CITY OF BELLEVUE

In Partnership with the
University of Washington

DEVELOPING A MOBILE APP
TO INCREASE LANGUAGE ACCESS
AT THE CITY OF BELLEVUE

City of Bellevue Project Lead
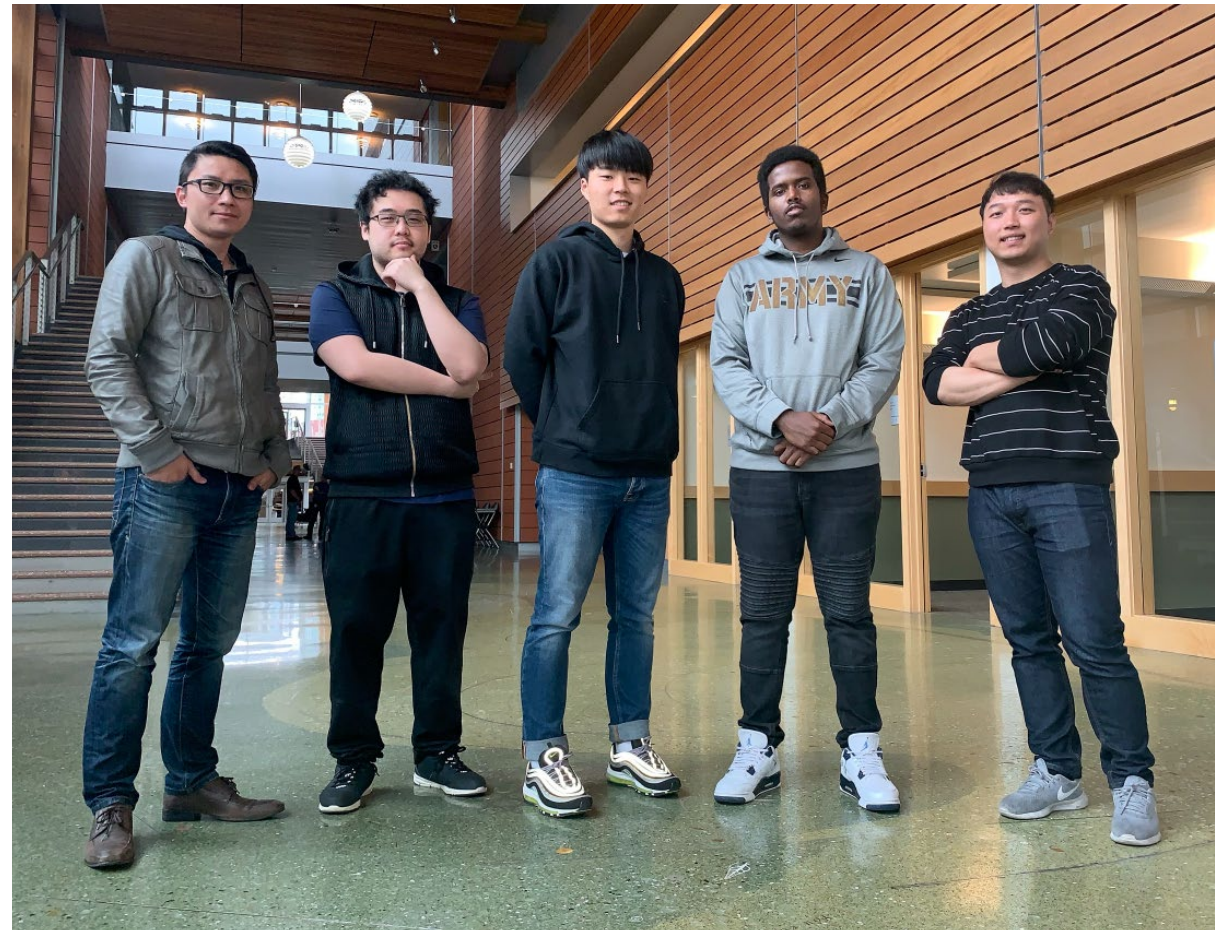Elaine Acacio

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Spring 2019

Livable City Year 2018–2019
in partnership with
City of Bellevue

LIVABLE
CITY YEAR

The LCY team at Bellevue City Hall. From left to right: Chung Liu, Adrian Kang, Edgar Hyeongwoo Park, Abdinassir Muse, and Juhwan Kim.
TERI THOMSON RANDALL

ACKNOWLEDGMENTS

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ABOUT LIVABLE CITY YEAR

The University of Washington's Livable City Year (LCY) initiative is a partnership between the university and one local government for one academic year. The program engages UW faculty and students across a broad range of disciplines to work on city-defined projects that promote local sustainability and livability goals. Each year hundreds of students work on high-priority projects, creating momentum on real-world challenges while serving and learning from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents, and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion and access. The program's 2018–2019 partner is the City of Bellevue; this follows partnerships with the City of Tacoma (2017–2018) and the City of Auburn (2016–2017).

LCY is modeled after the University of Oregon's Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), an international network of institutions that have successfully adopted this new model for community innovation and change. For more information, contact the program at uwlcy@uw.edu.

ABOUT CITY OF BELLEVUE

Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It's the high-tech and retail center of King County's Eastside, with more than 150,000 jobs and a skyline of gleaming high-rises. While business booms downtown, much of Bellevue retains a small-town feel, with thriving, woodsy neighborhoods and a vast network of green spaces, miles and miles of nature trails, public parks, and swim beaches. The community is known for its beautiful parks, top schools, and a vibrant economy. Bellevue is routinely ranked among the best mid-sized cities in the country.

