

Reentry and Neighborhood Disadvantage

January 1, 2017 – June 30, 2020



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Key Findings

- Racial disparities in socioeconomic disadvantage evident in Washington’s residential patterns were reflected but amplified in prison reentry.
- The concentration of recently released individuals in the state’s most disadvantaged areas exceeded the general population overall and within race group.

Background

Nearly 8,000 incarcerated individuals, on average, return to the community each year.¹ For many, the challenges of reentry are amplified in areas with limited opportunities for stable work, housing, healthcare, and other resources. Neighborhood disadvantage is linked to higher rates of recidivism and risks to public safety and may disproportionately affect recidivism rates in the department’s racial and ethnic minority populations (McNeeley, 2018).

The Washington State Department of Corrections operates with the mission “to improve public safety by positively changing lives.” Specific Department goals with relevance to reentry include: *Decrease the first-year rate of return to institution from 12% to 10% by 2023, Increase the rate of supervised individuals reporting from 64% to 70% by 2023, and, Establish continuity of care plans for 40% of releasing incarcerated individuals with a substance use disorder, mental health, and/or chronic care condition by 2023.* Understanding the community contexts of reentry supports WADOC’s collaborative work with community partners toward the goal of improving lives and successful community transition.

Our goal with this report was to describe the socioeconomic contexts of inmate releases and identify areas across the state characterized by the nexus of community reentry, racial disparity, and neighborhood disadvantage. This routine report was produced to support local operational needs; results were not intended as generalizable or to expand the knowledge base of a scientific discipline or scholarly field of study.

Methods

Data Source(s). OMNI as of August 25, 2020; Office of Financial Management Small Area Demographic Estimates Release 20191224_R01, American Community Survey 2018 5-Year Estimates; Washington Master Addressing Services (WAMAS)

¹ Washington State Department of Corrections, *Offender Management Network Information* (OMNI), 2020. Based on distinct individuals releasing from inmate status between 2010 and 2019.

Participants. A preliminary dataset included all individuals released from inmate status between January 1, 2017 and June 30, 2020 after a term of confinement of at least one year. Excluding decedents, individuals releasing to another state, federal custody, as homeless, or to an otherwise unverifiable location produced a dataset with $n = 12,097$ releases, or 91.2% of the initial data.

Analytic Approach. Neighborhood socioeconomic context was defined with a composite index based on the following census tract level variables: a) percent of adults 25 and older with less than high school education, b) percent 16 and over unemployed, c) percent 18 to 65 in poverty, d) percent of households receiving public assistance, e) percent of children in a single-parent household, and f) percent of households with income less than \$30,000. With the potential for outlying percentages in small area estimates, data was transformed by robust principal components analysis to identify a component retaining 64% of variation of the original data.

The socioeconomic contexts of reentry were described by race, and in relation to the general population. Given racial disparities 1) within the general population, 2) between the reentry and general population, and 3) within the reentry population itself, a second set of analyses identified places in the state with an above average association between socioeconomic disadvantage and reentry location by race. Tracts were identified by geographically weighted regression modeling counts of released individuals by race offset by estimated general population, also by race, as dependent on neighborhood socioeconomic disadvantage.

Results

Population demographic characteristics are shown in Table 1. White non-Hispanic individuals were the racial majority in both the reentry and general populations. Black non-Hispanic and American Indian and Alaska Native individuals were disproportionately over-represented in the reentry relative to general population.

Table 1. Population demographics.

