

# Supporting Accessibility in the Digital Era

CTM Office of Design & Delivery  
City of Austin

Community Technology & Telecommunications Commission  
/ February 13th, 2019

**1**

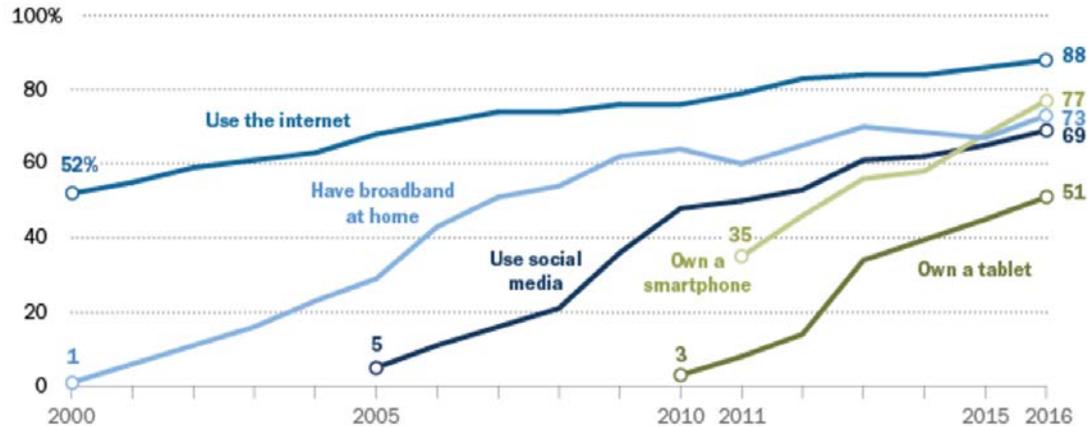
**Background**

 **Our last presentation**

# Resident expectations for digital services have totally changed.

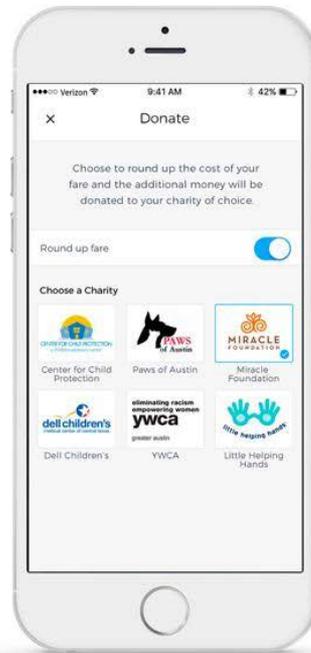
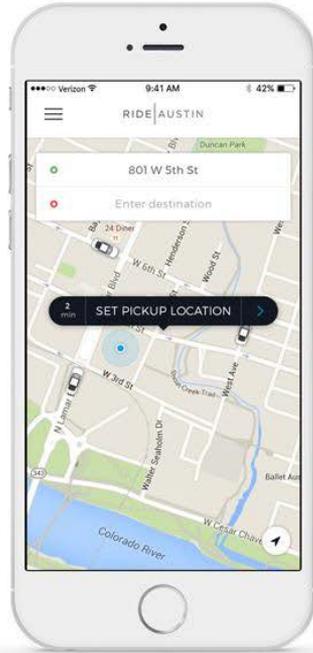
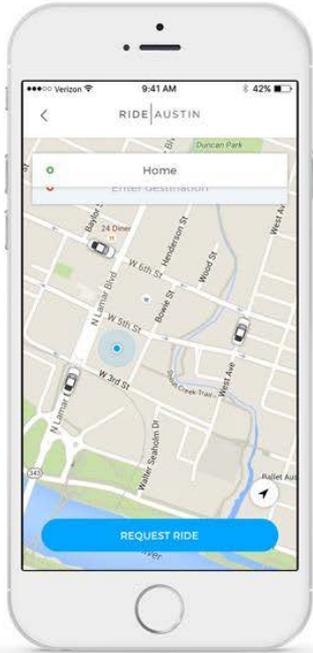
## The evolution of technology adoption and usage

% of U.S. adults who ...

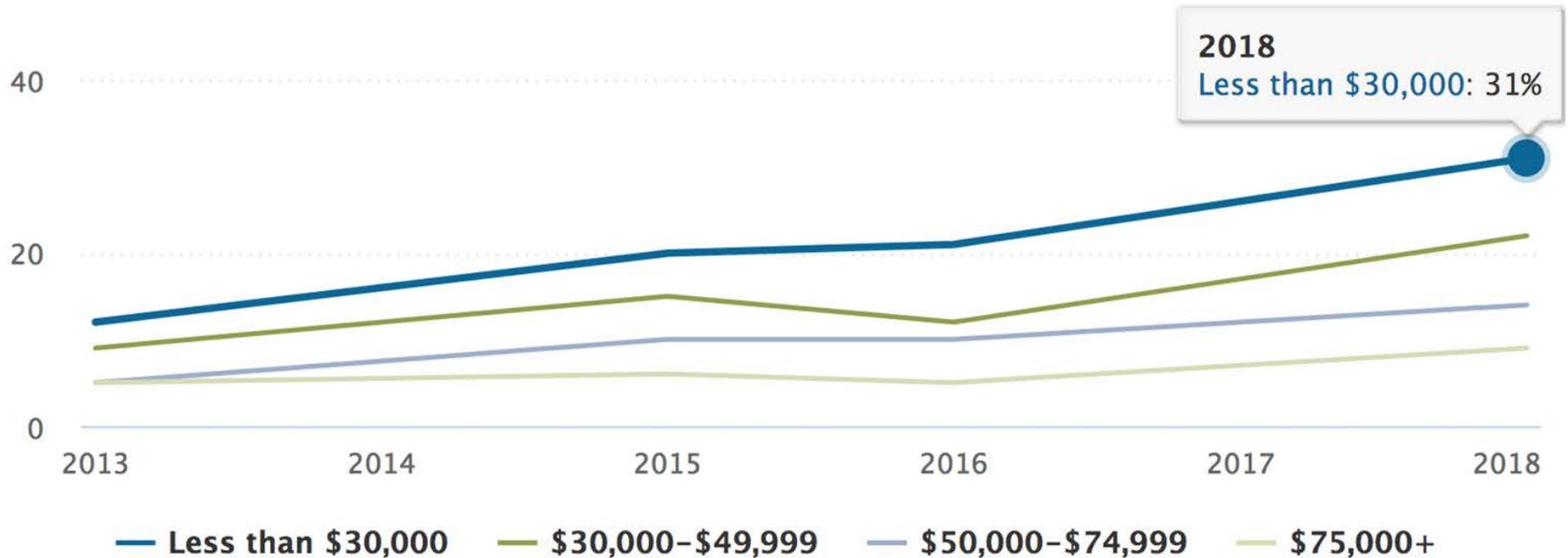


Source: Surveys conducted 2000–2016. Internet use figures based on pooled analysis of all surveys conducted during each calendar year.

