$3,999” to “No legal income.” Their earlier assessment was conducted while incarcerated; their change in employment status – and with it, risk – was affected by their release from prison.
- Lifetime motivation for all criminal behavior:** An individual assessed as High Drug risk was reassessed four months later as High Property risk. While they were initially regarded as being motivated by “Money/material gain” and “Obtaining drugs/chemical addiction,” their reassessment added “Power, dominance or control” and “Gang/peer status, acceptance or attention” as lifetime motivators of criminal behavior.
- All threatening, aggressive, or violent behavior ever:** An individual was initially assessed as Low risk and reassessed on the same day as High Drug risk. Their initial assessment identified “Violent prison or jail misconduct” as a violent behavior. The subsequent assessment added “Explicit threats of physical harm against specific individuals.”

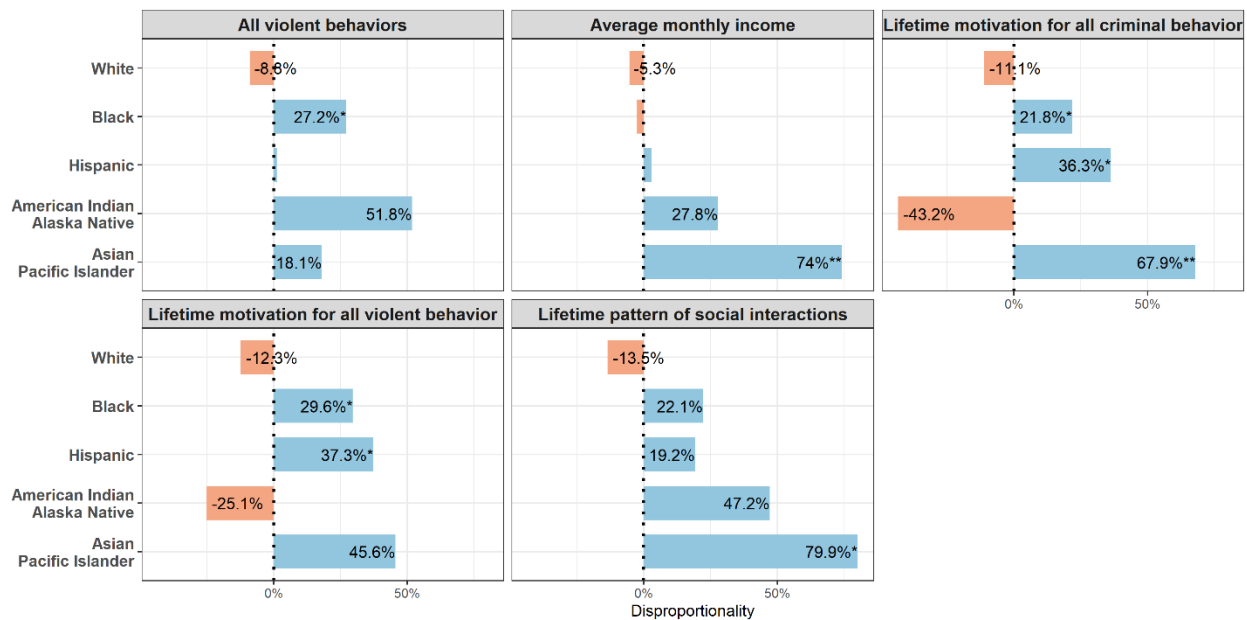
Measures of disparity associated with the most frequent items affecting race differences (Table 2) are shown in Figure 8. Black, American Indian and Alaska Native, and Asian and Pacific Islander individuals, for example, are over-represented among those with increased risk affected by changes to “All threatening, aggressive or violent behavior ever.” In the Black population, there were 27.2% more individuals with increased risk related to this item than would be expected if changes in response patterns did not vary by race.

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Figure 8. Significant differences in probability of response by race and ethnicity in items most frequently increasing reassessed risk while under field supervision.



** $p < .01$, * $p < .05$ significant association between race and probability of change in response. NOTE: Disproportionality measures group over/under representation relative to group share of population with change in reassessed risk.

Field – Lower Reassessed

Items most frequently associated with decreased risk while in the field population are shown in Table 3. Three scenarios based on “Time since last conviction,” “Annual prison visitations,” and “Most recent source of income” are described below.

Table 3. Most frequent items affecting a decrease in reassessed risk (e.g., reassessed risk is lower than initial contact risk) while under field supervision (n = 3,893).

Item with New Response	Frequency	Percent	Average Weight
Time since last conviction	1,726	44.3%	-55
Annual prison visitations	1,416	36.3%	-13
Most recent primary source of income	1,309	33.6%	-18
Current employment	1,272	32.7%	-8
Average monthly income	1,268	32.6%	-10

NOTE: average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

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- Time since last conviction:** An individual initially assessed as High Diverse risk was reassessed nine months later as Moderate risk due, in part, to their response to “Time since their last conviction.” Their response, “18 months to three years,” was changed to “More than three years.” In actuality, their last conviction was 11 months before their first assessment and 20 months before reassessment.
- Annual prison visitation:** An individual initially assessed as Moderate risk was reassessed over a year later as Low risk. Decreased risk was, in part, affected by a change in response from “Just entered prison” to “Not returning from prison.”
- Most recent source of income:** An individual initially assessed as High Diverse risk was reassessed five months later as High Violent risk due, in part, to their response changing from “No income” to “Offender/Household Employment.” The individual has no record of employment in OMNI, and they were residing in transitional housing at the time of both assessments.

Responses by race and ethnicity

Items with significantly different probability to affect decreased risk by race and ethnicity are shown in Table 4. An example of decreased risk related to “Most recent source of income” was described above. Two examples of increased risk related to “Average monthly income,” and “Type of Drug Problem” are described below.

Table 4. Most frequent items affecting a decrease in reassessed risk (e.g., reassessed risk is lower than initial contact risk) while under field supervision with significant association to race and ethnicity (n = 3,893).

Item with New Response	Frequency	Percent	Average Weight
Most recent primary source of income***	1,309	33.6%	-18
Average monthly income*	1,268	32.6%	-10
Type of drug problem***	1,221	31.4%	-45
Current pro-social support in neighborhood**	982	25.2%	-8
Primary residence**	843	21.7%	-21

*** $p < .001$, ** $p < .01$, * $p < .05$ significant association between race and probability of change in response. *NOTE:* average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Average monthly income:** An individual was assessed as High Drug risk while incarcerated and reassessed as Low risk after releasing to field supervision. Their response to “Average monthly income” changed from “No income” to “\$2,000-\$3,999.”
- Type of Drug Problem:** An individual initially assessed as High Property risk was reassessed six months later as High Drug risk. Responses identifying methamphetamine and heroin “Problem in Last 6 months” were from their reassessment.