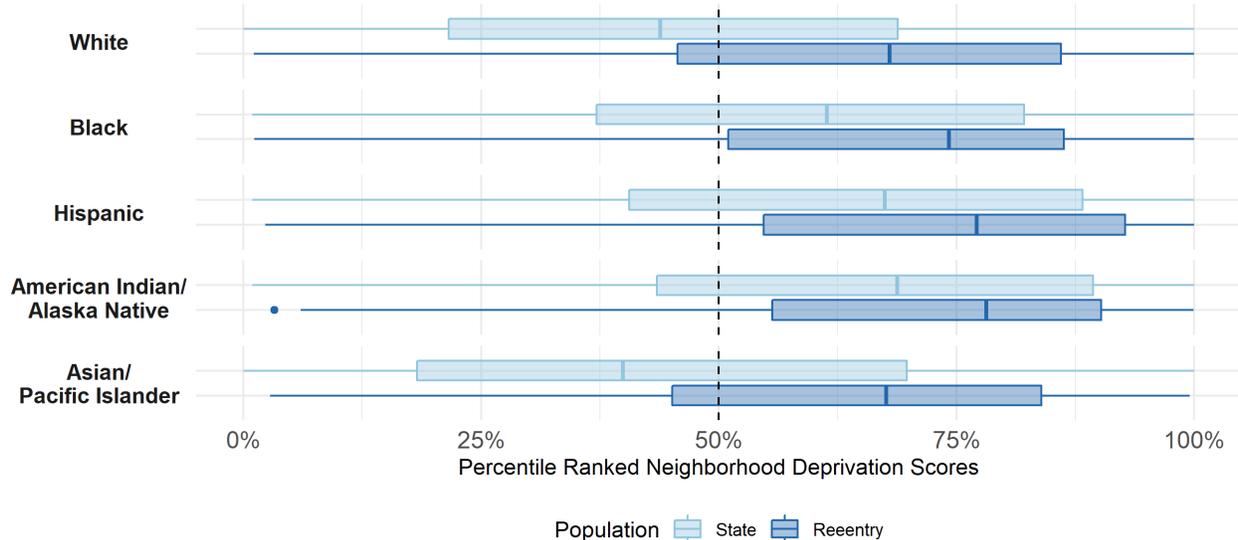
	DOC Releases	State Population, Ages 20-64 (3-year average)
Count	12,097	4,257,914
Race/Ethnicity		
White non-Hispanic	7,691 (63.6%)	3,050,374 (71.6%)
Black non-Hispanic	1,989 (16.4%)	177,855 (4.2%)
Hispanic	1,383 (11.4%)	523,191 (12.3%)
American Indian and Alaska Native	624 (5.2%)	56,307 (1.3%)
Asian and Pacific Islander	410 (3.4%)	450,187 (10.6%)

NOTE: DOC releases are by distinct inmate admission. State population is from OFM small area estimates. *Asian and Native Hawaiian and Other Pacific Islander* are grouped in OMNI.

Population Distribution by Neighborhood Type

The distribution of individuals across neighborhoods characterized by their level of socioeconomic disadvantage is shown by race and population in Figure 1. Disadvantage scores are percentile ranked with the 50th percentile indicating areas where half of all other neighborhoods across the state are less disadvantaged and half are more disadvantaged.

Figure 1. Distribution of Washington and DOC Reentry populations over neighborhood type by race.



NOTE: Boxplots are population quartiles, with shaded areas representing half of each group (from left to right, 25th to 75th percentile of group population).

Relative to Washington’s population, generally, the reentry population tended to locate in areas with a higher degree of disadvantage, both overall and by race. Race differences in the general population were reflected in the reentry population such that Black, Hispanic, and American Indian and Alaska Native individuals were generally more likely than White individuals to release to areas with a higher degree of disadvantage.

Proportional differences in the extremes of disadvantage were more telling of disparity in the reentry population (Table 2). For example, concentrations in the extremes in the general population were such that for every one Black or Hispanic adult living in one of the state’s least disadvantaged areas, there were three living in one of the most disadvantaged areas (i.e., 80/20 ratios of roughly 3:1 in both groups). Concentrations in the extremes in the reentry population, however, were 10:1 and 14:1 for Black and Hispanic individuals, respectively. The department’s American Indian population similarly released to the most-versus-least disadvantaged areas at a ratio of 11:1.

Table 2. Percent and ratio of population in Washington’s least and most disadvantaged neighborhoods by race.

	Neighborhood Deprivation Score Quintile		80/20 Ratio
	20 th Percentile (Least Disadvantaged)	80 th Percentile (Most Disadvantaged)	
White			
<i>General</i>	23.2%	15.0%	0.6
<i>DOC Reentry</i>	6.9%	34.2%	4.9
Black			
<i>General</i>	11.3%	29.1%	2.6
<i>DOC Reentry</i>	3.9%	40.3%	10.3
Hispanic			
<i>General</i>	10.6%	34.9%	3.3
<i>DOC Reentry</i>	3.3%	46.1%	13.8

