The Voices of Houston: A Linguistic Survey

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Executive Summary

This report summarizes the initial findings of the *Voices of Houston Project: A Linguistic Summary*, which seeks to determine the extent of the linguistic diversity found in the Houston Greater Metropolitan Area. The *Linguistic Survey* will provide an account of the linguistic diversity of the Houston Area by asking two related questions: (1) Which languages are spoken in the Houston area?; and (2) Where are these languages spoken?

In previous research, the Kinder Institute has identified Houston as the most racially and ethnically diverse metropolitan area in the country (Emerson et al.). One critical – and rich – component of this diversity, however, remains to be studied: language. Although language is intrinsic to who we are, to how we think about the world, and to how we understand our role in society, we do not have an account of the linguistic repertoire of our citizens. This report will present the preliminary findings of the project *Voices of Houston: A Linguistic Survey* which seeks to provide an account of the linguistic diversity of the Houston Greater Metropolitan Area (GMA). In the discussion of the results for this preliminary study, three questions will be addressed: (1) When assessing linguistic diversity, are estimates adequate? (2) When compiling a list of languages spoken in the area, are existing data compiled through surveys and questionnaires adequate? (3) What does the language data tell us and how can it be used?

Report

1.0 Introduction

In a recent report, the Kinder Institute revealed that the Houston area is the most racially and ethnically diverse metropolitan area in the country (Emerson et al.). One critical – and rich – component of this diversity, however, remains to be studied: language. Although language is intrinsic to who we are, to how we think about the world, and to how we understand our role in society, we do not have an account of the linguistic repertoire of our citizens. This report will present the preliminary findings of the project *Voices of Houston: A Linguistic Survey* which seeks to provide an account of the linguistic diversity of the Houston Greater Metropolitan Area (GMA). In the discussion of the results for this preliminary study, three questions will be addressed: (1) When assessing linguistic diversity, are estimates adequate? (2) When compiling a list of languages spoken in the area, are existing data compiled through surveys and questionnaires adequate? (3) What does the language data tell us and how can it be used?

In addition to addressing these questions, this report provides a summary of the languages catalogued thus far, and two preliminary maps of the distribution of languages in the Houston GMA. While interesting, the findings are far from definitive. Indeed, more data needs to be gathered and analyzed in order for us to have a clearer picture of the linguistic diversity. It is important to understand that because the demographic composition of any city changes from year to year, this research assessing linguistic diversity of the Houston Greater Metropolitan Area will be ongoing.

2. Overview of Project

Globalization, immigration, and native language come to mind when we consider the diversity of the Houston area and contemplate the challenge put forth in the Kinder Institute's diversity report, which suggests that we need "to investigate the underlying factors contributing to the increased diversity and continual segregation" (p. 22). Although many people in our society view the mastery of English as an integral component to assimilation, linguistic assimilation often erodes native language use in local communities. In fact, recent research suggests that we should strive to encourage people to maintain use of their native language, and that multilingualism may have cognitive and health benefits (Bialystock 2009; Schachter, Kimbro, and Gorman 2012). Other studies indicate that different groups of people assimilate linguistically at different rates (Alba et al.), so having insight into which languages individuals speak and their country of origin can inform our understanding of assimilation patterns.

Terry Grier, the Superintendant for the Houston Independent School District, told the *Houston Chronicle* that HISD's student population has origins in more than 90 different countries, and that more than 80 languages are represented in the district (Stanton). Similar numbers have been reported for other districts in the Houston GMA (e.g., Fort Bend, Alief, and Pearland). While these numbers are impressive, they do not give us a full picture of the diversity or the international nature of our city. To best serve the needs of the city's population, we must know more. If, for example, the Houston Board of Education wants to achieve its core initiative to instill a "culture of trust through action," it is imperative that we understand how best to communicate with the parents of children in our district, and this requires that we identify which languages these parents speak.

Ultimately, the results presented here summarizing the initial stages of this *Linguistic Survey* will serve as the starting point for a larger research program, *The Voices of Houston*, which aims to focus on local communities whose members speak languages other than, or in addition to, English. These languages include Spanish and other European languages, as well as Mandarin, Vietnamese, and Hindi. By determining the extent of the diversity represented within our community and identifying the languages spoken by our residents, this project will serve as the starting point for determining how Houston can lead the nation in embracing and documenting its rich diversity through linguistic research.

The *Linguistic Survey* will provide an account of the linguistic diversity of the Houston Area by asking two related questions: (1) Which languages are spoken in the Houston area?; and (2) Where are these languages spoken?