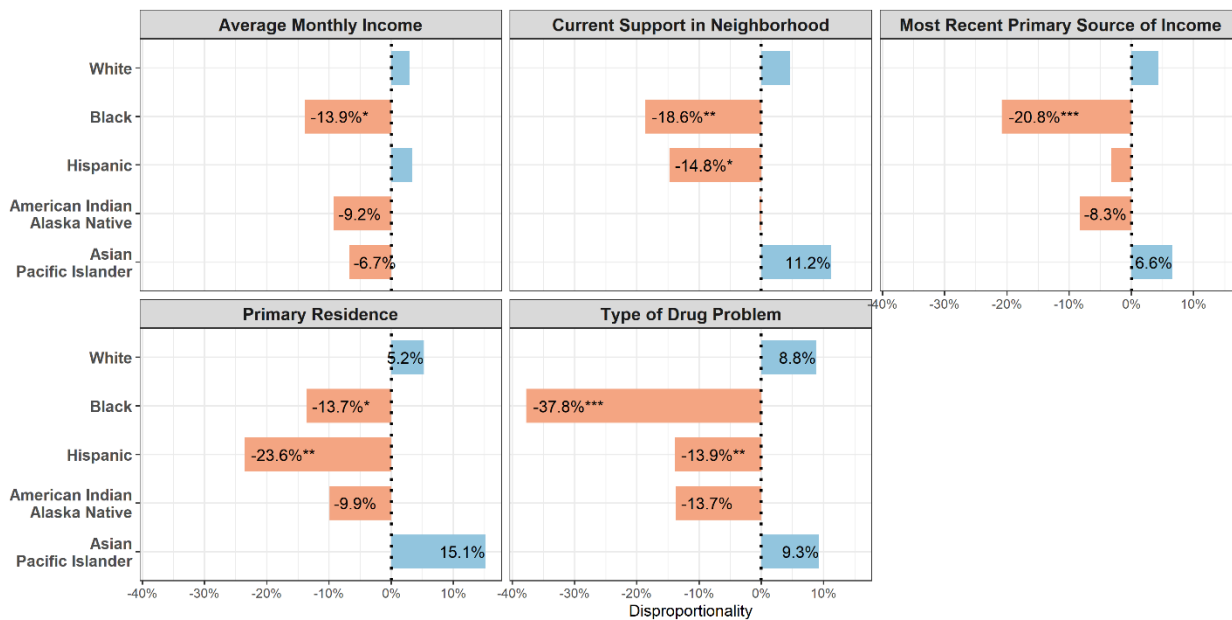
Measures of disparity associated with items affecting race differences (Table 4) are shown in Figure 9. Black individuals, for example, are significantly under-represented among those with decreased risk affected by changes to “Average monthly income.”

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Figure 9. Significant differences in probability of response by race and ethnicity in items most frequently decreasing reassessed risk while under field supervision.



*** $p < .001$, ** $p < .01$, * $p < .05$ significant association between race and probability of change in response. NOTE: Disproportionality measures group over/under representation relative to group share of population with change in reassessed risk.

Field Assessment Item Summary

An analysis of WAONE responses changing reassessed risk in the field population identified multiple areas for further research. First is the degree to which risk is informed by incongruities between items and agency operations. For example, visitation frequency may be informative of a person’s risk to reoffend but only to the degree to which visitation is a possibility. It is unclear how an item related to prison visitations should inform risk in operational contexts with little to no expectation of visitation. Second is the degree to which items based on staff discretion may capture implicit bias. For example, it is unclear how changes in lifetime motivation for criminal behavior are determined in a matter of months for any respondents. Of greater concern, though, is that when this determination is made, it is made more often for people of color. Lastly, given that items represent socioeconomic disparities as individual risk, future iterations of the WAONE may apply methods for balancing accuracy and fairness.³

³ Berk, R., Heidari, H., Jabbari, S., Kearns, M., & Roth, A. (2021). Fairness in Criminal Justice Risk Assessments: The State of the Art. *Sociological Methods & Research*, 50(1), 3–44.

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Recidivism

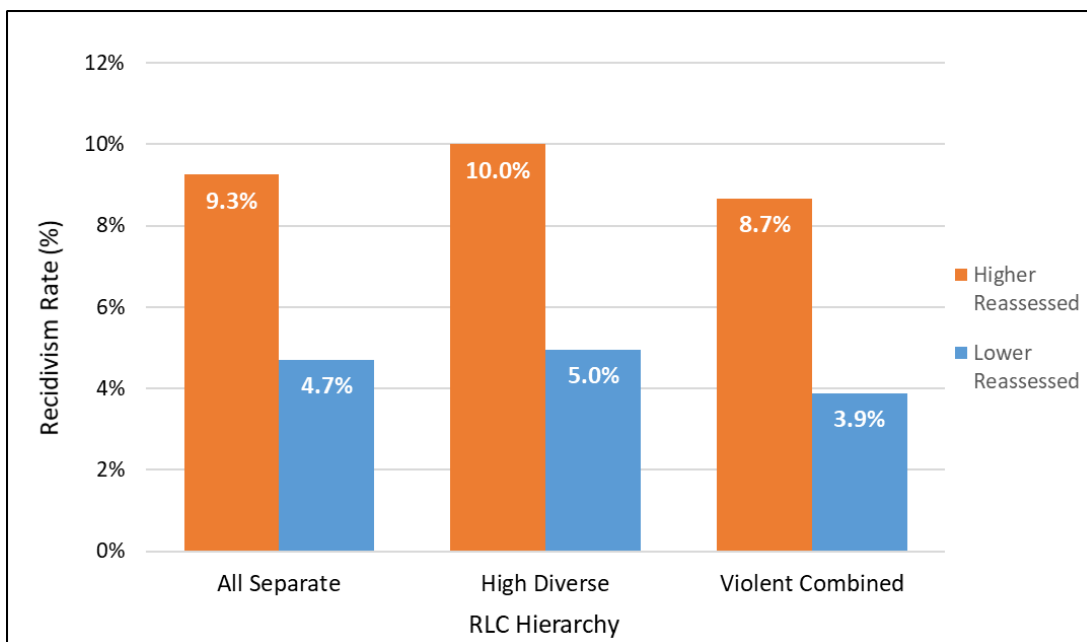
The WAONE was designed to assess the likelihood of felony recidivating events. Using WADOC’s standard definition of recidivism, there is some evidence to support that the reassessed risk level may be better at predicting first-year felony recidivism than the initial contact RLC.

Figure 10 shows that when someone is reassessed to a higher risk level, the tool is accurately predicting an increased risk of recidivism. This finding may also be evidence that people who are reassessed to an RLC that is lower than their initial contact RLC are less likely to have a felony recidivating event. Looking at the All Separate hierarchy, 9.3% of individuals who were reassessed to a higher risk level recidivated. Individuals who had a lower risk level when reassessed only saw 4.7% of people have a felony recidivating event during their first-year post release.

Other non-standard definitions of recidivism were also calculated that included violations, tolling, and offense dates. All measures consistently produced similar results, with those who were reassessed to higher risk levels recidivating at higher rates than those who were reassessed to lower risk levels. These results may not be conclusive since individuals whose reassessed risk was lower than initial contact risk may have received more resources, resulting in fewer recidivating events, among other factors.

Figure 10 combines the 2018 and 2019 release cohorts and looks at how many individuals recidivated. A follow-up analysis that included the 2020 release cohort produced similar results. These recidivism rates are lower than other recidivism measures because they only count individuals whose recidivating event occurred while they also had RLC drift.

Figure 10. First-year recidivism rates by RLC hierarchy and drift type.



