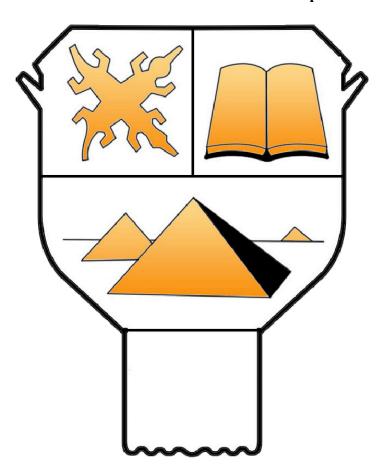
Borrowing While Black: National Trends in Subprime Refinance Mortgage Market

A Report Prepared By: The National Urban Research Group



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Introduction

Home equity is the major source of wealth. A homeowner is more likely to refinance a mortgage when the current interest rate falls below the rate on their existing mortgage. Beginning in the early 2000s, record low long-term interest rates, rising property values, and the desire to liquefy accumulated home equity motivated million of households to seek mortgage refinancing. A majority of these borrowers reported using home equity loans to repay debts. Others used them for home improvements, consumer expenditures (such as vehicle purchases, vacations, education, and medical expenses), and financial investments. For most borrowers the mortgage credit marketplace was highly competitive. The story was different for African American homeowners and traditional African American communities. Excluded from the credit mainstream, many of these borrowers turned to, and often steered into, marginal sources of mortgage refinancing in the higher cost subprime mortgage sector. In this respect, the same groups previously denied access to credit because of race were now inundated with higher cost loan products that stripped equity, diminished wealth, and inevitably lead to foreclosure and neighborhood-wide housing abandonment, a process often characterized as "redlining in reverse."

This analysis is part of a continuing sequence of case studies conducted by the National Urban Research Group examining the *Borrowing While Black* racial disparities in the allocation of higher cost subprime mortgage products. The National Urban Research Group conducted cross-sectional descriptive analysis, from the years 2004 to 2008, to understand racial disparities in the subprime refinance sector. Utilizing mortgage data supplied by the Home Mortgage Disclosure Act (HMDA), a primary research goal is to analyze whether a correlation exists between race and the allocation of subprime refinance mortgages. The data contained information on every applicant for a refinance mortgage made in the United States over this four-year period.²

² The original HMDA records contained 148.1 million records. In order to make the data manageable for analysis, we selected applications from African American and white borrowers who applied for the mortgage and the mortgage was originated, the mortgage was owner occupied, loan purpose was for home



¹ See, Glenn B. Canner, James T. Fergus, and Thomas A. Durkin, "Home Equity Lending," *Federal Reserve Bulletin*, vol. 75 (May 1989), pp. 33-44; and Glenn Canner, Karen Dynan, and Wayne Passmore, "Mortgage Refinancing in 2001 and Early 2002," *Federal Reserve Bulletin*, vol. 94 (December 2002), pp. 469-81.

- 1. Home refinance mortgages, as reported in HMDA, confirm that considerable growth in the market share of subprime mortgages occurred between 2004 and 2006 increasing from 14.7 percent to 29.4 percent. Higher cost subprime refinance mortgage volumes increased from under a half a million in 2005 to over 800,000 in 2005 and an additional 700,000 in 2006 before retreating to 136,318 by 2008. The collapse of the subprime mortgage sector starting in 2007 led to major declines in subprime market shares, declining to just 9.0 percent by 2008.
- 2. African American homeowners are over two times more likely to refinance an existing home with a subprime mortgage product compared to white homeowners. For African American borrowers subprime mortgage products accounted for 43.8 percent of home refinance mortgages compared to 17.4 percent for white borrowers. Results show that racial disparities persist despite level of income. African American homeowners in the highest income groupings relied on subprime refinance mortgage products at three times the rate of comparable income white borrowers (33.4 to 11.6). Higher income African American borrowers recorded higher market shares of subprime refinance mortgage than low-income (25.8 percent), moderate income (21.8 percent), and middle income (17.8 percent) white homeowners.³
- 3. Lower income African American single male and female borrowers are most likely to obtain higher cost loan products when seeking to refinance an existing home. Over half of African American males in the lower income grouping received a higher cost loan product, nearly twice as many as lower income white males (28.1 percent). The same pattern holds for lower income females where more than half of African American female applicants (53.5 percent) refinanced their existing homes with high cost loans compared to just one-fourth (24.8) of low-income white females.
- 4. African American couples with higher incomes were more than three times as likely to refinance a mortgage for an existing home with a higher cost subprime mortgage product as similar income white couples. Nearly one-third, 31.6 percent, of high income African American couples obtained subprime mortgage products, compared to just 9.6 percent of high income white couples. African American couples were also more than twice as likely to refinance an existing home with a high cost loan when compared to middle income (16.7 percent), moderate (21 percent), and even, lower income (24.6 percent) white couples.

