

EPA.net

Non-English Functionality Group

Report on the Non-English Speaking Community in East Palo Alto
in relation to their potential use of EPA.net

4.1.02

Table of Contents:

- I. Introduction
- II. Demographics
- III. Language Statistics
- IV. Latino Community
 - a. Community Needs
 - b. Community Organizations and Services
 - c. Computer Usage
 - d. Potential uses for EPA.net among the Latino Community
 - e. Translation
 - f. Recommendations for EPA.net
- V. Pacific Islander Community
 - a. Community Needs and Values
 - b. Community Organizations: Pacific Islander Outreach
 - c. Computer Usage
 - d. Potential uses for EPA.net among the Pacific Islander Community
 - e. Translation
 - f. Recommendations for EPA.net
- VI. Other Language Communities
- VII. Tables / Charts – East Palo Alto Demographics

I. INTRODUCTION

Across the Highway 101 from Stanford University lies a community with a diverse ethnic and linguistic population, limited economic resources and optimistic spirit – East Palo Alto. There are many organizations working in East Palo Alto to improve the quality of life for its residents, working on issues like education, housing, and jobs. One of these efforts is called the East Palo Alto Community Network. The vision of the East Palo Alto Community Network is to provide the technological capability to create “One East Palo Alto” that is informed, connected, and empowered. This will be done through the creation of a technological infrastructure for access, learning, collaboration, and economic development. The Community Network will consist of EPA.net, an online resource center that will provide relevant information and services for individuals and groups in East Palo Alto and East Menlo Park, and a number of Technology Access Points. This project is part of the HP Digital Village Initiative and is supported by the Hewlett Packard Company, US Department of Commerce, and Microsoft. This report is focused on EPA.net’s efforts to effectively reach the community, particularly the non-English speaking community.

EPA.net faces many challenges as it tries to reach East Palo Alto with relevant tools. Some of these challenges are due to lack of technology in the city, others are due to lack of education and others are due to the linguistic and cultural diversity among its population. The purpose of this document is to analyze the Latino and Pacific Islanders communities in East Palo Alto, to find out what their needs are, how those needs are currently being met, and how EPA.net can contribute to the process of improve these people’s quality of life.

II. DEMOGRAPHICS

A clear understanding of the demographic make-up of the East Palo Alto community is necessary for us to effectively evaluate and address the community’s needs. This is especially true in regards to our goal of building an online resource that is useful for members of different language communities.

Tables and charts for the data we currently have can be found at the end of this document. This data deals primarily with race, ethnicity and language. In the future, we hope to supplement this data with further data concerning languages most commonly spoken and technology usage in East Palo Alto.

According to this data, the two largest ethnic communities are Latinos and Pacific Islanders. While we will only discuss in detail these two groups in relation to EPA.net, we are aware of the existence of other language communities in the city.

III. LANGUAGE STATISTICS

The latest census data on language in East Palo Alto won't be released until June, 2002, and the demographics of East Palo Alto have changed too much since the 1990 census data to have it be accurate. Nevertheless, we can gather from the fact that 58.8% of the population is Latino and 7.5% is Pacific Islander that there are many non-English speakers in East Palo Alto. In 1990, when Latinos and Pacific Islanders comprised 46% of East Palo Alto's population, 36.23% of the population spoke a language other than English at home. We can estimate, therefore that in 2000, when 68.6% of the population is Latino or Pacific Islander, if the proportion of Latinos and Pacific Islanders speaking a non-English language at home is the same as in 1990, there could be up to 54% of East Palo Alto's population speaking a language other than English at home. Realistically, the percentages of non-English speakers in East Palo Alto is probably lower, since many children are growing up speaking English very well and speak their parents' native tongue poorly.

Of those non-English speakers, the majority speaks Spanish. The Ravenswood City Elementary School District demographics show that most non-English speakers speak Spanish (91.7%), followed by Tongan (5.8%) and Hindi (1.3%). A recent interview with Sue Allen revealed that 70% of the kids in this school speak Spanish at home.

There are tables at the end of this report with exact figures of 1990 and 2000 census data.

IV. THE LATINO COMMUNITY

The Latino population in East Palo Alto has grown from 36.6% in 1990 to 58.8% in 2000. The percentage of Latinos who speak Spanish at home in the schools is even higher: 70%. (Sue Allen) Though we won't know until the third quarter of 2002 how many of these people don't speak English, we can assume that most of the children have learned English, but most of the adults have limited English skills. 65% of East Palo Alto's population is over 18, but among the Latino community, only 60% are over 18. (Census) It is not unreasonable to estimate that one-third to one-half of East Palo Alto's Latino Community doesn't speak English at all.

Comprising almost two-thirds of East Palo Alto's population, the Latino community is an important part of East Palo Alto that needs to be attended. Below I have described some of the characteristics of this community and how these need to be taken into consideration when targeting the Latino community with a product such as EPA.net.