The answer to these questions will provide scholars interested in researching those aspects of human society that intersect with language (e.g., sociologists, anthropologists, linguists, education specialists, folklorists) the information necessary to identify populations to study in an effort to understand the rich linguistic diversity of the fourth largest city in the United States of America. This information will help address social issues that pertain to language. For example, the school districts of the Houston area aim to celebrate diversity in their classrooms, but if we do not know which languages and cultures are represented in our schools, how can we engage our students in relevant ways?

There are other, broader matters at hand, as well. Research shows that languages are dying at an alarming rate; some say that 50% of the languages spoken today will disappear by the end of the 21st century (Hale et al.; Crystal; Krauss). In the context of language death,

linguists are keenly interested in identifying which languages are spoken in communities large and small, in understanding the context in which these languages are spoken, and in recognizing factors that drive speakers to make the linguistic choices that they do. Why, for example, do some speakers give up their native language in favor of another? Understanding these patterns in an international city such as Houston can better equip linguists worldwide who endeavor to study endangered languages, especially those spoken in areas of linguistic contact between minority and dominant languages.

3. Goals and Methods of the Linguistic Survey

The goal of this survey is to compile the most thorough database to date of the languages that are spoken in the Houston Greater Metropolitan Area (GMA). This means that the survey is not focused on a statistical representation of languages spoken in the Houston GMA, but instead the focus is on compiling a comprehensive list that includes the name of languages spoken by the residents of the Houston GMA. As such, it makes sense to examine existing data when compiling the catalog. One place to start is to look to the Independent School Districts in our area, which are mandated by the State of Texas to gather information about the language spoken in the home as part of the demographic data collected by the Texas Education Association (TEA) through its Public Education Information Management System (PEIMS).

The Home Language Survey¹ is administered as part of TEA's bilingual education services. Per Texas state policy (TexReg3822), students who speak languages other than English at home should be identified and provided with bilingual education opportunities. Each school is tasked with administering the survey upon admission of a student to the district. The parents

¹ Appendix A provides a sample survey that is used in the Houston ISD; the surveys vary from district to district.

or guardians of children in prekindergarten through grade 8 complete the survey while students in grades 9-12 complete the survey on their own. The two questions that must be included on the survey are: (1) "What language is spoken in your home most of the time?"; and (2) "What language does your child speak most of the time?" Districts are free to include additional questions on the survey. The sample survey provided in Appendix A is one that is used by the Houston Independent School District; this survey includes additional information such as country of origin, but some schools only ask the two mandated questions. As we will see, requesting such additional information as country of origin ultimately makes the data obtained through the mandated questions more useful for educators and policy makers.

The PEIMS *Home Language Survey* is similar to the US Census Bureau's American Community Survey in that the question regarding the language spoken in the home is openended (i.e. a blank is provided for the respondent to fill in) and information about the extent to which it is spoken or the contexts in which it is spoken are not requested. This type of survey also leaves to question the proficiency of individual household members in languages other than English. For example, while a language other than English may be used in the house, children may primarily use English in their day-to-day interactions. In some instances, children have a passive understanding of the home language, but they are not productive in the language used by their parents or household members from older generations (i.e. they can comprehend the other language and respond appropriately in English, but they do not speak the other language fluently). Understanding how multiple languages are used in the homes of our community members is useful to educators who are trying to improve English proficiency in the schools and foster communication with parents and guardians of students, but it is also

useful to disciplines in the social sciences, specifically linguistics, as we try to understand linguistic assimilation patterns in the age of globalization.

The data analyzed for this report come from two sources: The Health Survey of Houston and several Independent School Districts that agreed to participate in the survey and provided data in time to be included in this report. Ultimately, the goal is to obtain data from all 70 of the Independent School Districts in the ten counties identified as the Houston Greater Metropolitan Area. These counties are as follows (the number of ISDs within each county is included in parentheses): Austin (5), Brazoria (8), Chambers (4), Fort Bend (5), Galveston (9), Harris (20), Liberty (7), Montgomery (7), San Jacinto (2), and Waller (3). The districts identified for this project all fall under either Region 4 Education Service Center or Region 6 Education Service Center. Of the 70 Independent School Districts identified for the Houston GMA, 20 are in Harris County. The initial stage of the *Linquistic Survey* targeted Harris County ISDs; 17 of the 20 identified were petitioned for data and five have agreed to contribute data (i.e. Aldine, Deer Park, Katy, Spring Branch, and Houston²). The next stage of this project will include an appeal to the Region 4 and 6 Education Service Centers³ directly in an effort to obtain data for all of the targeted districts. This will streamline the process of obtaining data and ensure that all of the data requested are in the same format. Specifically, for mapping purposes, this project seeks to obtain the name of the home language and street address for each student in the district. This will allow us to map each language spoken at the census tract level; such maps can be crossreferenced with other demographic data (e.g. annual income or education level) to better

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² The Houston ISD data have not yet been received; thus they are not part of this report.

