

REPORT ADVISORY

CENSUS 2020 CAMPAIGNS: POTENTIAL CONFUSION COULD UNDERMINE OUTREACH EFFORTS

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Abstract

Government entities across the U.S. are budgeting millions of dollars for large-scale marketing campaigns that address an expected undercount in the Census 2020, a consequence of the political environment that has engendered a mistrust of government programs among hard-to-count (HTC) groups like Hispanics, immigrants, the lower-income, and similar groups. To guide these campaign interventions, the Census Bureau developed the Planning Database, which includes an abundance of demographic characteristics and two predictive indicators of potential response to the Census 2020. The lack of documentation about the appropriate use of the Planning Database, coupled with the potential lack of knowledge and experience with Census Bureau data, can lead to confusion and possibly misguide users in selecting the appropriate HTC communities for their planned intervention. In a case study of Dallas County, Texas to identify high-priority census tracts using the 2019 Planning Database, we found that a different set of census tracts are produced when using the Low Response Score (LRS) when compared to the Self-Response Rate (SRR), and that the resulting demographic profiles also differed along key demographic characteristics relevant to defining HTC communities. Implications are discussed for improved planning of Census 2020 campaign interventions when using the Planning Database.

Introduction

The frenzy surrounding efforts to improve response rates to the Census 2020 is readily apparent across our nation. Indeed, considerable anxiety about a serious under-count of the population has resulted from a political environment that has made immigrants, Hispanics and other subgroups less trustful of government-sponsored programs. To minimize the potential negative effects of this distrust on participation in the Census 2020, some state and local government entities have allocated millions of dollars to launch marketing campaigns that target the hard-to-count (HTC) communities who have historically participated at lower levels in previous decennial censuses. For example, California plans to spend \$187 million on their Census 2020 campaign ¹ while Texas opted not to fund a Census 2020 campaign and is leaving this task to local government entities. Dallas County and the City of Dallas jointly budgeted \$1.9 million towards their local campaign,² while Harris County and the City of Houston have jointly budgeted \$4 million.³ The stakes are high for government entities that fail to engage their residents: a low response rate translates to millions in lost federal dollars that are used to fund schools, food and healthcare programs, infrastructure and other public programs. Moreover, the balance of political power can change dramatically as a result of population counts derived from the Census 2020. Undoubtedly, a misguided and unsuccessful Census 2020 campaign can have dire consequences for state and local government entities.

The Census Bureau Steps Up Its Support

To assist public entities in their efforts to improve response rates to the Census 2020, the Census Bureau developed the Planning Database ⁴ (PDB) which includes the *Low Response Score* –an indicator that estimates the likely response to Census 2020 based primarily on past response rates to the Census 2010 mail questionnaire. The PDB also includes a broad variety of demographic variables derived from the 2010 Census and the American Community Survey 2013-2017 5-Year file. The Planning Database was designed to help communities identify hard-to-count census tracts or block groups in outreach efforts to engage their residents. The Census Bureau also provided *ROAM* – Response Outreach Area Mapper – a valuable web site that provides the public easy access to demographic information that can be displayed to guide their community campaigns. ⁵

As with many good ideas, however, a new tool is only as good as the instructions that guide its usage. Having accessed and used these demographic tools to evaluate a potential outreach strategy for Dallas County, Texas, our staff identified several areas of confusion that could lead to a misguided campaign, especially among users who are less experienced with Census Bureau data and geospatial analyses. Our analyses and observations are discussed in the sections that follow.

The Planning Database and Variables of Interest

The Planning Database (PDB) includes demographic information for all U.S. census tracts and block groups in the U.S. The PDB excel files and documentation are available for download at <https://www.census.gov/topics/research/guidance/planning-databases.html>. Aside from an extensive listing of all the variables included in the PDB and a brief explanation of the attributes being measured, little or no guidance is provided regarding the appropriate analytic use of these variables. Although not specifically stated in the PDB, it is apparent to us that the appropriate use of the information provided in the PDB assumes a user with knowledge of demographic and geospatial concepts, and ideally some experience as well.