Community Needs

According to Julio García at OEPA, most Latinos in East Palo Alto have immigrated from Mexico and Central America in the past 10 to 20 years. Many of them are still here illegally, most of them are poor, and almost all of them still maintain close ties with their relatives in their originating countries. On average, the East Palo Alto Latinos migrated to the U.S. with a 6th or 7th grade education, though some have High School and College Degrees. An average Latino makes \$560 to \$570 a month. The Latino community is not very involved in the politics of East Palo Alto. There is very little representation in the City Government, and few Latinos get involved in city issues such as the IKEA issue in 2002, as observed by Luis Avelar, an community leader.

From conversations with Latinos in East Palo Alto and community leaders, we have found that top priorities for them are:

1. Education for their kids
2. Housing
3. Work
4. Migration Issues

According to Julio García, most Latinos realize that education is central to success. There is a strong push to have children go to school and get a good education. There are currently some issues pertaining to the quality of education in East Palo Alto. There is a strong push to improve education in East Palo Alto, and the Latino community is involved in this process. There is a committee called the "Comité de Padres de Familia" who is actively involved in this.

Housing is very tight for low-income community members. It is typical to find two to three families crowded in one house. The housing crisis in the Silicon Valley has affected East Palo Alto, raising rents to unaffordable prices for low-income Latinos.

(Julio)

In informal conversations with community members, we found that most Latinos migrated to the U.S. for financial reasons. The ability to work and make more money than in Mexico or Central America is central to the existence and growth of East Palo

Alto's Latino community. The recent economic crisis in the Silicon Valley has jeopardized the little economic stability Latinos had in the first place. Many Latinos have an even harder time finding work because of language and legal barriers. The ability to speak English is a basic skill that many employers require, making it more difficult for many Latinos to find jobs. In addition, the lack of proper paperwork prevents many Latinos from getting jobs as well. It is not uncommon for them to use false Social Security numbers and IDs in order to get hired. (Informal conversations)

Not having proper paper work makes it difficult, not only to find a job, but to simply live in East Palo Alto. From these informal conversations with community members, we found that Latinos get thrown in jail or deported for minor violations (such as speeding) if they don't have proper identification. The lack of proper migratory paperwork prevents many Latinos from participating in community decisions as well. Civil participation for elections and campaigns among Latinos are proportionately very low compared to the Black and White populations in East Palo Alto.

Community Organizations and Services

Though there are no non-profit organizations that are specifically run by and for the East Palo Alto Latino community, there are many organizations that are doing work with the Latino population. Most non-profits, such as Plugged-In and OEPA and others, end up helping a lot of Latinos. Some non-profit efforts, such as tutoring programs, end up serving Latinos almost exclusively, not intentionally, but as a result of the large Latino population. We found this to be true at the Library and at other after-school programs.

As informed by a library worker, the East Palo Alto library has a large Latino presence. With a semi-large Spanish book section, after-school tutoring programs with a Spanish tutor, classes in Spanish and weekly Spanish Children's Story Time, it is not surprising that a large percentage of library users are Latino.

In addition to the library and other non-profits that unintentionally end up benefiting the Latino community, there are several organizations that specifically target the East Palo Alto Latino community.

The main one in the education realm is the "Comité de Padres de Familia" (Parents' Committee). The current head of this organization is Marcelino López (650) 321-6016. This committee is working on improving the educational system in East Palo Alto and making sure the educational needs of Latino children are being met. We have not been able to meet with them yet to get a better idea of their exact concerns, but will do so soon.

The main group working with immigration issues, and consequently housing and job related issues, is the "Comité de los Derechos de los Imigrantes" (Committee for the Rights of Immigrants). This group is headed by Luis Avelar (650) 325-2151, who is also a contact for another group "Comunidad de Bases" (Foundations Community – part of the Catholic Church), which works on some of these issues as well. Church Youth groups, in addition to providing spiritual guidance, are also helping Latinos find work and housing informally, and are a source of guidance in migration and other issues.

The relationship between the four previously mentioned organizations is kind of blurry. They work together to put on things like housing rallies, and there is a lot of

overlap in the people involved. They all target the needs of the Latino community, but they really aren't official registered organizations with mission statements and budgets, they are mainly a group of concerned Latinos coming together to deal with certain issues. They also work together with similar organizations and groups in Redwood City and East Menlo Park, since many of the needs and circumstances are similar.

There is one organization that is an official non-profit targeting the East Palo Alto Latino community with regards to health. El Concilio, which originally started targeting Latinos in San Mateo, has recently started a program specifically for East Palo Alto: Community Educators. Their focus is mainly providing health education to the Latino Community. Their strategy is to train people to educate their neighborhood in health related issues.

Computer Usage

There is very little to no data on computer usage in East Palo Alto. The census 2000 schedule won't be releasing any information on technology use any time soon either. The EPA.net team will be conducting a survey in Spring of 2002 to get a better idea of technology use.