³ I must thank Dr. Robert M. Stein for suggesting that I contact these centers rather than continue pursuing permission from districts individually.

understand the composition of residents living in the Houston area. The data and how it has been mapped will be discussed in section 5 below. Before we turn to a discussion of the data here, we should consider the existing methods for estimating linguistic diversity and identify problems with relying on these methods.

4. Estimating Linguistic Diversity

Estimates for the number of languages spoken in the Houston Greater Metropolitan Area (GMA) range from 80 to 125. While some U.S. cities boast that they are linguistically diverse, some of these claims do not appear to be based on empirical evidence. New York City has been lauded as the most linguistically diverse city in the United States of America and possibly the world (Kauffman, Blevins and Holman). In 2010, the *New York Times* reported that more than 800 languages are spoken in the city (Roberts); a number that was estimated by experts at the Endangered Language Alliance⁴. The estimate is not based on guesswork; it is a number calculated using a method that is informed by expertise in linguistics and issues related to globalization and language endangerment. This includes knowledge of the languages spoken in different areas of the world and information pertaining to immigration patterns for New York City and the larger metropolitan area.

Using information about country of origin and the most thorough existing catalog of the world's languages (i.e. the *Ethnologue*, cf Lewis 2009), estimates were made based on the number of languages spoken in the country of origin with the estimate of speakers of individual

⁴ The Endangered Language Alliance website states that there are about 700 languages spoken, but Roberts (p.c.) indicated that the number 800 came from co-director of the Alliance, Dr. Juliette Blevins. In an email discussion about assessing linguistic diversity, Dr. Blevins concurred that the number came from her.

languages now living in New York ranging from 50% of the number of languages in the country of origin (e.g. Mexico) to as much as 90% (e.g. Europe).

There are several issues with estimating the number of languages spoken in any area. The first issue is that even though the estimate was calculated using an informed method, the resulting number of languages (800) spoken in New York City is more than twice that recorded in the Census Bureau catalog for the entire nation (381 languages) and more than four times the number of languages reportedly spoken by students in kindergarten through 2nd grade in the New York City public school system (more than 171 languages). The second issue is that the estimate is based on the total number of languages spoken in the country of origin. For example, if it is known that there are immigrants from Mexico living in the area, the estimate for how many of the languages spoken in Mexico are spoken in New York is based on the total number of languages in Mexico⁵, which, according to *Ethnologue*, is 291 (Lewis). Using the method whereby 50% of the languages of Mexico are estimated to be spoken in New York results in an estimate that of 800 languages estimated for the New York City area, as many as 146 of the languages spoken are from Mexico. While this may indeed be the case, the estimates need to be approached with caution.

To illustrate this point, Table 1 in Appendix B provides an estimation of the number of languages spoken in the Houston area; the method used to derive the number presented in

⁵ When evaluating this method there are two critical issues to consider. The first is the long-standing issue of determining the status of a spoken variety as a language versus a dialect. The second is the issue of relying on the *Ethnologue*, which is a database created by the Christian Missionary organization Summer Institute of Linguistics whose goal is bible translation. While it is widely agreed upon that the *Ethnologue* is the most complete database of the languages of the world, not everyone agrees with the linguistic boundaries that the catalog asserts (i.e. the status of language versus dialect). The discussion of these issues, however, is beyond the scope of this report.

Table 1 is informed by the method used to derive the number for New York City ⁶. The table includes a sample of the countries of origin represented in the Houston area (based on reports through the ACS). The sample includes the top four ranked countries for number of immigrants to the Houston area for Latin America, Asia, and Africa. The table lists each country by name, the number of languages spoken in each country, and the languages other than English that are reported for the Houston Area. Additionally, the table includes calculations for an estimate that 50% and 25% of the total number of languages of each country would be spoken in the Houston area. As Table 1 illustrates, using just 12 of the over 90 countries identified through the ACS as countries of origin in the estimate for the number of languages spoken in the Houston area, the estimates are quite high.

If the estimate is that 50% of the languages of a country are represented in the immigrant community, then we would expect well over 1,000 languages to be spoken in the Houston Area; a more conservative estimate is that 25% of the languages are spoken, which still provides an estimate of 500 languages for the Houston area. These numbers are well over the numbers that we encounter analyzing existing data gathered through surveys and questionnaires.