The city spans more than 33 square miles between Lake Washington and Lake Sammamish and is a short drive from the Cascade Mountains. Bellevue prides itself on its diversity. Thirty-seven percent of its residents were born outside of the US and more than 50 percent of residents are people of color, making the city one of the most diverse in Washington state.

Bellevue is an emerging global city, home to some of the world's most innovative technology companies. It attracts top talent makers such as the University of Washington-Tsinghua University Global Innovation Exchange. Retail options abound in Bellevue and artists from around the country enter striking new works in the Bellwether arts festival. Bellevue's agrarian traditions are celebrated at popular seasonal fairs at the Kelsey Creek Farm Park.

Bellevue 2035, the City Council's 20-year vision for the city, outlines the city's commitment to its vision: "Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past." Each project completed under the Livable City Year partnership ties to one of the plan's strategic areas and many directly support the three-year priorities identified by the council in 2018.

BELLEVUE 2035:
THE CITY WHERE YOU WANT TO BE

Developing a Mobile App to Increase Language Access at the City of Bellevue supports the *High Performance Government* target area of the Bellevue City Council Vision Priorities and was sponsored by the Department of City Manager's Office.

HIGH PERFORMANCE GOVERNMENT

Bellevue is characterized by high performance government. Our residents live in a safe, clean city that promotes healthy living. The perception of safety contributes to the success of businesses and neighborhoods. Police, fire and emergency personnel are seen by citizens every day, and we ensure that these services reflect high standards and pride.

People are attracted to live here because they see that city government is well managed. Our high quality of customer service ensures that residents realize a direct link between their tax dollar investments and the services they receive. We make public investments wisely, assuring taxpayers that we are living within our means, while also ensuring that we have superb infrastructure to support growing businesses and desirable residential opportunities. We have beautiful public buildings that residents point to with pride. Government plays its role in supporting the careful balance of neighborhoods, commercial and retail growth, diverse residential living opportunities, and amenities that characterize Bellevue. City leadership fosters careful, long-term planning, responsible financial policy, and thoughtful partnerships with businesses, the nonprofit sector, and the region.

We seek input from our residents and businesses, and this input informs city decision-making. We make decisions in a transparent manner. We support public engagement and connectivity. Bellevue does its business through cutting-edge technology. City government uses technology to connect with its residents, giving them voice in their community. Our boards, commissions, and other citizen advisory groups assist the City Council in providing superior leadership by representing the diverse interests of the city and providing thoughtful and creative ideas that assure sound policy direction and decisions.

Our residents care for Bellevue. They speak up and collectively work to address our mutual needs. In Bellevue, our commitment to public service is paramount. Our residents know that their local government listens, cares about, and responds to them.

Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past.

The seven strategic target areas identified in the Bellevue City Council Vision Priorities are:

ECONOMIC DEVELOPMENT
Bellevue business is global and local.

TRANSPORTATION AND MOBILITY
Transportation is both reliable and predictable. Mode choices are abundant and safe.

HIGH QUALITY BUILT AND NATURAL ENVIRONMENT
From a livable high-rise urban environment to large wooded lots in an equestrian setting, people can find exactly where they want to live and work.

BELLEVUE: GREAT PLACES WHERE YOU WANT TO BE
Bellevue is a place to be inspired by culture, entertainment, and nature.

REGIONAL LEADERSHIP AND INFLUENCE
Bellevue will lead, catalyze, and partner with our neighbors throughout the region.

ACHIEVING HUMAN POTENTIAL
Bellevue is a caring community where all residents enjoy a high quality life.

HIGH PERFORMANCE GOVERNMENT
People are attracted to living here because they see that city government is well managed.

For more information please visit: https://bellevuewa.gov/city-government/city-council/council-vision

EXECUTIVE SUMMARY

Bellevue's residents represent a rich tapestry of races, cultures, and languages. About 42% of Bellevue's population in 2015 spoke a language other than English at home, compared to King County 27%, Seattle 21%, the state of Washington 19%, and the US 22% (US Census Bureau, 2016 American Community Survey). The Bellevue School District reported having 95 different languages spoken by children enrolled in the 2016–2017 school year (City of Bellevue).

This rich language diversity has made language access a high priority for the City of Bellevue, not only because of its federal mandate under Title VI of the Civil Rights Act, but because language access and information are integral components of exceptional customer service and social justice.

In the Fall of 2018, the City of Bellevue asked the University of Washington (UW) to create an in-house software application that could help the City of Bellevue's workforce quickly sift through a database of language access resources and identify the specific resources appropriate for their clients. Through the UW Livable City Year program, Elaine Acacio in the City Manager's Office was introduced to Professor Ankur Suri in the School of Engineering and Technology at UW Tacoma. Professor Suri assigned a team of five undergraduate student interns to take on this applied technology challenge.

The student team began their process by meeting several times with Bellevue staff to learn about the various challenges faced by employees when trying to provide language access services to residents. The students conducted one-on-one meetings with City staff who work at the Service First desk, Blayne Amson, ADA/Title VI Administrator with the City Manager's Office, and Mark Heilman, who oversees the Neighborhood Outreach division. The students also met with staff from the departments of Finance and Asset Management, Community Development, and IT, to further understand the nuances of the problem.

> It is hoped that this project will enhance clarity for the City's workforce as they provide and use language access resources while serving Bellevue's diverse community.