In earlier and current versions of the PDB, the Low Response Score (LRS) has been provided as the one of several indicators that one might use to identify HTC census tracts or block groups and is represented as a percentage – that is, lower scores indicate a higher likelihood of completing the 2020 Census, while a higher score indicates a lower likelihood. Importantly, the LRS estimate was developed⁶ based on responses to the 2010 Census which primarily used a single mode of data collection -- a mail questionnaire. In the updated 2019 version of the PDB, a new variable was introduced – the Self Response Rate or SRR – that also estimated the likely response rate to the 2020 Census and expressed as a percentage -- that is, a low score represents a lower likelihood of completing the Census 2020 and a higher score representing a higher likelihood. The two indicators are highly and negatively correlated with each other (Pearson correlation = $-.796$, $p < .01$), suggesting that they are measuring a similar attribute. Importantly, the SRR was based on the two-mode methodology used in the American Community Survey that includes both mail and online options, followed by telephone and personal interviews. The predictive accuracy of both the LRS and the SRR was supplemented by selected demographic characteristics using different modeling approaches. Indeed, a

considerable investment was made by the Census Bureau to facilitate usage of the PDB with the expectation that communities throughout the U.S. would achieve the best possible response to the Census 2020. In our opinion, however, the relative inexperience of many organizations with Census Bureau data, demographic concepts and geospatial analysis – coupled with minimal documentation to guide the public’s use of this information – is likely to lead to confusion and misuse of this valuable demographic tool. In the following section, we will elaborate in more detail on our concerns about the appropriate use of the Low Response Score and the Self-Response Rate that are included in the PDB.

Considerations for Selecting an Indicator to Target HTC Communities

For the purpose of illustration, we will assume that a public entity is launching a Census 2020 campaign and plans to use the Planning Database to identify census tracts with the greatest risk of not self-responding to the Census 2020. The Low Response Score (LRS) has received relatively more attention in the PDB documentation, grant proposals for outreach efforts, and other literature and is therefore more likely to be used to identify high priority census tracts. By contrast, the Self-Response Rate (SRR) was recently introduced in the 2019 version of the PDB and may be, in our opinion, a more relevant predictor of responses to the Census 2020 for two important reasons: (a) the SRR is based on the two-mode methodology -- mail and online modes that is utilized by the American Community Survey and the Census 2020, and (b) the SRR was developed from more current data in the American Community Survey 2013-2017. A public entity that is trying to define the best strategy for targeting HTC communities may not have the knowledge or experience to decide which of these two indicators would be most beneficial to their outreach efforts targeting HTC communities. The wrong choice could be costly and fail to produce the expected outcomes by targeting the wrong census tracts.

Evaluating the Two Indicators

In our initial efforts to define an outreach strategy for Dallas County, we experienced some confusion about the relative merits of using the LRS or SRR and decided to conduct some simple analyses to remove the uncertainties. For these analyses, we downloaded the relevant information from the 2019 Planning Database for Dallas County, Texas. We used ArcGIS Pro to conduct some of the geospatial analyses and SPSS for some statistical reports. Following are

the steps that we employed address the merits of each of the two indicators for targeting HTC communities.

Step 1: We first wanted to see if the LRS and SRR variables differed substantially in the areas they target as having high percentages of HTC residents. We selected the top 25 census tracts, first using the LRS and then the SRR variables.