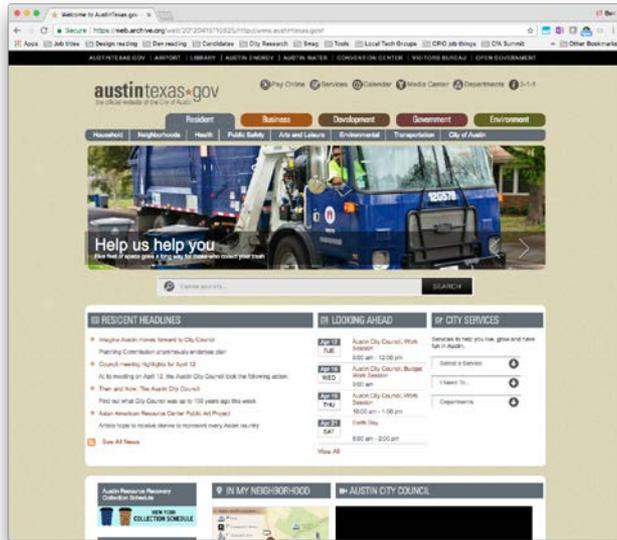
# Resident expectations for digital services have totally changed.



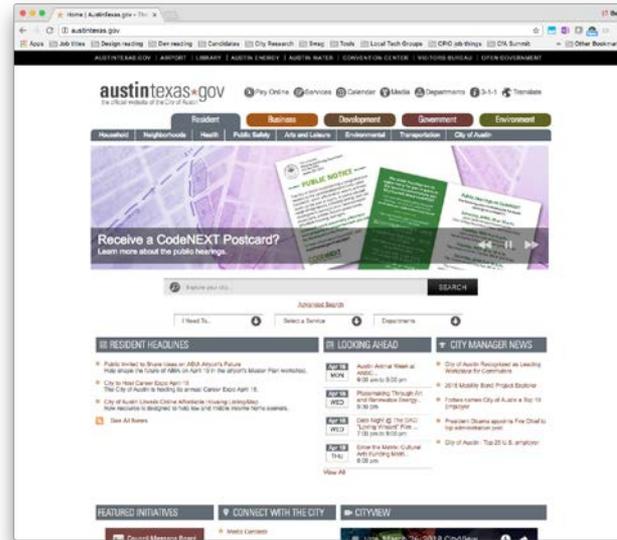
# % of U.S. adults who do not have broadband at home but use smartphones



# The way that we design and deliver services in government hasn't kept up.



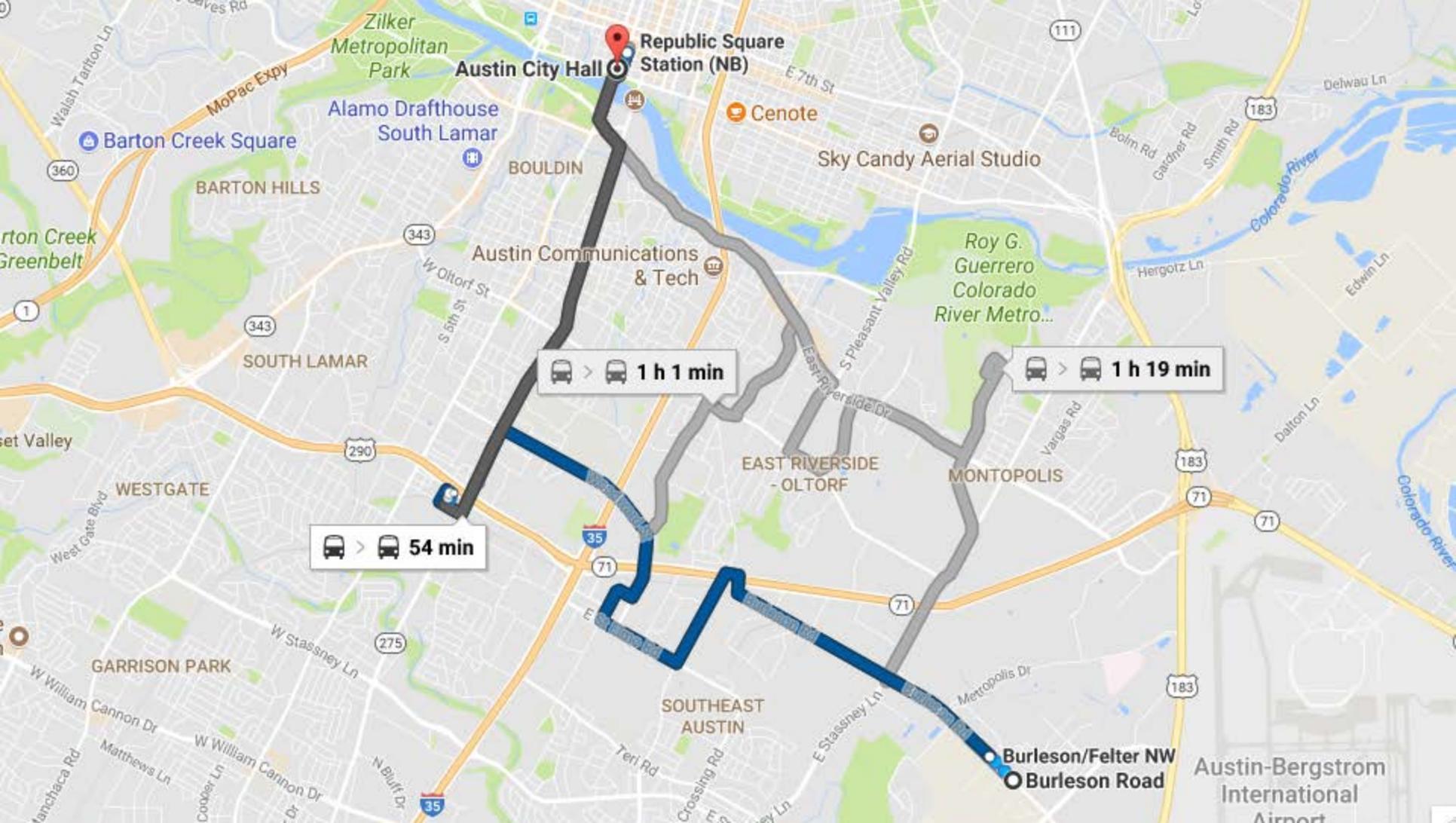
austintexas.gov  
in April 2012



austintexas.gov  
in April 2018

**The way that we design and deliver services in government hasn't kept up.**





Republic Square Station (NB)

Austin City Hall

Alamo Drafthouse South Lamar

Cenote

Sky Candy Aerial Studio

Austin Communications & Tech

Roy G. Guerrero Colorado River Metro...