While the estimated number using the ELA method is evaluated critically, it must be noted that the method employed has a significant advantage: the estimation allows room for languages which may not be reported through surveys to be included. As Juliette Blevins noted (p.c.) speakers of minority languages tend to report major languages as their native or home

⁶ While Dr. Blevins and I have communicated in broad terms about the method used for the New York estimates, what is presented in Table 1 is not representative of the exact method she and her colleagues employed. When I learn of the exact procedure used, I will replicate it in order to discover the estimate for Houston.

language. The perception is that surveyors are trying to ascertain the number of speakers of dominant languages (e.g. Spanish) and that nobody has any interest in tracking the number of speakers of minority languages (e.g. Nahuatl). This perception leads to the under-reporting of minority languages and skewed numbers for the dominant languages. As Table 1 illustrates, the only language reported on any existing survey or questionnaire as a native or home language in the Houston Area from each of the four countries in Latin America is Spanish. Considering the number of indigenous languages spoken throughout Mexico and the rest of Latin America, the idea that only speakers of Spanish would migrate to the United States seems highly unlikely. A recent report on NPR (Adler) of the work being done by the ELA in New York indicates that speakers of indigenous languages of Mexico are often embarrassed of their native language and report that they only speak Spanish, which is the more prestigious variety. Through education and outreach, the *Voices of Houston Project: A Linguistic Survey* aims to reach speakers of minority languages and instill in them a sense of pride with regard to their linguistic heritage.

5. Surveying Linguistic Diversity

Like the method of estimation, existing studies of linguistic diversity in the United States should also be evaluated critically. These studies are based on data gathered through the US Census Bureau's American Community Survey (ACS), which represents a sample of the larger population. One report that analyzes the data from the 2007 ACS states that the survey sampled "just under 3 million housing unit addresses and a separate sample of just under 200 thousand people living in group quarters" (Shin and Kominski 15). Because the goal of the

⁷ Another reason to not report one's native/home language is that one has experienced discrimination based on being a speaker of that language.

Houston *Linguistic Survey* is to compile a list of languages spoken in the Houston Greater Metropolitan Area, survey data such as this, while useful, cannot be used exclusively. As this project progresses and moves away from the existing data gathered, part of the process of obtaining the fullest account of the languages spoken in the area will require educating the public and speakers of minority languages that we wish to include every language on our list no matter how obscure. In this section, some of the issues with the available data obtained through surveys and questionnaires will be outlined.

One crucial issue with the existing data is that it is not representative of the entire population. One set of data is based on a sample survey of residents of the Houston GMA (e.g. the Health of Houston Survey), which means that it is unlikely that every language spoken in Houston has been catalogued. Another set of data has been gathered through the Independent School Districts of the region (i.e. *The Home Language Survey*), which means that only the languages of residents who have school-age children will be included in the database. Other issues with survey and questionnaire data pertain to the way individuals are asked to identify the language spoken in the home.

While both the Health of Houston survey and the *Home Language Survey* both ask which language is the primary language used in the home as an open ended question, not all languages are included in the final database. This is because the responses to these surveys and questionnaires are entered in to databases and the names of individual languages are entered using a code (e.g. the PEIMS code for English is 98). When the data is tabulated, if any respondent has listed a home language that is not included on the list of 141 languages with a code, then the language is categorized as 'Other languages'.

Another problem that we face when conducting a survey of languages spoken in the home pertains to how individuals report. Some of these issues have been raised in Section 4 above (e.g. prestige, preference to identify as speaker of dominant language, history of persecution). Another potential issue is that many surveys request the name of a single language, but in some homes more than one language is used in day-to-day interactions and it is difficult for individuals to answer the question regarding which language a child uses the most. The child may use one language with his mother and another with his father and a third with his siblings; how the respondent should choose the language that child uses *most* may be something the respondent finds too difficult.

One issue with surveys about language that is of particular concern to linguists relates to how languages are identified. Because the names of each language are simply listed without identifying where they are spoken, there is some ambiguity regarding which variety might be used in the homes of the respondents. For example, there are many different varieties of Arabic, but the PEIMS language codes have one designation for Arabic as a single language. Knowing whether the variety is Jordanian Arabic versus Egyptian Arabic is of interest to linguists and other social scientists studying language and assimilation patterns of immigrants. We also find that aggregated data results in a collapse of multiple varieties into one category; in many of these cases we find that linguists would not aggregate in the same way. For example, the list of PEIMS language codes includes '5L' which is identified as Taiwanese/Formosan/Min Nan (Chinese). While all three are identifiably spoken in Taiwan, they are not considered the same language by linguistic standards. Formosan is a term used to identify the group of languages that are most likely a subset of the Austronesian languages; the languages identified as