Prison Population

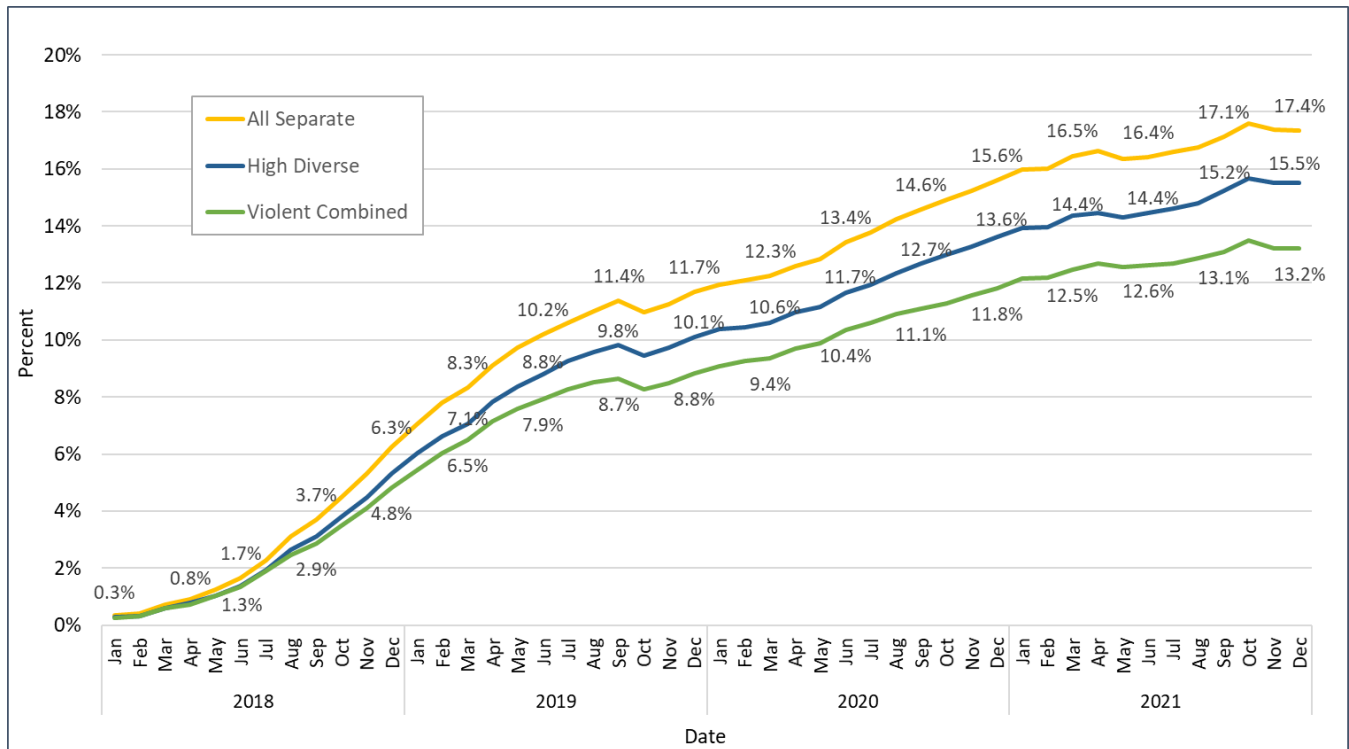
RLC Drift Growth

RLC drift among individuals in prison has grown at a higher rate than for individuals in the field population. Like the field population, the increase has recently begun to show signs of slowing. All three RLC hierarchies follow nearly identical trends over time. The All Separate hierarchy shows that 17.4% of the current prison population (as of 12/31/2021) has a difference between their initial contact and reassessed risk levels (Figure 11).

The higher reassessed RLC drift type for the prison population has grown at a higher rate than the higher reassessed drift type in the field population (Figure 12). This difference is due, in part, to prison-specific assessment items and an increased likelihood of the detection of misconduct while in a facility, among other factors. The lower reassessed drift type in the prison and field populations follow similar trends.

Analyses of the High Diverse and Violent Combined hierarchies were also conducted. The trends for these hierarchies were nearly identical to the All Separate hierarchy.

Figure 11. Percent of the prison population with RLC drift by RLC hierarchy.

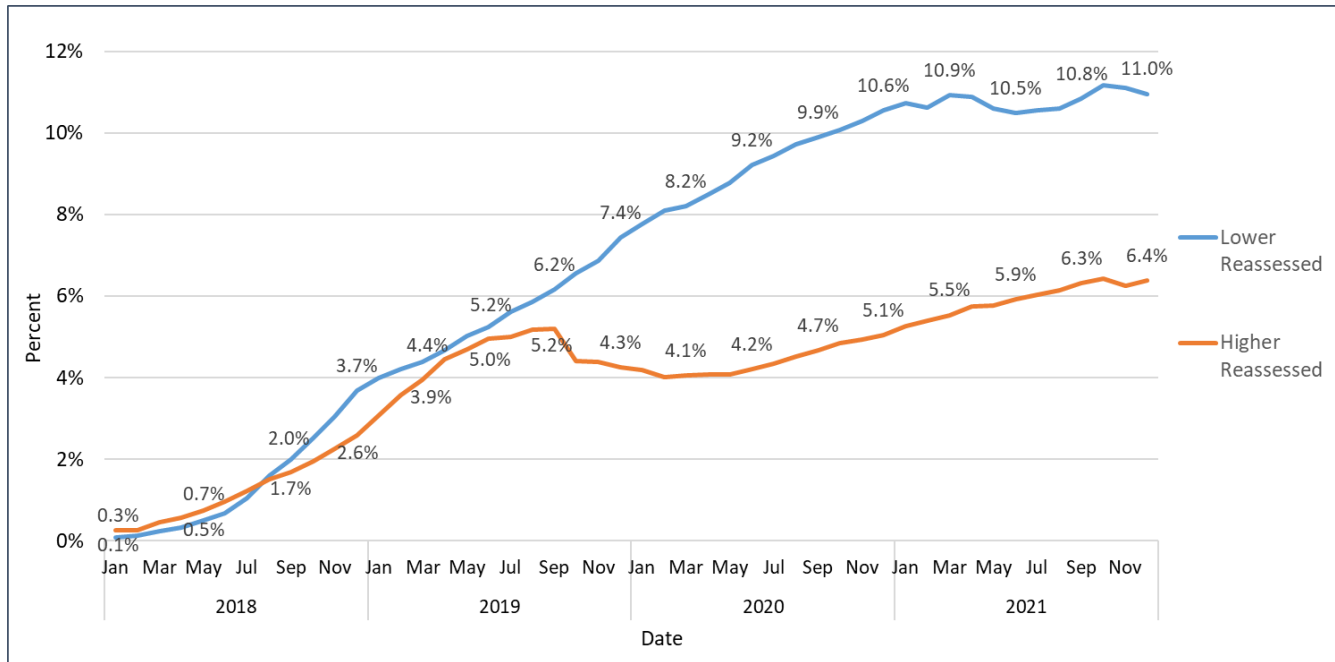


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Figure 12. Percent of the prison population with RLC drift by drift type (All Separate RLC Hierarchy).



Length of RLC Drift

In the prison population, people with longer periods of incarceration experience RLC drift for longer periods of time. On average, 60% of the prison population with drift will have a drift length between 0-24 months (Figure 14), which is slightly lower than the field population (65-70%). The highest frequency drift length is overwhelmingly seen at the six-month mark. By policy, this is the required interval between reassessments for the prison population.

The start dates for drift in the current prison population (as of 12/31/2021) vary widely. Most of these individuals have drift beginning during calendar years 2020 and 2021 (Figure 13). This is likely due to a combination of the average length of drift while in the prison population (Figure 15) as well as the average length of stay in WADOC confinement (33.4 months).⁴

⁴ Agency Fact Card R. 12/2021. Washington State Department of Corrections. (2022, February). Retrieved March 2022, from <https://www.doc.wa.gov/docs/publications/reports/100-RE004.pdf>

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Figure 13. Distribution of the current prison population with RLC drift by drift start date (as of 12/31/2021).