1 h 1 min

1 h 19 min

54 min

EAST RIVERSIDE - OLTORF

MONTOPOLIS

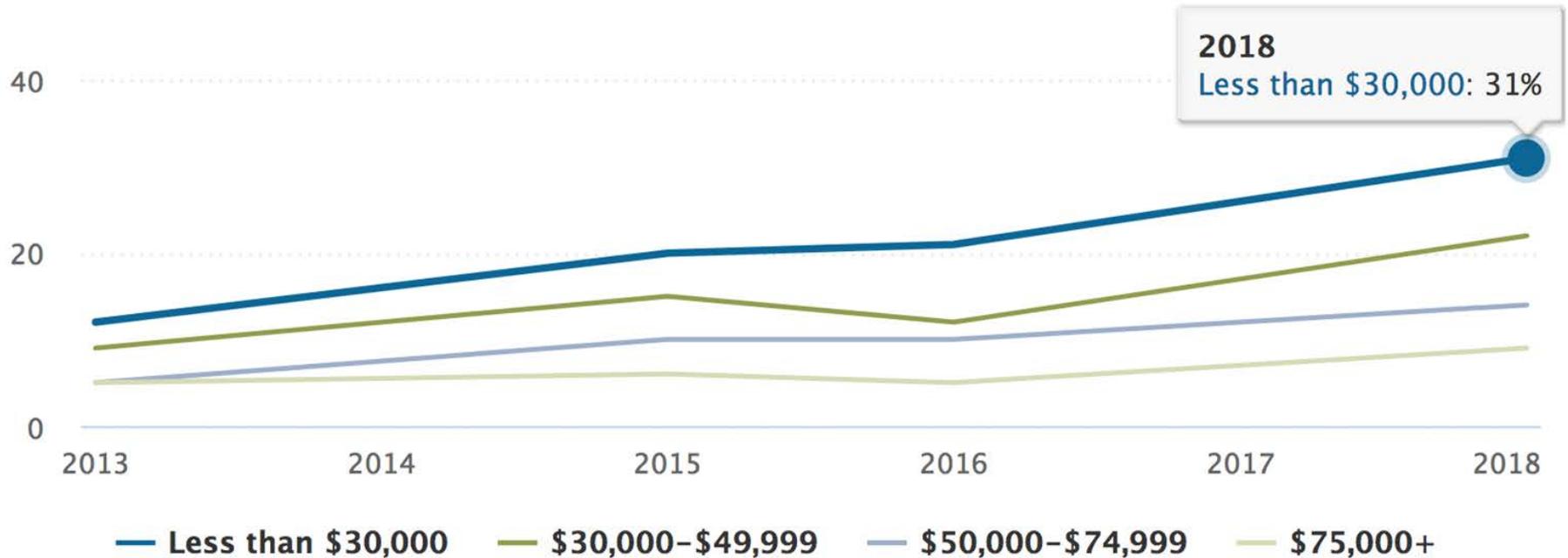
SOUTHEAST AUSTIN

Burleson/Felter NW  
Burleson Road

Austin-Bergstrom International Airport

**Failing to support digital  
services disproportionately  
harms lower-income  
populations.**

# % of U.S. adults who do not have broadband at home but use smartphones



**2**

# **Supporting accessibility in the digital era**

How do we define  
“accessibility”?

**Compliance**



**Accessibility**





Yellow, pink, and green sticky notes at the top left of the table.



Handwritten note on an orange sticky note at the top center.

An orange sticky note at the top right of the table.

A pink sticky note on the right side of the table.

A cluster of colorful sticky notes (pink, blue, yellow) at the top of the main workspace.



A green sticky note on the left side of the workspace.

A group of yellow and blue sticky notes in the middle-left area.

A group of yellow and blue sticky notes in the middle-right area.

A group of yellow and blue sticky notes in the upper-middle area.

A yellow sticky note in the lower-middle area.

Cost Based Incentive

Payment methods - banking access

"Carriers" can carry what the system uses

Business Requirements

Disconnection from other online services - bank account

Bank Alerts

Mobile data access

3G Mobile LTE - 4G LTE

For response and design needs it will be 24/7 while in mobile

Doesn't have a device

Bandwidth to host provider

Adaptability of a physical device

Physical location of server (cloud)

Low or average connection

Limited resources for digital content

Physical ability (Hardware)

Physical ability (Software)

Company that provides the service

Form of a physical device location

Lowest cost with these features

Use of transportation to a place with cell

Company that provides the service

Reliability

Physical ability

Business Requirements

Company that provides the service

Blank yellow sticky note

Computer ability

Physical ability (Software)

Reliability

Company that provides the service

Business Requirements

Company that provides the service

Business Requirements

Company that provides the service

Business Requirements

Company that provides the service

Physical ability (Hardware)

Company that provides the service

Business Requirements

Physical ability (Software)



A yellow sticky note on the right side of the workspace.

# High-level barriers to access and inclusion



Barrier #1

## Awareness

Are residents aware that the service exists?



Barrier #2

## Access

Are residents able to access the service?