Broadly speaking, the categories of language access resources at Bellevue include:

- Bilingual City staff who are willing to provide interpreting or translation services for small jobs on a volunteer basis
- Bilingual staff who serve as cultural navigators at Mini City Hall in Crossroads Mall who can provide in-person interpretation
- Devices that provide simultaneous interpretation at public meetings
- Telephonic interpretation
- Third-party professional interpreters or translators

Under the direction of Professor Suri, the students worked in two teams to develop versions of the software application for iOS and Android. Throughout the project, students met frequently with City staff to refine the design and test the prototypes. The end product is a mobile app that asks the user a series of questions about the type of services needed by the client and then guides them to the appropriate resources.

It is hoped that this project will enhance clarity for the City's workforce as they provide and use language access resources while serving Bellevue's diverse community. For next steps, the students recommend that Bellevue adapt this app to a webpage for internal use so that employees can find information about language access services from their laptops and desktop computers. Ultimately, it is hoped that a similar site could be made available to the public.

A pair of guardian lion statues from sister city Hualien, Taiwan, took up residence at Bellevue City Hall in 2013. The event was marked by a visit from Hualien's first lady, Zhang Mei-Hui (center), as well as Hualien city officials and business leaders.
CITY OF BELLEVUE

COMMITMENT TO EXCEPTIONAL PUBLIC SERVICE

The City of Bellevue is committed to helping speakers of other languages access City services. This is due in part to legal reasons — under Title VI of the Civil Rights Act, all federally-funded entities are required to provide language accommodation to limited English proficiency (LEP) individuals who request it. The threshold according to the law is 5% or more of the eligible population. For example, if 5% or more of Spanish speakers are LEP, then the federally-funded entity, e.g., the city, must provide translation of vital documents, especially those that are emergency related.

But there is more behind Bellevue's commitment to language access than federal law. The City views language accommodation as a key strategy for achieving Exceptional Public Service — one of the City's five core values.

COMMITMENT TO SOCIAL JUSTICE

For every individual, language access is essential for participation in a democratic system, for civic engagement, and for the exercise of one's human rights. In an emergency, it can even save a life. "If you think about the many ways that we as individuals give and receive information that enables us to make informed decisions — for example, how we engage with local government, or access vital life-saving resources — it is clear that language access is much more than a legal mandate, it is a prerogative of every individual," says Elaine Acacio, Diversity and Inclusion Program Administrator for the City Manager's Office.

Language access is among the top priorities of the City of Bellevue Diversity Advantage Team, a cross-departmental squad that works to drive and catalyze change within city government and the community. "It's not just that we abide with the law but that we provide what is needed," Acacio says. "Language access is a social justice issue."

According to Acacio, City of Bellevue staff understand their responsibility to provide language accommodation if requested, and are committed to provide it. The challenge is in the execution. Invitations to public meetings are written in English, including the standard text that states that language accommodation is available to those who ask. "But how can a non-English speaker know that if the text is in English?" Acacio asks.

> "Language access is much more than a legal mandate, it is a prerogative of every individual."
>
> — *Elaine Acacio*

EXCEPTIONAL PUBLIC SERVICE

The following text is from Bellevue's statement of core values. Note that language accommodation is a key strategy for achieving Exceptional Public Service.

We deliver outstanding service to the customer. We are committed to exceptional service for all of our customers. We demonstrate quality, caring, and sensitivity in every process, service, and product we deliver. We value the contributions of citizens and partners. Our community can expect open, fair, consistent, and responsive service.

General Strategies:

- Provide high quality services and products effectively and efficiently.
- Provide the staffing and resources to enable quality levels of service.
- Emphasize collaboration and teamwork.
- Maintain effective public information processes.
- Provide easy access to City services and products.
- Use public involvement to connect with the community.
- Deliver services in partnership with community organizations and citizens.
- View customer feedback as essential.
- Ensure accountability by reporting on performance.
- **Recognize the ethnic, economic, and cultural diversity of the community and provide alternative service modes to meet the differing needs of our residents.**

CITY OF BELLEVUE

Given the variety of language accommodation resources needed by residents, the myriad of resources available, and the sheer number of languages spoken in Bellevue, the coordination of Bellevue's language accommodation services had grown into a monumental challenge in customer service, or, in Acacio's words, "the perfect storm."

During the last four years, Acacio and her team have worked to identify and catalogue the many interpreting, translation, and ADA resources that are available to non-English speakers in Bellevue. This ever-expanding list of resources comprises the following broad categories:

- Bilingual City staff who are willing to provide interpreting or translation services for small jobs on a volunteer basis
- Bilingual staff who serve as cultural navigators at Mini City Hall in Crossroads Mall who can provide in-person interpretation
- Devices that provide simultaneous interpretation at public meetings
- Telephonic interpretation
- Third-party professional interpreters or translators

As the list of language accommodation resources grew — a good thing in its own right — it became more difficult for City staff to find what they needed when faced with a request. Staff found themselves conducting time-consuming searches in the City's in-house SharePoint files — which is where the information was located — and still sometimes coming up empty-handed because there was too much material to sift through, or because they weren't sure which resources were appropriate for the client.

In the Fall of 2018, the City of Bellevue asked the University of Washington (UW) to create an in-house software application that could help staff quickly find the appropriate language accommodation resource. Through the UW Livable City Year program, Elaine Acacio in the City Manager's Office was introduced to Professor Ankur Suri in the School of Engineering and Technology at UW Tacoma. Professor Suri felt that this project would be an excellent applied technology challenge for her upper-division, undergraduate student interns.

