

# Transforming Austin's Digital Services

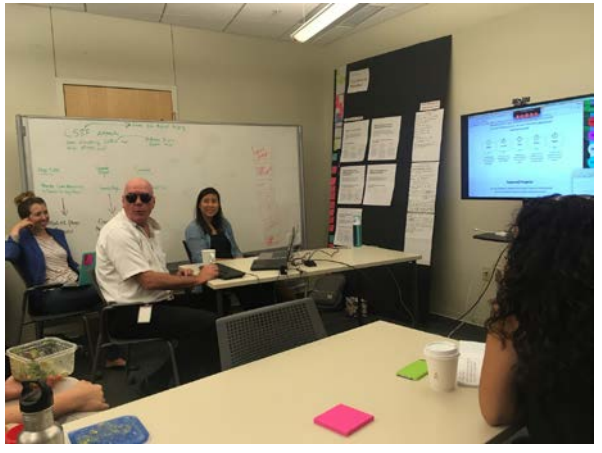
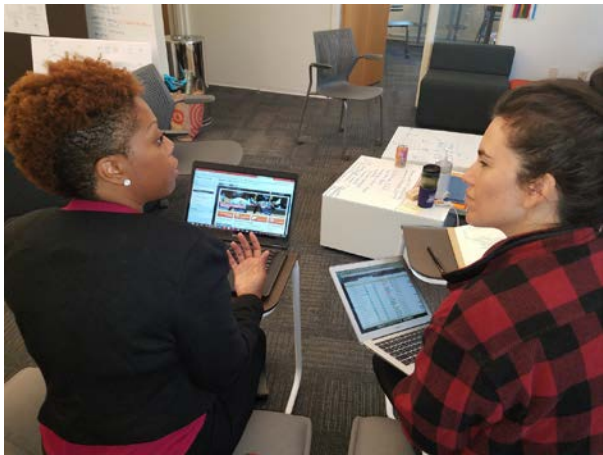
Community Technology & Telecommunications Commission  
January 10, 2018

# Today

- Putting Residents First
- Transforming Austin's Digital Front Door
- Our Approach to Tech

1

**Hello!**



# Government that Works

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*If you **want** to come to City Hall to do business with us, we'll be here for you. But if you **have** to come to City Hall to do business with us, then we're not doing our job.*

*Jascha Franklin-Hodge,  
City of Boston*

**Build living digital services  
that grow, adapt, and improve  
with user needs.**

2

**Putting residents first**

／ Putting residents first works well with an iterative approach

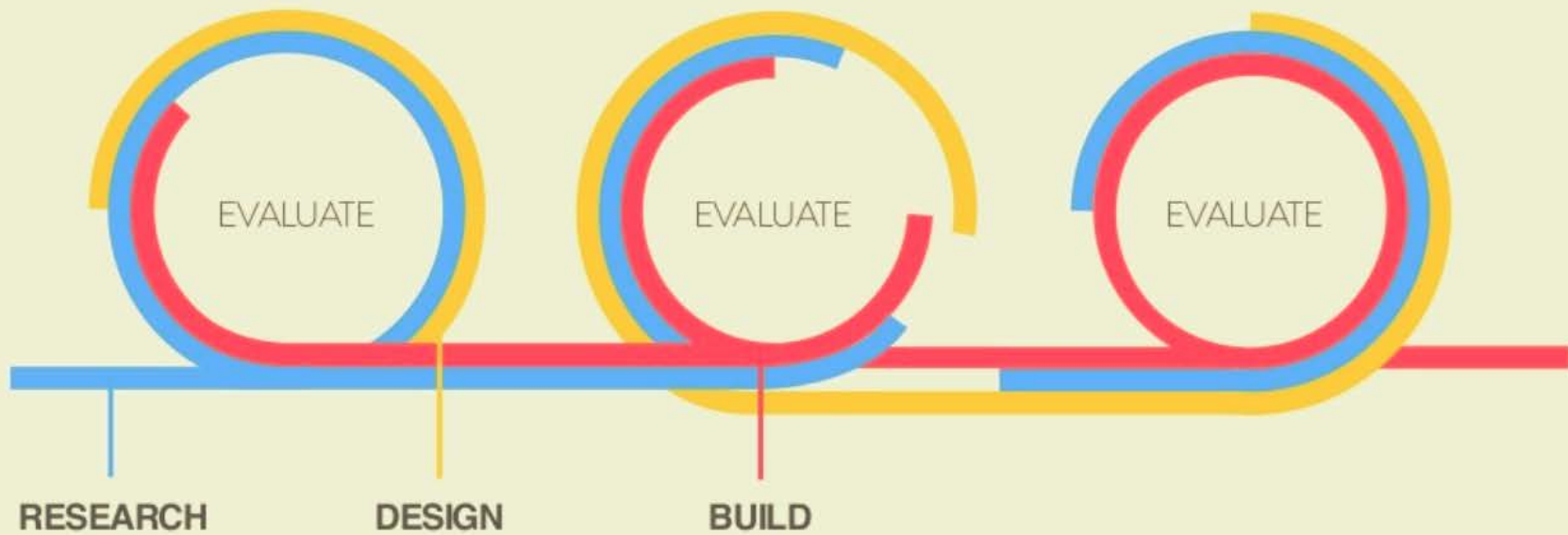


# TRADITIONAL PROCESS

LINEAR AND ATOMIZED



[UX Research within an Agile Design and Development Sprint Cycle, from UXPA](#)



# Why we are going iterative and not taking the traditional approach

- Research helps us to stay focused on user needs so it should be a continuous part of our work
- Implementers aren't brought in early enough or made part of the process which builds empathy of user needs
- Expert decisions are made with expert voices

／ **Observe how residents use services**

**austintexas.gov**  
the official website of the City of Austin

Pay Online Services Calendar Media Departments 3-1-1 Translate

Resident

Business

Development

Government

Environment

Household

Neighborhoods

Health

Public Safety

Arts and Leisure

Environmental

Transportation

City of Austin



Explore your city...

SEARCH

[Advanced Search](#)

I Need To...