From discussions with Latino community members, it looks like the percentage of Latinos with home computers is extremely low. An informal survey in the Belle Haven Elementary school revealed that 25% of the kids had a computer at home. Most of the computer access that occurs is channeled through schools and public computer clusters. Apart from the schools, there are currently two computer clusters: Plugged-In and the library. In addition to these, OEPA is hoping to institute several TAPs (Technology Access Points) in the next few years, and will be announcing the location of a couple new TAPs in the next couple months. By Summer 2002, EPA community members should be able to access computers and Internet from 3 to 5 locations.

Current usage of the library and Plugged-In indicates that the Latino community is indeed using computers. This does not mean that a high percentage of the Latino population is using computers, it just means that there is definitely Latino representation among the people who do use them. The number of people overall using computers in East Palo Alto, regardless of their race or language, is very low, however. This means that even if there are, for example, 500 Latinos using computers in the Plugged-In and the library (a high estimate), that is still less than 3% of the total East Palo Alto Latino community. With only 3% of the Latino community using the Internet, it is hard to imagine how EPA.net could have a significant effect on it.

Another source of computer usage is in schools. Latino kids can learn how to use computers in school, which increases the chances of the children's parents learning how to use computers too. A library worker mentioned that sometimes children come in with a parent, and together they use the Internet to send an email or apply for a job. An interview with Sue Allen revealed that Belle Haven Elementary School (25% of the students are from EPA) has given a laptop to all their kids between grades 4 and 8. The kids are very good at word processing and Internet browsing. They can take their laptops home with them, and their parents are starting to learn how to use them as well. The kids don't get to keep the laptops after they graduate from 8th grade, but will most likely have

become dependent enough on them that they will try to access them when they move on to High School.

Overall, most Latinos don't know how to use computers or the Internet, though this is rapidly changing with programs such as Belle Haven's. Many Latino adults, though, from what we gather by informal conversations with them, don't see how they are relevant enough to their lives to go through the trouble of learning how to use them. Those who do see some relevance still struggle with language and access barriers, or simply don't have time to learn, given their demanding jobs. The survey conducted in Spring of 2002 will hopefully shed more light on these issues.

Potential Uses for EPA.net among the Latino Community

Even if access barriers are overcome, to the point where every Latino can access a computer and the Internet without much trouble, there are still relevance barriers that need to be overcome. The question EPA.net needs to ask is: what content and tools are so important to the Latino community, that members of this community would go through the trouble of learning and accessing them? The survey to be conducted in Spring of 2002 will hopefully shed some light on this question, but preliminary research has shown that there are several tools that the Latino community would find particularly attractive. These ideas were gathered from Julio García, Katy Henrickson (Lawyer that works with illegal immigrants) and conversations with community members. These are:

1. News
2. Job Search
3. Housing Search
4. Immigration Forms
5. Discussion Forums

As mentioned before, most Latinos in East Palo Alto have recently immigrated from Mexico and Central America. What's interesting is that they still maintain close ties with their families. According to Julio, these Latinos still care deeply about what is happening in their homeland, and have little to no way of finding out what's going on apart from occasional long distance phone conversations and weekly or monthly Spanish newspapers. There are many Latinos who would love to be able to get daily news from their home country, political and economic updates, and also very importantly: soccer scores in their home country. The Spanish newspapers are not frequent enough, and they don't always report what people want to hear about. EPA.net could partner with local Internet news providers in Mexico and Central America, in order to provide daily news for EPA.net users.

This prospect raises an issue for the EPA.net design: customization. EPA.net may have to be customizable not only linguistically (appearing in English, Spanish and Tongan), but may also have to be customizable geo-politically (letting people choose their hometown and get information specific to that hometown).

At the same time, EPA.net was initially created to bring the community together. EPA.net's strategy so far has been to use things like discussion forums and local news to achieve this. It seems, though, from talking to members of the community, that Latinos would not find these community-participation tools useful enough to their daily lives to

warrant them using EPA.net. It appears that if you want East Palo Alto's Latinos to read local news and participate in discussion forums, you need to first lure them to EPA.net for another reason. You need to give them something they are really interested in, such as soccer scores or hometown news, in order for them to go through the trouble of accessing EPA.net in the first place. The recommendation here is not to eliminate EPA local news and discussion forums, but to provide incentives for the Latino community to connect to EPA.net, and then let them realize over time that they do care about local news and discussion forums.

Hometown news and soccer news are not enough incentive for everyone, though. A very useful tool that the Latino community would really use is a job-searching tool, allowing people to find jobs in and near to East Palo Alto. This tool would be especially useful if it contained search parameters like "Doesn't have to speak English" and "No SSN required." EPA.net would have to do further research to figure out exactly what to include in this tool, but the general idea of a job-search is clearly endorsed by the Latino community.

A similar tool that would be a great incentive is a housing search. This tool would be especially useful if it extended to Redwood City and Oakland, so that the Latino community could find housing wherever possible for the cheapest price.