All five of the students on this team were international students who had learned English as a second language. Later, team leader Adrian Kang noted that he and his fellow team members understood firsthand the importance of language accommodation, and that they felt personally connected to the work.

TRANSLATION AND INTERPRETING

On the surface, the difference between interpreting and translation is only the difference in the medium: the interpreter translates orally, while a translator interprets written text. While both require a deep knowledge of more than one language, the skill sets are quite different.

The key skills of the **translator** are the ability to understand the source language and the culture of the country where the text originated, then using a good library of dictionaries and reference materials, to render that material clearly and accurately into the target language. In other words, while linguistic and cultural skills are still critical, the most important mark of a good translator is the ability to write well in the target language.

An **interpreter**, on the other hand, must be able to translate in both directions on the spot, without using dictionaries or other supplemental reference materials. Interpreters must have extraordinary listening abilities, especially for simultaneous interpreting. Simultaneous interpreters need to process and memorize the words that the source-language speaker is saying now, while simultaneously outputting in the target language the translation of words the speaker said 5–10 seconds ago. Interpreters must also possess excellent public speaking skills and the intellectual capacity to instantly transform idioms, colloquialisms, and other culturally-specific references into analogous statements the target audience will understand.

LANGUAGESCIENTIFIC.COM

An initial interview with Blayne Amson (left), Bellevue's ADA/Title VI Civil Rights Program Administrator, helped orient the students to the project.
ELAINE ACACIO

"IT'S JUST LIKE TURBO TAX!"

Students first met with City staff to better understand the various challenges faced by City employees when trying to identify language accommodation resources for residents. Staff described their desire for an app that asks the user a series of questions and then quickly points them to the appropriate information.

It sounded to the students like Turbo Tax, a tax preparation software application that uses questions to guide the user to solutions based on their specific tax situation.

The City, Professor Suri, and the students agreed that the student team would create a user-friendly app that City staff could use on their cell phones (both iOS and Android). The app would ask a few questions about the client's need and then direct the user to the appropriate language access resource.

BELLEVUE'S CHANGING DEMOGRAPHICS

To fully understand the need for this project, it is important to consider Bellevue's dramatic shift in racial and ethnic diversity in recent decades. In 1990, non-Hispanic Whites made up 85% of Bellevue's population. Over the next 25 years, this percentage declined dramatically so that by 2015, for the first time, non-Hispanic Whites no longer represented the majority of residents in Bellevue. Instead, a plurality of races/ethnicities existed (US Census Bureau: 1990 Census, 2000 Census, 2010 Census, and 2015 American Community Survey).

Other large cities in Washington have also surpassed the 50% minority mark, including Kent (55%), Yakima (52%), Federal Way (52%), and Renton (51%). (Seattle's population is 34% minority, and Tacoma's 41%.) What is notable about Bellevue is its high percentage of Asian residents. The city has one of the highest percentages of Asian population of all the large cities in the US, ranking 14 out of 319 (US Census Bureau, 2015 American Community Survey).