Select a Service



Departments



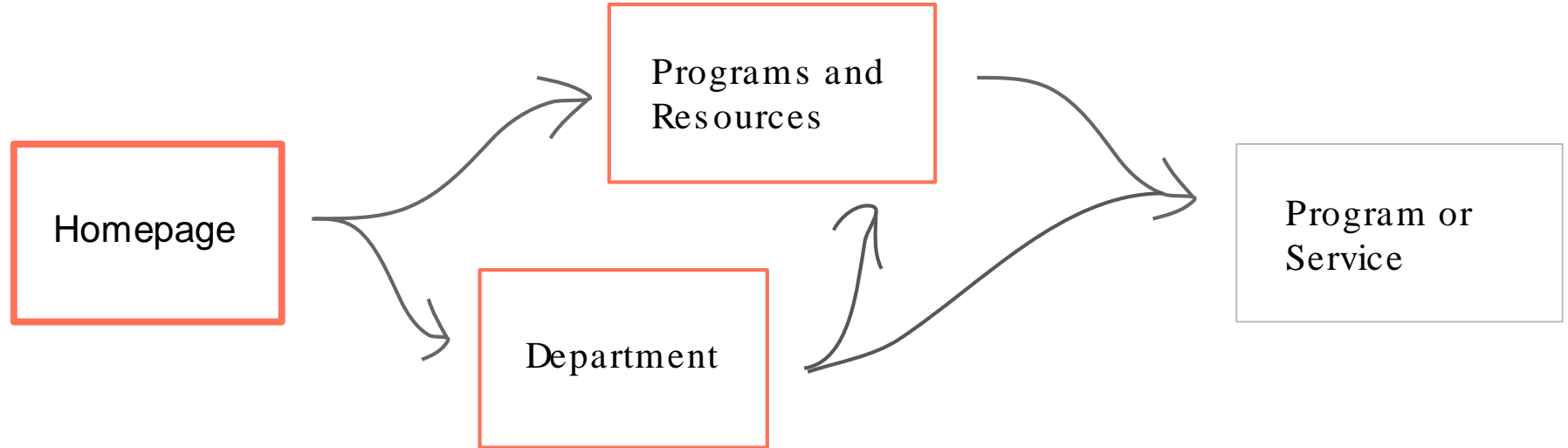
RESIDENT HEADLINES

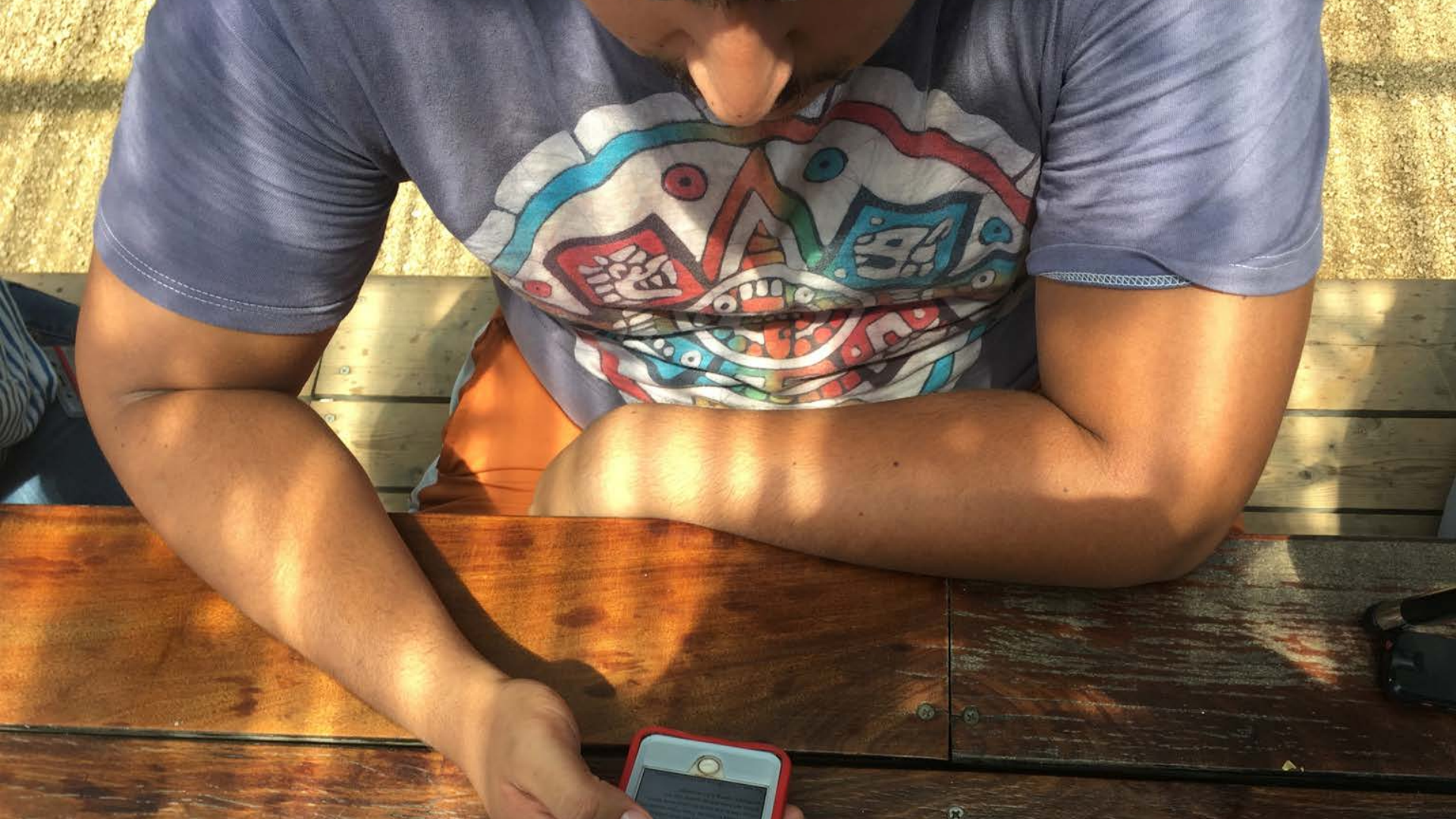
LOOKING AHEAD

CITY MANAGER NEWS



# Current AustinTexas.gov navigation goal







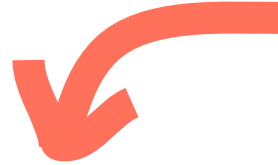
# How Austin residents access Austintexas.gov



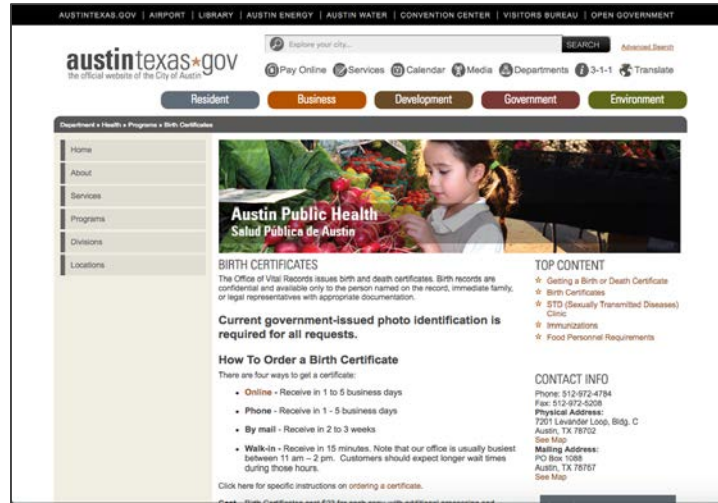
21%



61%



Google





# Testing Austin digital services MVP content relationships

**Theme:** Living

**Topic:** Education, training, and classes

**Service:** Sign up for a free recycling class

**Service:** Register for a small business accounting class

**Service:** Register for a beginners watercolor class

**Topic:** Manage compost, recycling, trash, energy, and water

**Service:** Look up your recycling, compost, and trash pick-up days

**Service:** Sign up for a free recycling class

**Service:** Apply for a rainwater harvesting rebate

**Help residents discover  
related services based on  
their needs and goals.**

／ Using resident observations to change the user experience





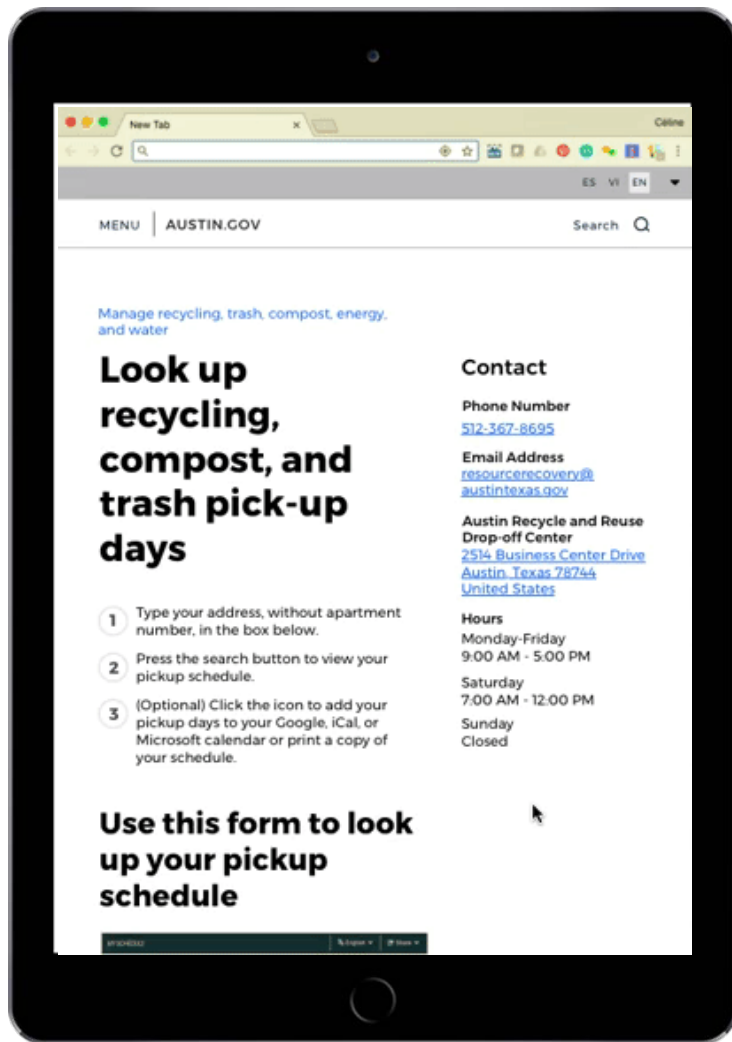


# From A to B

The test site that Tiandra and James used has two paths to other services:

1. Use the blue text above the service title to navigate to a topic page with all related services
2. Use the 'related services' tiles in the grey section

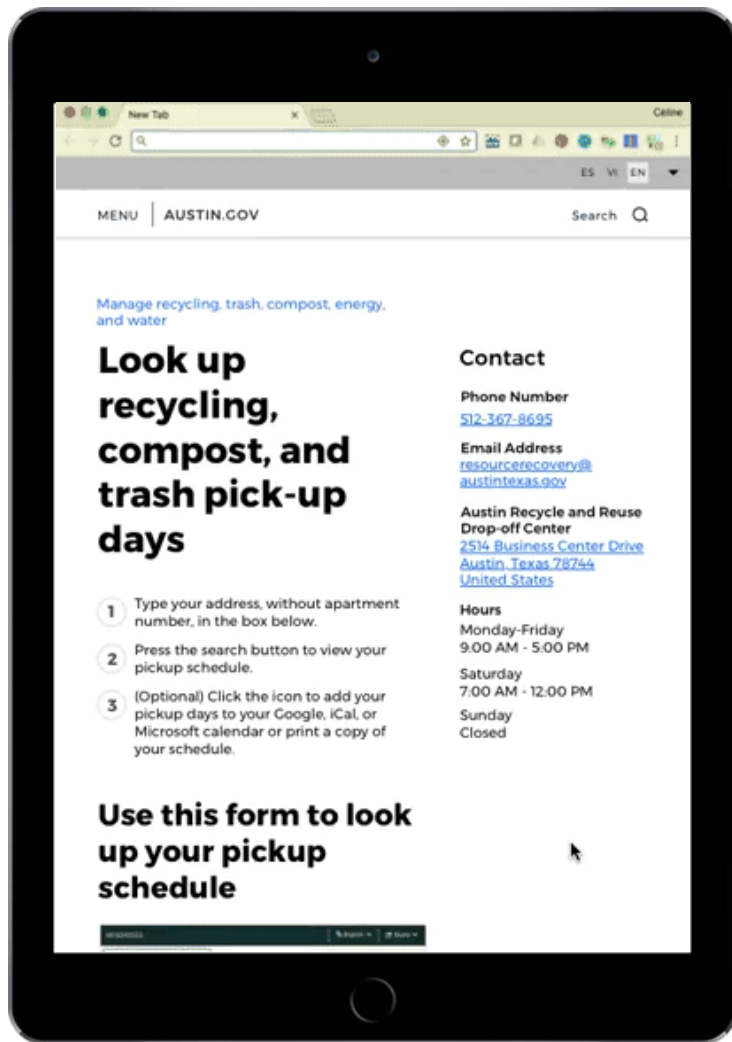
But, Tiandra never scrolled into the grey section on her tablet, and James said, "I'm trained to ignore [the footer]".



# From A to B

We observed from Tiandra and James that the gray sections feel unrelated and more like a footer.