'Formosan' are extinct and the remaining 'East Formosan' languages of Taiwan are spoken by the indigenous people of the island (e.g. Amis, Kavalan). Similarly, the PEIMS language codes include an entry for both Macedonian and Slavic. If one searches Slavic on the *Ethnologue* (Lewis), one finds that it is an alternative name for Macedonian. In the data analyzed for this study, some respondents identify the home language as Chinese; but 'Chinese' is not considered a single language by linguists. The *Ethnologue* (Lewis), for example, lists thirteen different varieties of 'Chinese' which it identifies as a 'macrolanguage' of China. Other respondents were more specific. For example in one district 'Hainanese' is identified as a home language. According to the *Ethnologue* (Lewis), 'Hainanese' is a variety of Min Nan, which is one of the thirteen varieties of Chinese listed in the catalog⁸. The catalog of languages identified for the Houston area that is presented in Table 2 of Appendix B has additional information regarding the names of individual languages provided in footnotes.

5. Discussion of Data and Maps

Of the districts that have agreed to contribute data to this project, one has been analyzed and mapped using Geographic Information Systems (GIS) software ArcGIS 10⁹. Additionally, the data obtained from the four other ISDs have been preliminarily analyzed. This section will present a summary of the information and provide a discussion of the data.

The map illustrating the distribution of languages spoken for the Aldine Independent School District is included as Figure 1 in Appendix C. Each student in the Aldine district was assigned to a census tract based on the reported address. The home languages associated with

⁸ It is important to note that Chinese Sign Language and Chinese Pidgin English are excluded from this number.

⁹ Jean Niswonger, GIS Specialist at Rice University, receives credit for the mapping of the data for which I am most grateful. She also provided helpful suggestions and asked insightful questions that will ultimately inform this project in a positive way.

each census tract were then identified on a map of the Aldine Independent School District.

While the majority of the 60,704 students surveyed in the Aldine district identify Spanish (54%) or English (44%) to be the home language, the remaining students (2%)¹⁰ report speaking 39 other languages at home. Similarly Spring Branch ISD has 50% of the 33,460 students completing the survey reporting that English is the language spoken at home and 44% reporting that Spanish is spoken at home. The remaining 6% of the students either did not respond or reported speaking one of the 58 other languages identified in the Spring Branch ISD.

In Katy ISD, of the 8,483 students reporting, 72% report that Spanish is the language spoken at home. Of the remaining 28%, 79 additional languages are represented with none comprising more than 4% of the total number reporting.

The report from Deer Park ISD includes information from 7,478 students. Most students in Deer Park speak English (82.5%); the second most commonly spoken language is Spanish (16.5%) the remaining 1% of the students speak 13 other languages.

A summary of all of the languages identified through the *Home Language Survey* is provided in Table 2 of Appendix B. The table includes the names of 112 individual languages (as identified by PEIMS) and a list of the Independent School Districts reporting speakers of each language. As this project progresses, one goal is to analyze data from more school districts in order to get a better picture of the linguistic diversity in the Houston GMA. As noted by von Ahn et al, aggregated census data presents groups as heterogeneous populations. In their study they found that for London the groups that obfuscated rich linguistic diversity were 'Black African' and 'White Other' (p.4). Their study also found that looking at the languages without

 $^{^{10}}$ < 1% of the students surveyed did not provide the name of a home language. In these cases the students either wrote the name of a language that is not included on the list provided by PEIMS or no language was provided.

any corresponding demographic data was also not sufficient. Future avenues of research for the *Voices of Houston Project* include examining the distribution of languages spoken in our region, and an examination of the demographic information of these individuals (e.g. race/ethnicity, income level, etc.). By disaggregating data such as race/ethnicity and language for the individuals within our community, we can create a more detailed portrait of local residents. Rather than examining groupings such as 'white non-Hispanic', we can see that this group comprises many ethnic and cultural backgrounds.

One problem with the data gathered by the TEA is that it is the country of origin is not a mandatory question. This is problematic when considering a language such as French, which is spoken not only in France and other European countries, but it is also spoken in many former French colonies (e.g. Algeria, Cameroon, Burkina Faso, and Côte d'Ivoire). The study by von Ahn et al found that this type of distribution could obfuscate details such as the fact that in London, "57% of French speaking pupils are 'black'...suggest[ing] the need to analyse language and ethnicity data in these cases to understand the nuances of people's circumstances and needs" (p.6).

