



DIGITAL WEB SERVICES NETWORK

Bringing together digital product managers, designers, and engineers.

cdt.ca.gov/dwsn

DWSN Quarterly Forum

Thursday, July 20, 2023



California
DEPARTMENT OF TECHNOLOGY
STRATEGY INNOVATION DELIVERY



Digital Web Services Network

- Welcome to the DWSN forum, we will begin shortly.
- For the best experience, please use your computer to join the meeting.
- Mute your audio.
- Turn off your video.
- Use the raise hand button or the meeting chat for comments and questions.

DWSN Forum Agenda

Opening Remarks.....	Koji Kumpulainen (3 minutes)
Using Figma for Design Documentation.....	Kelly Diaz (15 minutes)
Data-Driven Decision.....	Joseph Ledoux/Shawn Brouwer (15 minutes)
Analytics.....	Linda Tracy (5 minutes)
State Web Template V6	Art Khomishen/Christina Florente/Carter Medlin (20 minutes)
Accessibility	Greg Duncan (5 minutes)
Automatic Speech-to-Text in Citizen-facing Apps.....	Selvarani Janarthanan/Vikram Verma (10 minutes)
Suggested Future Topics / Closing Remarks.....	Koji Kumpulainen (2 minutes)



**DIGITAL
WEB
SERVICES
NETWORK**

Opening Remarks

Koji Kumpulainen

State Web Services Manager
California Department of Technology



**DIGITAL
WEB
SERVICES
NETWORK**

CalPERS using Figma for Design Documentation

Kelly Diaz

Principal UX Designer
California Public Employees' Retirement System

Using Figma for Design Documentation

Kelly Diaz, Principal UX Designer

California Public Employees' Retirement System (CalPERS)



Introduction 🤝

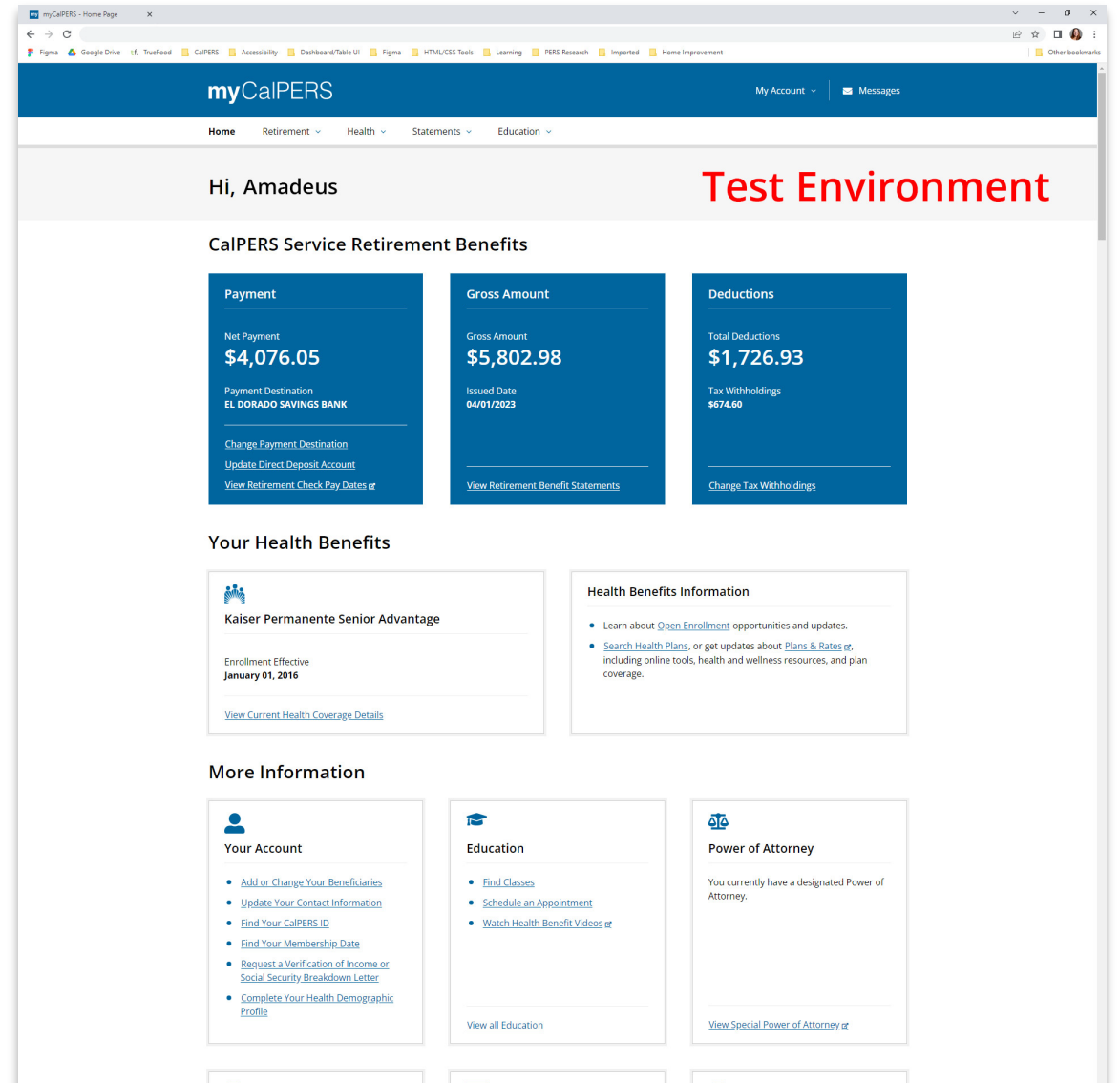
- About Member Self-Service (MSS)
- A Brief History of MSS Design Documentation
- Balsamiq to Figma
 - Design documentation for MSS is unique.
- Successes and Challenges with Figma
- Questions