1. We removed the gray section break
2. Updated the 'related services' title to be more of a prompt
3. Changed the attributes of the service tiles to focus the resident there and make it visible on white background



# Was that the right path?

We don't need to conduct a usability test for every change—but—the layout, interactions, and content are never done. They can always be improved based on resident-user observations and feedback.



／ Improving how we recruit for a diverse pool of test participants

## Want a better City of Austin website?

Help the City of Austin by giving feedback on our new online services. We'll be providing HEB gift cards to all participants!

Sign up today: [tinyurl.com/DecemberWebTest](https://tinyurl.com/DecemberWebTest)

# Opportunities for recruiting Austin residents for usability testing

Help us with recruiting!

We would love to send it to the commission in the future and get advice on how to reach out to participants

3

Content

# A Website that Puts Residents First

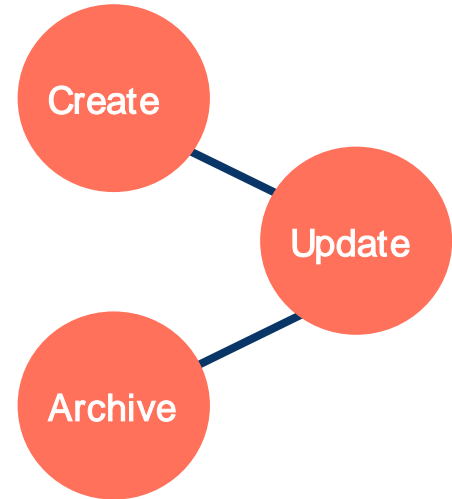
## Content



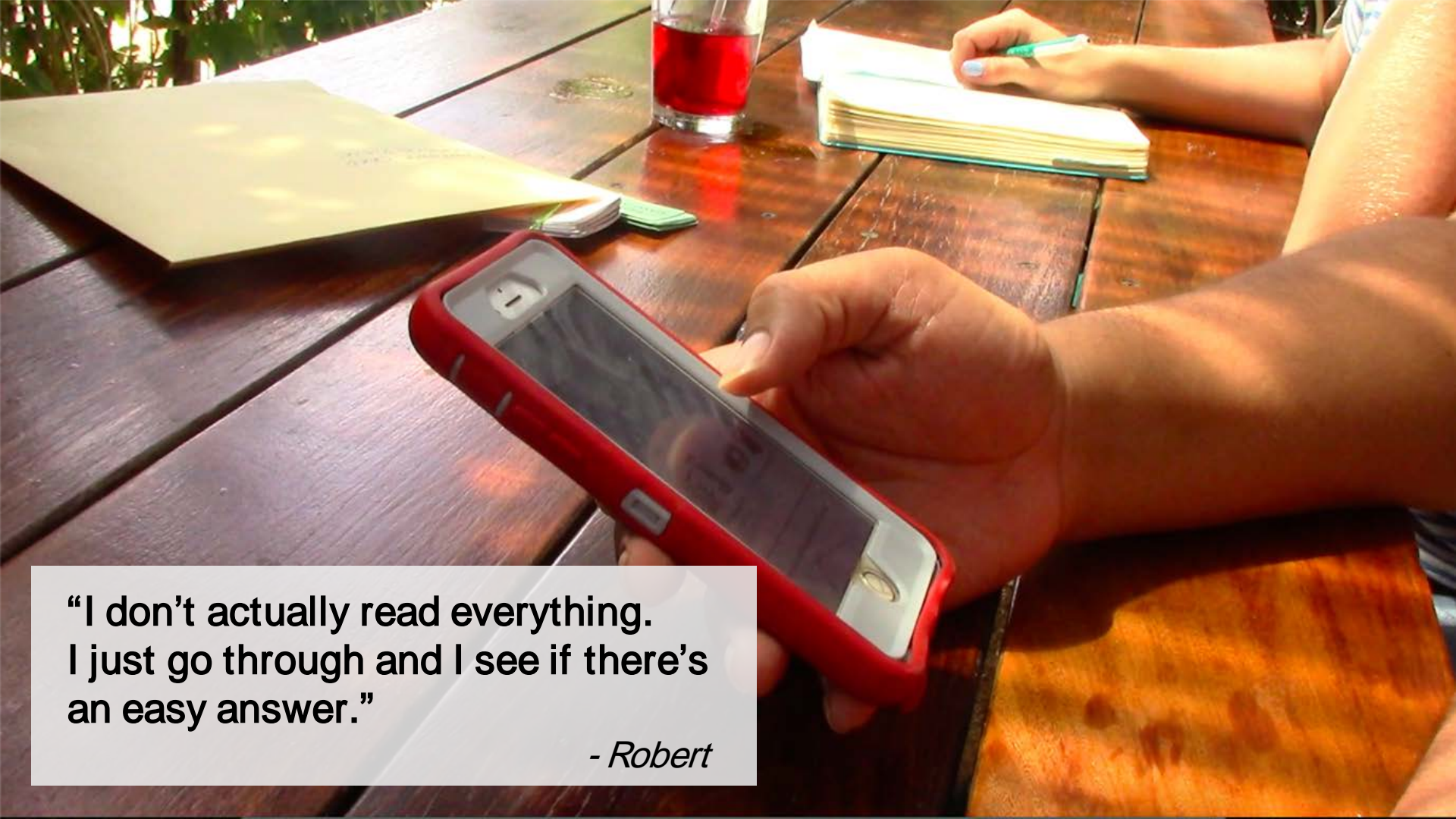
## People



## Workflow



Residents find current  
content too lengthy and  
complex, and content is  
not accessible to all.



**“I don’t actually read everything.  
I just go through and I see if there’s  
an easy answer.”**

*- Robert*

**What's in it for me?**

<p><b>Use Austin transportation, streets, and parking</b></p>	<p><b>Pay bills, tickets, and utilities</b></p>	<p><b>Find jobs in Austin</b></p>	<p><b>Adopt and care for dogs and cats</b></p>
<p><b>Manage trash, recycling, energy, and water</b></p>	<p><b>Education, training, and libraries</b></p>	<p><b>Apply for building and event permits</b></p>	<p><b>Experience art and culture in Austin</b></p>
<p><b>Look Up Your Documents and Track Pick-Up Days</b></p>	<p><b>Take a class or workshop</b></p>	<p><b>Find health services</b></p>	<p><b>Get fire, police, and emergency help and information</b></p>
<p><b>Participate in local government and volunteer</b></p>	<p><b>Hike, bike, swim, and play</b></p>	<p><b>Apply for housing and financial assistance</b></p>	
<p><b>Caring for family and home</b></p>			

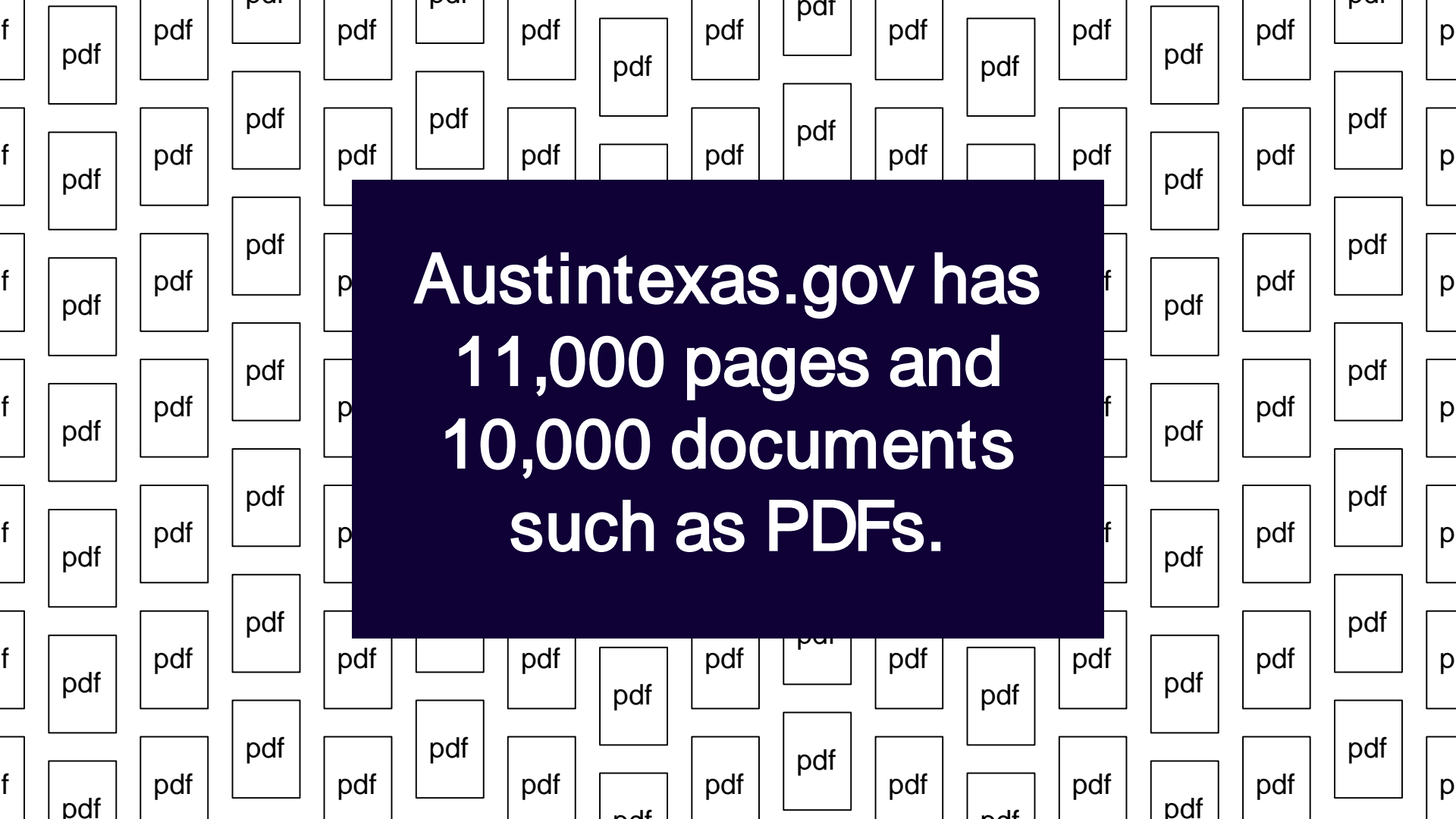
**PERSON, TECHNOLOGY AND INNOVATION PROGRAM**