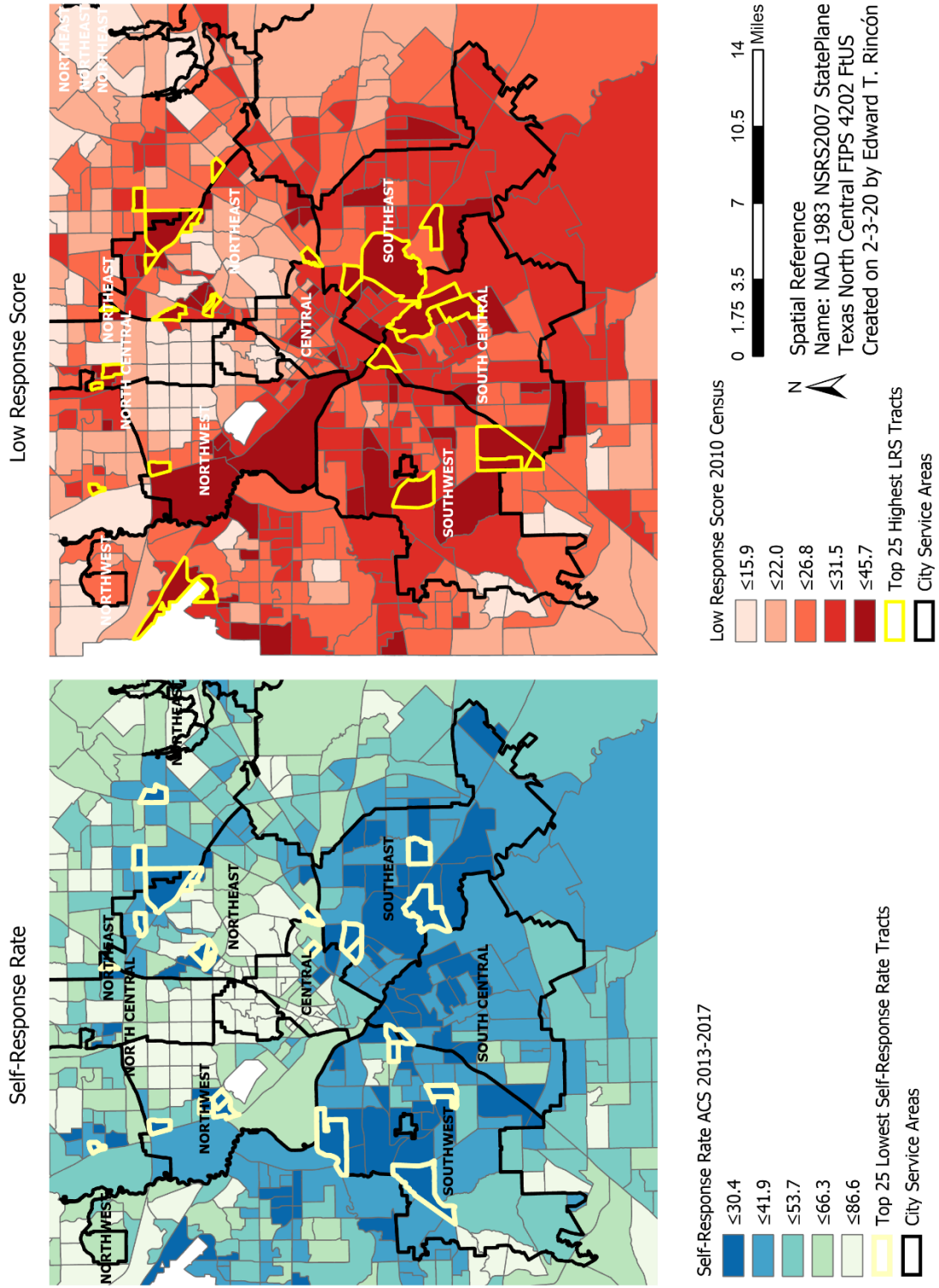
Table 1 on the following page presents the results of this analysis. The census tracts highlighted in yellow indicate the matches or similar census tracts discovered when searching for the highest concentration of HTC communities – a match rate of only 36 percent. This analysis confirmed the first important finding: the specific number and mix of census tracts that a user identifies will depend on which of the two indicators are utilized.