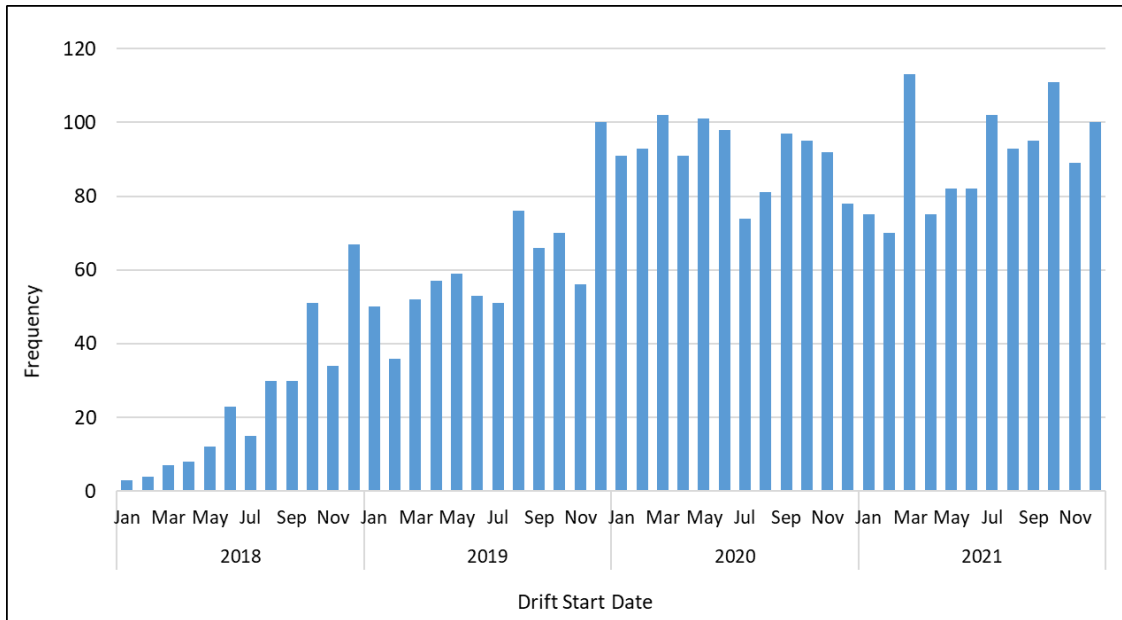
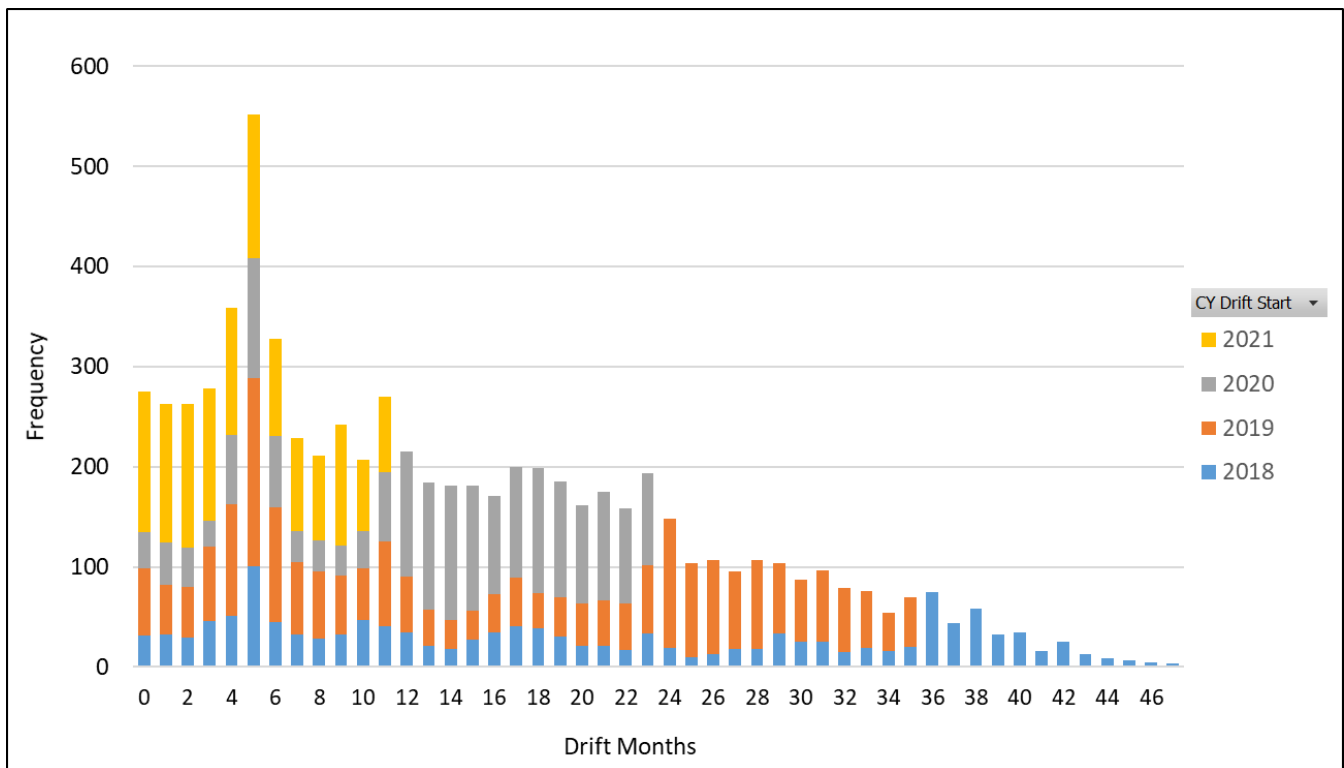


Figure 14. Distribution of the prison population with RLC drift by cumulative drift length (months).

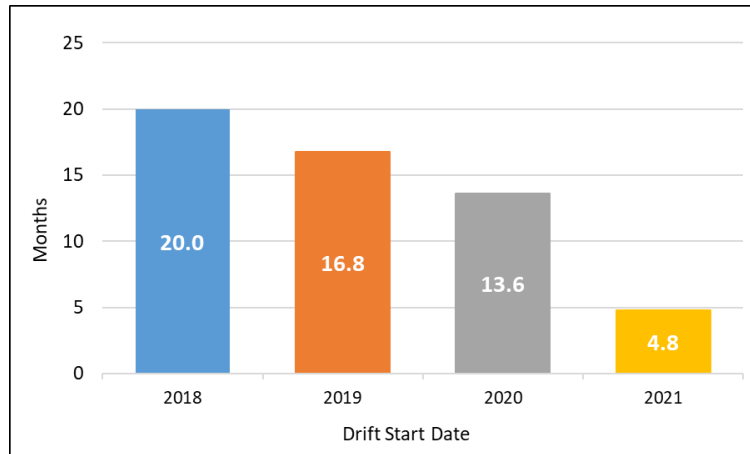


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Figure 15. Average drift length by drift start year.