**2015-2016**

**2015-2016**

- Linda

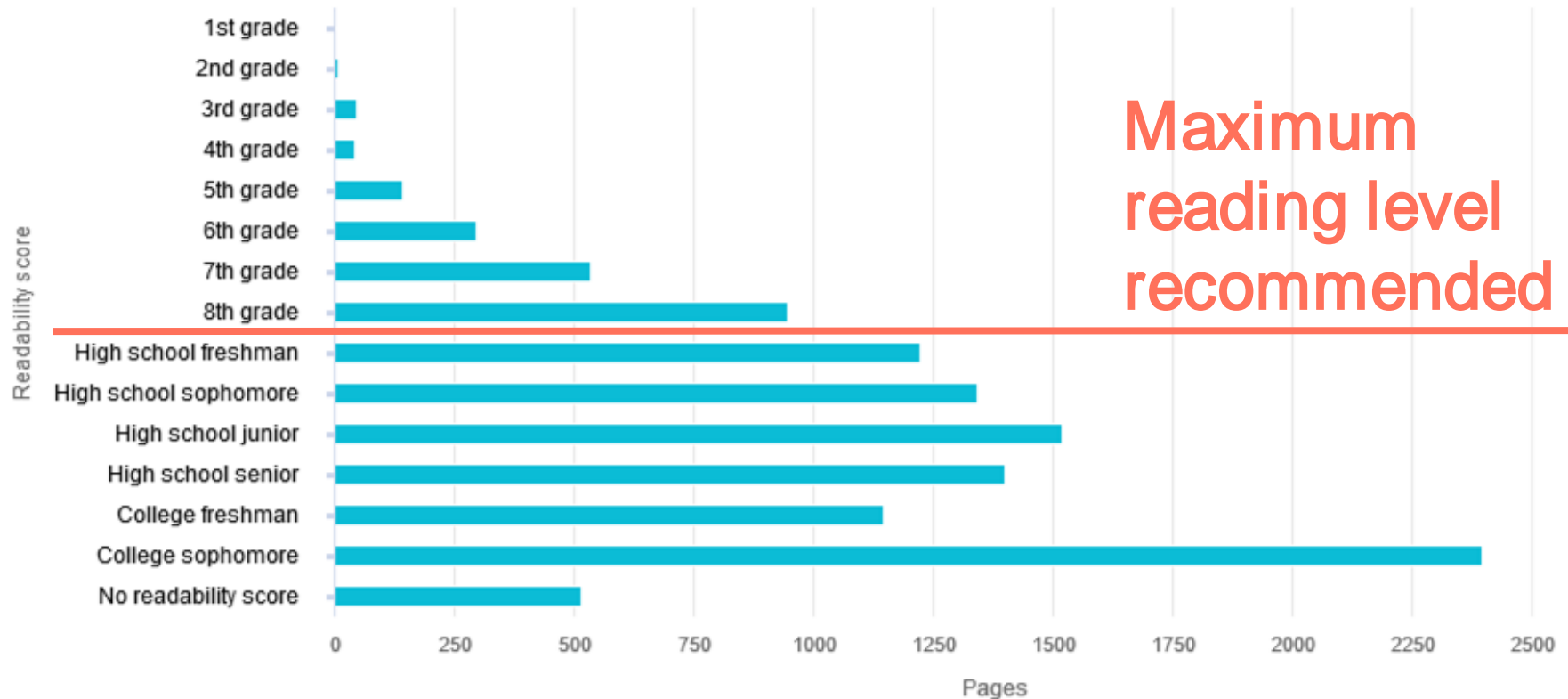


The background of the image is a repeating pattern of the letters 'pdf' in a black, sans-serif font. Each 'pdf' is enclosed within a thin black rectangular border. These elements are arranged in a staggered grid across the entire image. In the center, there is a large, solid dark blue rectangle that serves as a backdrop for the main text.

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

# AustinTexas.gov Pages Reading Level

Readability score based on: Flesch Kincaid Grade Level ?



**We are coaching authors  
and publishers to write  
service-oriented content.**

# Department-oriented vs Service-oriented

Service-oriented language is a way of addressing the services available to residents, instead of the departments providing the services.

Department-oriented language	Service-oriented language
Certification for MBE/WBE	Get Certification for Your Minority or Woman-Owned Business

# Dive in to Digital Services

These digital services make it easier to get what you need. New services are added regularly.

my.indy.go  
v



## Apply for a Mortgage Deduction

Lower your tax on mortgaged property

[Learn more →](#)



## Request a Public Record

Take these steps to view or copy public information

[Learn more →](#)



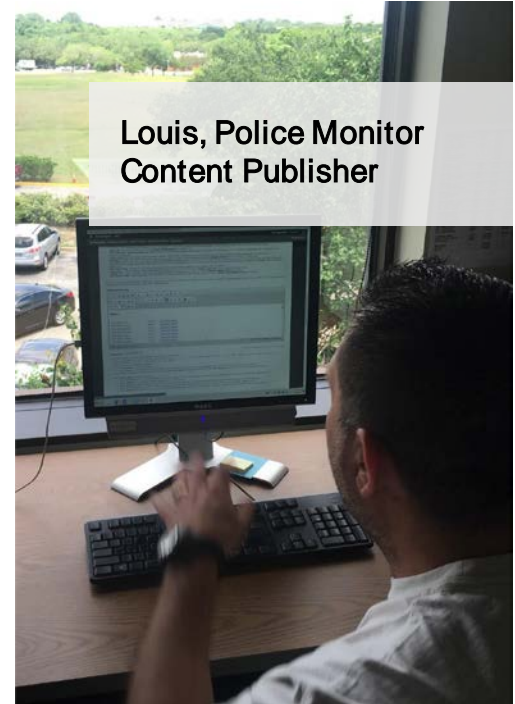
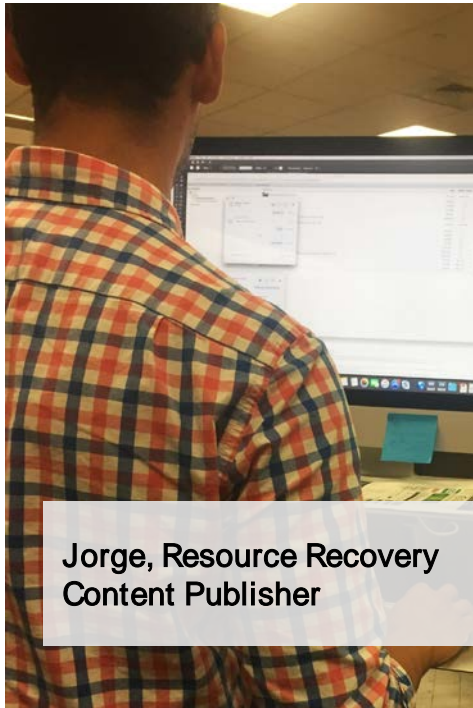
## Find Bid Opportunities

Search open bids to find projects of interest to your company

[Learn more →](#)

Residents find outdated  
content because it is  
difficult for staff to  
manage existing content.