Because of the immigration status of many Latinos, immigration and tax forms and guides would be very useful to them. Many Latinos don't know, for example, that they can go get free immigration counseling from a trusted lawyer, and they don't know how to make the most of their migratory situation. EPA.net could offer tools and services that make the process easier for Latino East Palo Alto community members.

Once these tools are in place, it is quite possible that discussion forums will start being heavily used by the Latino community, not so much as opinion centers, but as advice centers. Certain Latino EPA.net members who have had success finding a job or housing or getting past certain migration laws would be able to post what they did on EPA.net, paving the way for other Latinos to follow in their footsteps. It is also possible that EPA.net discussion forums would be used as a place to rally people for housing campaigns and other events, increasing participation among the Latino community in city affairs. This is strictly my opinion from observing the use of forums in other existing online Latino communities such as Deguate.com and Terra, but I could be wrong.

Because of the nature of the needs of the Latino community, using EPA.net to meet those needs might involve some legal complications. EPA.net would have legally disassociate itself from the content of its website if it wishes to actively facilitate job searches for illegal immigrants and allow a platform for illegal information to be put online (such as how to bypass immigration laws). This is something that EPA.net needs to evaluate closely.

Translation

EPA.net is currently available in Spanish through the Google translator. A subjective analysis by a native Spanish speaker of translation tools available on the web shows that Systran offers the best translation. It appears that the current Google translation uses Systran.

The results of the analysis are below. 7 was chosen subjectively as the current accuracy level of Google's translation, and all other translation tools were measured in comparison to Google's.

Alta Vista	7 (uses Systran)
Systran	7-7.5
Google	7 (might use Systran)
Prompt Translator	6
Freetranslation.com	6.5
Dictionary.com Transl.	N/W
Intertran	5
WorldLingo	7 (might use Systran)
IBM Alphaworks	N/W
Voila	6
Alis (Gist-n-time)	6

A more comprehensive scientific linguistic analysis should be conducted in order to find the best long-term solution for translating EPA.net to Spanish. The Google systems works well for now, and is definitely usable, and chances are it will continue to improve over time, so it may not be necessary to change translation systems.

Recommendations for EPA.net

EPA.net should definitely conduct its computer usage survey among the Latino population in East Palo Alto to better understand the status and potential uses of EPA.net. Based on research conducted this far, there are two recommendations that I have.

The first recommendation is regarding EPA.net's content. I recommend that EPA.net develop the tools recommended in the "Potential uses for EPA.net among the Latino Community" section. Hometown news, job-search tools, housing-search tools and immigration forms and advice are services that the Latino community could definitely benefit from. Best of all, most of these services already exist, so it is just a matter of partnering with or linking to current content providers. It wouldn't take too much work on EPA.net's part to implement them. EPA.net could also work on having a section for kids, in order to bring them into the process of EPA's development as well. If the kids can learn to find local news, participate in discussion forums and use EPA.net's tools, they are not only more likely to do these things when they reach adulthood, but are also likely to teach their parents how to do these things now.

Another aspect of content is that it must be streamlined to allow a user to get everything he or she needs in half an hour. The library and other access centers have limits on how much time you can spend on a computer. The library's limit is half an hour. The new TAPs might have a longer limit, but it would still be good to make sure and EPA.net user can access all the information he or she wants within half an hour. Making sure the TAPs have access to printing can help this process run smoother as well.

The second recommendation is regarding marketing EPA.net to the Latino community. I seriously doubt that EPA.net would get much response if they didn't implement any of the tools recommended above. Even if it just implemented one of the

aforementioned tools, it would be enough to start a marketing campaign. Another aspect is access. EPA.net should probably wait until there are more than two places to access the Internet before launching a massive campaign. Once there are relevant tools on and easy access points to EPA.net, I recommend printing weekly samples of EPA.net's content and distributing it throughout the community. This was an idea that Julio had. If community members can see on a hardcopy that there is a place that offers them their hometown news, or has job and housing postings, they are more likely to say "I want more of this" and go through the trouble of going to a TAP to access EPA.net. This distribution can happen easily through the different committees, organizations and church groups in East Palo Alto. From my conversations with them they seem more than willing to cooperate. Another big marketing channel is the school system. If children can be convinced that EPA.net can help their parents, they will go home and convince their parents to give it a try.

EPA.net has great potential to benefit the East Palo Alto community and bring it together. But in order to do this it needs to attract 60% of East Palo Alto's population: the Latino community. Doing this will require meeting its needs through information technology, and using those tools as a gateway to increasing community participation.

V. THE PACIFIC ISLANDER COMMUNITY

The 2000 Census sets the Pacific Islander population in East Palo Alto at almost 8%, with the largest percentage of Pacific Islanders being Tongan. The Pacific Islander community in East Palo Alto also includes Samoans and – in smaller numbers – Fijians and other Pacific Islander groups. A little over 10% of students enrolled in the Ravenswood City Elementary School District are Pacific Islanders, and about 7% of English learning students in the district speak Tongan or Samoan.