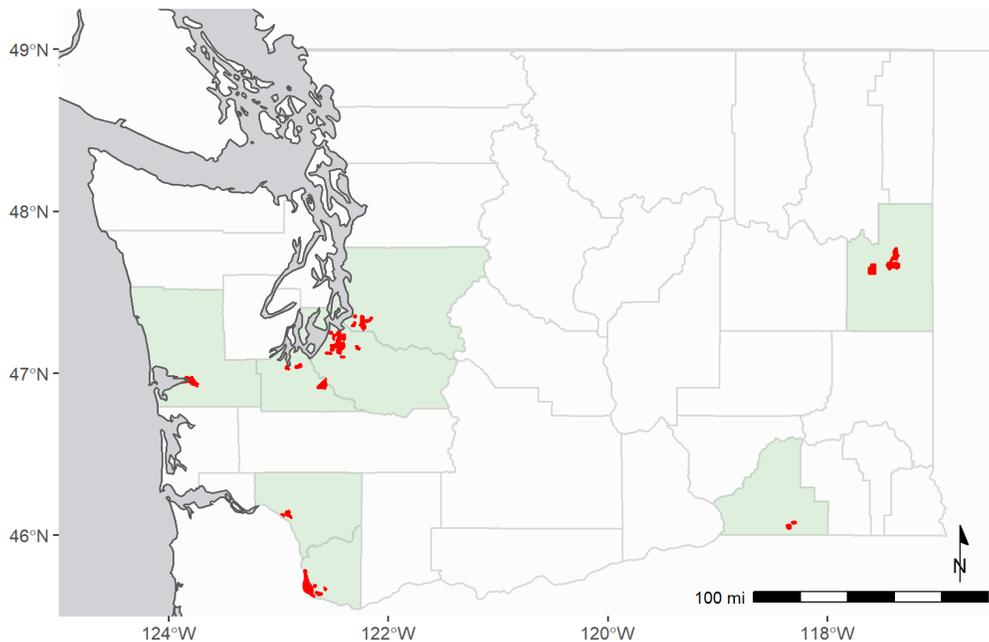
Table 2. Percent and ratio of population in Washington’s least and most disadvantaged neighborhoods by race, continued.

	Neighborhood Deprivation Score Quintile		80/20 Ratio
	20 th Percentile (Least Disadvantaged)	80 th Percentile (Most Disadvantaged)	
American Indian/Alaska Native			
<i>General</i>	9.1%	39.3%	4.3
<i>DOC Reentry</i>	4.5%	48.6%	10.8
Asian/Pacific Islander			
<i>General</i>	27.3%	16.1%	0.6
<i>DOC Reentry</i>	5.1%	32.0%	6.2

Local Variation in the Association between Reentry and Deprivation

Given a general association between neighborhood disadvantage and prison reentry described in the previous section, local variation – specifically, neighborhoods with a higher than average association between disadvantage and prison reentry – is presented below by race.

Figure 2. Areas with above average association between neighborhood disadvantage and the prevalence of the Black reentry population relative to Black general population.



NOTE: Red highlighted areas are census tracts; adjacent tracts are merged.

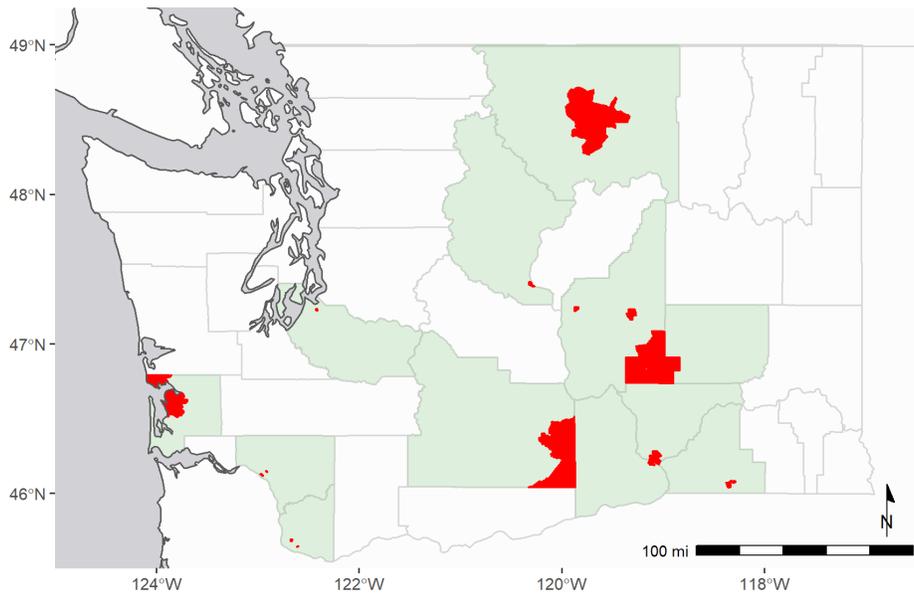
Black Population. Areas where the prevalence of the Black reentry population relative to the general population of Black adults was most strongly associated with socioeconomic disadvantage are shown in Figure 2.