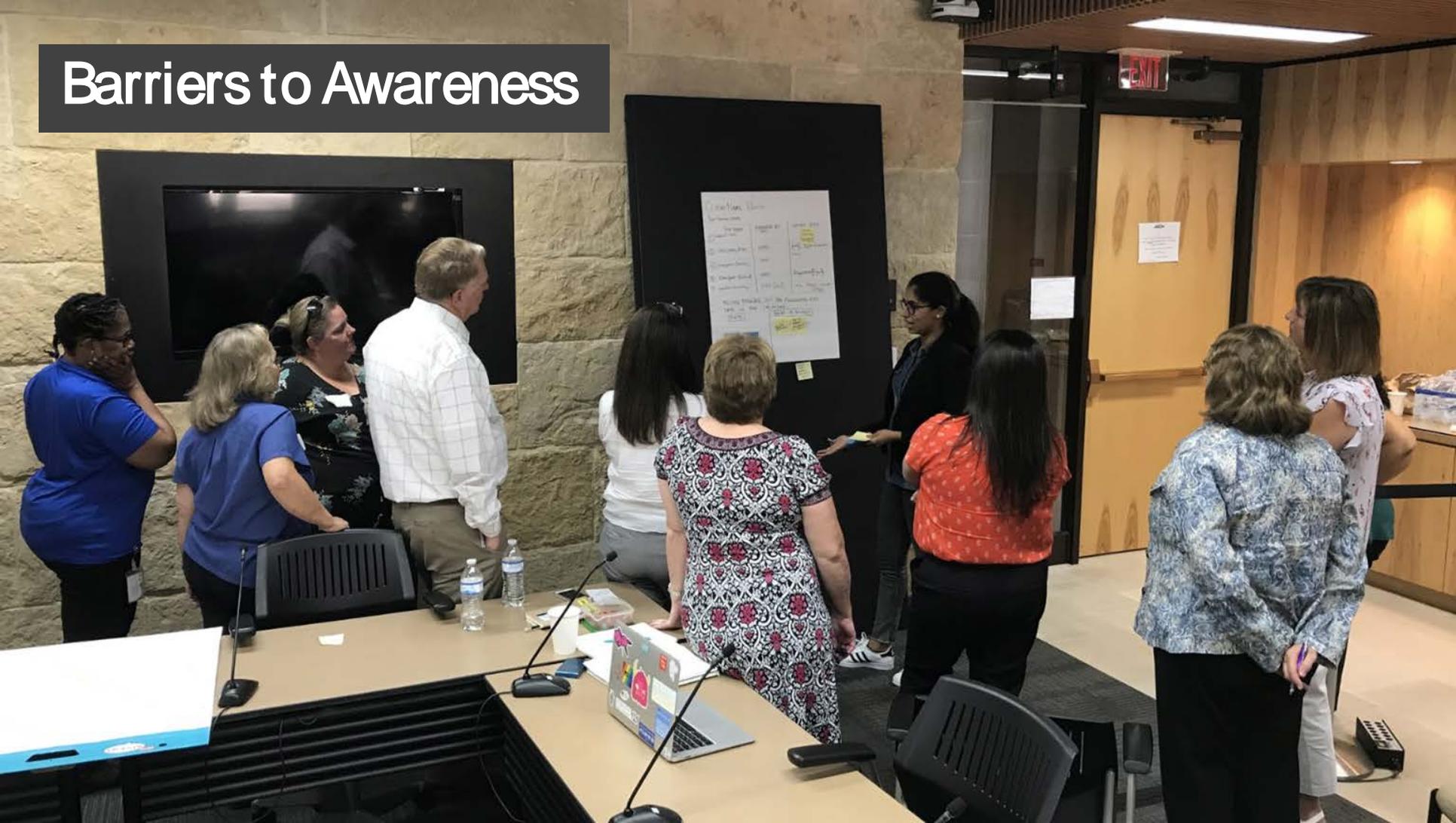


Barrier #3

## Inclusion

Are residents able to use the service?