A Pacific Islander Outreach Health survey from 1999 (which is included at the end of this report) provides a rough breakdown of the different subgroups in terms of ethnicity and language within the Pacific Islander community. According to this survey, Tongans make up the majority of Pacific Islanders by far, with 76% of the Pacific Islanders surveyed identifying themselves as Tongan. Samoans, with 27% of those surveyed, make up the next largest group, followed by Fijians, with 5%.

In terms of language, 70% of those surveyed were fluent in Tongan and 34% were fluent in Samoan. Only 2% of the respondents spoke no English.

Taking these figures into account, we may want to focus first on adapting EPA.net to meet Tongan needs. It might be best to wait until a Tongan version of EPA.net is established before we branch into a Samoan or any other Pacific Islander adaptation. The different Pacific Islander adaptations will likely be similar, but there will be differences in terms of language and cultural aspects of the site.

Community Needs and Values

The single most important need for the Tongan community in EPA is immigration assistance. Many members of the community are here illegally, which means they must keep a low profile in terms of public aid programs, and which means that they cannot easily find work. We don't currently know if this is a problem faced by other Pacific Islanders, but immigrants from American Samoa at least would not be affected by these immigration issues.

Employment is another area that many Pacific Islanders are concerned with. Because of their illegal status, many Tongans are relegated to low-paying, physical jobs such as gardening. Furthermore, in general unemployment rates in East Palo Alto are substantially higher than unemployment rates for the rest of San Mateo County.

Finding housing and partaking in economic development are two other issues of importance in the Pacific Islander community – just as they are issues of importance in the EPA community as a whole. Poor housing conditions and overcrowding afflict much of the available housing in East Palo Alto. In recent years, securing affordable housing in East Palo Alto and the surrounding areas has become increasingly difficult.

The community also values obtaining a good education, which can be viewed as a means to economic development. This can be difficult when students do not speak English fluently, as many Pacific Islander students do not. In a city where the high school drop out rate is estimated at 50%, educating any population can be a challenge.

Health is another area that causes some concern in the Pacific Islander community. Because of their illegal status, many Pacific Islanders – primarily Tongans – do not answer health surveys. In the past, there has also been speculation that some Pacific Islanders are wary of Western medical practices. If this speculation is in fact true, then many Pacific Islanders could be neglecting their health.

Of course, family values, culture and religion all play very important parts in the lives of most Pacific Islanders. The average household size of Pacific Islanders in EPA is about 6 people, which is larger than the overall city average. This is because grandparents and non-nuclear relatives often live with a family. In addition, many Pacific Islanders are involved in preserving their culture and in worship.

Community Organizations: Pacific Islander Outreach

The main organization serving the Pacific Islander community in East Palo Alto is Pacific Islander Outreach, or PIO. PIO offers a variety of services to the EPA community. Among these are educational and cultural activities, such as basic computer training, art exhibits and culturally-directed after-school programs at many of the elementary schools. PIO also offers a variety of health services, including but not limited to basic community health education, a health survey, intervention for certain diseases (AIDS, diabetes, hepatitis, and others), and education on topics such as domestic violence prevention and alcohol abuse. The organization also offers translation services in Tongan, Samoan and Fijian. The most effective way of reaching the Pacific Islander community in East Palo Alto is probably by going through PIO.

Computer Usage

While many Pacific Islanders are beginning to become more familiar with computers and the Internet, the IT Specialist for PIO estimates that about 85% of the Pacific Islander population still has little or no knowledge of computers. That said, community members are more and more beginning to take advantage of computer access at Plugged In and the library. Pacific Islander youths – more so than adults – use the library and Plugged In for Internet access.

Potential Uses for EPA.net among the Pacific Islander Community

In order for EPA.net to be a truly useful tool for the Pacific Islander community, it should address and appeal to many of the needs and values of the community already mentioned. This can be done through the implementation of certain features. Below are some suggestions for potential features.

- Immigration Forms and Resources – This could include links to immigration sites, an immigration emailing list, FAQs, and possibly a help line to send immigration

questions to that would feed directly to the immigration specialists in East Palo Alto.

- Free email – This could provide a doorway to the Internet and thus the EPA.net community for people who are not currently familiar with computers or the Internet.
- Housing Search and Information – A housing search for affordable, well-maintained housing in the area would be helpful. This piece might include a way to contact officials about poor housing conditions or to explore legal options.
- Job Search
- Health Resources – A page with contact information for local health resources would be helpful, as would a general information page about different health issues like alcoholism or diabetes.
- Educational Resources – Information on the local schools, high school equivalency examinations, adult courses, English courses, scholarships, college preparatory courses, college admissions.
- Island News – News about what’s going on in the Pacific Islands.
- Local News – News about the Pacific Islander community in East Palo Alto and in San Mateo County. This could include news about outstanding accomplishments by individuals, cultural events, religious events, and anything that else that affects the community.
- Discussion Forums – These really should be in Tongan (and perhaps ultimately in Samoan and Fijian) in order for them to be sites of interesting discussion. Because of the language breakdown, Pacific Islanders like to discuss politics and issues in their own tongues rather than in English. Discussion forums on immigration, health, education, or any of the other topics mentioned before may become very lively when the group’s native language is used.