Table 1: Match Rate Between LRS and Self-Response Rate

Rank	Census Tract	Low Response Score	Rank	Census Tract	Self Response Rate
1	48113019212	45.7	1	48113009804	6.3
2	48113010904	40.4	2	48113009610	6.8
3	48113019013	39.5	3	48113007202	8.0
4	48113018506	38.4	4	48113019212	10.6
5	48113016607	38.0	5	48113007201	13.0
6	48113013625	37.7	6	48113009303	15.4
8	48113008603	37.1	7	48113004800	17.9
7	48113012208	37.1	8	48113001204	18.3
9	48113014103	36.9	10	48113004700	19.0
10	48113009304	36.8	9	48113018506	19.0
11	48113013011	36.5	11	48113007821	19.3
12	48113009610	36.4	13	48113013713	20.0
13	48113010903	36.2	12	48113019013	20.0
15	48113008701	35.3	14	48113013011	20.4
14	48113013713	35.3	15	48113012208	20.6
16	48113002701	35.2	16	48113002701	21.0
17	48113007818	35.2	17	48113002702	21.2
18	48113007819	35.2	18	48113007820	21.4
19	48113018403	35.0	19	48113007818	21.8
20	48113004100	34.8	20	48113010703	21.8
21	48113010704	34.8	22	48113010601	21.9
22	48113011500	34.8	21	48113010804	21.9
23	48113018503	34.8	23	48113018204	22.6
24	48113007823	34.7	25	48113009202	23.1
25	48113013615	34.7	24	48113019035	23.1
Total	25		Total	25	

Figure 1 on the following page presents a map that further illustrates the unique geographic distribution of the census tracts selected by each of these two indicators. It is clear the indicators are selecting quite different communities in Dallas County.

Figure 1: Comparison of Top 25 Census Tracts Selected Using the Low-Response Score vs. Self-Response Rate, Dallas County



At this point, a local entity may be wondering: Which one of these outcomes should I utilize to plan the outreach campaign – the one defined by the LRS or the SRR? Would my

campaign be misguided by selecting the LRS or the SRR indicator? Perhaps knowing the demographic characteristics reflected by these two lists of census tracts would help to evaluate which list provides a better demographic fit to the HTC target audience. This task was addressed by Step 2.

Step 2: To evaluate the demographic characteristics reflected in each of these two lists, we produced descriptive statistics using 28 demographic variables provided in the Planning Database. After a comparison of the two lists with the demographic characteristic, we reduced the list to seven (7) variables that reflected the largest differences between the two lists. The two lists were generally similar along the other 21 demographic variables considered. Tables 1 and 2 below present the results of these comparisons.

Table 1: Demographic Profile of Top 25 Tracts Selected by Low Response Score (LRS)

Characteristics	N	Median	Sum
Low Response Score	25	36.2	
PCT Hispanic ACS 13-17	25	57.3	
PCT College ACS 13-17	25	10.3	
PCT Not HS Grad ACS 13-17	25	34.8	
PCT Born foreign ACS 13-17	25	31.8	
Tot Population ACS 13-17	25	3,711	94,548
Pop. Under_5 ACS 13-17	25	346	9,897
Pop. 5_17 ACS 13-17	25	774	21,485

Table 2: Demographic Profile of Top 25 Tracts Selected by Self-Response Rate (SRR)

Characteristics	N	Median	Sum
Self-Response Rate	25	20.0	
Pct. Hispanic ACS 13-17	25	68.3	
Pct. College ACS 13-17	25	6.3	
Pct. Not HS Grad ACS 13-17	25	50.2	
Pct. Born Foreign ACS 13-17	25	40.1	
Tot Population ACS 13-17	25	4,826	120,232
Pop Under 5 ACS 13-17	25	447	12,106
Pop. 5 to 17 ACS 13-17	25	1,098	28,553

In comparing the results of Tables 1 and 2, it is apparent that the SRR provides a better fit with the characteristics of the HTC community that the campaign is attempting to reach. For example, residents in census tracts selected by the SRR indicator revealed:

- A higher concentration of the Hispanic population;
- A higher percentage of non-high school graduates;
- A lower percentage of college graduates;
- A higher percentage of the foreign born;
- A larger total population;
- A larger population of children under 5 years old; and
- A larger population of persons 5 to 17 years old.

This analysis confirmed the second important finding: the demographic profile of census tracts selected by the SRR provides a better fit to the targeted HTC profile than the census tracts chosen by LRS. Of course, this finding alone does not confirm that the SRR is superior to the LRS regarding the selection of HTC communities but just suggestive. Moreover, these results are relevant only to Dallas County, Texas and may produce different outcomes in other geographic areas.