purchase and refinance, conforming mortgage (removing "jumbo mortgage"), conventional mortgages (removing FHA/VA mortgages), loan type was of one-to-four-family dwelling. Applications were race or income are missing are removed from analysis. After applying all filters, the final dataset contains information on approximately 22.9 million mortgages. Of which, 12.6 million was use for refinancing an existing mortgage and 10.0 million for purchasing a one-to-four family home.

³ Low- income applicants are those with incomes below 50 percent of the median income of all applicants; Moderate-income are those with median incomes between 50 and 80 percent; middle income between 80 and 120; and high-income are those with incomes above 120 percent of the median income for all applicants.



5. **Predominately African American neighborhoods show similar patterns of overexposure in the subprime sector**. Results indicate that the likelihood of a homeowner refinancing an existing home with a subprime mortgage specialist correlates with the percentage of African American residents in the neighborhood. In neighborhoods where the majority of residents are African American, 32.7 percent of homeowners, one out of every three, refinanced a mortgage for existing homes with a subprime mortgage product compared to 17 percent in areas with less than 10 percent African American populations.

Empirical Results

The National Urban Research Group analysis of over 10.2 million home purchase mortgages allocated between 2004 and 2008 documents the evolution and growing influence of the higher cost subprime mortgage sector. One of the most noteworthy aspects of this escalation is the role of race. By far the highest share of subprime home purchase lending is to African American borrowers and in neighborhoods where African American comprised a majority of the residents. At each income level, African American households and individuals purchasing a home in majority African American neighborhoods were more likely to purchase a home with a higher cost subprime mortgage product. After controlling for income and family status, the only observed differences in subprime market shares is the race of the applicant or racial composition of neighborhood.

1. Home refinance mortgages, as reported in HMDA, confirm that considerable growth in the market share of subprime mortgages occurred between 2004 and 2006 increasing from 14.7 percent to 29.4 percent.

As indicated in **Figure (1)**, overall 20.3 percent of all borrowers used a higher cost subprime mortgage product when refinancing an existing home. Considerable growth in the market share of subprime mortgages occurred between 2004 and 2006, increasing from 14.7 percent to 29.4 percent, declining to just 9.0 percent by 2008. **Figure (2)** show refinancing volumes more than doubled during the peak years of 2005 and 2006 and increased from 499,707 refinance mortgages in 2004 to over 1.5 million by 2006 (808,635 mortgages in 2005 and 718,340 mortgages in 2006). Following the collapse of the subprime mortgage sector starting in 2007, the number of subprime refinance mortgages diminished to 136,318 subprime refinance mortgages by 2008.



2. African American homeowners are over two times more likely to refinance an existing home with a subprime mortgage product compared to white homeowners.

Empirical results clearly indicate that African American individuals are overrepresented in the subprime lending market. During the study period, when refinancing an existing home, African American borrowers received 1.37 million mortgages. As **Figure (3)** show, African American borrowers received 11 percent of all home purchase mortgages (1.4 million out of 12.6 million mortgages), but represented 25 percent of all households who purchased a home with a mortgage lender specializing in higher cost loans (600,031 of 1.57 million purchase loans). Overall, African Americans borrowers were 2.5 times more likely to purchase a home with a high-cost loan than white applicants (43.8 compared to 17.4). As **Figure (4)** show, similar racial disparities occur between African American and white borrowers in each income groupings. Higher income African Americans (33.4 percent) refinanced their homes with subprime lenders at just about three times the rate of similar income white homeowners (11.6 percent). Results show that racial disparity persists despite level of income. Higher income African American homeowners (33.4 percent) recorded higher market shares of subprime refinance mortgages than low-income (25.8 percent), moderate income (21.8 percent), and middle income (17.8 percent) white homeowners.