# Barriers to Awareness

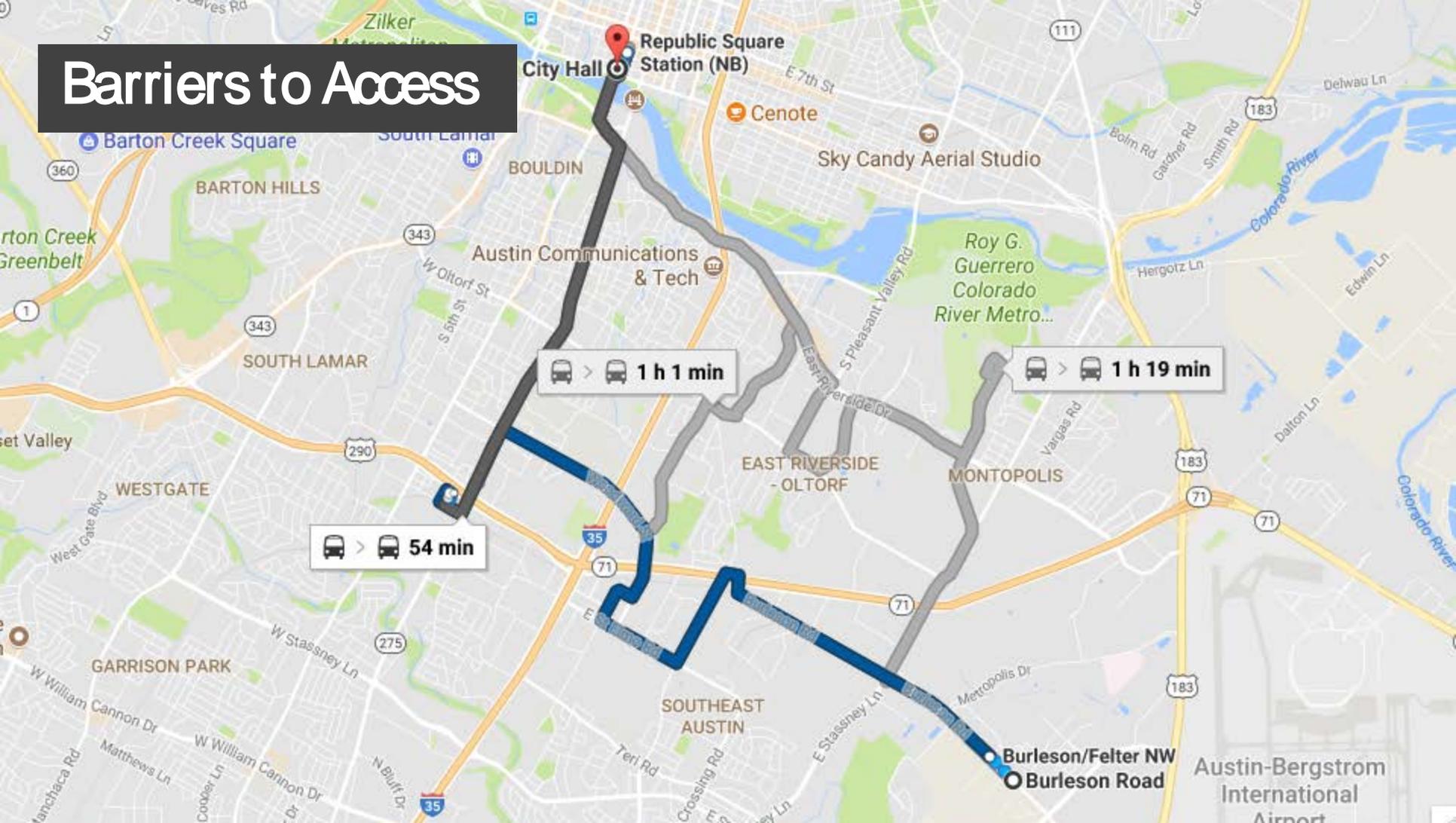




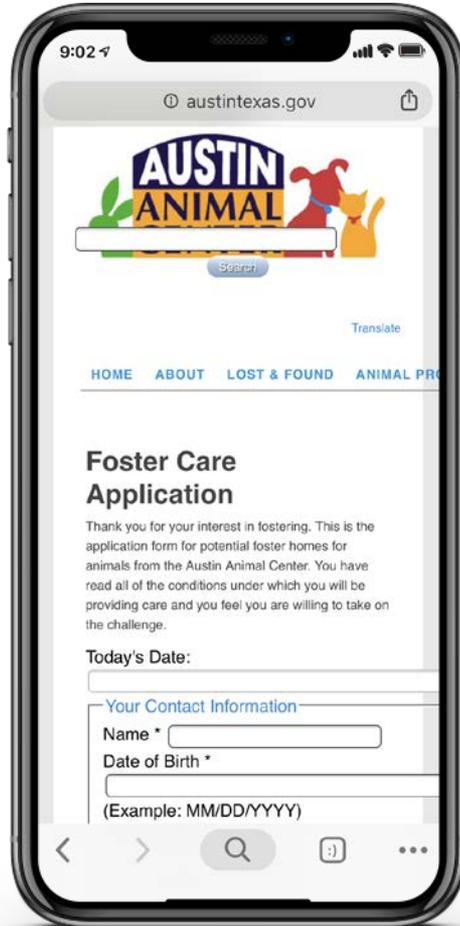
## Barriers to Awareness

**Austintexas.gov has  
11,000 pages and  
10,000 documents  
such as PDFs.**

# Barriers to Access



# Barriers to Access



# Barriers to Access

Anne

texas.gov/online-form/foster-care-application

Phone or Fax Number must be in format XXX-XXX-XXXX. (Example: 123-456-7890)

Phone or Fax Number must be in format XXX-XXX-XXXX. (Example: 123-456-7890)

HOME ABOUT LOST & FOUND ANIMAL PROTECTION SERVICES/RESOURCES SUPPORT FAQ

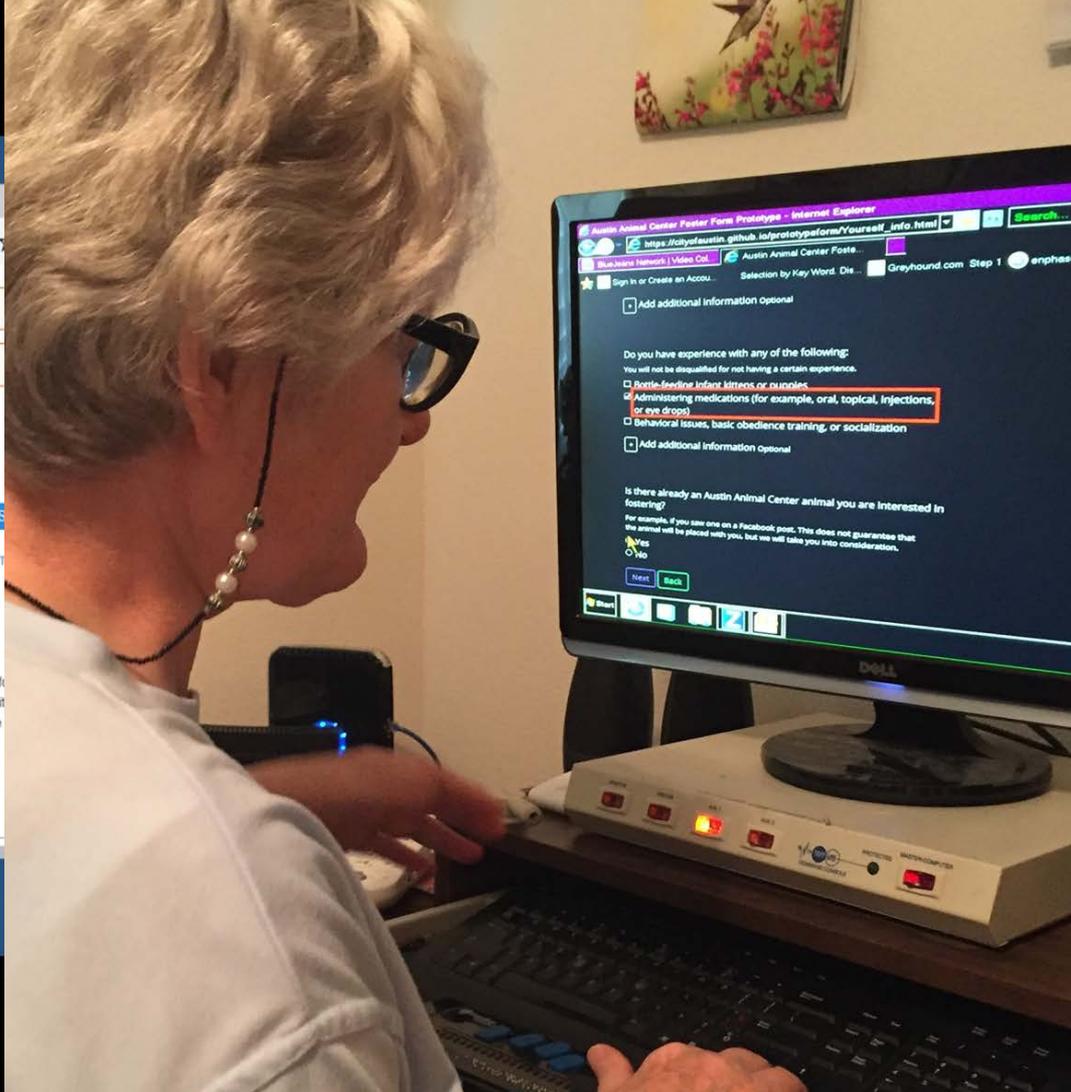
## Foster Care Application

Thank you for your interest in fostering. This is the application form for potential foster homes for animals from the Austin Animal Center. You have read all of the conditions under which you will be providing care and you feel you are willing to take on the challenge.