6. Conclusions

This report summarizes the initial stage of the *Linguistic Survey*. While the results presented here are interesting and illustrate that Houston is linguistically rich, further research needs to be done to adequately catalog the depth of the diversity. The data from the Houston Independent School District needs to be analyzed and mapped and other districts need to be recruited to participate in this project by contributing the data they have already gathered. While individual districts have shown resistance to participating in this study, presenting the

current findings to the board of Regions 4 and 6 may lead to access of data from all districts in the Houston Greater Metropolitan Area. This project will also move beyond compiling a survey of the area school districts and attempt to survey all Houstonians. Part of a larger survey includes educating the public that multilingualism is nothing to be ashamed of and we are interested in cataloging the linguistic diversity of the Houston Greater Metropolitan Area.

Appendix A: Home Language Survey

Housing Independent School District Tracting a College-Bound Culture		TON INDEPENDENT SCHOOL DISTRICT HOME LANGUAGE SURVEY (PK - 12) (English)		
Student Name:		School:		
tudent Address:		Home Pho	ne:	
ate of Birth:	Gr Day Year	rade: H	ISD ID#:	PEIMS#:
				n at home by each student all students. Please answer
) Place of Birth (Country o	scho	ols	year	nber of complete academic
	Month	Day Year_		
 When your child lived ou Yes, my child attend 				
	me period, including r de periods of absence	month and year (exa	imple: Grade 2	cified: , Jan. 2002 through May Do not include regularly
M) Has your family worked i		LTURE or FISHING	INDUSTRY in	the last 3 years?
PART B:	□ No			
1. What language is s	poken in your home	most of the time?		
English Sp	anish Vietna	amese Oth	er (Specify)	
What language do English Sp	oes the student (deanish Vietna			
Grades PK – 8		Grades 9 -	- 12	
(Parent or Guardian)	(Parent or	Guardian or St	udent)
(Date)		(Date)		
NOTE TO SCHOOL PERSONNEL: 1. Signed copy of the Home student's permanent foold 2. In Part A items marked	Language Survey (HLS)		Yes, NEEDS (If entering g	DLPT ENTRY TESTING ades PK-12)
immigrant students. (Re identification procedures) outside of the United St.	efer to Bilingual/ESL Prog) An immigrant student is ates or its territories and I tates for less than three	ram Guidelines for one who was born has been attending	Yes, NEEDS E (If entering gi	NGLISH NRT ENTRY TESTING rades 2-12)
years. Item marked with students. 3. In Part B, an answer of a	an (M) is required for ider	ntification of migrant sh to either question		ist be tested, identified, and n appropriate program within enrollment.
(and written testing if ente				
				ITEM NUMBER

Appendix B: Tables

Table 1: Estimates of Linguistic Diversity for Houston Area

Of

	Languages			
Country	(Ethnologue)	50% Of Total	25% Of Total	Languages Other Than English Reported In Texas
Mexico	291	145.5	72.75	Spanish
El Salvador	6	3	1.5	Spanish
Honduras	10	5	2.5	Spanish
Guatemala	53	26.5	13.25	Spanish
Viet Nam	106	53	26.5	Vietnamese
				Bengali, Gujarati, Hindi, Kannada (Kanarese),
				Kashmiri, Konkani, Malayalam, Marathi, Nepali,
India	438	219	109.5	Oriya, Panjabi (Punjabi), Tamil, Telugu (Telegu), Urdu
				Chinese, Hakka, Mandarin, Cantonese, Uighur,
China	292	146	73	Chaochow, Hainanese, Shanghai
				Cebuano (Sebuano), Tagalog, Bisayan,
Philippines	171	85.5	42.75	llonggo (Hiligaynon), Pampangan
				Yoruba (Kru, Ibo/Igbo), Efik, Hausa, Kache (Kaje, Jju),
Nigeria	514	257	128.5	Kwa, Mande
Ethiopia	84	42	21	Amharic, Tigrinya
Egypt	11	5.5	2.75	Arabic, Greek
South Africa	24	12	6	Afrikaans (Taal), Shona, Sotho
	Total	1000	500	

Table 2: Languages Spoken in Houston Area¹¹

Language Name		Independent School District Reporting
1.	Afrikaans (Taal) ¹²	Aldine, Fort Bend, Katy
2.	Akan (Fante, Asante)	Aldine, Fort Bend, Katy
3.	Albanian, Gheg (Kossovo/Macedonia)	Aldine, Fort Bend, Katy, Spring Branch
4.	Albanian, Tosk (Albania)	Aldine, Katy
5.	Amharic	Aldine, Fort Bend, Katy, Spring Branch
6.	Arabic	Aldine, Deer Park, Fort Bend, Katy, Spring Branch

¹¹ Some surveys were not completed by students or their parent/guardian. Also, some surveys included languages that are on the list of PEIMS language codes, these are identified as *Other languages* (Code #99). Further research includes determining what these other languages are spoken in the area.