Translation

Both Samoan and Tongan are historically oral languages. So, there are a limited number of writing tools available for these languages. While there are a few translation tools available for Tongan and Samoan, the best translation solution for now may require actually having people go through and translate the site. This would ensure accurate translation. PIO has the resources for translation into the three languages Tongan, Samoan and Fijian. The problem with language tools is that, in the case of Tongan, there are three different wordings for anything, depending on the person to whom you’re speaking. This makes translation very difficult, and to our knowledge, no accurate tools exist. The script set for both Tongan and Samoan is the regular English script set. So, on discussion forums and chat sites, we could encourage people to write in Tongan or Samoan without having to implement any new technologies. Also, because the languages are oral, voice technologies may be well-received, rather than written technologies.

A handful of Tongan and Samoan language translation technologies do exist, however, and they are listed here.

- Speakglobally.com: The company translates entire web sites into Tongan, providing daily, weekly or monthly updates. This involves outsourcing, which is probably quite pricey. Other outsourcing solutions also exist.
- Multicorpora Translation Tools: These tools are meant for Computer Aided Translation. This means that they make translation more efficient than the existing translation system through database technologies, but the catch is that a translation system has to be in place. They start at around \$49 and run up to \$2219.
- Tango Multilingual Web Browser: This translates web sites into Tongan or Samoan for users of this particular browser. A possibility is that this browser could be installed at technology access points, and users could view the site in their own language by visiting one of these access centers. Runs for \$49.
- ViA Voice Translation technologies – Currently, there are no voice translation tools available for the Samoan or Tongan languages. But, ViA does have voice translation for Spanish and other languages, so it may be a company to keep an eye on.

The development of machine translation tools is also a possibility. Machine translation can translate chat, emails, and discussion forums in real time. These tools perform what is known as “gist” translation, meaning that they give the gist of what the document says. They work by interpreting the structure of sentences in the source language and generating a translation based on the language rules of the target language. A machine translation engine needs to be developed in order to implement this solution

Recommendations for EPA.net

In order to appeal to the Pacific Islander community, EPA.net should appear in translated form of some sort. A possibility is to just make sure that the content provided by the EPA.net team is translated, and then leave users to use the discussion forums in their own language. This may be limiting, because it defeats the notion of cross-language communication in discussions. The site should also appeal to Pacific Islander needs and values, maybe implementing some of the potential features discussed in the “Potential Uses” section of this report.

Assessing the needs of the community in more detail than is done here could be done through a survey. As mentioned before, the best way to reach the Pacific Islander community is through PIO, so we could perhaps seek that organization’s help in distributing a survey. It might also be to our advantage to survey people already using computers and the Internet, in places like the East Palo Alto Library and Plugged In. This way, we could get input from people familiar with the Internet regarding what sorts of things they would like to see on EPA.net.

VI. OTHER LANGUAGE COMMUNITIES

Apart from the Latino and Pacific Islander communities, there are also several small Asian communities within the city, each with its own language. Within the Asian subgroup, the Filipino population is the largest, followed by the Asian Indian population. For the most part, members of these groups seem to be comfortable with English. One surprising statistic, however, is the fact that Hindi-speakers constitute the third largest English learning group in the Ravenswood City Elementary School District, behind Spanish and Tongan. (It is worth noting that many Fijians as well as East Indians speak Hindi.) This may be evidence of a growing Hindi-speaking population in EPA, something that we might want to look out for.

Nevertheless, on the whole Asians only make up about 2% of the city's population, and less than 1% of the school district's students. Because there are so many Asian languages, no one language group makes up more than 1% of the community. Coupled with the appearance that most speakers of Asian language also speak English, a good approach for us at this time may be to focus on the Latino and Pacific Islander communities. As the project expands, we may be able to address the needs of other language communities.