Today's Date:

Your Contact Information

<http://www.austintexas.gov/department/aac>



# Barriers to Access

✕

## Make a payment

You may pay your Texas Gas Service bill online with an electronic check or your credit or debit card.

STEP 1 STEP 2

How would you like to make your payment?



Check

Official Payments charges a \$1.50 convenience fee to process all online payments. Texas Gas Service does not charge, collect or receive any portion of this fee.



Credit Card

Official Payments charges a \$1.50 convenience fee to process all online payments. Texas Gas Service does not charge, collect or receive any portion of this fee.

# Barriers to Access

The screenshot shows a web browser window with the URL <https://coautilities.com/wps/myportal/occ/occ/unselected/p...>. The page header includes navigation links for AUSTINTEXAS.GOV, AIRPORT, LIBRARY, AUSTIN ENERGY, AUSTIN WATER, AUSTIN CONVENTION CENTER, VISITORS BUREAU, and OPEN GOVERNMENT. The main header features the City of Austin logo and the text "City of Austin Utilities Online Customer Care". On the right, there are links for "My Profile", "Help", "Contact Us", and "Log Out". Below the header, there are three buttons: "My List of Accounts", "Pay My Bills", and "Payment Methods". A welcome message reads "Welcome: Benjamin Guhin Account #: Change".

The "Payment Methods" section is active, showing a form to "Add payment method". Under "Bank account type", the "Checking" option is selected. The form includes fields for "Routing number", "Retype routing number", "Account number", and "Retype account number". A "Submit" button is green, and a "Cancel" button is grey. To the right of the form is a preview of a check with the following details:

- Your Name: 1234 Oak Anytown, USA
- 1001
- 20
- PAY TO THE ORDER OF
- DOLLARS
- FOR
- ⑆ 234 56 789 ⑆ 0001 234 56 789 ⑆ 1001
- Check-Routing Number: 234 56 789
- Account Number: 0001 234 56 789
- Check Number: 1001

The "Contact Us" section on the right features the City of Austin logo and provides the following information:

- Customer Care**  
(512) 494-9400  
TDD: (512) 477-3663
- Outside Austin call toll-free:**  
(888) 340-6465
- Monday - Friday  
7:00 a.m. to 9:00 p.m. CST  
Saturday  
9:00 a.m. to 1:00 p.m. CST
- [Contact Us](#)

# Barriers to Inclusion



**3**

# **Recent developments**

# Supporting Awareness

The screenshot shows the City of Austin website header with navigation links for 'Permits & Tickets', 'Housing & Utilities', 'Pets', 'Health & Safety', 'Explore & Visit', 'Government & Business', and 'Jobs'. A search bar is located on the right. The main content area features the title 'Investigation Process' and a sub-header 'Learn about the OPO's complaint investigation process.' The body text explains that complaint specialists in the Office of Police Oversight (OPO) independently review every complaint and follow the investigation process described on the page. A section titled 'Here's what to expect' includes a 'Timeframe' subsection stating that investigations could take up to six months to complete and may require one to four hours of your time over the course of those months. A 'Contact Information' sidebar on the right provides an email address, a physical address (7201 Levander Loop, Austin, TX 78702), and a phone number (512-974-5000).

Airport AUS: 311

City of Austin

English Español Tiếng Việt العربية

Permits & Tickets Housing & Utilities Pets Health & Safety Explore & Visit Government & Business Jobs

## Investigation Process

Learn about the OPO's complaint investigation process.

Complaint specialists in the Office of Police Oversight (OPO) independently review every complaint and follow the investigation process described on this page. Complaints qualify for formal investigation when they indicate a potential violation of Austin Police Department (APD) administrative policies.

### Here's what to expect

**Timeframe**  
Investigations could take up to six months to complete and may require one to four hours of your time over the course of those months. Our office will check in with you monthly to give you an update, and at the end of the process you will have the option of a close-out meeting to discuss the outcome of your complaint in detail.

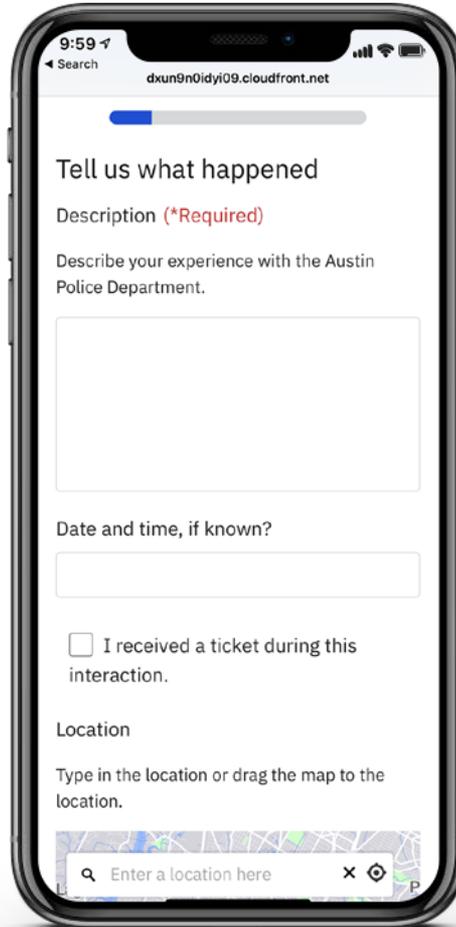
#### Contact Information

[email.address@austintexas.gov](mailto:email.address@austintexas.gov)

[7201 Levander Loop](#)  
[Austin, TX 78702](#)

512-974-5000

# Supporting Access



9:59  
Search dxun9n0ldiyi09.cloudfront.net

Tell us what happened

Description (\*Required)

Describe your experience with the Austin Police Department.

Date and time, if known?

I received a ticket during this interaction.

Location

Type in the location or drag the map to the location.