About Member Self-Service (MSS)



About Member Self-Service (MSS)

- Application that active and retired public employees of California use to manage retirement and health benefits
- Built on myCalPERS database
- myCalPERS powers three user interfaces (UIs) - internal, external, and employers
- UX supports the external, public-facing UI, MSS
- Transactional website



A Brief History of MSS Design Documentation

1

CalPERS
Wireframes
myCalPERS & PSR Integration - Release 2x

Home

Version: #1.1
Date: July 14, 2013
Created by: SSA User Experience Team

2

Document Control

Date	Author	Version	Change/Reference
1/8/2011	SSA Team	1.1	New
1/20/2011	Michael Brown	1.2	Added link to Disability Retirement Election page to Disability Retirement Election page
1/20/2011	Michael Brown	1.3	Added Service Credit to election changed benefit page link for new user
1/28/2012	Michael Brown	1.4	Removed Date Calculator column from the Service Credit Purchase Status page

3

myCalPERS

Health Open Enrollment

October 17th - November 24th

Learn More

Message Center 4

Send a Message

Publications

Change Password

Security Settings

My Contributions last reported 11/03/2010

Total Balance \$47,345.27

Total Contributions \$43,652.83

Total Interest \$3,692.44

Service Credit 22.352 years

Health Enrolled

CalPERS Market Value \$220.2 billion

Connect with

Home - Active

Skip to: Content | Footer

Welcome Josh | Site Map | CalPERS On-Line | Log Out

myCalPERS

Home Accounts Benefit Estimate Health Learning Center Profile

Message Center 4
Send a Message

Publications

Change Password

Security Settings

Health Open Enrollment

October 17th - November 24th

Learn More

1 of 4

Welcome (maintain content portlet)

This can be used occasionally as needed for content. Welcome to myCalPERS, which has been enhanced to provide you with even more online services. myCalPERS now gives you control of your total benefits picture in one place, so that you can easily view, manage, and make decisions concerning your finances, health, and retirement.

Important Announcements

- Annual Member Statements have been sent.
- It's that time of year again! Don't forget to [sign up](#) or [make changes](#) to your health enrollment.
- Another message for the participant.