BELLEVUE'S CULTURAL DIVERSITY, 1970–2015
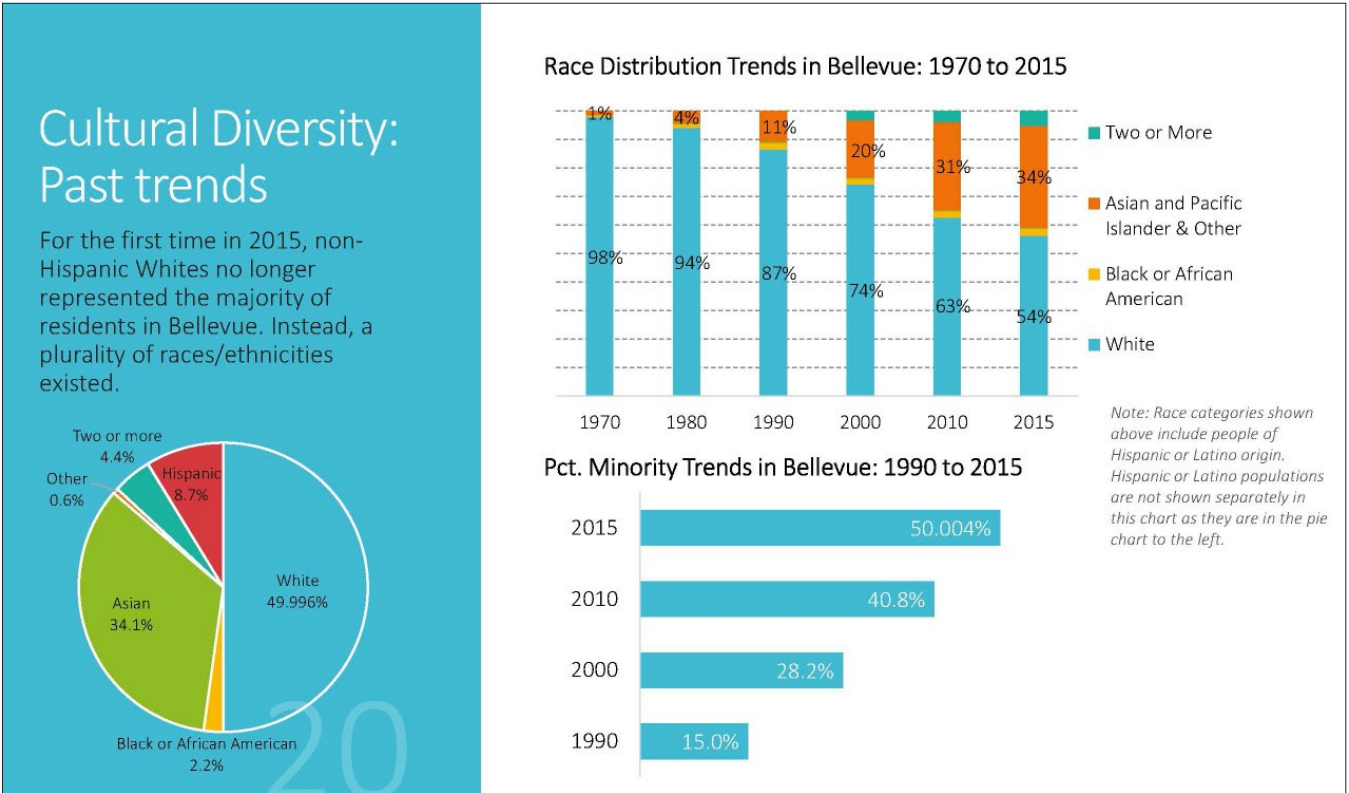
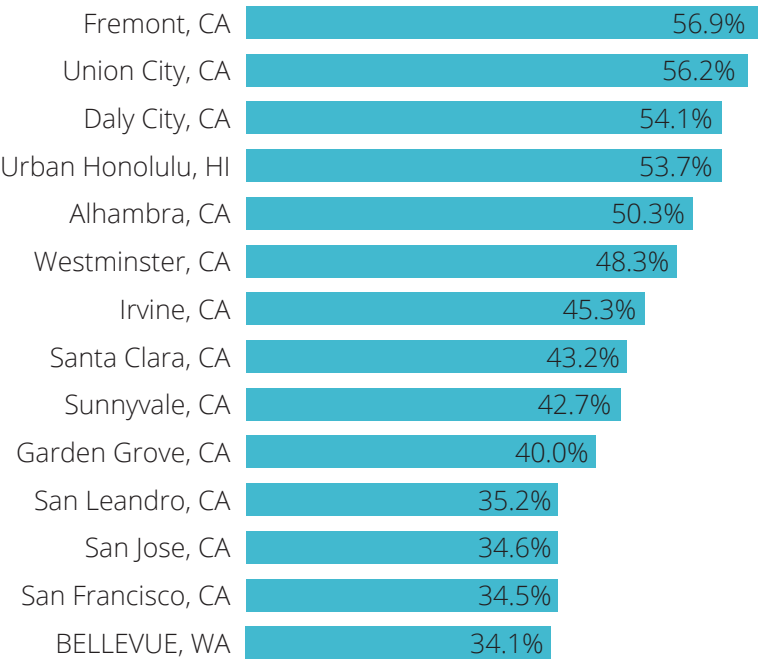US CENSUS BUREAU, 2015 AMERICAN COMMUNITY SURVEY, CITY OF BELLEVUE

Individuals born outside the US accounted for roughly 93% of Bellevue's population growth from 2000 to 2015.

Almost all newcomers to Bellevue in the last two decades have been born outside the US. The city's population increased by about 30,000 people between 2000 and 2015, and foreign-born individuals accounted for roughly 93% of that population growth (US Census Bureau: 2000 Census, 2010 Census, and 2015 American Community Survey).

A look at the city's racial demographics in 2015 provides a recent snapshot. That year, 39% of Bellevue's population was foreign-born and 61% was native-born. To put this figure into regional context, that same year Seattle's population was 17.5% foreign-born, King County's was 21.7% foreign-born, and Washington State's was 13.7% foreign-born (US Census Bureau, 2015 American Community Survey).

According to US Census data, more than two-thirds of Bellevue's foreign-born population was born in Asia, followed by 16% in Europe, and 10% in Latin America. India and China were the Asian countries from which most of Bellevue's foreign-born population were born (US Census Bureau, 2010-2014 American Community Survey).

PERCENT ASIAN COMPARISONS FOR LARGE US CITIES, 2015

City	Percent
Fremont, CA	56.9%
Union City, CA	56.2%
Daly City, CA	54.1%
Urban Honolulu, HI	53.7%
Alhambra, CA	50.3%
Westminster, CA	48.3%
Irvine, CA	45.3%
Santa Clara, CA	43.2%
Sunnyvale, CA	42.7%
Garden Grove, CA	40.0%
San Leandro, CA	35.2%
San Jose, CA	34.6%
San Francisco, CA	34.5%
BELLEVUE, WA	34.1%

US CENSUS BUREAU, 2015 AMERICAN COMMUNITY SURVEY

Naturalization ceremony in Bellevue CITY OF BELLEVUE

BELLEVUE'S LANGUAGE DIVERSITY

Bellevue's exceptional racial and ethnic diversity contributes to the community's rich language diversity. About 42% of Bellevue's population in 2015 spoke a language other than English at home, up from 14% in 1990. This compares to the cities of Federal Way and Kent, both with 40% of the population speaking a language other than English at home, King County 27%, Seattle 21%, the state of Washington 19%, and the US 22% (US Census Bureau, 2016 American Community Survey).

The Bellevue School District reported having 95 different languages spoken by children enrolled in the 2016–2017 school year (City of Bellevue).