# Helping City Staff Manage Existing Content

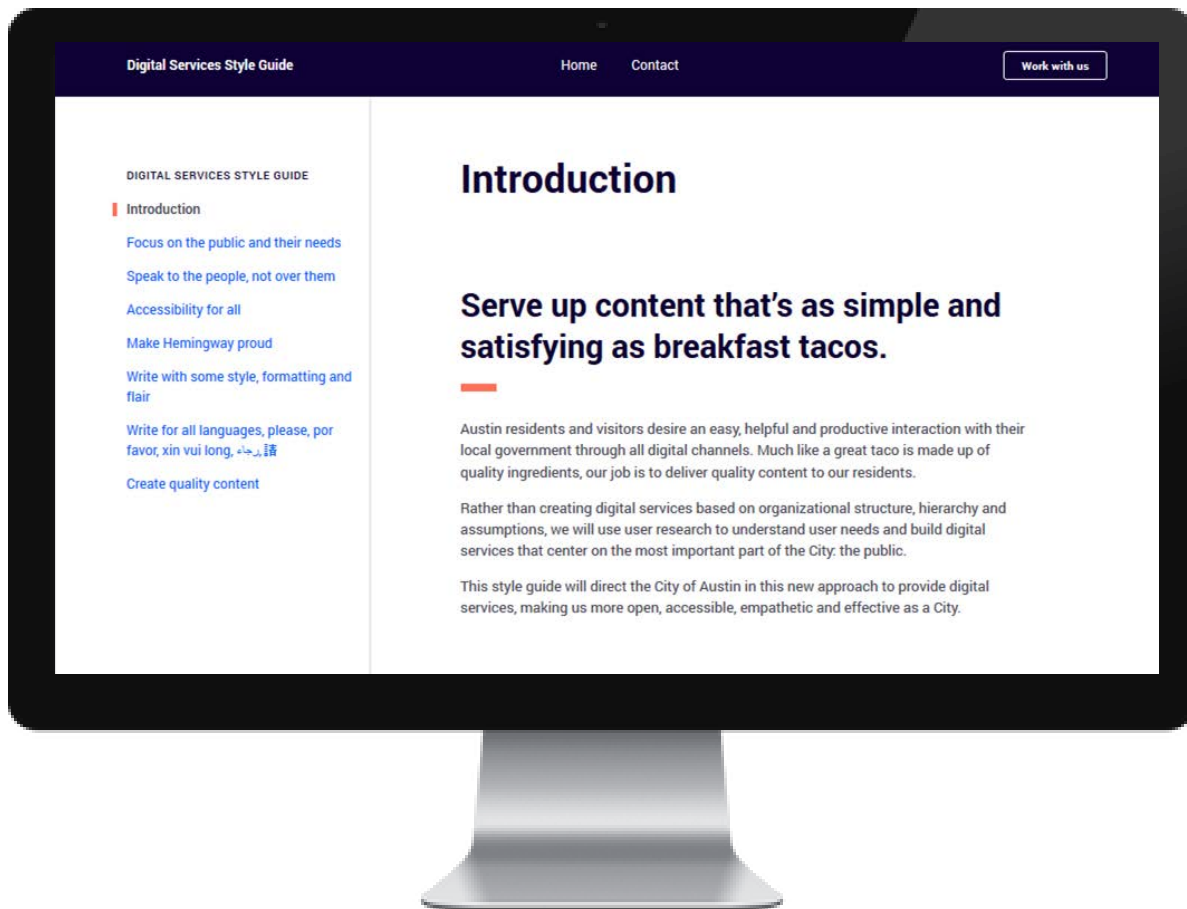


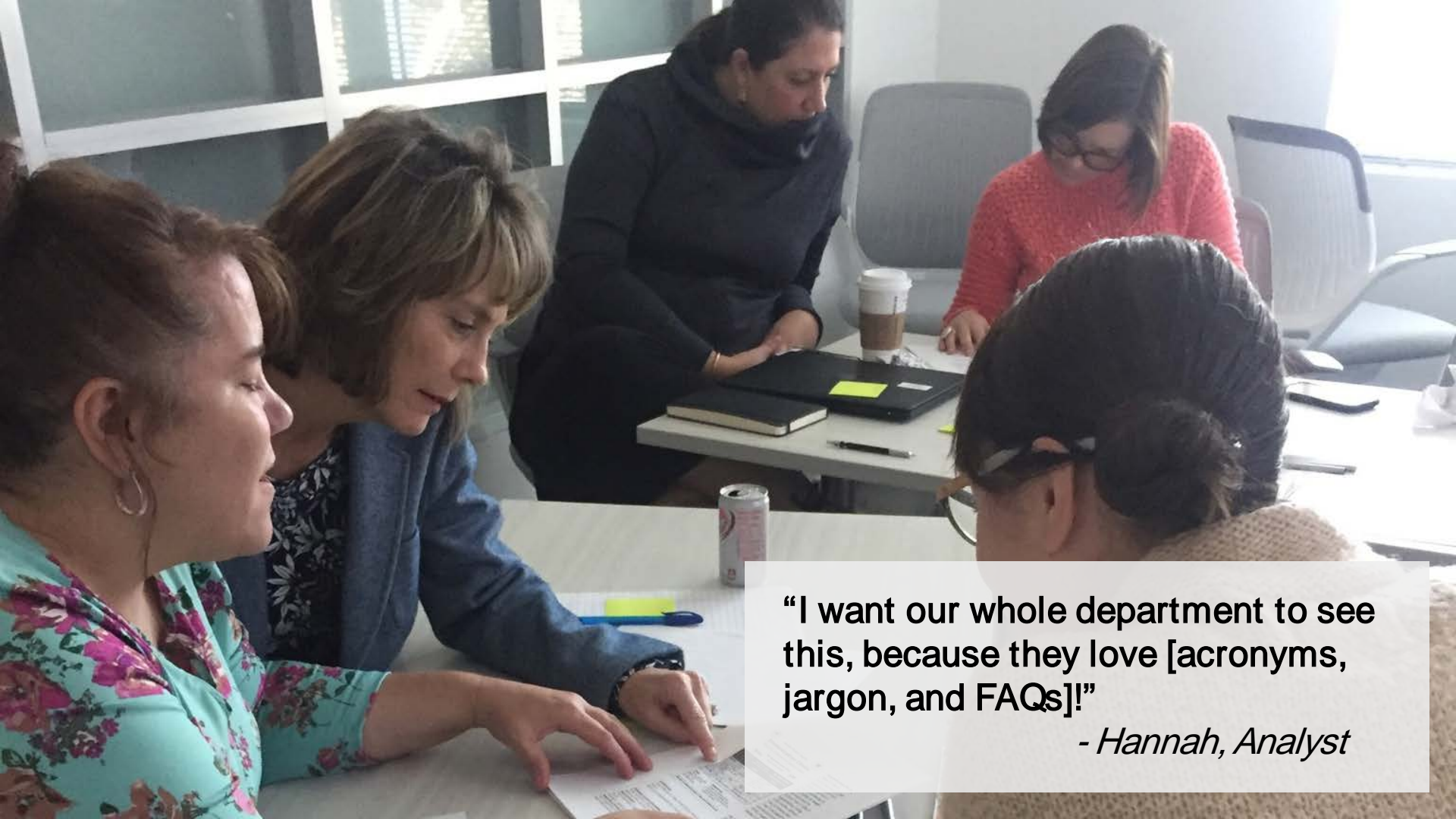
**Staff want to provide better content, but they need more guidance, training and tools to do so.**



**We are making content writing easier by providing staff with the training and tools they need.**

# City of Austin Style Guide





**"I want our whole department to see this, because they love [acronyms, jargon, and FAQs]!"**

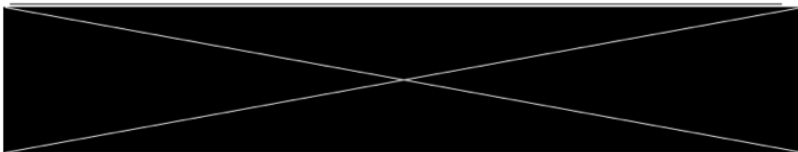
*- Hannah, Analyst*

Just a sec. Let's check content quality from the resident's side.

MOBILE VIEW

DESKTOP VIEW

Image will be placed here after page is reviewed



Write an actionable title, starting with a verb

---

Example: Look Up Your  
Recycling and  
Trash Pickup Days

Write out the steps a resident needs to take to use the service

---

Example:

1. Look up your address
2. Add schedule to your Google, iCal,  
or Microsoft calendar or print a copy

## Suggested Changes

0 acronyms can be written out for comprehension.  
*Spelling out acronyms make the information easier to read.*

1 sentence is in passive voice. Change to active voice.  
*The active voice is more direct.*

0 sentence is hard to read. Simplify, shorten, or split sentence.  
*Choosing a simpler word saves space and makes your content easy to read.*

0 word or phrase has a simpler alternative.  
*Choosing a simpler word saves space and makes your content easy to read.*

0 sentences have a reading level above 8th grade.  
*Let's keep it accessible, Austin!*

**Well done, Susanne!**



**You've crafted an awesome new  
service page and fixed all errors!**

**Your page has been submitted for review!**

**We'll let you know when it's live.**

**[VIEW DASHBOARD](#)**

**[CREATE ANOTHER PAGE](#)**

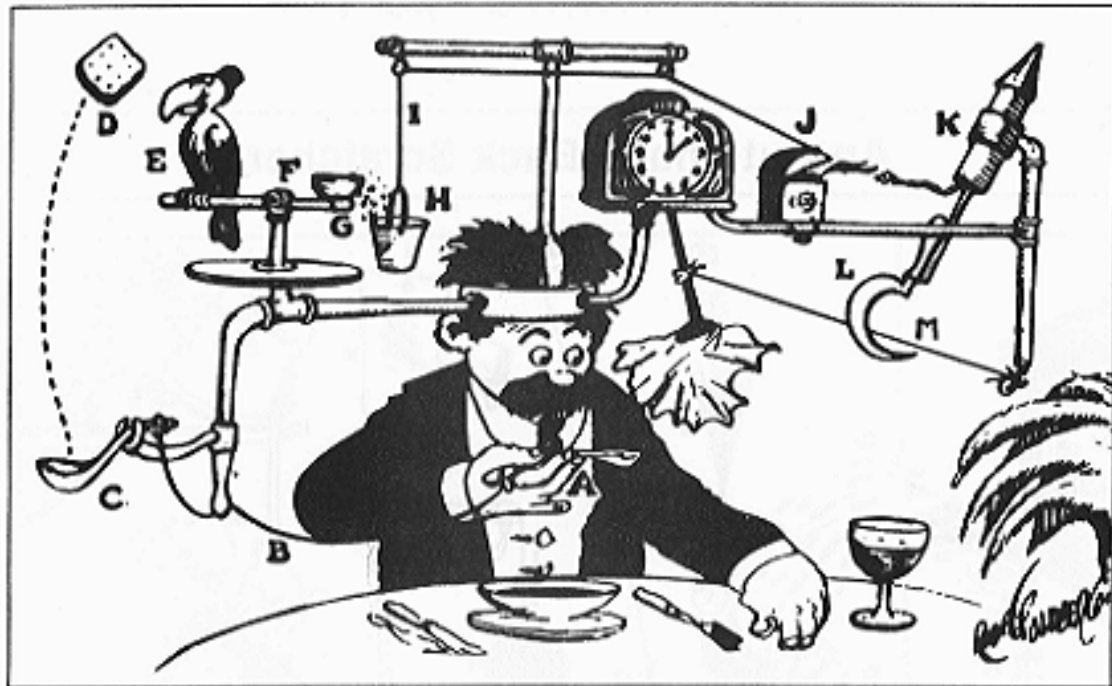
**We can be the leader  
of how cities provide  
resident-focused content.**