¹² According to Ethnologue, Taal (Tsotsitaal [ISO Code: fly]) and Afrikaans are not mutually intelligible (i.e. the speaker of Taal cannot understand the speaker of Afrikaans and vice versa).

7. Armenian Fort Bend, Katy, Spring Branch

8. Assyrian (Syriac, Aramaic) Aldine, Fort Bend

9. Bengali Aldine, Fort Bend, Katy, Spring Branch

10. Bosnian Fort Bend, Katy, Spring Branch11. Bulgarian Fort Bend, Katy, Spring Branch

12. Burmese Fort Bend, Katy, Spring Branch

Cambodian (Khmer)
 Aldine, Deer Park, Fort Bend, Katy, Spring Branch
 Cantonese (Chinese)
 Aldine, Deer Park, Fort Bend, Katy, Spring Branch

15. Cebuano (Visayan) Fort Bend, Katy, Spring Branch

16. Chamorro Aldine

17. Chaochow/Teochiu (Chinese) Aldine, Fort Bend, Katy, Spring Branch

18. Chinese Spring Branch

19. Choachowl¹³ Fort Bend

20. Croatian Aldine, Fort Bend, Katy

21. Czech Fort Bend, Katy, Spring Branch

22. Danish Katy, Spring Branch

23. Dari Fort Bend

24. Dutch/Flemish Fort Bend, Katy, Spring Branch

25. Efik Aldine, Fort Bend, Katy

26. English Aldine, Deer Park, Fort Bend, Katy, Spring Branch

27. Eskimo Aldine28. Ewe Aldine

29. Farsi (Persian) Fort Bend, Katy, Spring Branch

30. Filipino Fort Bend

31. Finnish Fort Bend, Katy

32. French Aldine, Fort Bend, Katy, Spring Branch

33. Fukien/Hokkien (Chinese) Fort Bend, Katy

34. German Aldine, Fort Bend, Katy, Spring Branch

35. Greek Deer Park, Fort Bend, Katy, Spring Branch

36. Gujarati Aldine, Deer Park, Fort Bend, Katy, Spring Branch

 $^{^{13}}$ There is no record of *Choachowl* in Ethnologue. This is most likely a typographical error (cf Chaochow/Teochiu).

37. Guy Anise¹⁴ Fort Bend
 38. Hainanese Deer Park

39. Haitian-Creole Fort Bend, Katy, Spring Branch

40. Hakka (Chinese) Fort Bend

41. Hebrew Fort Bend, Katy, Spring Branch

42. Hindi Aldine, Fort Bend, Katy, Spring Branch

43. Hmong Katy

44. Hungarian Fort Bend, Katy

45. Ibo/Igbo Aldine, Fort Bend, Katy, Spring Branch

46. Icelandic Katy

47. Ilonggo (Hiligaynon) Fort Bend, Katy

48. Indonesian Fort Bend, Katy, Spring Branch49. Italian Fort Bend, Katy, Spring Branch

50. Japanese Aldine, Fort Bend, Katy, Spring Branch

51. Kache (Kaje, Jju) Fort Bend

52. Kannada (Kanarese) Fort Bend, Spring Branch

53. Kashmiri Fort Bend

54. Konkani Aldine, Fort Bend, Katy

55. Korean Deer Park, Fort Bend, Katy, Spring Branch

56. Kpelle Katy

57. Krio Fort Bend, Katy, Spring Branch

58. Kurdish Fort Bend, Katy

59. Kwa Fort Bend

60. Laotian (Lao) Aldine, Fort Bend, Spring Branch

61. Latvian Fort Bend, Katy

62. Lithuanian Katy

63. Lunganda Fort Bend, Katy

64. Malay Fort Bend

65. Malayalam Deer Park, Fort Bend, Katy, Spring Branch

66. Maltese Fort Bend

¹⁴ This is how the language name was entered into the database that I obtained. It is most likely supposed to be *Guyanese*.