3. Lower income African American single male and female borrowers are most likely to obtain higher cost loan products when seeking to refinance an existing home.

Figure (5) and Figure (6) indicates that lower income African American single male and female borrowers are most likely to obtain higher cost loan products when seeking to refinance an existing home. One out of every two (54 percent) of African American males in the lowest income grouping received a higher cost loan product, nearly twice as many as lower income white males (28.1 percent). The same pattern holds for lower income females where more than half of African American female applicants (53.5 percent) refinanced their existing homes with high cost loans compared to one-fifth of white females in the same income grouping. Each income group show similar racial disparities. The race gap is such that over one-third of high income African American single males and females received high cost loans, compared to 16.0 percent of high income white single males and white single females.

4. African American couples with higher incomes were more than three times as likely to refinance a mortgage for an existing home with a higher cost subprime mortgage product as similar income white couples.

Notably, as shown in **Figure (7)**, even after calculating for discrepancy in income and family status, African American couples are more likely that white couples to refinance with a subprime mortgage product. Nearly one-third, 31.6 percent, of high income African American couples obtained subprime mortgage products, compared to just 9.6 percent of high income white couples. African American couples were also more than twice as likely to refinance an existing home with a high cost loan when compared to middle income (16.7 percent), moderate (21 percent), and even, lower income (24.6 percent) white couples.

5. Predominately African American neighborhoods show similar patterns of overexposure in the subprime sector.

Figure (8) examines subprime racial concentrations at the neighborhoods level. Results show the heavy reliance on higher cost subprime mortgage products in predominantly African American neighborhoods. In neighborhoods where the majority of residents are African American, one out of every three borrowers refinanced an existing home with a subprime mortgage product. The results indicate that the likelihood of receiving a higher cost subprime mortgage increases with the percentage of African American population. Neighborhoods less than 10 percent African American had a subprime market share of only 17.0 percent, in areas between 10 and 20 percent the market share is 17.3, neighborhoods between 20 and 50 percent African American resident recoded a market share of higher cost subprime home purchase products of 20.1 compared to 32.7 for areas over 50 percent African American.

Summary

The National Urban Research Group analysis of over 12.6 million refinance mortgages allocated between 2004 and 2008 documents the evolution and growing influence of the higher cost subprime sector in home refinancing. One of the most noteworthy aspects of this escalation is the role of race. In particular, there appears to be an over dependence in the use of subprime loan products by African American households and residents in majority African American neighborhoods. At each income level, African American households and homeowners in majority African American neighborhoods were more likely to refinance an existing home with a higher



cost subprime mortgage product. After controlling for income and family status, the only observed differences in subprime refinance market shares is the race of the applicant or racial composition of neighborhood.

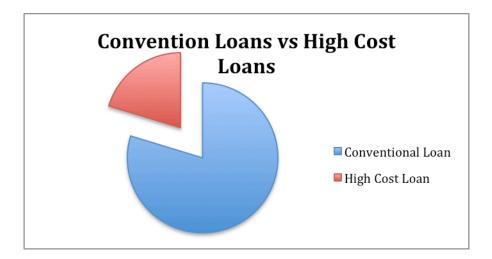
A report from *United for a Fair Economic* projected "the greatest loss of wealth in moderate U.S. history" causing African Americans between \$71 and \$92 billion of dollar in loss wealth. ⁴ A more recent report by the Pew Center found that "the bursting of the housing market bubble in 2006 and the recession that followed late 2007 to mid-2009 took a far greater toll on the wealth" of African American households than whites. Between the years 2005 to 2009, African Americans lost over half of their net wealth. A principal cause of this erosion was "plummeting house values." As a result, the median wealth of white households is 20 times that of African Americans, "the largest since the government began publishing such data a quarter century ago" and almost twice as large as the ratios for the two decades prior to the subprime mortgage crisis.⁵ To the extent that home ownership is a vital aspect of wealth and financial stability, the steering of African American borrowers into higher cost subprime mortgage products and the deeply troubling consequences it poses to African American households and African American communities is a contemporary civil rights issue.

⁵ Paul Taylor et al, Twenty-to-One: Wealth Gaps Rise to Record Highs between Whites, Blacks and Hispanics, Pew Research Center, Washington, D.C. (2011).