VII. TABLES / CHARTS – EAST PALO ALTO DEMOGRAPHICS

Census 1990 Data – U.S. Census Bureau

Race and Latino Origin

RACE AND LATINO ORIGIN		
Total population	23,451	100.00%
White	7,431	31.69%
Black	10,071	42.94%
American Indian, Eskimo, or Aleut	154	0.66%
Asian or Pacific Islander	2,252	9.60%
Other race	3,543	15.11%
Latino origin (of any race)	8,527	36.36%

Language

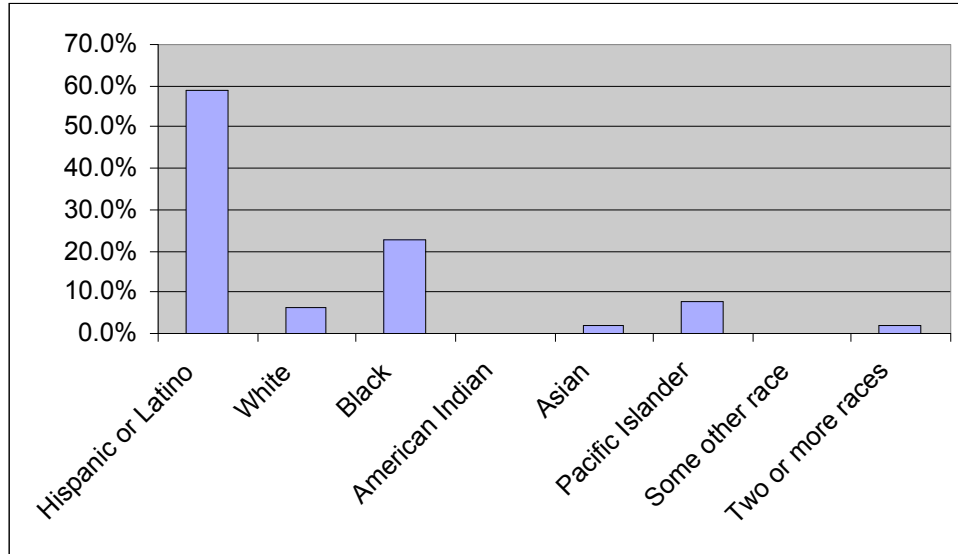
LANGUAGE SPOKEN AT HOME		
Persons 5 years and over	20,945	89.31%
Speak a language other than English	8,497	36.23%
Do not speak English "very well"	5,019	21.40%
Speak Spanish	6,438	27.45%
Do not speak English "very well"	4,185	17.85%
Speak Asian or Pacific Island language	1,460	6.23%
Do not speak English "very well"	633	2.70%

Census 2000 Data – U.S. Census Bureau

Race and Age

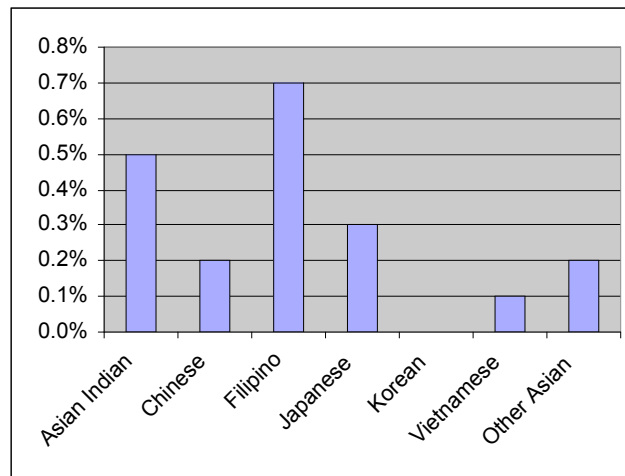
RACE	Number	Percent	18 & over	under 18	55 and over	Median Age
Total population	29506	100.0%	100.0%	100.0%	100.0%	25.8
Latino or Latino*	17,346	58.8%	54.1%	67.5%	23.6%	22.3
White	1,930	6.5%	9.0%	2.0%	11.0%	37.8
Black	6,641	22.5%	25.1%	17.7%	52.0%	36.0
American Indian	66	0.2%	0.2%	0.2%	0.4%	27.7
Asian	621	2.1%	2.6%	1.1%	4.6%	32.8
Pacific Islander	2,223	7.5%	6.7%	9.2%	6.0%	22.9
Some other race	67	0.2%	0.3%	0.2%	0.2%	22.4
Two or more races	612	2.1%	2.0%	2.2%	2.2%	24.0

* Latino or Latino of any race
 35% of the population is under 18.
 10.3% of the population is aged 55 or over.

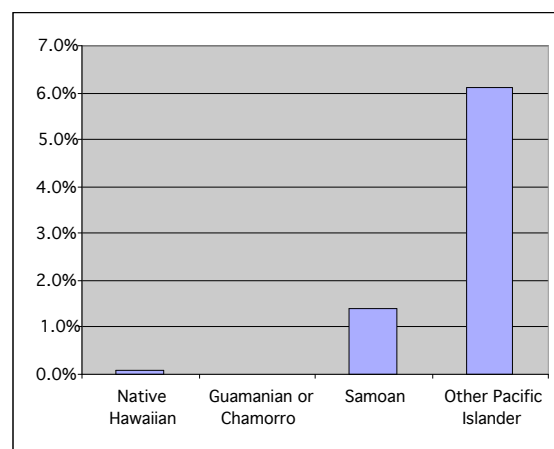


Race Breakdown

ASIAN	Number	Percent
Total	657	2.2%
Asian Indian	160	0.5%
Chinese	66	0.2%
Filipino	221	0.7%
Japanese	93	0.3%
Korean	14	0.0%
Vietnamese	40	0.1%
Other Asian	63	0.2%