In weighting the relative merits of the LRS and the SRR in terms of their value in predicting response rates to the Census 2020 and as a guide to campaign outreach efforts, potential users should also consider the resources dedicated to the decennial census and the American Community Survey. As explained by Robert Santos, Chief Methodologist for The Urban Institute, there are several reasons to believe that the LRS might be a more relevant measure of likely responses to the Census 2020:⁷

- Demographic Changes: While the size and composition of populations can change significantly over time, the demographic profile of the HTC community has changed very little, suggesting that the information captured by the LRS from the 2010 Census may have more value in predicting responses to the 2020 Census.
- Generalization: It is not clear that the ACS experience will translate very well to the 2020 decennial experience. People in the high LRS groups are not likely to complete the questionnaires online at the same levels as low LRS groups like whites or higher-income groups. Moreover, the nature of the workforce used to collect data for the ACS and the decennial census is quite different – millions of

less experienced workers collect information for the decennial census, while a much smaller and highly trained workforce collect ACS data on a more frequent annual basis.

- **Identifying HTC Groups:** The LRS and SRR both have merit in identifying HTC communities. Rather than focus on which indicator is better than the other, perhaps the list of census tracts identified by these two indicators should be combined to achieve a better outcome for outreach strategies.

In our soon to be released book – *The Culture of Research* – we reviewed the results of several mixed-mode surveys that we conducted in past years with culturally-diverse populations, and concluded that the online mode is typically the least popular choice for selected subgroups when respondents are provided an option between a mail or an online mode to complete a survey.⁸ Based on this review, we also had some skepticism about the ability of the Census Bureau’s emphasis on the online mode to capture members of the HTC communities in the Census 2020.

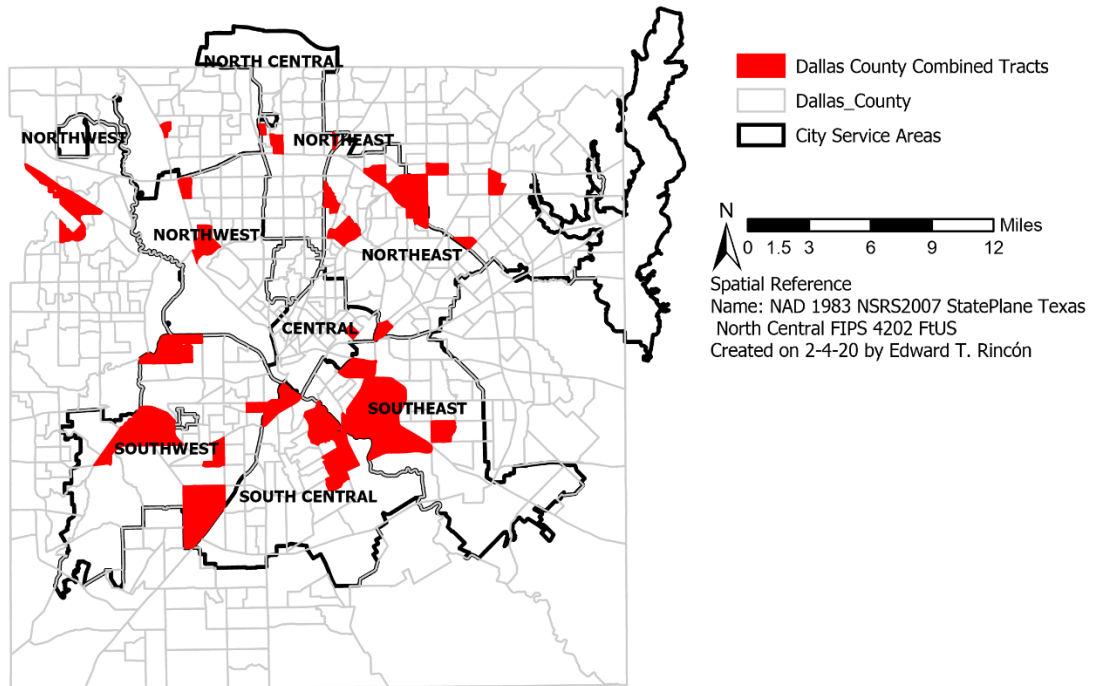
On its face, the suggestion to combine the two lists of census tracts generated by the LRS and SRR makes intuitive sense, although one would also want to understand the demographic profile of the census tracts resulting from this suggestion. To address this issue, we combined the two lists of census tracts and generated a new combined list of 41 census tracts. Table 3 below presents the demographic characteristics of the 41 census tracts that resulted from the combination of the lists generated by using the LRS and SRR indicators. In general, the demographic profile for the combined list of census tracts was very similar to the profile generated by the SRR approach. The combined tracts, however, did produce larger population numbers as would be expected by the addition of more census tracts.