This tremendous expansion of language diversity has made language accommodation a high priority for the City of Bellevue, not only because of its federal mandate under Title VI of the Civil Rights Act, but because language access is an integral component of exceptional customer service and social justice.

PERCENT OF POPULATION SPEAKING LANGUAGE OTHER THAN ENGLISH AT HOME, 2016

Pct Lang other than English
- 61.8% - 53%
- 52.9% - 40%
- 39.9% - 30%
- 29.9% - 25%
- 24.9% - 19%

CITY OF BELLEVUE

TOP LANGUAGES SPOKEN AT HOME OTHER THAN ENGLISH, 2011–2015

Language	Bellevue Citywide		Speak English less than "very well"	
	Estimate	Percentage of Pop 5 and Over	Estimate	Percentage speaking specific language
Chinese	11,983	9%	5,945	50%
Spanish or Spanish Creole	7,121	6%	3,451	48%
Other Asian languages	5,204	4%	1,329	26%
Korean	4,260	3%	2,180	51%
Hindi	3,818	3%	838	22%
Russian	2,900	2%	1,305	45%
Japanese	1,862	1%	795	43%
Other Indic launguages	1,612	1%	456	35%
Vietnamese	1,431	1%	776	54%
French (incl. Patois, Cajun)	1,340	1%	122	9%
Other Indo-European Language	1,001	1%	379	38%
Tagalog	879	1%	335	38%
Persian	831	1%	414	50%

Top languages spoken at home other than English in Bellevue have changed signifcantly from the years portrayed in this table (2011–2015). New data elevates both Korean- and Russian-speaking residents above 4%—the threshold for signifcant population segments. US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY 2011–2015

METHODS

INITIALIZATION AND EVALUATION

The student team began their process by meeting several times with City staff to learn about the various challenges faced by City employees when trying to provide language accommodation to residents. The students conducted one-on-one meetings with City staff who work at the Service First desk, as well as Blayne Amson, ADA/Title VI Administrator with the City Manager's Office. From these interviews, the students defined "user stories." The students also met with staff from Finance and Asset Management, Community Development, and IT, to further understand the nuances of the problem.

Concurrently, through their internship with Professor Ankur Suri, the team researched technological solutions developed by other cities facing similar challenges. They also studied the impact of information availability through mobile technology.

In consultation with the City, it was decided that the students would develop a mobile app so that the information would be central and accessible. The team established the following goals for the app:

- Develop separate iOS and Android versions
- Make it simple
- Make it efficient
- Lead user to results in less than five minutes

The students ultimately decided to filter by service, e.g., translation or interpreter, rather than language. This is because the user will be asked to indicate the language once they land on the appropriate services request form. As the students saw it, services can be provided in all languages, so it made more sense to filter by the needed service, rather than by language.
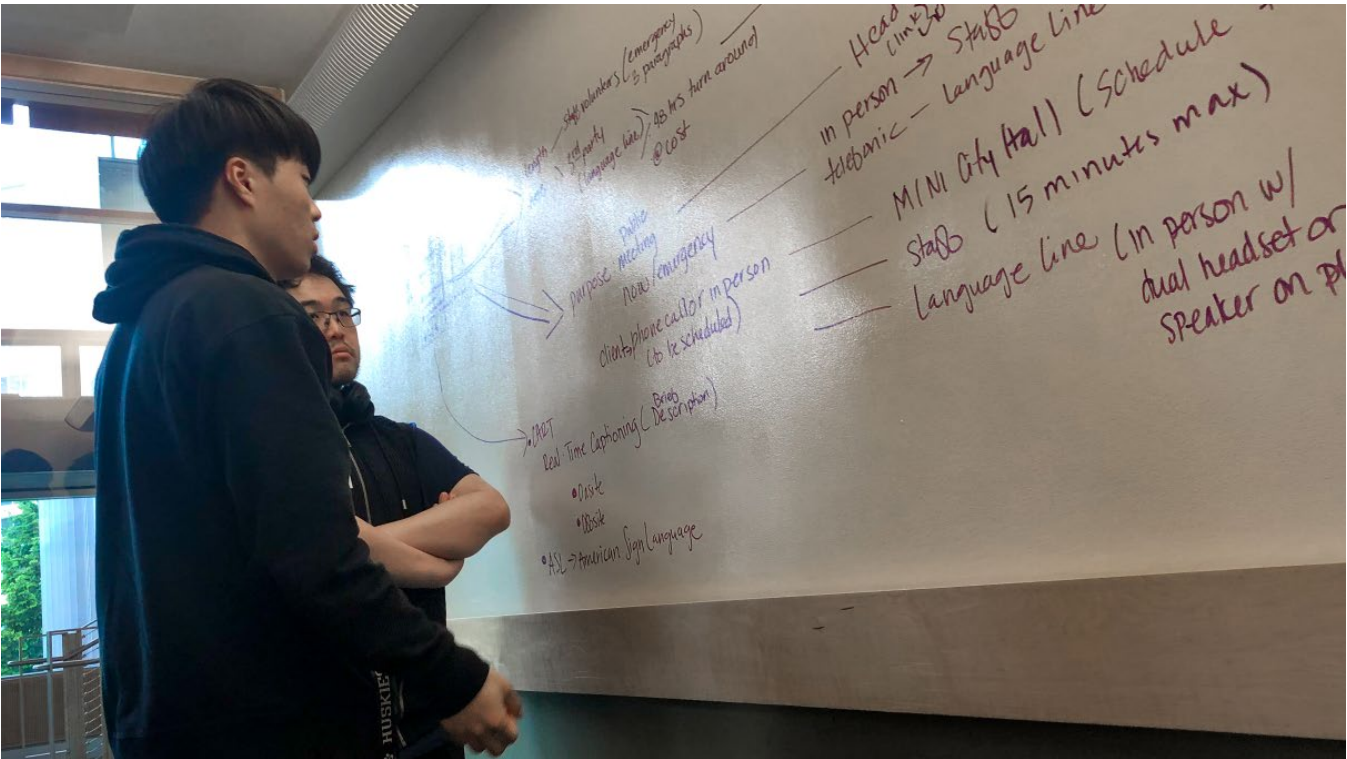
Edgar Hyeongwoo Park (foreground) and Adrian Kang study the decision tree developed in collaboration with City of Bellevue staff. ELAINE ACACIO