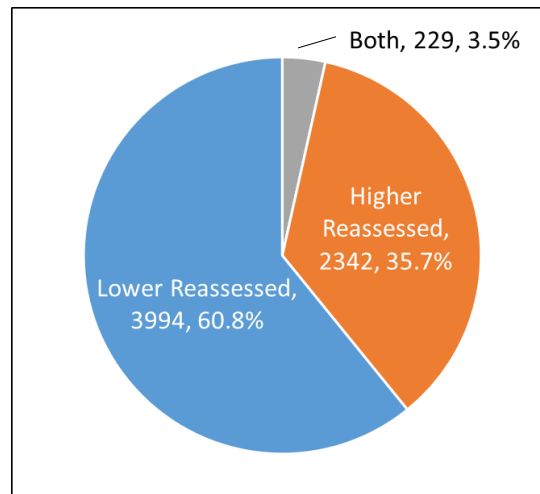


Characteristics of the Affected Population

Less than two-thirds of the total RLC drift population is reassessed to a lower risk level than their initial contact risk level (Figure 16). Similar to the field population, this difference may indicate that people are less likely to display behaviors that exhibit risk over time. However, the prison population with drift is reassessed to a higher risk level (35.7%) at a greater rate than the field population (25.2%). There are many factors that could be contributing to an increased likelihood of reassessing to a higher risk level in prison, such as a greater potential for the detection of misconduct in a prison setting compared to the detection of misconduct in the community.

The racial composition of the prison population with drift is nearly identical to that of the prison population during the same timeframe. Looking at figure 17, the prison population displays significant variance by drift type across racial groups. These findings indicate that a larger share of the Black and Hispanic populations have been reassessed to a higher risk level than other racial groups. In addition, individuals who are White are more likely to be reassessed to a lower risk level than other racial groups.

Figure 16. Distribution of the prison population with RLC drift by drift type.

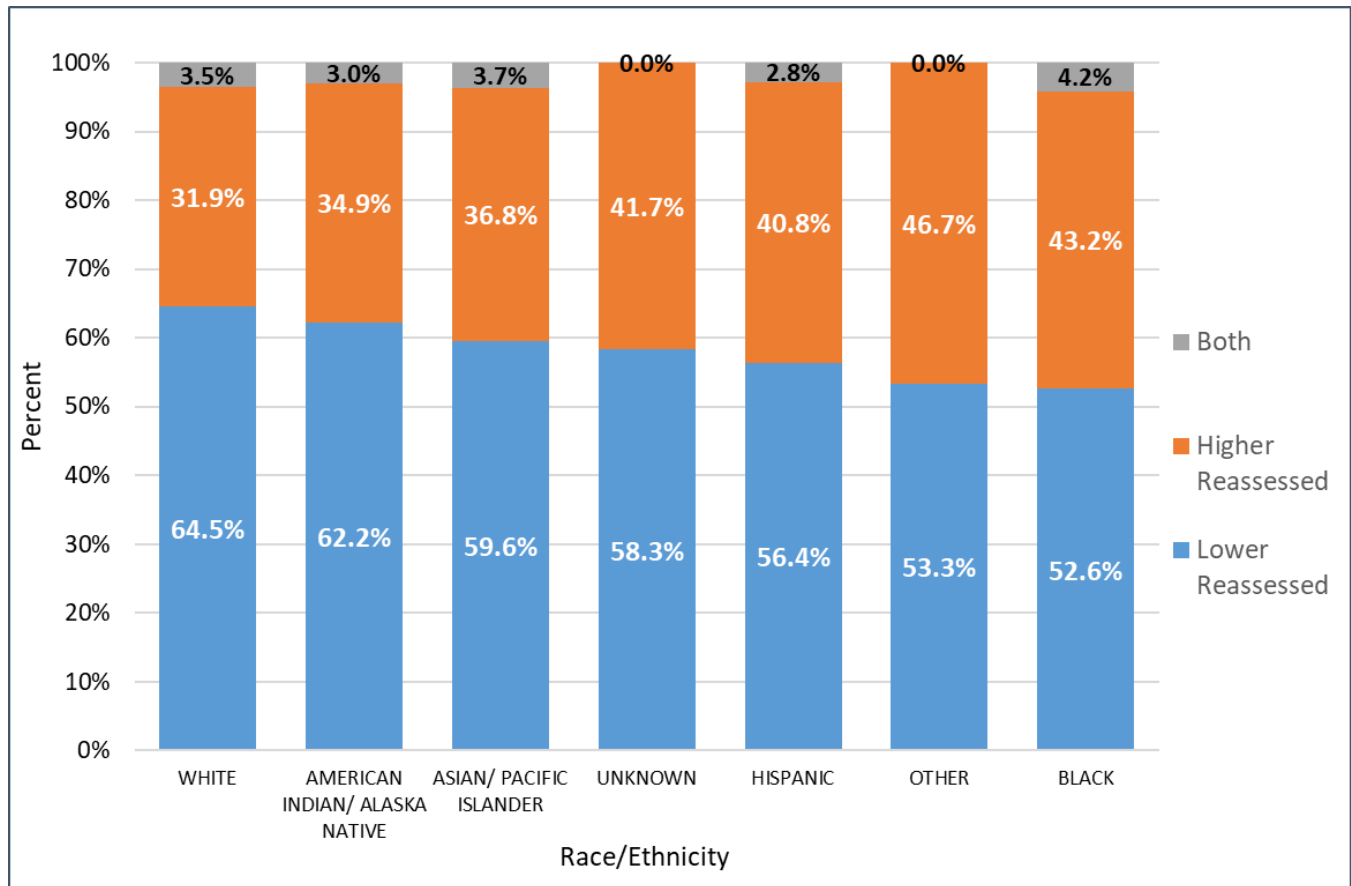


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Figure 17. Distribution of drift type for the prison population with RLC drift by race/ethnicity.



Assessment Items

Prison – Higher Reassessed

Items most frequently associated with increased risk while in the prison population are shown in Table 5. Three scenarios based on “Annual prison visitation,” “Number of prison infractions,” and “Number of serious violent infractions” are described below.

Table 5. Most frequent items affecting an increase in reassessed risk (e.g., reassessed risk is higher than initial contact risk) while in prison (n = 2,573).

Item with New Response	Frequency	Percent	Average Weight
Annual prison visitations	947	36.8%	+8
Number of prison infractions	764	29.7%	+10
Number of serious/violent prison infractions	639	24.8%	+11

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All threatening, aggressive, or violent behaviors	638	24.8%	+23
Lifetime motivation for all criminal behavior	507	19.7%	+21

NOTE: average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Annual prison visitation:** An individual initially assessed as High Violent risk was reassessed six months later as High Diverse risk. Increased risk was, in part, affected by a change in response from “10 or More” to “None.” The anniversary of their admission date had passed between assessments.
- Number of prison infractions:** An individual initially assessed as High Property risk was reassessed four months later as High Diverse risk due, in part, to their response changing from “None” to “One to Two.” Between assessments, they had been found guilty of WAC violation 709, being out of bounds in another person’s cell.
- Number of serious/violent prison infractions:** The assessed risk of the individual described above was also affected by their change in response to “Number of serious/violent prison infractions”, again, related to the WAC violation 709 that occurred between assessments.

Responses by race and ethnicity

Items with significantly different probability to affect increased risk by race and ethnicity are shown in Table 6. An example of increased risk related to “Type of Drug Problem,” “Lifetime impacts of alcohol/drug use,” and “Security threat group” are described below.

Table 6. Most frequent items affecting an increase in reassessed risk (e.g., reassessed risk is higher than initial contact risk) while in prison with significant association to race and ethnicity (n = 2,573).