Areas highlighted in red represent:

- 24.1% of the Black reentry population and 10% of the Black general population
- 14.6% on average adults 25 and older with less than a high school education
- 22.7% on average adults 18 to 65 in poverty

- 8.5% on average in the workforce and unemployed

Figure 3. Areas with above average association between neighborhood disadvantage and prevalence of Hispanic reentry population relative to Hispanic general population.



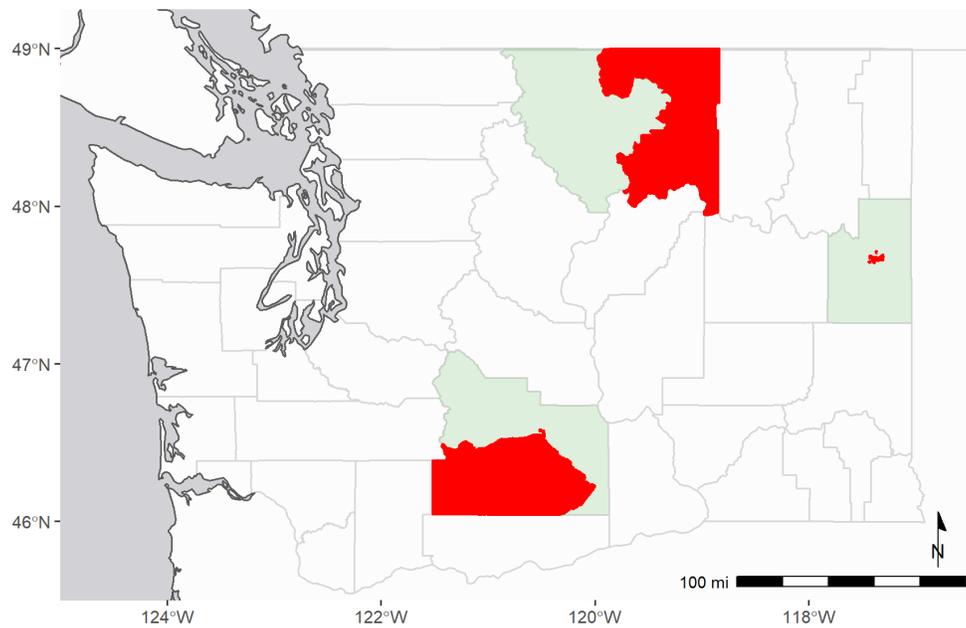
NOTE: Red highlighted areas are census tracts; adjacent tracts are merged.

Hispanic Population. Areas where the prevalence of the Hispanic reentry relative to general population was most strongly affected by socioeconomic disadvantage are shown in Figure 3.

Areas highlighted in red represent:

- 15.6% of the Hispanic reentry population and 10.9% of the Hispanic general population
- 33.0% on average adults 25 and older with less than a high school education
- 20.9% on average adults 18 to 65 in poverty
- 8.4% on average in the workforce and unemployed

Figure 4. Areas with above average association between neighborhood disadvantage and prevalence of American Indian and Alaska Native reentry relative to general population.