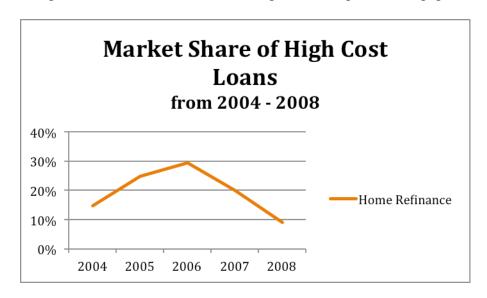
⁴Available at, http://www.faireconomy.org/files/StateOfDream 01 16 08 Web.pdf

Figure 1: High Cost Subprime Refinance Mortgages



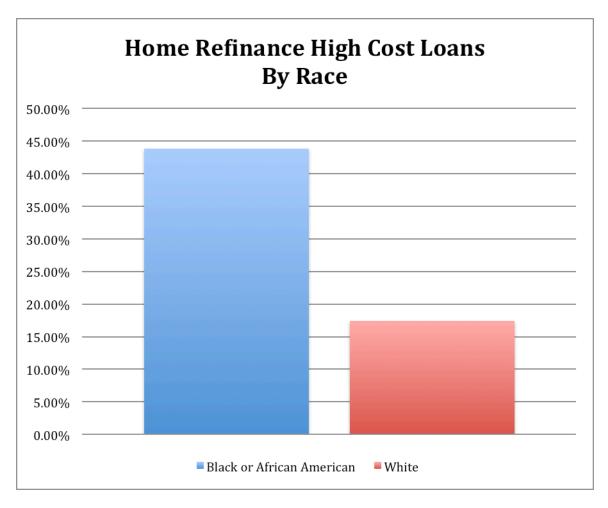
	Conventional Loan	High Cost Loan	Total
Overall Refinancing	10060412	2558026	12618438
	79.7%	20.3%	100.0%

Figure 2: Market Share Trends in High Cost Subprime Mortgages



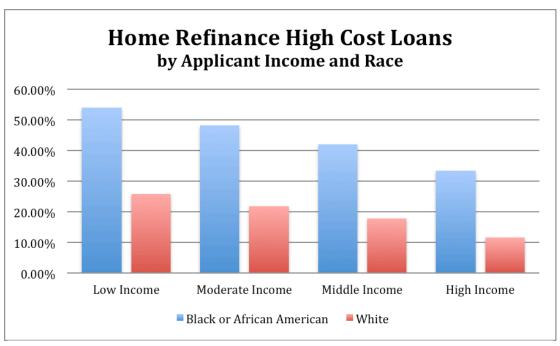
	Conventional Loan	High Cost Loan	Total
2004	2899149	499707	3398856
	85.3%	14.7%	100.0%
2005	2452125	808635	3260760
	75.2%	24.8%	100.0%
2006	1724471	718340	2442811
	70.6%	29.4%	100.0%
2007	1600023	395026	1995049
	80.2%	19.8%	100.0%
2008	1384644	136318	1520962
	91.0%	9.0%	100.0%

Figure 3: Applicant Race



	Conventional Loan	High Cost Loan	Total
Black or African American	770449	600031	1370480
	56.2%	43.8%	100.0%
White	8548063	1798345	10346408
winte	82.6%	17.4%	100.0%

Figure 4: Applicant Income and Race



	Conventional Loan	High Cost Loan	Total
Black or African American	111507	130593	242100
	46.1%	53.9%	100.0%
William	839710	292619	1132329
White	74.2%	25.8%	100.0%

Moderate Income

	Conventional Loan	High Cost Loan	Total
Black or African American	208041	192423	400464
	51.9%	48.1%	100.0%
White	1896275	529176	2425451
winte	78.2%	21.8%	100.0%

Middle Income

	Conventional Loan	High Cost Loan	Total
Black or African American	232396	167597	399993
	58.1%	41.9%	100.0%
White	2484720	539785	3024505
	82.2%	17.8%	100.0%