Service Credit Purchase Status

We are currently processing Service Credit Purchase requests through December 2011.



my|CalPERS

Logged in as **Bodie** | [Contact Us](#) | [Log Out](#)

2 New Messages

- Home
- Retirement
- Health
- Education Resources
- Profile
- Message Center

Educate yourself for today and tomorrow.

[Visit the CalPERS Education Center »](#)

G6 L13

2011 AMS Annual Member Statement
Your 2011 Statement is Available

C9

H2 CalPERS Market Value

S1 S2 **\$220.2 billion**
As of 3/22/2012

1 2 3 4

G2,3,4 **G1 L1**

H2 [<program type> Account Summary](#) last reported 11/03/2010 **C1 S2**

L3 [Total Balance](#)

\$47,345.27

Contributions **\$43,652.83** Interest **\$3,692.44**

L4 [Total Service Credit](#)

22.352 years **S3**

Your Current Membership **Local Safety** **S3**

L5 [Time to Earliest Retirement](#)

18.34 years

Your Retirement Formula **2% at 50**

Time to Earliest Retirement should account for minimum vesting (ex: 47 year old new hire must wait to 52). Count shows '0' after **Time to Earliest Retirement** has been reached.

S4 L10 [Health Enrollment](#)

G5 You are enrolled in **<health plan name>** effective June 1, 2002. **C3**

Your Health is Important **Q1?**

Learn more about our [Plans & Rates](#), including online tools, health and wellness information, and plan coverage. **C4 L11**

H2 [Public Affairs Content](#)

This can be used occassionally as needed for content. Welcome to my|CalPERS, which has been



Active/Multiple Program Active/Inactive

3 / 13

myCalPERS

Logged in as BODIE | Contact Us | Log Out 2 New Messages

Home Retirement Health Statements Education Resources Profile Message Center

<Program Type> Account Summary last reported <mm/dd/yyyy> G1

Total Balance \$47,345.27
Total Service Credit 22.353 years
Estimated Earliest Retirement 15.822 years

Contributions \$43,652.83 Interest \$3,692.44
 Your Current Membership State Miscellaneous
 Your Retirement Formula 2% at 50

View Retirement Contribution Details View Service Credit Information Calculate a Retirement Estimate

Learn About Applying for Retirement

Your Information
 Add or Change Your Beneficiaries
 Update Your Contact Information
 Find Your CalPERS ID
 Find Your Membership Date

Power of Attorney
 You currently have a designated Power of Attorney. For more information, view Special Power of Attorney

Request a Letter
 Need a Member Account Balance or Verification of Deposit letter? We can send documents on your behalf to a third party

Watch Educational Videos
 View informative videos on retirement planning, benefit basics, and more.

Health Enrollment
 You are enrolled in <Health Plan Name> effective January 01, 2017.

Health Benefits Information
 Learn about Open Enrollment opportunities and updates.
 Find a Medical Plan, or get information about Plans & Rates, including online tools, health and wellness resources, and plan coverage.

Your Annual Statements
 <YYYY> Annual Member Statement
 <YYYY> Health Plan Statement
 View All Statements

Announcements & Information
 This can be used occasionally as needed for content. Welcome to myCalPERS, which has been enhanced to provide you with even more online services. myCalPERS now gives you control of your total benefits in one place, so that you can easily view, manage, and make decisions concerning your finances, health, and retirement.