Item with New Response	Frequency	Percent	Average Weight
Type of drug problem*	475	18.5%	+34
Lifetime impacts of alcohol/drug use**	407	15.8%	+7
Security threat group***	328	12.7%	+42
Methods of supporting alcohol and/or drug use*	272	10.6%	+20
Alcohol or drug use problem**	264	10.2%	+27

*** $p < .001$, ** $p < .01$, * $p < .05$ significant association between race and probability of change in response. NOTE: average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Type of Drug Problem:** An individual assessed as High Violent risk was reassessed one month later as High Diverse risk. Their responses to “Type of Drug Problem” were changed from “Never has a drug problem” to “Methamphetamine”, “Heroin” and “Cocaine/Crack Problem” in the past and “in the last six months.” This

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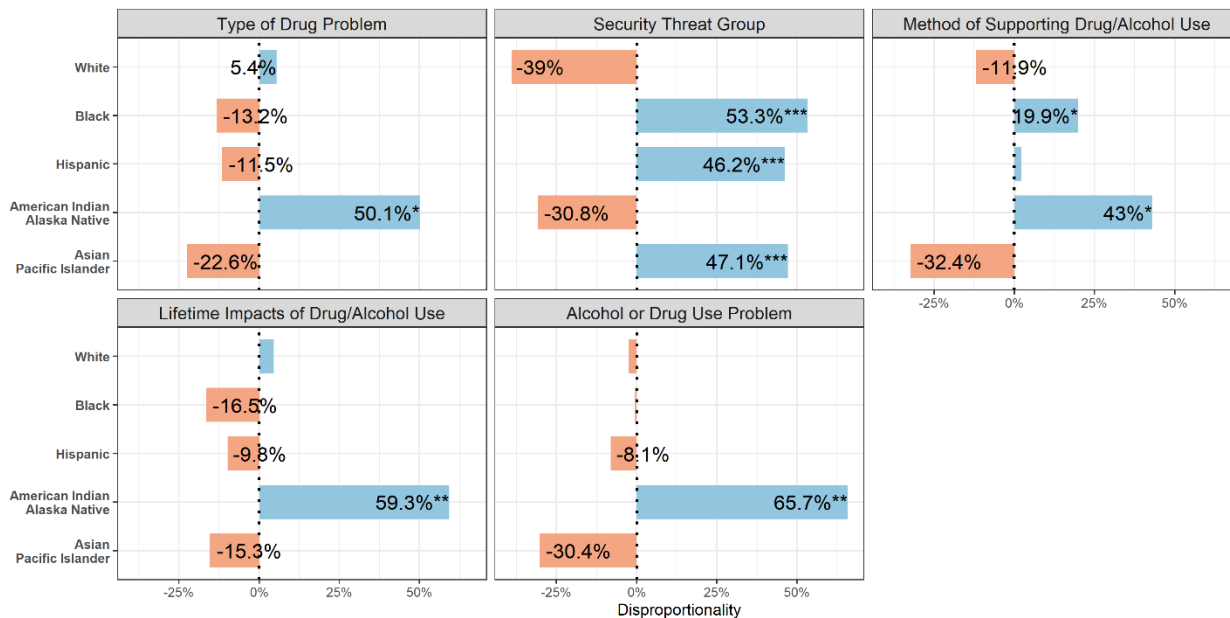


individual’s admission to prison was more than three years before either assessment; there were no OMNI records indicating either a positive UA test or drug-related WAC violation.

- Lifetime impacts of alcohol/drug use:** An individual assessed as High Violent risk was reassessed four months later as High Diverse risk due, in part, to their response changing from “No Alcohol or Drug Problem” to Drug or Alcohol use affecting “Past Employment/Education Problems,” “Past Interference Keeping Pro-Social Friends,” “Anti-social behaviors/Law violations” and “Prior Conviction.”
- Security threat group:** An individual initially assessed as Moderate risk was reassessed six months later as High Violent risk due, in part, from their response changing from “No/Unknown” to “Yes.”

Measures of disparity associated with items affecting race differences (Table 6) are shown in Figure 18. Black, Hispanic, and Asian and Pacific Islander individuals, for example, are significantly over-represented among those with increased risk affected by changes to “Security threat group.”

Figure 18. Significant differences in probability of response by race and ethnicity in items most frequently increasing reassessed risk while in prison.



*** $p < .001$, ** $p < .01$, * $p < .05$ significant association between race and probability of change in response. NOTE: Disproportionality measures group over/under representation relative to group share of population with change in reassessed risk.

Prison – Lower Reassessed

Items most frequently associated with decreased risk while in the prison population are shown in Table 7. Three scenarios based on “Time since last conviction,” “Age,” and “Annual prison visitations” are described below.

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Table 7. Most frequent items affecting a decrease in reassessed risk (e.g., reassessed risk is lower than initial contact risk) while in prison (n = 4,122).

Item with New Response	Frequency	Percent	Average Weight
Time since last conviction	1,594	38.7%	-56
Age	1,027	24.9%	-104
Annual prison visitations	820	19.9%	-8
Completed prison offender change program	577	14.0%	-16
Participated in prisons vocational programming	572	13.9%	-15

NOTE: average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Time since last conviction:** An individual initially assessed as High Diverse risk was reassessed four months later as High Property risk. Time since their last conviction was identified as “0 to six months” in the first assessment (3.2 months in actuality) and “More than 6 to 18 months” in the second assessment (6.9 months in actuality).
- Age:** An individual initially assessed as High Diverse risk was reassessed six months later as High Property risk. Their age was identified as “20 to 29” in the first assessment (29 years old, in actuality) and “30 to 39” in the second (30 years old, in actuality).
- Annual prison visitations:** An individual initially assessed as High Property risk was reassessed over a year later as High Drug risk. Decreased risk was, in part, affected by a change in response from “None” to “Ten or More” annual prison visitations.

Responses by race and ethnicity

Items with significantly different probability to affect decreased risk by race and ethnicity are shown in Table 8. An example of change affected by “Time since last conviction” described above. Scenarios based on “Completed prison offender change programming,” and “Respect for the property of others” are described below.

Table 8. Most frequent items affecting a decrease in reassessed risk (e.g., reassessed risk is lower than initial contact risk) while under field supervision (n = 4,122).

Item with New Response	Frequency	Percent	Average Weight
Time since last conviction**	1,594	38.7%	-56
Completed prison offender change programming*	577	14.0%	-16
Respect for property of others*	471	11.4%	-19