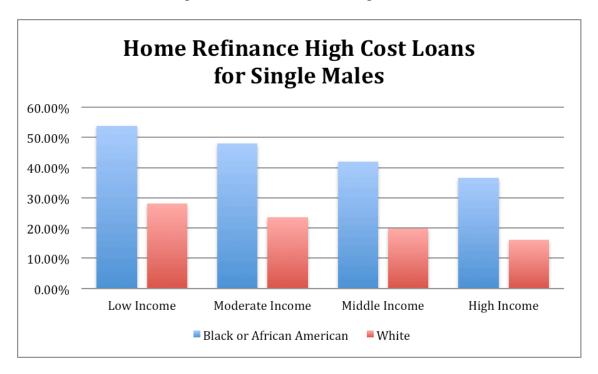
High Income

	Conventional Loan	High Cost Loan	Total
Black or African American	218505	109418	327923
	66.6%	33.4%	100.0%
White	3327357	436765	3764122



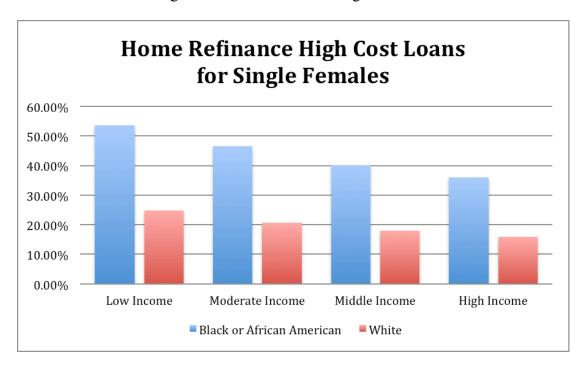
88.4% 11.6% 100.0%

Figure 5: Home Refinance Single Males



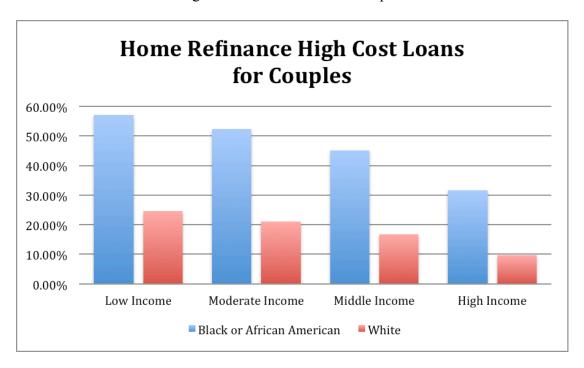
	Conventional Loan	High Cost Loan	Total
Single Black Male	30314	35209	65523
	46.3%	53.7%	100.0%
Cinala White Mala	248118	97046	345164
Single White Male	71.9%	28.1%	100.0%
Moderate Income			
Ci., 1, Di., 1 M.1.	63498	58636	122134
Single Black Male	52.0%	48.0%	100.0%
Single White Male	591174	182169	773343
	76.4%	23.6%	100.0%
Middle Income			
G' 1 D1 1 1 1 1	66865	48399	115264
Single Black Male	58.0%	42.0%	100.0%
Single White Male	623647	154557	778204
Single White Male	80.1%	19.9%	100.0%
High Income			
Single Dieds Mele	50701	29428	80129
Single Black Male	63.3%	36.7%	100.0%
Single White Male	667143	126868	794011
Single White Male	84.0%	16.0%	100.0%

Figure 6: Home Refinance Single Females



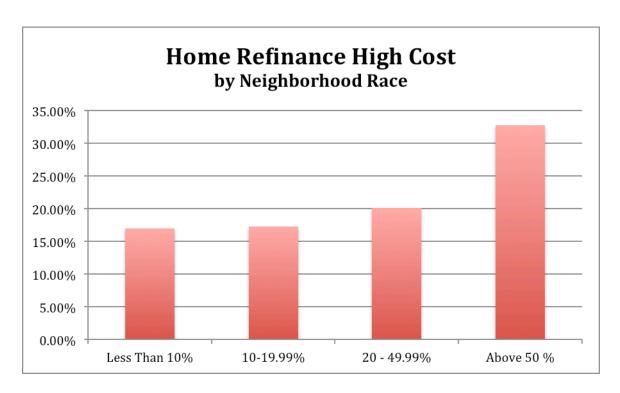
	Conventional Loan	High Cost Loan	Total
Single Black Female	68797	79036	147833
	46.5%	53.5%	100.0%
Ci1. W/Liz. F1.	401451	132376	533827
Single White Female	75.2%	24.8%	100.0%
Moderate Income			
Ci., 1, Dl. 1, F., 1,	105072	91589	196661
Single Black Female	53.4%	46.6%	100.0%
Single White Female	596538	155126	751664
	79.4%	20.6%	100.0%
Middle Income			
G: 1 D1 1 E 1	90232	60638	150870
Single Black Female	59.8%	40.2%	100.0%
Cinala White Famala	469406	103264	572670
Single White Female	82.0%	18.0%	100.0%
High Income			
Single Dieds Femals	49322	27691	77013
Single Black Female	64.0%	36.0%	100.0%
Cingle White Female	328638	61709	390347
Single White Female	84.2%	15.8%	100.0%