DESIGN

The students then created five skeleton designs (drawings) using XCode. They selected their top three, and then presented these to the City.

IMPLEMENTATION

Each team member then created a prototype, coding only the Translation piece at this point. For the iOS version, the students wrote their code in Swift, the only iOS program language. For the Android, the students wrote in Java, a common Android coding language.

The students presented these prototypes to the City and received feedback. The teams then combined the best pieces from the individual prototypes to create an end version.

TESTING AND FEEDBACK

The students met with Elaine Acacio and about six other City staff to test the end version which had been loaded onto the students' phones. One issue that come up during the testing phase was differences between the iOS and Android versions, which the students had not been aware of. In response to the feedback received, the students then created more consistency between the two platforms, and made other final refinements.

DELIVERY AND NEXT STEPS

The students delivered the app in three version to the City: iPad, iOS, and Android.

For next steps, the City could create a webpage for internal use that could mimic the work of the app. Ultimately, a similar website could be made accessible to the public.

Edgar Hyeongwoo Park (center) and Juhwan Kim test their language access app in the lobby of Bellevue City Hall. JUHWAN KIM

THE LANGUAGE ACCESS APP

The home page of the app asks the City staff member to select between the following three options:

- Interpretation
- Translation
- ADA

The home page for the language access app
LCY STUDENT TEAM
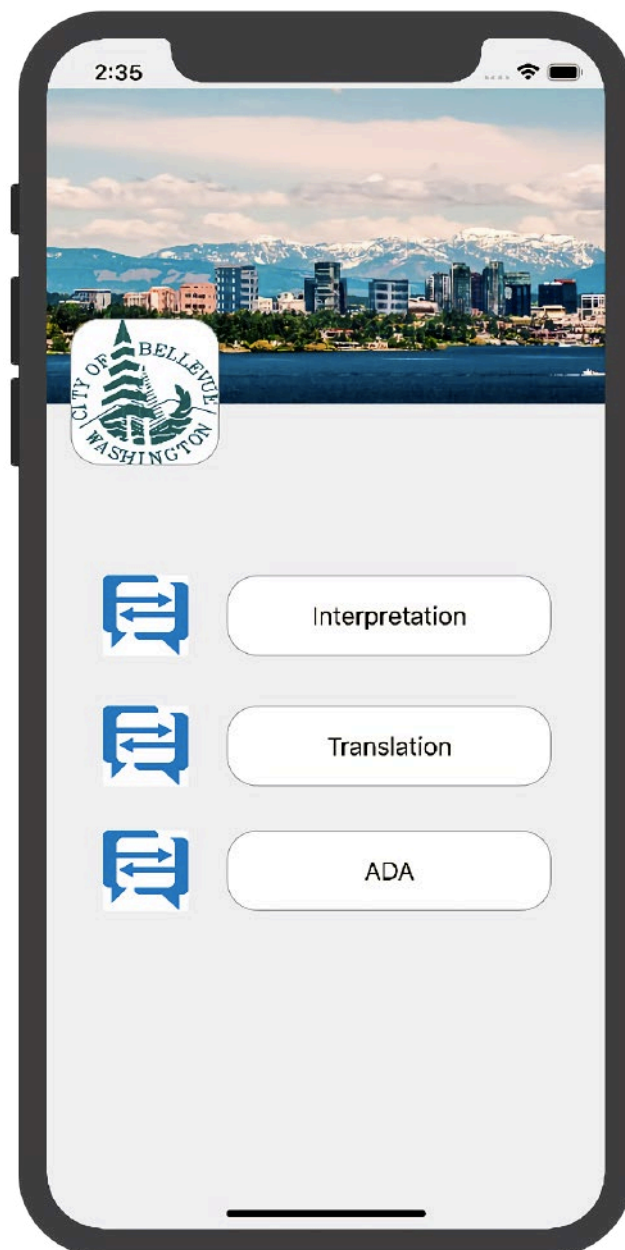
```swift
10  import UIKit
11
12  class TranslationViewController: UIViewController, UIPickerViewDataSource, UIPickerViewDelegate {
13
        @IBOutlet weak var file: UILabel!
        @IBOutlet weak var requiretime: UILabel!
        @IBOutlet weak var Next: UIButton!
        @IBOutlet weak var icon: UIImageView!
        @IBOutlet weak var type: UIPickerView!
        @IBOutlet weak var time: UIPickerView!
        @IBAction func request (_ sender: UIButton){
21          if file.text == "More than 3 Paragraphs (about 300 words)"{
22              UIApplication.shared.open(URL(string:"https://cobweb.ci.bellevue.wa.us/projects/evm/
                    Project%20Documents/Forms/AllItems.aspx?
                    RootFolder=%2fprojects%2fevm%2fProject%20Documents%2fVendors&FolderCTID=0x01200093B8C7EA9A
                    735D49A1F1D0AF8773917D")!as URL, options:[:], completionHandler: nil)
23          } else if file.text == "File Type" || requiretime.text == "Time Requriment" {
24              let PopUp1 = UIStoryboard(name: "Main", bundle: nil).instantiateViewController(withIdentifier:
                    "newwindow") as! PopUp
25              self.addChildViewController(PopUp1)
26              PopUp1.view.frame = self.view.frame
27              self.view.addSubview(PopUp1.view)
28              PopUp1.didMove(toParentViewController:self)
29          } else {
30              UIApplication.shared.open(URL(string:"https://helpdesk.bellevuewa.gov/MRcgi/MRhomepage.pl?
                    USER=EAcacio&PROJECTID=15&MRP=103a90137b3a1a329e1c637823404cfff&OPTION=none&WRITECACHE=1&F
                    IRST_TIME_IN_FP=1&FIRST_TIME_IN_PROJ=1&dispatch_script=MRlogin.pl&")!as URL, options:[:],
                    completionHandler: nil)
31
32          }
33
34
35      }
36
37      let filetype = ["File Type","Poster (about 100-200 words)","Paragraph (about 200-600 words)","More
            than 3 Paragraphs (about 300 words)"]
38
39      let timer = ["Time Requriment","Within 24 Hour","Within 48 Hours","More Than 48 Hours"]
40
41
42      func numberOfComponents(in pickerView: UIPickerView) -> Int {
43          return 1
44      }
45
```