67. Mandarin (Chinese) Aldine, Deer Park, Fort Bend, Katy

68. Mande Fort Bend

69. Marathi Fort Bend, Katy, Spring Branch

70. Menominee Fort Bend71. Nepali Fort Bend

72. Norwegian Fort Bend, Katy, Spring Branch73. Oriya Fort Bend, Katy, Spring Branch

74. Pampangan Fort Bend

75. Panjabi (Punjabi) Aldine, Fort Bend, Katy

76. Pashto (Pushto) Fort Bend, Katy, Spring Branch

77. Pilipino (Tagalog) Aldine, Fort Bend, Katy

78. Polish Fort Bend, Katy, Spring Branch

Portuguese Aldine, Fort Bend, Katy, Spring Branch
 Romanian Aldine, Fort Bend, Katy, Spring Branch
 Russian Deer Park, Fort Bend, Katy, Spring Branch

82. Samoan Aldine

83. Serbian Fort Bend, Katy, Spring Branch

84. Shanghai (Chinese) Fort Bend, Katy

85. Shona Fort Bend

86. Sindhi Aldine, Fort Bend, Katy, Spring Branch

87. Sinhalese (Sri Lanka) Katy, Spring Branch¹⁵

88. Slavic Katy

89. Somali Fort Bend, Katy, Spring Branch

90. Sotho Fort Bend

91. Spanish Aldine, Deer Park, Fort Bend, Katy, Spring Branch

92. Swahili Aldine, Fort Bend, Katy, Spring Branch

93. Swedish Fort Bend, Katy, Spring Branch

94. Taal Spring Branch95. Tagalog Spring Branch

¹⁵ The entry for Spring Branch was *Sr Lanka* [sic], which is not the name of a language. Based on the languages spoken in Sri Lanka, I have placed this entry under Sinhalese.

96. Taiwanese/Formosan/Min Nan

(Chinese) Fort Bend, Katy

97. Tamil Aldine, Fort Bend, Katy, Spring Branch

98. Telugu (Telegu) Aldine, Fort Bend, Katy, Spring Branch

99. Thai Aldine, Deer Park, Fort Bend, Katy, Spring Branch

100. Tigrinya Fort Bend

101. Tiwa Aldine, Fort Bend, Katy

102. Tuluau¹⁶ Fort Bend, Spring Branch

103. Turkish Fort Bend, Katy, Spring Branch

104. Ukrainian Fort Bend, Katy, Spring Branch

105. Urdu Aldine, Deer Park, Fort Bend, Katy, Spring Branch

106. Vietnamese Aldine, Deer Park, Fort Bend, Katy, Spring Branch

107. Welsh Fort Bend

108. Yombe Fort Bend

109. Yoruba Aldine, Fort Bend, Katy

¹⁶ This language is included on the PEIMS list of language codes and is included on lists of language codes for other states as well (e.g. Illinois). It is not, however, found in any language database (e.g. Ethnologue, Glottolog). Furthermore, when one searches for this language, the only places it appears are on *Home Language Surveys* across the country. Further research includes determining alternative names for this language and where it is spoken.

Appendix C: Maps

Figure 1: Map of Languages in Aldine ISD

Number of Languages Spoken by Census Tracts in Aldine ISD

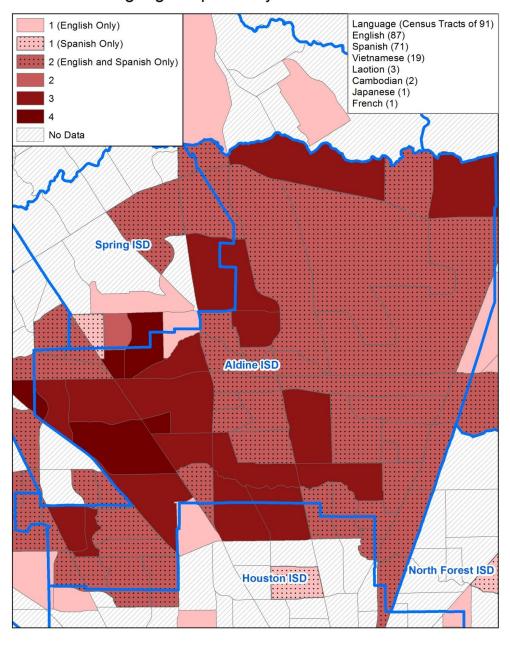
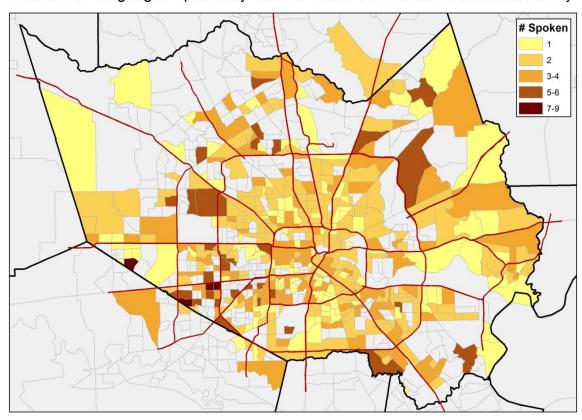


Figure 2: Map of Languages from Health of Houston Survey

Number of Languages Spoken by Census Tracts from Health of Houston Survey



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