Figure 7: Home Refinance Couples



	Conventional Loan	High Cost Loan	Total
DI 1 C 1	10670	14133	24803
Black Couple	43.0%	57.0%	100.0%
White Country	180358	58720	239078
White Couple	75.4%	24.6%	100.0%
Moderate Income			
Dlask Caumla	33530	36956	70486
Black Couple	47.6%	52.4%	100.0%
White Couple	674840	180285	855125
	78.9%	21.1%	100.0%
Middle Income		•	
DI 1 C 1	63265	51671	114936
Black Couple	55.0%	45.0%	100.0%
White Counts	1325752	266121	1591873
White Couple	83.3%	16.7%	100.0%
High Income			
Plank Couple	100112	46282	146394
Black Couple	68.4%	31.6%	100.0%
White Counts	2210870	234151	2445021
White Couple	90.4%	9.6%	100.0%

Chart 7: Home Refinance by Neighborhood Race



	Conventional Loan	High Cost Loan	Total
Less Than 10%	3820797	780401	4601198
Less Illali 1070	83.0%	17.0%	100.0%
10-19.99%	2354737	492709	2847446
10-19.99%	82.7%	17.3%	100.0%
20 40 00%	2575985	650003	3225988
20 - 49.99%	79.9%	20.1%	100.0%
Above 50 %	1308893	634913	1943806
AUUVE JU /0	67.3%	32.7%	100.0%

Table 4: Borrowing While Black Disparity Ratio for Home Refinance Mortgages

Low-income compared to Low-income

- 1. Low-income African American female compared to Low-income white female, **disparity** ratio 1.9 (53.5 market share compared to 24.8).
- 2. Low-income African American male compared to Low-income white male, **disparity** ratio 2.1 (53.7 market share compared to 28.1).
- 3. Low-income African American couple compared to Low-income white couple, **disparity** ratio 2.3 (57.0 market share compared to 24.6).

Moderate-income compared to Moderate-income

- 4. Moderate-income African American female compared to Moderate-income white female, **disparity ratio 2.0** (48.0 market share compared to 23.6).
- 5. Moderate-income African American male compared to Moderate-income white male, **disparity ratio 2.2** (46.6 market share compared to 20.6).
- 6. Moderate-income African American couple compared to Moderate-income white couple, **disparity ratio 2.4** (52.4 market share compared to 21.1).

Middle-income compared to Middle-income

- 7. Middle-income African American female compared to Middle-income white female, **disparity ratio 2.1** (42.0 market share compared to 19.9).
- 8. Middle-income African American male compared to Middle-income white male, **disparity ratio 2.2** (40.2 market share compared to 18.0).
- 9. Middle-income African American couple compared to Middle-income white couple, **disparity ratio 2.7** (45.0 market share compared to 16.7).

High-income compared to High-income

- 10. High-income African American female compared to High-income white female, **disparity ratio 2.3** (36.7 market share compared to 16.0).
- 11. High-income African American male compared to High-income white male, **disparity ratio 2.3** (36.0 market share compared to 15.8).
- 12. High-income African American couple compared to High-income white couple, **disparity ratio 3.3** (31.6 market share compared to 9.6).



Table 5: Neighborhood Income and Race

5.a (Neighborhood Income)

	Conventional Loan	High Cost Loan	Total
т т	105937	78912	184849
Low Income	57.3%	42.7%	100.0%
Moderate Income	1126317	558068	1684385
Moderate income	66.9%	33.1%	100.0%
Middle Income	5083893	1389563	6473456
Middle income	78.5%	21.5%	100.0%
High Income	3744265	531483	4275748
	87.6%	12.4%	100.0%

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