Enter a location here

# Supporting Access

The screenshot shows the homepage of the United States Web Design System. The browser address bar displays 'https://v2.designsystem.digital.gov'. The page features a dark blue header with the system name, version 'v2.0 Beta 4', and buttons for 'Download code and design files' and 'View on GitHub'. A navigation menu includes 'Documentation', 'Components', 'Design tokens', 'Utilities', 'Page templates', and 'About USWDS'. The main content area has a blue background with a dark blue box containing the text 'A design system for the federal government' and 'Design and build fast, accessible, mobile-friendly government websites backed by user research.' Below this are four red circular icons representing 'Getting started', 'UI components', 'What's new', and 'Page templates', each with a corresponding text block and a link.

U.S. Web Design System: A de x +  
https://v2.designsystem.digital.gov  
An official website of the United States government [Here's how you know](#)

**United States Web Design System** v2.0 Beta 4 [Download code and design files](#) [View on GitHub](#)

[Documentation](#) [Components](#) [Design tokens](#) [Utilities](#) [Page templates](#) [About USWDS](#)

**A design system for the federal government**  
Design and build fast, accessible, mobile-friendly government websites backed by user research.

**Getting started**  
Learn how to get started using the U.S. Web Design System for your project, regardless of your technical stack.  
[Take the first step](#)

**UI components**  
Discover all the different components that the Design System provides as both design and development assets.  
[Browse the components](#)

**What's new**  
Keep up to date with the current news and product development updates for the U.S. Web Design System.  
[See what's new](#)

**Page templates**  
Explore the different page templates that have been created to jump start your product development.  
[Start from a template](#)

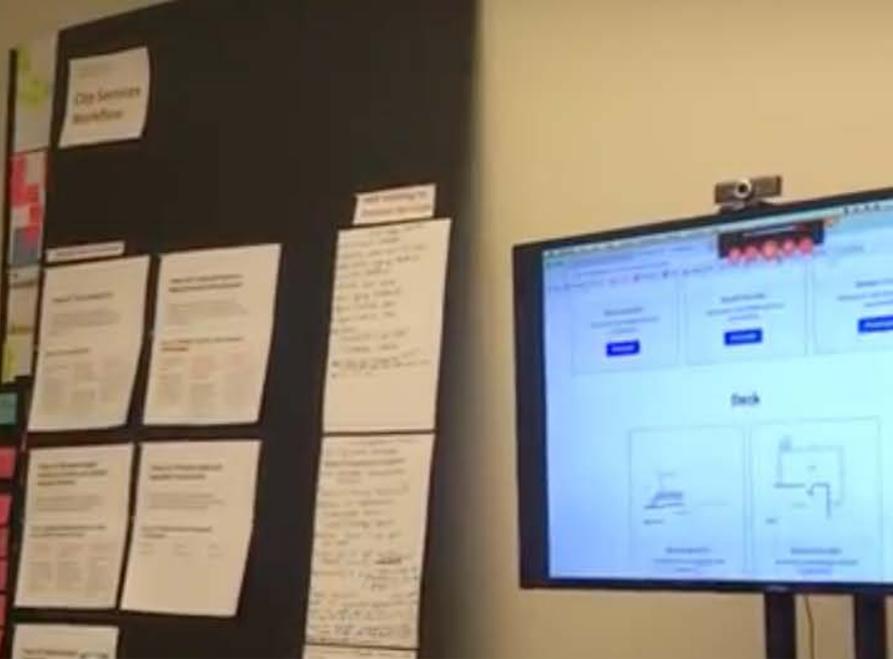
# Supporting Access



*(Reading with screenreader)*

**“I couldn’t see any of the form information. It is just unlabeled edit boxes and radio buttons.”**

*- David, ADA Program Manager*



# Supporting Access



# Supporting Inclusion



# Supporting Inclusion

...t.org/post/digital-inclusion-program-helps-older-and-low-in...

**KUT 90.5** Austin's NPR Station Listen Live DONATE

News ▾ Features ▾ Life & Arts ▾ Podcasts Support ▾ About ▾ Music ▾ Program Schedule Search

## Digital Inclusion Program Helps Older And Low-Income Austinites Catch Up With Technology

By AVERY MILES • AUG 15, 2018

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The University of Texas at Austin  
**Texas MBA**  
Monday & Tuesday Evenings  
[LEARN MORE »](#)  
Expand Your Network

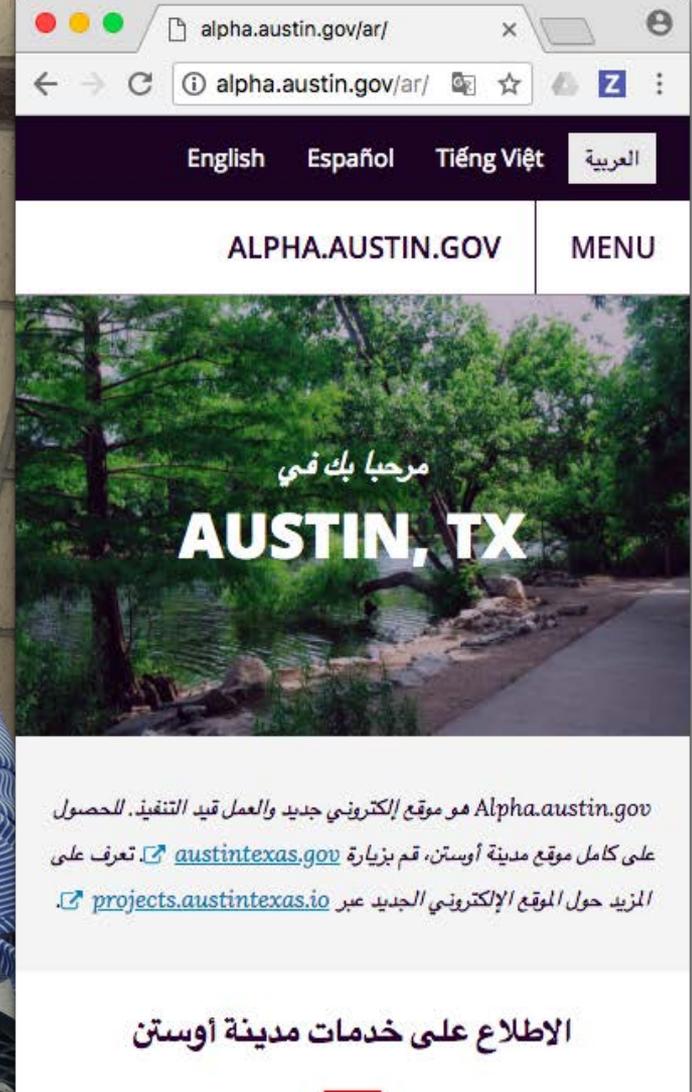


AUSTIN  
food + wine  
FESTIVAL  
APRIL 26-28, 2018 - AUSTIN, TX

# Supporting Inclusion

“There was nothing, now there is something.”