4

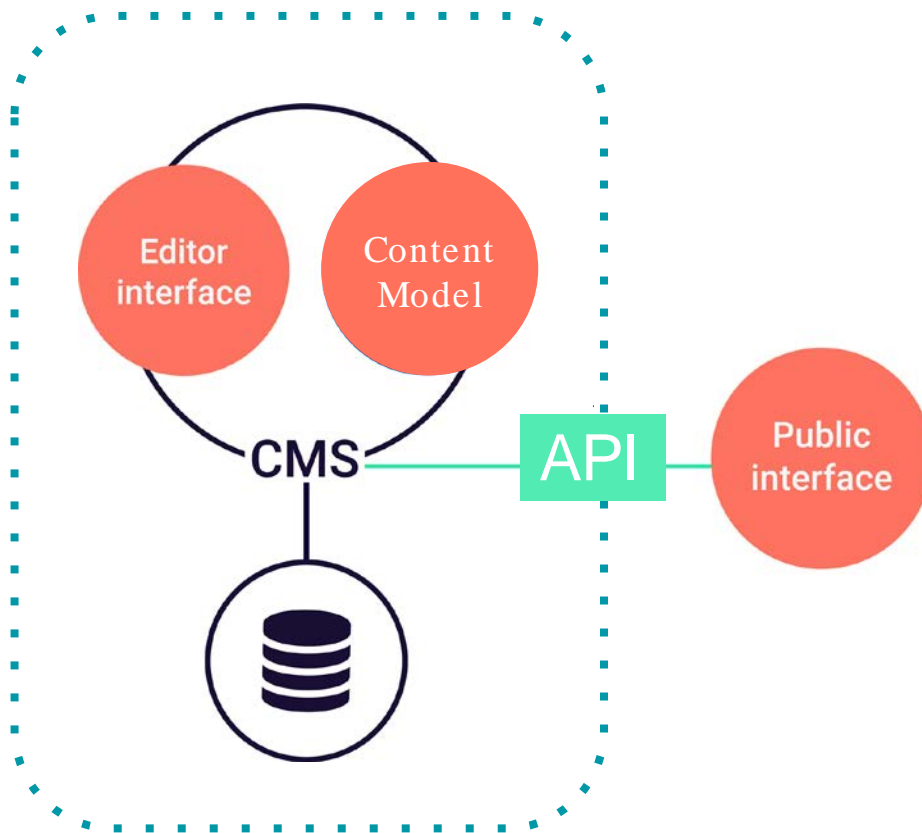
# Open Source CMS

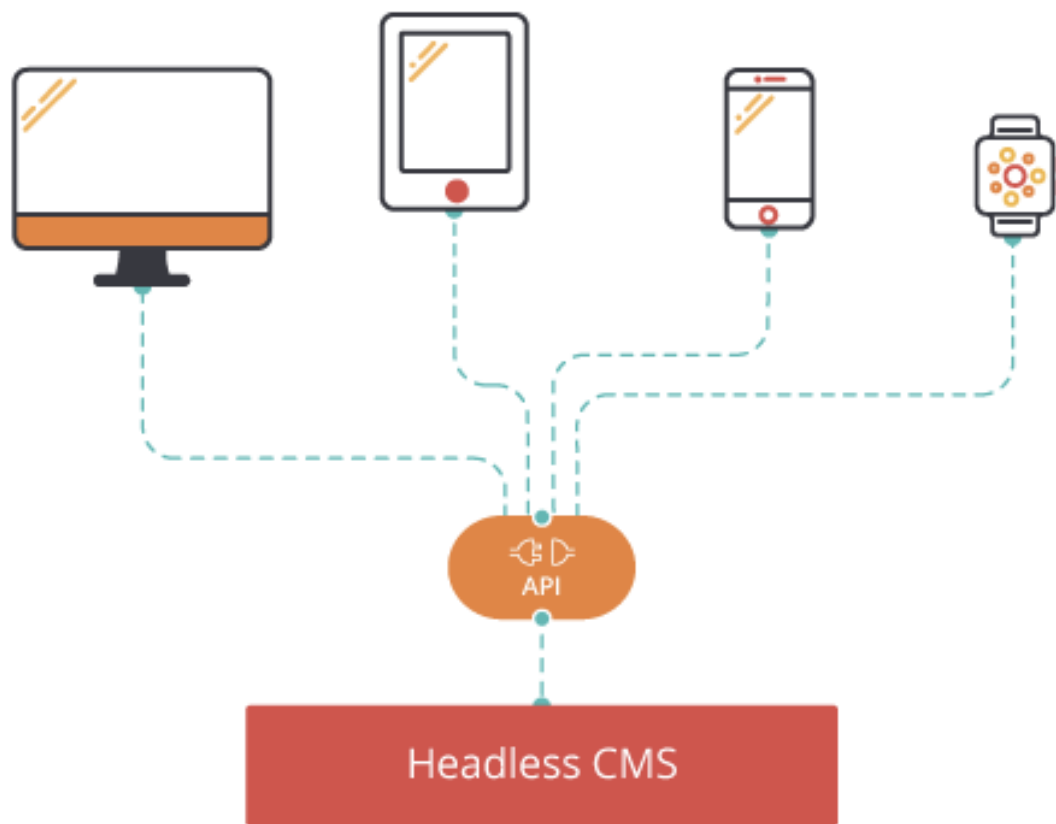
Apologies  
up front

## Self-Operating Napkin









# Technology trends and content management



## Benefits of a Decoupled CMS

- **Scaling** is cheap with static assets
- **Security** exposure decreased
- **Reuse** content in different contexts
  - websites vs mobile apps
- **Integration** with external APIs

[\[Link to Jacob's Medium Article\]](#)

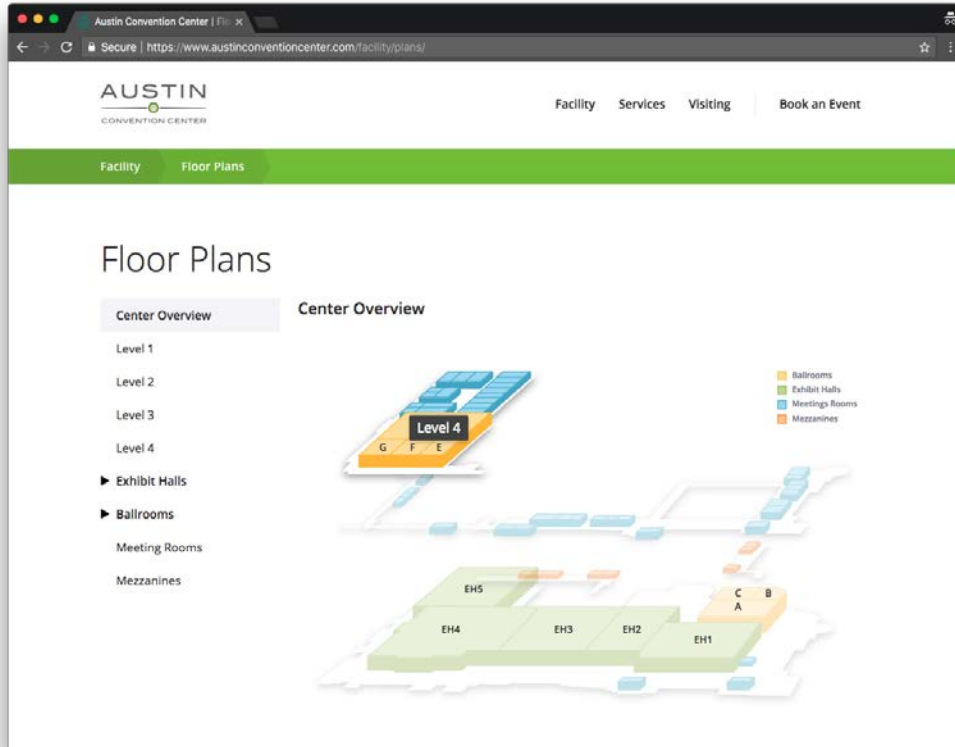
# [cityofaustin.github.io/innovation-fellows/](https://cityofaustin.github.io/innovation-fellows/)

The screenshot shows a web browser displaying the website "cityofaustin.github.io/innovation-fellows/". The browser's address bar shows the URL. The website has a dark purple header with the text "An official City of Austin website" and a "Translate" button. Below the header is a navigation bar with links: "Home", "About Us", "Civiqueso Posts", "Events", and "Join Us". A button labeled "Go to our Projects site" is also present. The main content area features a large photograph of four people (three men and one woman) in a meeting room, standing around a table with several whiteboards covered in colorful sticky notes. Below the photograph, the title "Changing up Local Government" is displayed in a bold, dark font, followed by a short red horizontal line. Underneath the line, a paragraph of text describes the City of Austin's Design, Technology, and Innovation Fellows program.

Changing up Local Government

The City of Austin's Design, Technology, and Innovation Fellows program provides an opportunity for Austin's passionate and civic-minded designers and developers to bring the principles, values, and practices of the technology sector into government.