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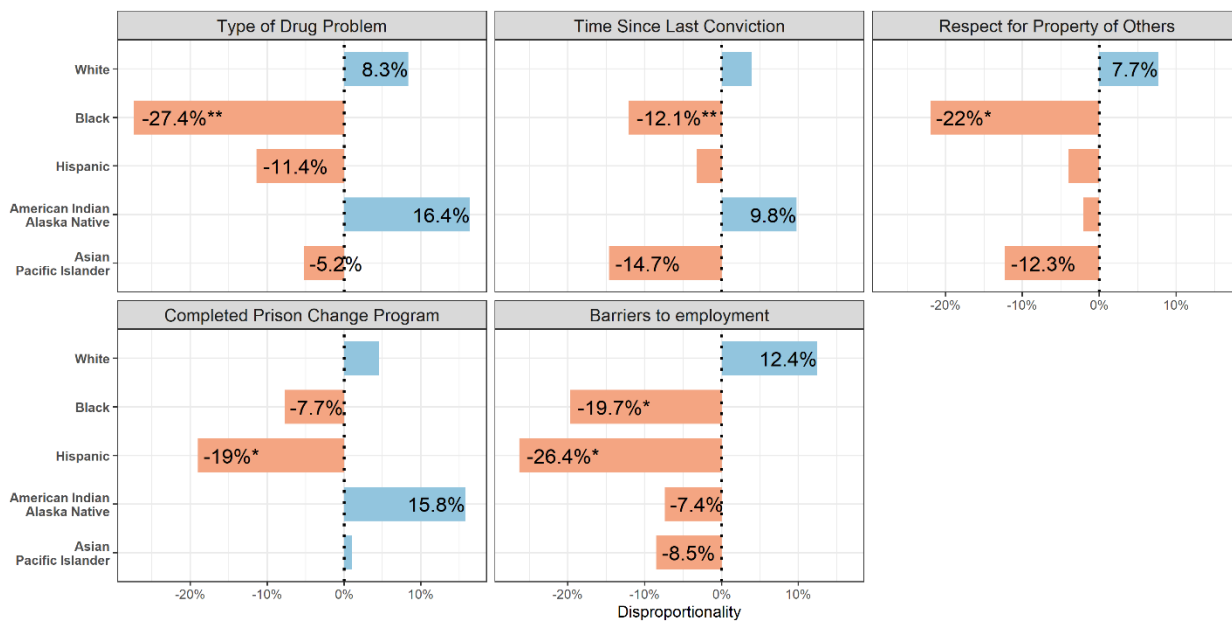
Type of drug problem**	410	9.9%	-41
Barriers to employment*	292	7.1%	-5

** $p < .01$, * $p < .05$ significant association between race and probability of change in response. *NOTE:* average weight is average magnitude of change affected by new response across WAONE’s various risk scales.

- Completed prison offender change programming:** An individual initially assessed as High Violent risk was reassessed seven months later as Moderate risk due, in part, to their response to this item changing from “Never Participated” to “Current Incarceration – Completed.” In the time between assessments, they received a DOCART completion certificate.
- Respect for property of others:** An individual initially assessed as High Diverse risk was reassessed seven months later as High Drug risk due, in part, to a change from “Conditional Respect for Personal Property” to “Respects Property of Others.”

Measures of disparity associated with items affecting race differences (Table 8) are shown in Figure 19. Hispanic individuals, for example, are significantly under-represented among those with decreased risk affected by changes to “Completed change program in prison.”

Figure 19. Significant differences in probability of response by race and ethnicity in items most frequently decreasing reassessed risk while in prison.



** $p < .01$, * $p < .05$ significant association between race and probability of change in response. *NOTE:* Disproportionality measures group over/under representation relative to group share of population with change in reassessed risk.

Prison Assessment Item Summary

An analysis of WAONE responses affecting risk in the prison population identified multiple areas for further research. First, is the degree to which items based on staff discretion may capture implicit bias. For example, to the degree that the WAONE is a record of incarcerated individuals’ lifetime history of substance use, accuracy

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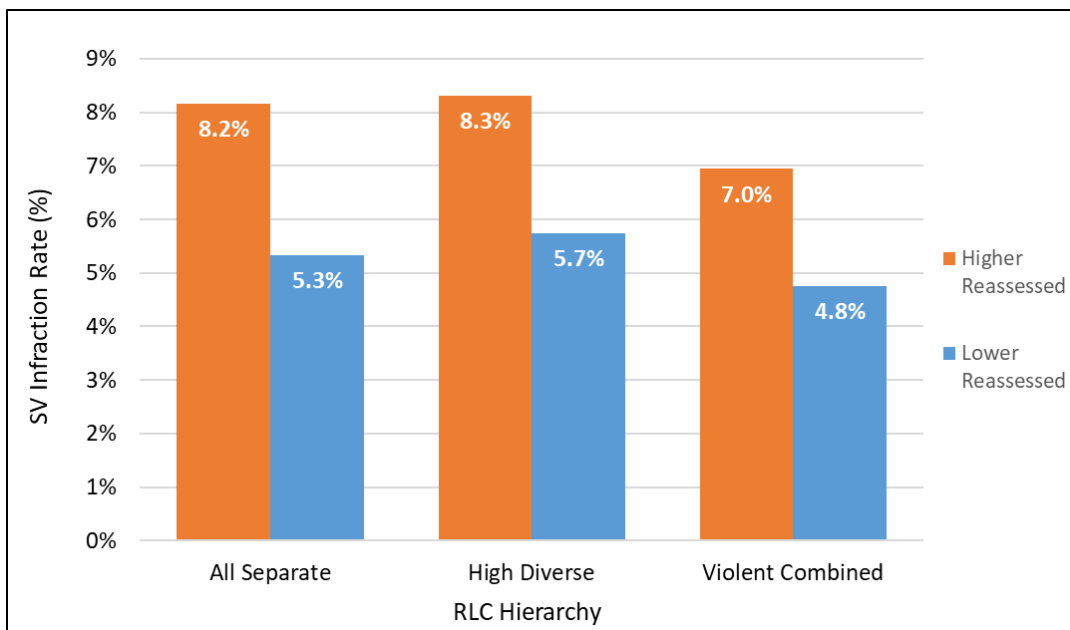
and changes to the record have disparate impacts on assessed risk. Second, given that items represent socioeconomic disparities as individual risk (e.g., group differences in prevalence of gang affiliation), future iterations of the WAONE may apply methods for balancing accuracy and fairness.⁵

Serious Violent Infractions

Even though the WAONE was not designed to assess the likelihood of prison misconduct we can use it as a proxy for the prison population to assess serious violent (SV) behavior. The resulting rates are similar to the predictiveness of the recidivism measure, indicating that the reassessed risk level may predict the likelihood of a serious violent infraction more accurately than the initial contact risk level. Many other factors contribute to an individual’s likelihood of serious violent infraction so results may not be conclusive.

Figure 20 shows that when someone has a higher reassessed risk level, the tool is more accurately predicting serious violent infractions than their initial contact risk level. Looking at the All Separate hierarchy, 8.2% of individuals with a reassessed risk level that was higher than their initial contact RLC had a serious violent infraction compared to 5.3% of people with a lower reassessed risk level.

Figure 20. Rates of serious violent infractions by RLC hierarchy and drift type.



⁵ Berk, et. al., 2021

Recommendations

WADOC is already working to update the WAONE. Below is a non-comprehensive list of recommendations that are already in progress or under consideration:

- Applying a fairness-based approach towards item weighting.
- Establishing an override process and appeals process for individuals under WADOC jurisdiction.
- Increasing the number of auto-populated fields in the assessment to reduce the potential for error.
- More extensive verification of self-reported responses for individuals under WADOC jurisdiction.
- Investing in staff training and refining current policies and procedures.

Summary

Currently, most individuals in the prison and field populations have a reassessed RLC that is the same as their initial contact RLC; however, 12.8% of the assessed field population and 17.4% of the assessed prison population have reassessed risk levels that differ from their initial contact risk level, a condition known as drift. Most of the drift population is reassessed to a lower risk level while a smaller number are reassessed to higher risk levels.

Given the operational uses of risk scores, differences between reassessed risk and initial contact risk may have department-wide impacts. This includes:

- 1) Resources may be improperly allocated.
- 2) Potential risk to WADOC for maintaining two RLCs should be considered when determining whether to proceed with the norming period or implement the WAONE as a dynamic risk assessment as intended.