PACIFIC ISLANDER	Number	Percent
Total	2252	7.6%
Native Hawaiian	29	0.1%
Guamanian or Chamorro	2	0.0%
Samoan	417	1.4%
Other Pacific Islander*	1804	6.1%

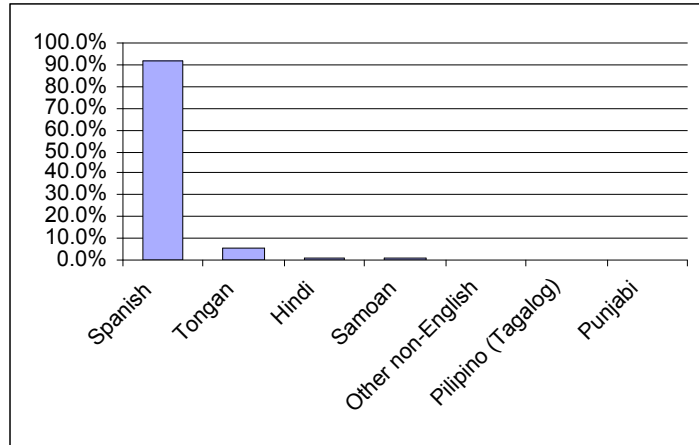


*includes Tongan

California Department of Education - Educational Demographics Unit

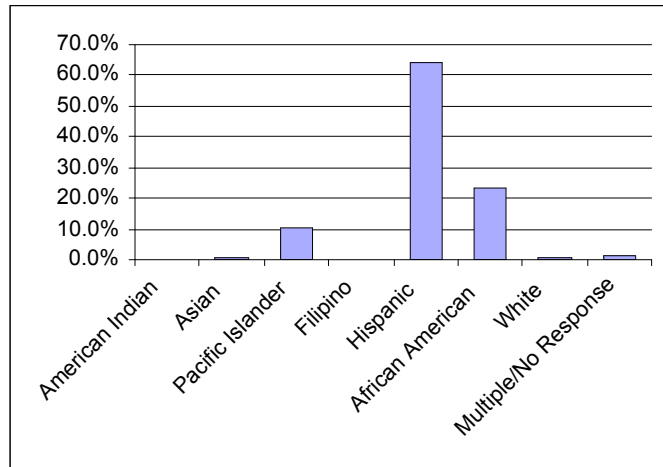
Language Breakdown of Non-English Speakers

LANGUAGE	Number	Percent
Spanish	3277	91.7%
Tongan	207	5.8%
Hindi	45	1.3%
Samoan	40	1.1%
Other non-English	2	0.1%
Pilipino	2	0.1%
Punjabi	1	0.0%
Total	3574	100.0%

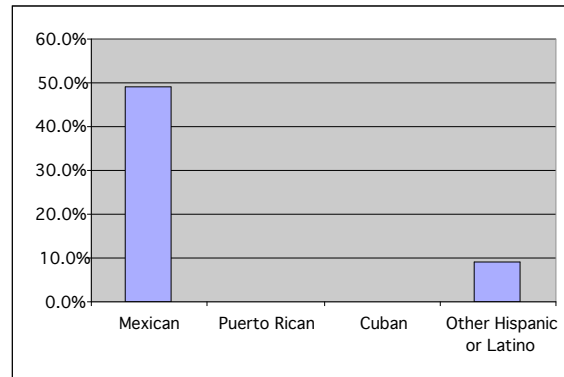


**Enrollment by Ethnicity, 1999-2000
Ravenswood City Elementary School District**

ETHNICITY	Number	Percent
American Indian	0	0.0%
Asian	38	0.7%
Pacific Islander	552	10.2%
Filipino	5	0.1%
Latino	3446	63.9%
African American	1267	23.5%
White	33	0.6%
Multiple/No Response	52	1.0%
Total	5393	100.0%



LATINO	Number	Percent
Total	17346	58.8%
Mexican	14550	49.3%
Puerto Rican	70	0.2%
Cuban	12	0.0%
Other Latino or Latino	2714	9.2%



Data from PIO Health Project, 8/1999

Additional demographic data concerning the Pacific Islander community

AGE	<18	18-35	36-49	50+
Percent*	33.3%	31.9%	17.4%	18.1%

ETHNICITY	Tongan	Samoan	Fijian
Percent*	76%	27%	5%

LANGUAGE	Percent*
Fluency in English	81%
Some English	14%
A little English	4%
No English	2%
Fluency in Tongan	70%
Fluency in Samoan	34%
English or Tongan	96%

*Percentages are out of the 138 persons surveyed

Some respondents may identify with more than one ethnic group, explaining why the ethnic percentages don't add to 100%.