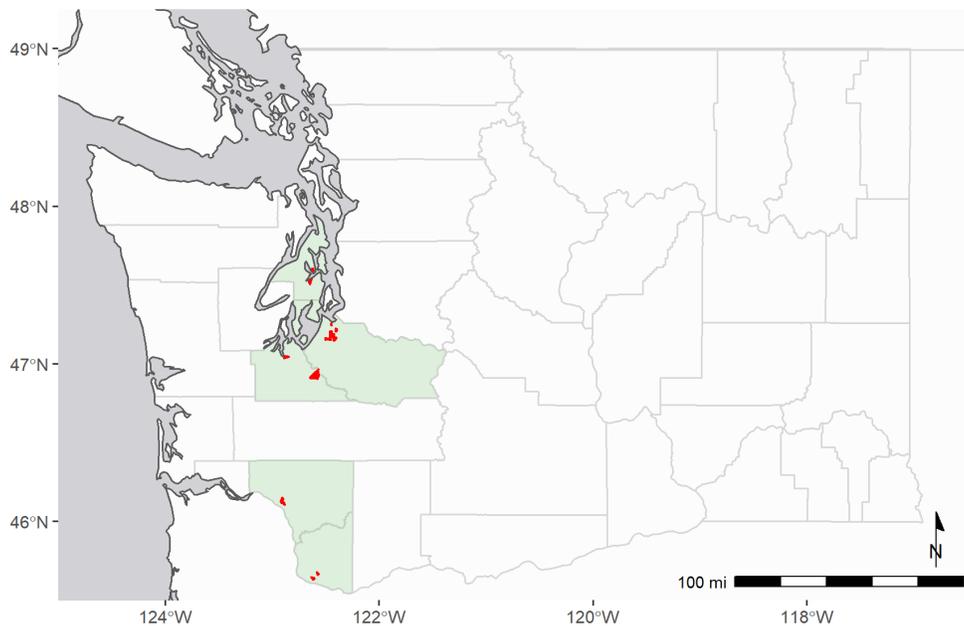
NOTE: Red highlighted areas are census tracts; adjacent tracts are merged.

American Indian and Alaska Native Population. Areas where the prevalence of the American Indian and Alaska Native reentry population was most strongly affected by socioeconomic disadvantage are shown in Figure 4.

Areas highlighted in red represent:

- 15.7% of the American Indian and Alaska Native reentry population and 10.8% of the American Indian and Alaska Native general population
- 22.6% on average adults 25 and older with less than a high school education
- 25.8% on average adults 18 to 65 in poverty
- 9.4% on average in the workforce and unemployed

Figure 5. Areas with above average association between neighborhood disadvantage and prevalence of Asian and Pacific Islander reentry relative to general population.



NOTE: Red highlighted areas are census tracts; adjacent tracts are merged.

Asian and Pacific Islander Population. Figure 5 shows areas where the prevalence of the Asian and Pacific Islander reentry was strongly related to socioeconomic disadvantage.

Areas highlighted in red represent:

- 12.9% of the Asian and Pacific Islander reentry population and 1.1% of Asian and 3.5% Pacific Islander general population
- 14.3% on average adults 25 and older with less than a high school education
- 21.6% on average adults 18 to 65 in poverty
- 7.9% on average in the workforce and unemployed

Limitations

Results reflect an established method of measuring neighborhood-level socioeconomic disadvantage; however, there are several alternate approaches. Future analyses, especially those in partnership with other state agencies working to address disparities of opportunity, may use additional neighborhood-level data to refine the measure and its application towards supporting communities.

Under Washington statute RCW 72.09.270, barring exceptional circumstances having direct impact on public safety or a person's post-release outcomes, individuals releasing from prison return to their county of origin. However, the extent to which neighborhood-level releases correspond to neighborhood of origin, however, is unknown given data limitations. Similarly, data reflect the Department's knowledge at the time of release, and do not represent post-release mobility. Understanding the degree to which reentry affects population sorting beyond general residential patterns, and the utility of present findings to upstream intervention require further analysis and additional data sources.

Summary

The findings of this analysis show that racial disparities in socioeconomic disadvantage evident in residential patterns of the general population are reflected but amplified in prison reentry. The concentration of recently released individuals in the state's most disadvantaged areas exceeds the general population, both overall and by race group. Preliminary analysis relating individual outcomes to neighborhood contexts indicate that individual's releasing to socioeconomic disadvantaged have a greater likelihood of violating and failure to report in the first 60 days after release. Additionally, an established literature validates the association between neighborhood-level deprivation and individual level health outcomes. Continued analysis will support targeted efforts toward operational improvements and community partnership building to address the nexus of incarceration, socioeconomic disadvantage, and race.

References

McNeeley, S. (2018). Ecological context, criminal propensity, and recidivism: An examination of moderating influences at the census tract level. *Criminal Justice Review*, 43(4), 494-511.

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