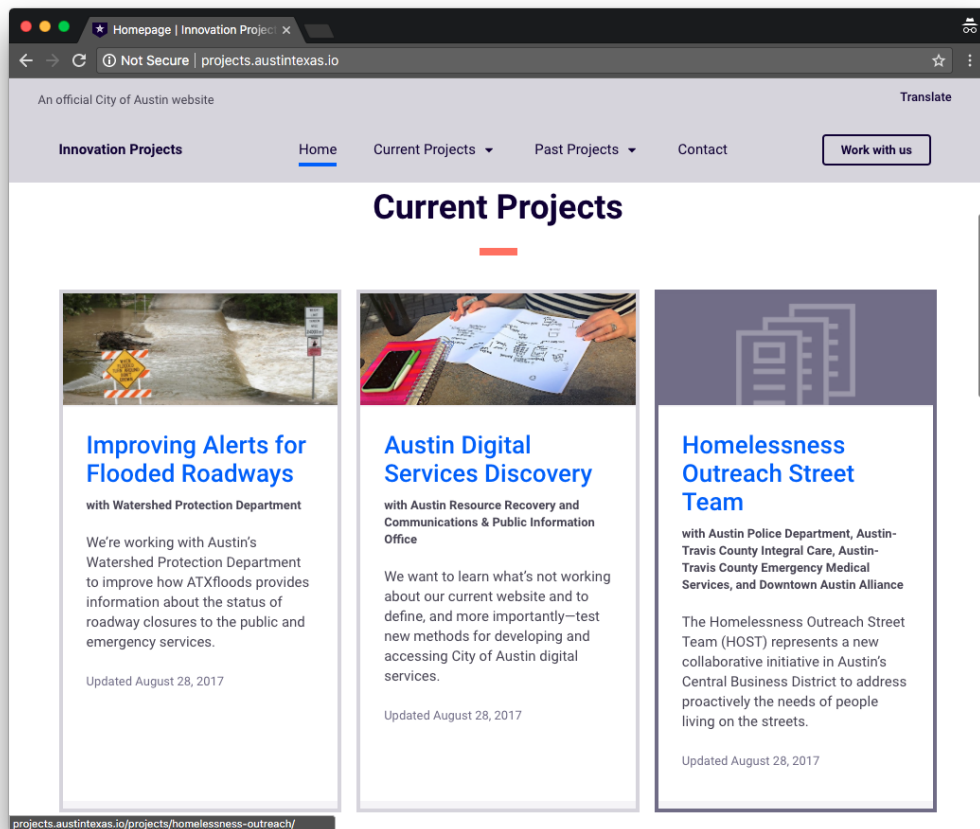
[austinconventioncenter.com](https://www.austinconventioncenter.com)



**contentful**  
future. friendly. content.



# projects.austintexas.io



[permittingatx.com](https://permittingatx.com)



cloudcannon



algolia



Do I need a Shed Permit? — C x

permittingatx.com/residential/projects/shed/define/

OVERVIEW | **1. DEFINE** → 2. CONSULT → 3. APPLY → 4. REVIEW → 5. INSPECT

## Zoning requirements

Whether your project needs a permit or not, there are still zoning regulations you must follow to make sure your shed follows the City of Austin's code. Some customers choose to buy pre-made sheds since they can be moved off of easements and setbacks. Pre-made sheds still count toward your total impervious cover and must also follow zoning requirements.

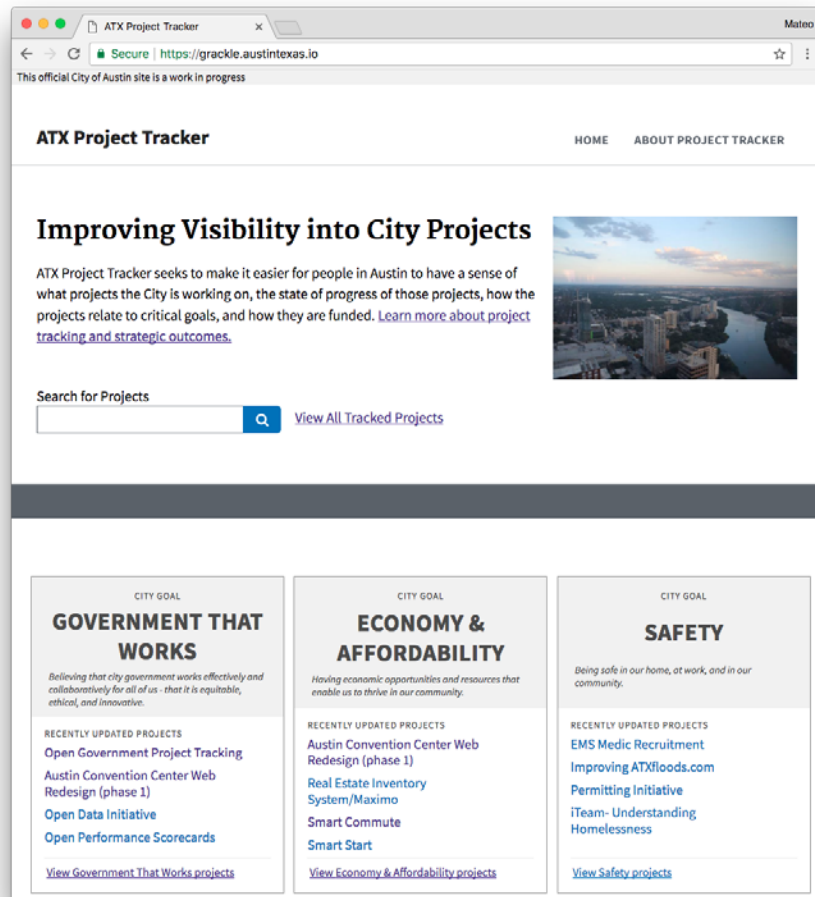
The diagram illustrates a property layout with a dashed rectangular boundary. Inside this boundary, there is a solid rectangular area labeled "Impervious cover". To the right of the "Impervious cover" area, within the dashed boundary, is the label "Buildable area". Below the dashed boundary, there are two horizontal dashed lines. The space between these two lines is labeled "Setback". Below the "Setback" area, there is a solid horizontal line, and the space below this line is labeled "Easement".

Setbacks	Easements	Impervious Cover
<p><b>What is impervious cover?</b> Rooftops, driveways, parking lots, and other man-made or stone surfaces that keep water from being absorbed into the ground. Impervious cover restrictions are put in place to prevent flooding during and after heavy rains. If you do not live in a floodplain, your impervious cover cannot exceed 45% of your property. If you do live in a floodplain, your impervious cover cannot exceed 10% of your property. Impervious cover restrictions are in place to make sure a significant amount of water is making it back into the soil and to prevent flooding. <a href="#">Learn more about impervious</a></p>		

[grackle.austintexas.io](https://grackle.austintexas.io)



Gatsby



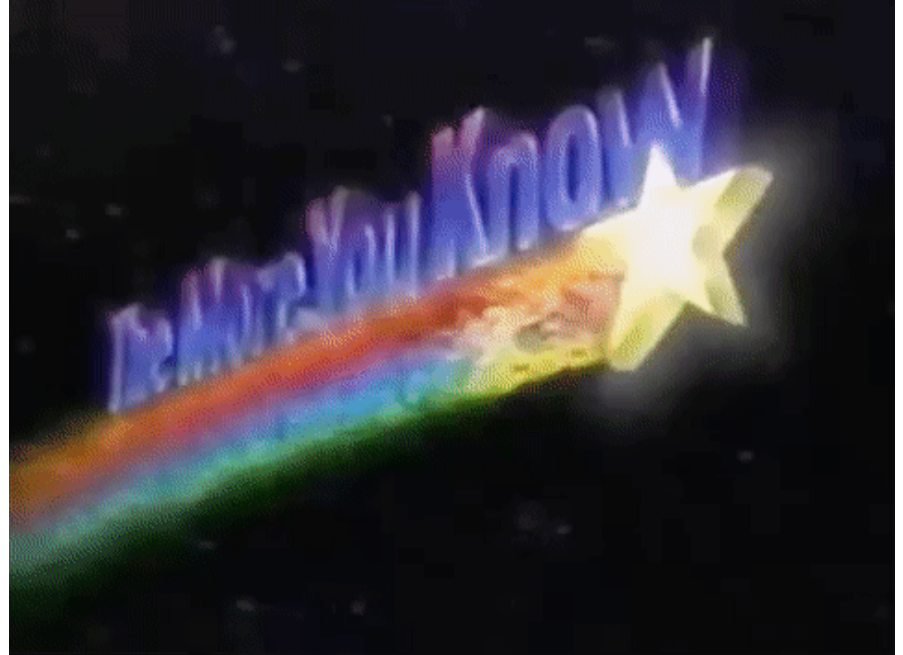




**We're becoming very familiar with  
content management systems**

# What did we learn?

- We can build sites that are customizable, complex, and **extendable** without a backend server.
- The **content management experience** is **hard** definitely not solved by moving content into YAML files or spreadsheets



# How could we improve?

- In most cases, technical decision of selecting a content editing system were made before **understanding the needs of the content creator** or the nuances of the content model
- Most challenges in developing the sites were around the **rigidity of the content system** and limitations to adapt of content model



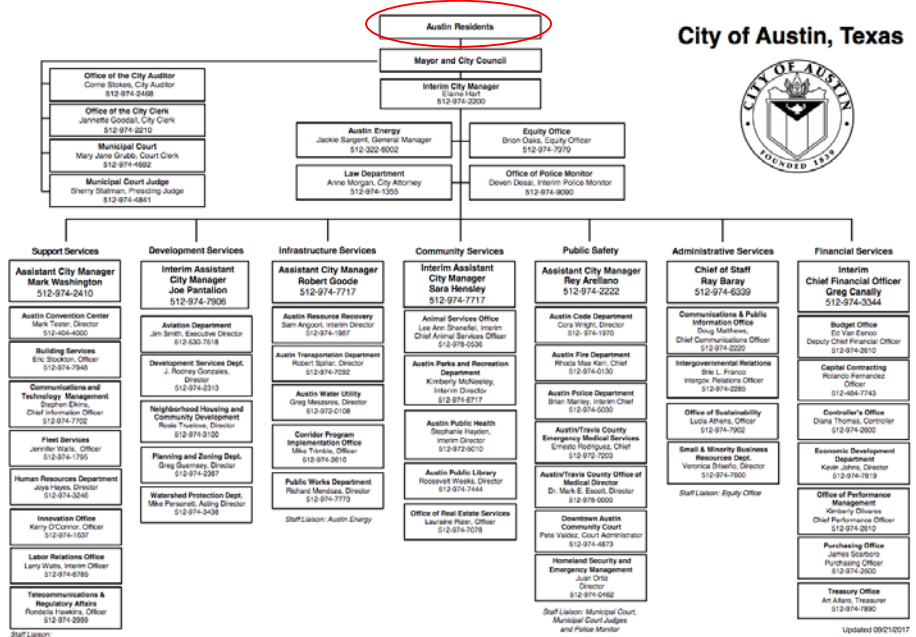
# Content, not technology, is the hard part

- The real work is around making sure **residents have a great experience.**
- The way to do that is to support content authors.