Disability Retirement Status

Date Received	Disability Type	Determination	Determination Date	Approved As
2/1/2008	Industrial Disability	Pending	-	<retirement type>

1. Display View All Service Accounts link for Multiple Program Active users.
2. Time to Earliest Retirement should account for minimum vesting (ex. 47 year old new hire must wait to 52). Count shows '0' after Time to Earliest Retirement has been reached.
3. Link dynamically displays when user is within one year of earliest retirement date, and when user reaches earliest retirement date. See Content Document for reference.
4. Link dynamic based on whether user has Beneficiary on file or not. See Content Document for reference.
5. Content is dynamic based on whether user has POA on file or not. See Content Document for reference.
6. Display if user is health subscriber.
7. Open Enrollment link URL is dynamic based on if user is a health subscriber, or not. See content document for reference.
8. Your Annual Statements - order list of statements by most recent. Hide entire portlet if no statements to display.
9. Display most current Annual Member Statement if statement exists.
10. Display most current Health Plan Statement if user is health subscriber and statement exists.
11. This section is the Welcome portlet text as controlled by PAOF via ToolBox.
12. Disability Retirement Status only displays for members with DRS applications in progress.
13. Plans & Rates link URL is dynamic based on if user is a active or retiree. See content document for reference.
14. Do not display Estimated Earliest Retirement portlet if earliest retirement date can not be calculated.
15. Health Benefits Information portlet displays for members who are health enrolled in health eligible.



Navigation

Search document

Headings Pages Results

Version Control

Content

Quick Tips

Notifications (Alert, Error or Success)

Links

Screen Reader Only

Table Captions

Banner Ad

Additional Notes

Content

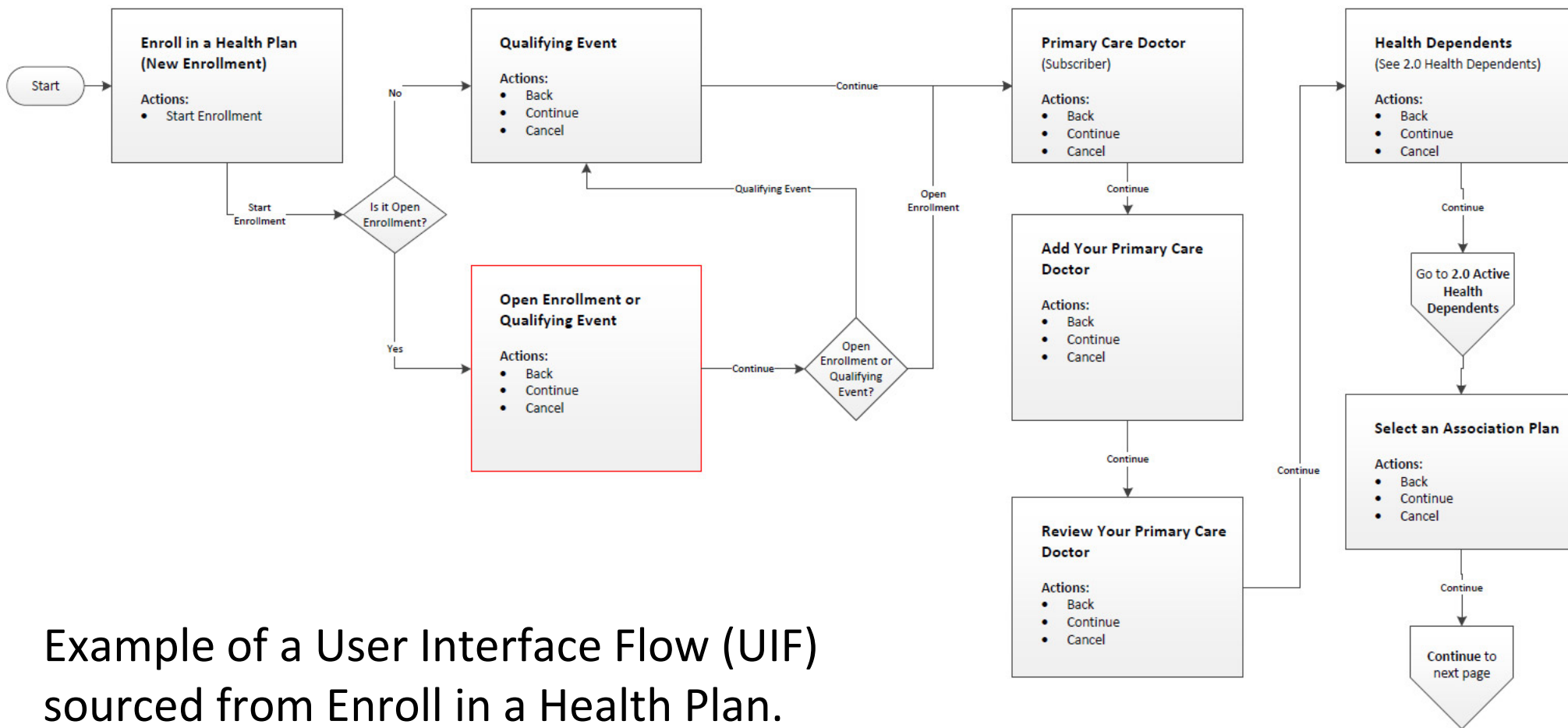
Tag #	Style	Page Name/ Flow Number	Content	Notes
C1	Body	Home	Last reported <date>	
C2	H3	Home	<u>Pay Your Invoices</u>	
C3	Body	Home	You can make one-time payments for the following: <ul style="list-style-type: none"> Benefit Overpayment Complementary Annuitant Premium Program (CAPP) Prepaid Health JRS II Prepaid Account Medicare Overpayment Retroactive Health Premium Service Credit Purchase 	
C4	Body	Home	<u>Enroll in a health plan</u> to begin your health benefits coverage. Learn about <u>Open Enrollment</u> opportunities and updates. <u>Search Health Plans</u> or get information about <u>Plans & Rates</u> , including online tools, health and wellness resources, and plan coverage.	L68 = Enroll in a health plan L33, L41 = Open Enrollment L34 = Search Health Plans L11 = Plans & Rates Displays for members who are health enrolled or health eligible.
C5	H2	Home	Your Health Benefits	
C6	H2	Home (Active)	<Program Type> Account Summary	<Program Type> is dynamic.
C7	Body, Big Number	Home (active with zero years left to retire)	Your Estimated Unmodified Allowance \$<X,XXX.XX>	
C8	H2	Home (Active, Inactive, Retired)	Working After Retirement	Figcaption; Dynamically display if we have user's retirement formula.
C9	Figcaption	Home (Active, Inactive,	Normal Retirement Age	Paragraph w/ quick tip link. See Q1. Dynamically display if we have user's