Besides current operational uses of risk scores, WADOC can anticipate that drift will affect operational disparities subsequent to ending the norming period. The Black and Hispanic populations would see increases in risk level disproportionate to other racial groups. It is also important to keep in mind that for all racial groups in the drift population, people are more frequently reassessed as lower risk than they are higher risk. For the field population there would be little to no racial disparity created as a result of ending the norming period.

Assessment items acting as a proxy for race will represent societal inequities as individual risk. Findings on race differences in items affecting change in reassessed risk suggest that WADOC consider a fairness-based approach to item weighting. Other considerations may include establishing override procedures to address newly discovered risk or protective factors.

WADOC and its partners should continue monitoring the WAONE to assess performance. There are still outstanding questions that more comprehensive reviews might address. More research is needed to further assess offender-level differences related to how the tool makes classification decisions for individuals. Institutional differences should also be revisited to determine how areas such as training, assessment frequency and the implementation process may affect outcomes.

Where changes in the justice-involved population can be anticipated, WADOC should work to gain the ability to adjust the WAONE. Supreme court decisions (e.g., *State v Blake*) and legislative actions can require updates to the risk assessment. Being able to make those changes internally, in collaboration with stakeholders, would allow for a more effective response to emergent situations. Allowing WADOC and its partners to refine the tool as new data, findings and evidence-based research is available would improve its accuracy and enable staff to make better decisions in support of WADOC's mission.

Methodology

Data Source(s): OMNI Population, Sentencing, and Assessment Data as of December 31, 2021

Methods for Report

This report only includes WAONE assessments that have one of the six risk levels as both their reassessed and initial contact RLC. All other assessments are excluded.

There are three RLC hierarchies that rank risk level differently in order to identify whether the reassessed RLC was higher or lower than the initial contact RLC. These are listed below in rank order from highest to lowest, respectively.

- All Separate: HVPD, HV, HP, HD, MOD, LOW
- High Diverse: HVPD, (HV/HP/HD), MOD, LOW
- Violent Combined: (HVPD/HV), (HP/HD), MOD, LOW

Percentages are provided in this report but may not always be a useful measure for comparison due to small population sizes.

Methods for RLC Drift Growth Findings (figures 1-2 and 11-12):

Figures 1 and 2 are the field population and figures 11 and 12 are the prison population.

Individuals are counted once each month they are in the field/prison population. They are counted as having RLC drift if their initial contact RLC does not match their reassessed RLC, for that month. Figure 1 and figure 11 percentages were calculated by dividing the sum of individuals with RLC drift for each RLC hierarchy during the end-of-month snapshot by the total number of individuals in the end-of-month snapshot. Figure 2 and figure 12 percentages were calculated by dividing the sum of individuals and RLC drift type (i.e., higher reassessed and lower reassessed) during the end-of-month snapshot by the total number of individuals in the end-of-month snapshot. Only the All Separate hierarchy is provided in this section.

Methods for Length of RLC Drift Findings (figures 3-5 and 13-15):

Figures 3, 4, and 5 are the field population and figures 13, 14, and 15 are the prison population.

For the RLC drift start/end dates and length (months) calculations, if any of the following are true, an end date will be created:

- They are not consecutively in the field/prison population snapshots (they leave the field/prison population). If they are entering the field/prison population with RLC drift, a start date will be created. This does not include changes between the prison and field populations unless they are not in consecutive snapshots for either.
- Their initial contact/reassessed RLCs change from being different to being the same (e.g., they have a new assessment and their reassessed RLC equals their initial contact RLC). If their initial contact/reassessed RLCs change from being the same to being different a start date will be created.

Figures 3 and 13 only include individuals in the current field or prison populations and people are only counted once by the start date (month/year) of their RLC drift.

Figures 4, 5, 14, and 15 can count individuals more than once if they have multiple periods of drift while in the field or prison population. This includes the full drift population.

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Methods for Characteristics of the Affected Population Findings (figures 6-7 and 16-17):

Figures 6 and 7 are the field population and figures 16 and 17 are the prison population.

This section uses the All Separate RLC hierarchy and each person is only counted once but can be included in both the field and prison drift populations. Only the drift population is included.

For figures 7 and 17, percentages were calculated by taking the number of individuals in a racial group by their drift type and dividing by the total number of individuals in that racial group (e.g., White population with a higher reassessed RLC divided by the White population).

Note: 551 of the assessments in this section had a previous assessment that was submitted less than one month prior to the drift assessment. There were 13,836 person-level drift assessments total. That means fewer than 4% (3.98%) of drift assessments may have been created during a timeframe that has a high probability of being inaccurate data.

Methods for Assessment Items Findings (figures 8-9, 18-19 and tables 1-8):

This section uses the All Separate RLC hierarchy to measure change in an individual's drift assessment and their assessment prior to drift.

The average weight is based on the average magnitude of change affected by a new response across the WAONE's various risk scales. Only male risk weighting was used for this report. Assessment items are only included if the item score's trajectory changed in the same direction as the reassessed risk level (e.g., higher reassessed risk includes items that had a positive change in score).

Methods for Recidivism Findings (figure 10):

RLC drift Start and End Date Calculations- if any of the following are true, a drift end date will be created:

- They are not consecutively in the field population snapshots (they leave the field population). If they are entering the field population (with RLC drift) a start date will be created.
- Their reassessed risk level and initial contact risk level change from being different, to being the same. If their reassessed risk level and initial contact risk level change from being the same to being different, a start date will be created.

Recidivism is measured as a recidivating event occurring during the first year after an inmate type (non-violator) release. Only includes individuals whose RLC drift occurred during the first year. Excludes individuals who released but did not have RLC drift during the first year. Only release cohorts 2018 and 2019 are included. The data from these two release cohorts was combined in the recidivism rates. The recidivating event is only counted if it occurred while the individual had RLC drift. Percentages were calculated by dividing the sum of individuals who recidivated by the total number of individuals with drift, for each RLC hierarchy and drift type. Individuals are counted as recidivating if re-incarcerated with an inmate type (non-violator) admission with WADOC. The recidivating event is based on their admission date.

Note: This measure of recidivism will likely be lower than other similar measures for the overall population since it is only counted as a recidivating event if it occurred while they had RLC drift.

Methods for Serious Violent Infraction Findings (figure 20):

RLC drift Start and End Date Calculations- if any of the following are true, a drift end date will be created:

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- They are not consecutively in the prison population snapshots (they leave the prison population). If they are entering the prison population (with RLC drift) a start date will be created.
- Their reassessed risk level and initial contact risk level change from being different, to being the same. If their reassessed risk level and initial contact risk level change from being the same to being different, a start date will be created.

Only guilty and reduced findings were included. If it was reduced, it must have been reduced to one of the serious violent (SV) infractions.

Serious violent infractions include: 501- Homicide; 502- Aggravated Assault on Inmate; 505- Fighting; 602- Possessing a Weapon; 604- Aggravated Assault on Staff; 611- Sexual Assault on Staff; 633- Assault on Inmate; 635- Sexual Assault on Inmate; 704- Assault.

Excludes individuals who did not have RLC drift during the timeframe. The SV infraction is only counted if it occurred while the individual had RLC drift. Percentages were calculated by dividing the sum of individuals with an SV infraction by the total number of individuals with drift, for each RLC hierarchy and drift type.

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