# “The People are at the top of the org chart.”

- “Put Residents First” is the 1st of our 6 Digital Service Values.
- This orients our priorities as a service organization.
- Our dev team is making tools to serve the user researchers, who serve the content editors, to serve the public.



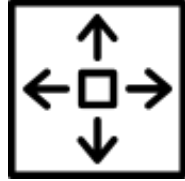
# Narrowing down the most critical features for MVP

- Robust User Roles for Content Coaching
- Customizable Admin Interface
- Mobile First Content Preview
- Content Performance Dashboard
- Translation
- Forms

# Building on an open source platform



Customizable



Expandable



Portable



Supported

# Conversations with our peers

- We've had 2 conversations with cfpb folks about Wagtail
- We talked to Boston.gov & Mass.gov about Drupal 7 vs Drupal 8



Mass.gov



# Wagtail ecosystem

- Developed in **Feb '14** by Torchbox, agency based in the UK.
- Torchbox managed big public sites with Drupal.
  - *“You don’t get fired for choosing Drupal.”*
- Made with Wagtail:
  - United Nations, Oxfam, NBC News, 18F, FEC, cfpb, UK Gov, NHS, NASA, Intel, Wharton, City of Helsinki, Municipality of Anchorage, Open Canada
- Our team is already [contributing back to the Wagtail open-source](#) project.



# Django/Python ecosystem

- **Django** is the underlying MVC framework.
- **Python** community
  - Common language for CS 101
  - Widely used in GIS, Academic and Scientific communities

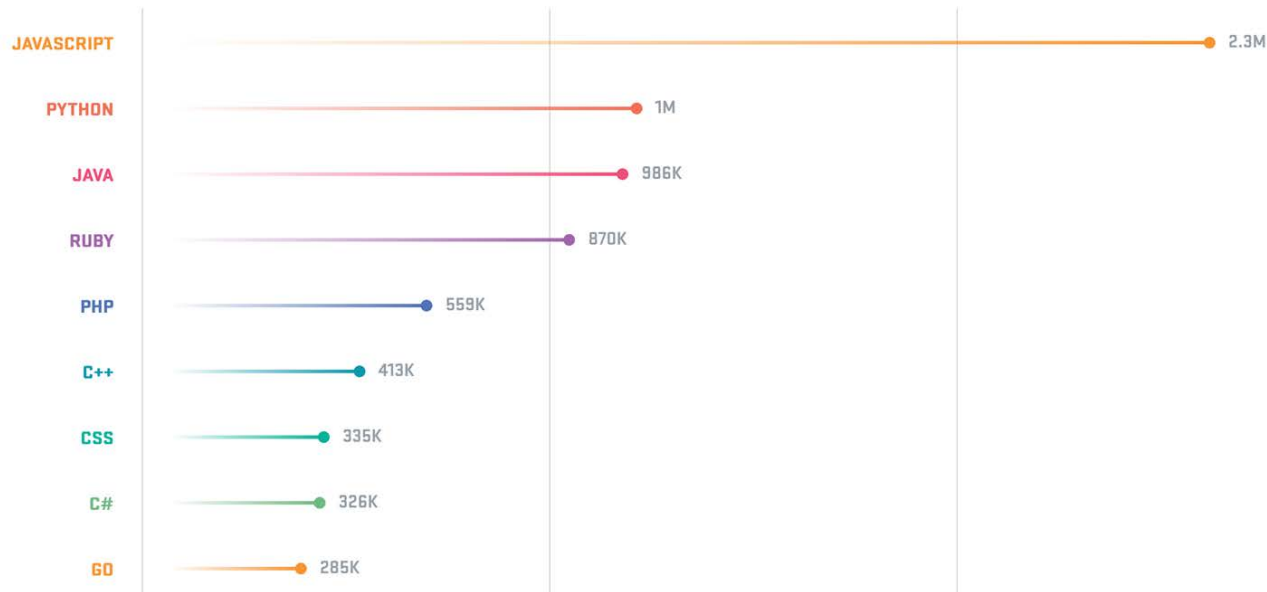


# Recruiting the next gen of civic technologists

## The fifteen most popular languages on GitHub

by opened pull request

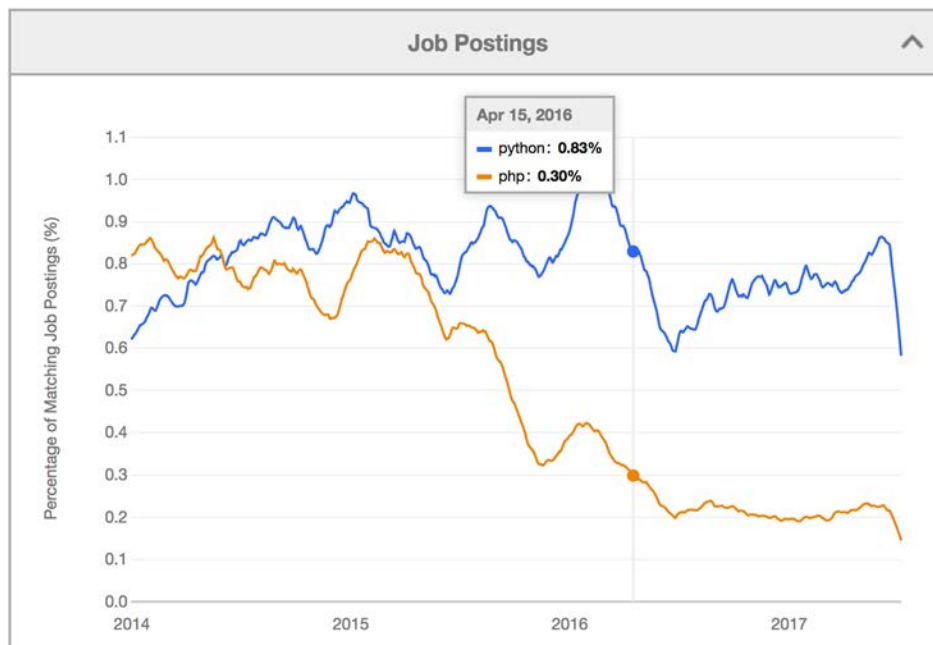
GitHub is home to open source projects written in 337 unique programming languages—but especially JavaScript.



# Recruiting the next gen of civic technologists

## python and php Job Trends

python × php × + Add Term Find Trends



# Working in the open

The screenshot shows a web browser window displaying a GitHub project page for the 'City of Austin' organization. The browser's address bar shows the URL 'https://github.com/orgs/cityofaustin/projects/1'. The page header includes navigation links for 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. The main content area features a Kanban board with five columns: 'Needs Discussion' (3 items), 'We will Do' (9 items), 'In Progress' (6 items), 'Blocked' (1 item), and 'Done' (21 items). Each column contains task cards with details such as the task name, issue number, effort level, and due date. For example, in the 'Needs Discussion' column, the first task is 'Persist language selection across user sessions' (janis#54) with 'low' effort and 'MVP' due date. The 'In Progress' column shows 'Feedback Form' (janis#18) with 'medium' effort and 'MVP' due date. The 'Blocked' column has 'Application block for Recollect' (janis#26) with 'medium' effort and 'MVP' due date. The 'Done' column lists completed tasks like 'Use `Accept-Lang` for determining which lang to serve' (joplin#40) and 'Get Page API data via slug instead of via ID' (joplin#26).

City of Austin

Repositories 83 People 68 Teams 20 Projects 1 Settings

Janis Joplin

Filter cards

+ Add cards Fullscreen Menu

**Needs Discussion 3**

- Persist language selection across user sessions  
janis#54 opened by mateoclarke  
effort: low when: MVP
- Live preview for mobile  
joplin#32 opened by benweatherman  
effort: high when: MVP
- Build translation workflow  
joplin#17 opened by benweatherman  
effort: high

**We will Do 9**

- Application block Map  
janis#27 opened by ifsimicoded  
effort: medium when: MVP
- Add map to contact section  
joplin#76 opened by cthibaultatx  
when: MVP
- Plug and configure analytics  
janis#30 opened by cthibaultatx  
effort: medium when: MVP
- Add header image holders and background color  
janis#37 opened by cthibaultatx  
effort: low when: MVP
- Create separate austin.gov feedback tracker repo  
janis#31 opened by cthibaultatx  
effort: low when: MVP

**In Progress 6**

- Feedback Form  
2 of 4  
janis#18 opened by benweatherman  
effort: medium when: MVP
- Department Model and Dept Page endpoint  
joplin#36 opened by ifsimicoded  
effort: medium when: MVP
- Topic Page  
janis#29 opened by ifsimicoded  
effort: medium when: MVP
- Language Selection  
0 of 3  
janis#35 opened by cthibaultatx  
effort: high when: MVP
- Homepage  
janis#33 opened by cthibaultatx  
effort: low when: MVP

**Blocked 1**

- Application block for Recollect  
janis#26 opened by ifsimicoded  
effort: medium when: MVP

**Done 21**

- Use `Accept-Lang` for determining which lang to serve  
joplin#40 opened by benweatherman  
effort: low when: MVP
- Get Page API data via slug instead of via ID  
joplin#26 opened by benweatherman  
effort: low when: MVP
- Topic Model and Page Endpoint  
joplin#37 opened by ifsimicoded  
effort: medium when: MVP
- Service Page Endpoint updates  
joplin#38 opened by ifsimicoded  
effort: medium when: MVP
- Service / Contact Model  
joplin#39 opened by ifsimicoded

Automated as Done

# Alpha.austin.gov

- Initial release of alpha.austin.gov in February
  - Refining usability testing & recruiting
  - Prioritizing features and improvements
- Extend content model
  - Events Pages
  - Process (Step-by-step) Pages
- Adding content from more departments
  - EMS
  - ...more

**Build living digital services  
that grow, adapt, and improve  
with user needs.**