Software code for the language access app. LCY STUDENT TEAM

INTERPRETATION

If the user selects "Interpretation," they are then asked:

What is the purpose?

- Public meeting
- Emergency
- Phone call/in person

PUBLIC MEETING

The user is then asked:

What do you need?

- Headsets *(If selected, the user is sent to an online form to reserve a headset device for simultaneous interpretation.)*
- Interpreter *(If selected, the user is sent to the online request form for third-party interpreters.)*

EMERGENCY

The user then selects between:

- In person *(If selected, the user is then sent to the online request form for volunteer City staff interpreters.)*
- Telephonic *(If selected, the user is then sent to the online request form for volunteer City staff interpreters.)*

PHONE CALL / IN PERSON

The user is then asked:

What services do you need?

- Mini City Hall *(If selected, the user is then provided with the schedule of interpreters at Mini City Hall.)*
- Staff *(If selected, the user is then sent to the online request form for volunteer City staff interpreters.)*
- Language Line *(If selected, the user is referred to the website for LanguageLine Solutions, a third-party telephone interpreting service.)*

TRANSLATION

If the user selects "Translation," they are then asked two more questions:

File Type?

- Poster (about 100–200 words)
- No more than three paragraphs
- More than three paragraphs

How soon is translation needed?

- Less than 24 hours
- Less than 48 hours
- More than 48 hours

What jobs go to volunteer translators? For posters and jobs that are no more than three paragraphs, or for longer jobs with a time requirement of more than 48 hours, the City staff member is referred to the online request form for volunteer translators. Volunteer translators have the option to accept or decline the job.

What jobs go to third-party translators? For documents that are more than three paragraphs, or for jobs with a time requirement of less than 48 hours, the user is sent to the online request form for third-party translators.

The LCY team demonstrates the language access app to staff from the City of Bellevue's Parks and Community Services Department at the LCY year-end poster presentation. From left to right: Juhwan Kim, Abdinassir Muse (behind Kim), Nancy Kartes, Shelley McVein (behind Brittingham) and Shelley Brittingham.
ELAINE ACACIO

ADA

If the user selects "ADA," they are then asked to select between:

- Communication Access Realtime Translation (CART), *i.e., computer-aided, real-time captioning*
- American Sign Language (ASL)
- Braille

CART supports not only the deaf or hard of hearing community, but may also benefit those who are learning English, as spoken English can be easier to track when one is reading it as well as hearing it.

CART

If the user selects CART, they are then asked to select between:

- On Site *(If selected, the user is then sent to the reservation form for CART services at City Hall.)*
- Remote *(If selected, the user is then sent to the reservation form for CART services where they can request Remote CART.)*

ASL

If the user selects ASL and needs are within 48 hours, user is provided a staff volunteer ASL list. If need is for something that can be scheduled ahead of time, a vendor list for ASL interpreters is provided.

BRAILLE

If the user selects Braille, they are provided a list of vendors.

CONCLUSION

We hope that this project will enhance clarity for the Bellevue's workforce as they provide and use language access resources while serving Bellevue's diverse community. For next steps, we recommend that Bellevue adapt this app to a website for internal use so that employees can find information about language access services from their laptops and desktop computers. Ultimately, we hope that a similar website could be made available to the public.

Looking forward, we hope that Bellevue's language access services will continue to help foreign-born residents to feel welcome and at home, to participate in civic discourse, to receive life-saving communication, and to embody their cultures within the rich tapestry of the Bellevue community. In achieving these goals, Bellevue moves closer to fulfilling the vision of its City Council: "Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past."

"Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past."

— *Bellevue City Council's vision statement*

Annual Pacific Northwest Ukranian Festival in Bellevue's Crossroads Park CITY OF BELLEVUE