Table 3: Demographic Profile of Combined Tracts Selected by Low Response Score and Self-Response Rate

Characteristics	N	Median	Sum
Self Response Rate ACS 13-17	41	21.9	
Low Response Score	41	34.8	
Pct. Hispanic ACS 13-17	41	60.5	
Pct. College ACS 13-17	41	7.7	
Pct. Not HS Grad ACS 13-17	41	39.9	
Pct. Born Foreign ACS 13-17	41	34.0	
Tot Population ACS 13-17	41	4,005	177,121
Pop Under 5 ACS 13-17	41	436.0	18,291
Pop. 5 to 17 ACS 13-17	41	893.0	40,744

Figure 2 on the following page illustrates the geographic distribution of these 41 combined census tracts, which clearly provides a broader reach than provided by the LRS or SRR methods alone.

Figure 2: Distribution of Combined Census Tracts Using Low-Response Scores and Self-Response Rates to Identify the Top 41 Hard-to-County Communities in Dallas County



Thus, the combined method may be a viable approach for expanding outreach efforts to a broader number of HTC communities while also maintaining a demographic profile that appears consistent with the profile generated by the SRR method.

Conclusion

Our discussion of the use of the information provided by the Planning Database was designed to help users make informed decisions about the use of the LRS and SRR indicators when planning outreach strategies. We discovered that, depending on whether the LRS or SRR indicators are used, campaign strategists could select census tracts whose demographic profile may not fit the profile of the desired HTC communities.

Although not specifically discussed in our analysis, the findings may be of interest as well to research practitioners who use the Planning Database to plan surveys in their communities. The reader is reminded that our findings are pertinent only to Dallas County,

Texas and may not be generalizable to other geographic areas. Nonetheless, by following similar steps in analyzing the Census 2020 campaign objectives for different government entities and using an analyst who has attained adequate knowledge and experience with Census Bureau files, demographic concepts, and geospatial analysis, a public entity will have more confidence in the approach that they have chosen. The Census Bureau has provided a valuable tool with the Planning Database to assist government entities in planning a successful Census 2020 campaign. It is the user's responsibility, however, to ensure that valid interpretations are made to guide their Census 2020 campaigns.

About Rincón & Associates LLC

Rincón & Associates LLC has conducted studies of multicultural populations over the past 45 years for academic, public and private institutions throughout the U.S. The company's studies have been highlighted in global, national and local media on topics related to multicultural consumer trends, food deserts, demographic trends, access to healthcare, crime patterns, mixed-mode methodology, survey bias with multicultural populations, site location analysis, retail redlining, and others. Dr. Edward T. Rincón, president of Rincón & Associates LLC, is a research psychologist and a current member of the American Association for Public Opinion Research (AAPOR) and an Associate Scholar at the SMU John Goodwin Tower Center for Public Policy and International Affairs. In *The Culture of Research* – a book scheduled for release in Spring 2020 – Dr. Rincón reviews the many issues that compromise the quality of multicultural research studies and offers recommendations for best practices.

We welcome your feedback and inquiries. Please direct your comments and inquiries using the following information:

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Reference Notes

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