Anne, Resident



The screenshot shows a web browser displaying the website alpha.austin.gov/ar/. The browser's address bar shows the URL. The website has a dark header with navigation links for English, Español, Tiếng Việt, and العربية. Below the header, there are buttons for ALPHA.AUSTIN.GOV and MENU. The main content area features a scenic image of a park with trees and a path, overlaid with the text "مرحبًا بك في AUSTIN, TX". Below the image, there is a paragraph of text in Arabic: "Alpha.austin.gov هو موقع إلكتروني جديد والعمل قيد التنفيذ. للحصول على كامل موقع مدينة أوستن، قم بزيارة [austintexas.gov](http://austintexas.gov). تعرف على المزيد حول الموقع الإلكتروني الجديد عبر [projects.austintexas.io](http://projects.austintexas.io)". At the bottom, there is a section titled "الاطلاع على خدمات مدينة أوستن".

# Supporting Inclusion



**4**

**What needs to change**

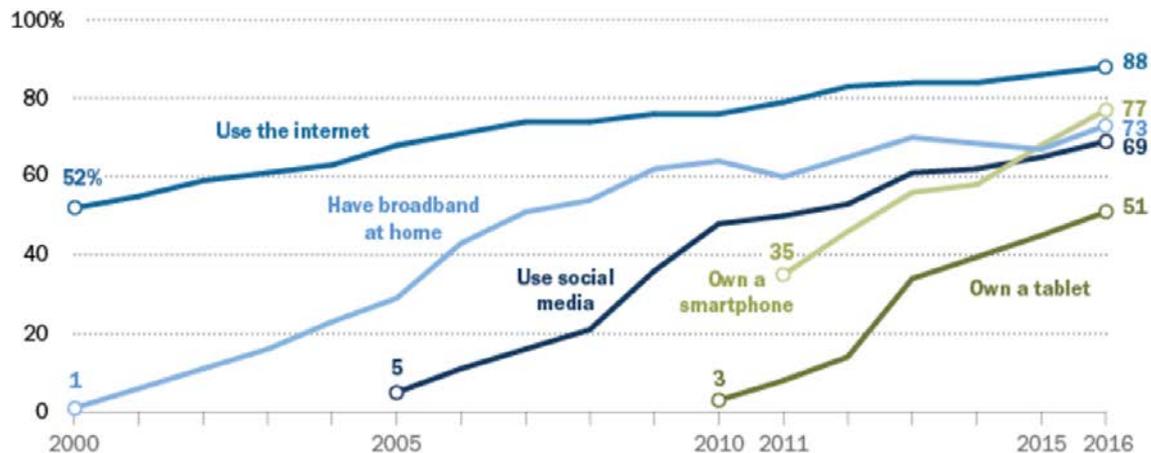
Build a coalition to support this work.



# Plan for the fact that everything will change.

## The evolution of technology adoption and usage

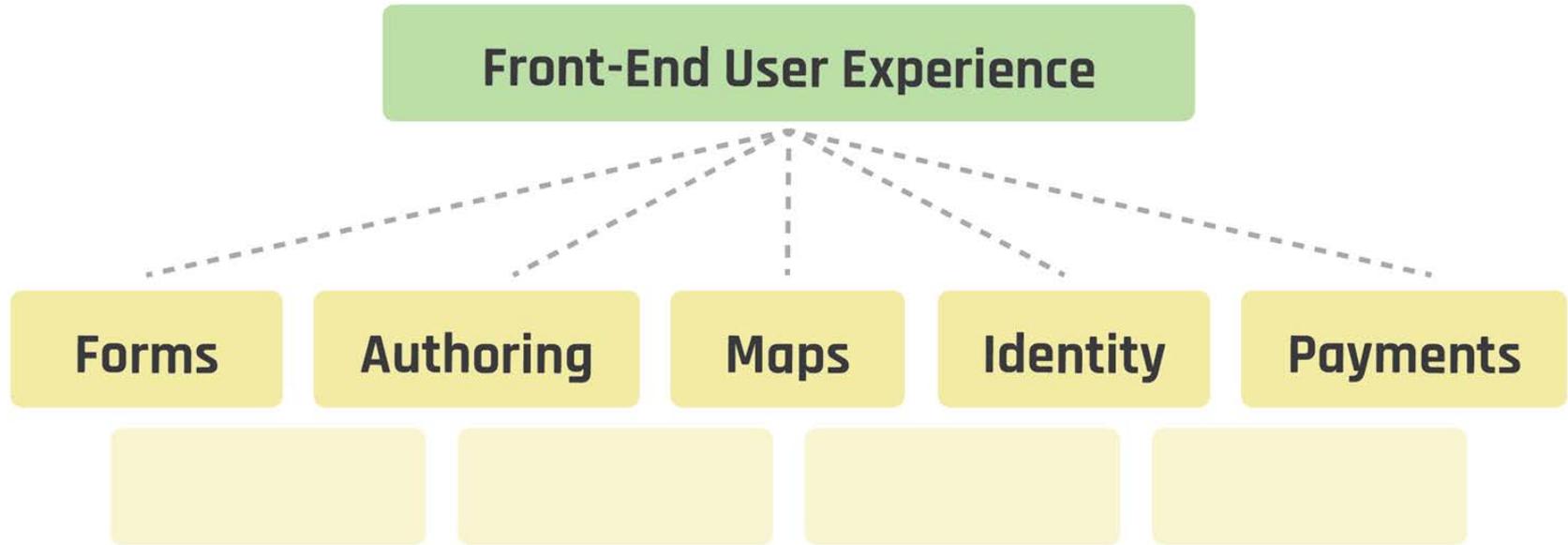
% of U.S. adults who ...



Source: Surveys conducted 2000-2016. Internet use figures based on pooled analysis of all surveys conducted during each calendar year.

PEW RESEARCH CENTER

Plan for the fact that everything will change.



Plan for the fact that everything will change.