MSS: User Interface Flow

Enroll in a Health Plan

Primary Flow 1.0 – Active member enrolls in a health plan (1 of 2).

Note: Cancel triggers Cancel Modal and sends user back to **Enroll in a Health Plan**.



Example of a User Interface Flow (UIF) sourced from Enroll in a Health Plan.

Balsamiq to Figma

Balsamiq to Figma (1 of 3)

- In 2021, CalPERS IT leadership decided to sunset Balsamiq in favor of Figma for prototyping and wireframing
- UX design team took this transition as an opportunity to make our design documentation more efficient
 - Needed to find a way to combine wireframes, content documents, and user interface flows into one source
 - Needed Figma to help us improve our efficiency and speed in delivering design documentation

Balsamiq to Figma (2 of 3)

Over the course of a year, the UX team:

- Collaborated as a team on how to improve efficiency at creating design documentation
- Interviewed other IT team members (business analysts, accessibility analysts, developers, system testers) and stakeholders
 - How do others use our design documentation? What can we keep doing? What can we stop doing?
- Researched best component library practices
 - How do we create an organized library? Which components do we need to build? How can we make our library flexible enough to remove, add, or push updates to existing components?



Balsamiq to Figma (3 of 3)

Over the course of a year, the UX team:

- Informed IT leadership of upcoming transition from Balsamiq to Figma
 - Transition would be impacting other IT team members, not just UX
- Gave presentations to IT team members on Figma on the upcoming transition
- Built a full component library and reusable templates
- Socialized Figma with a small IT team on a focused pilot project
 - Gained enough feedback from focused IT team to identify gaps in adopting Figma
 - What worked well? What didn't work well?
 - Gained enough information to start drafting and implementing Figma processes and procedures to fold into design process

Layers Assets 11.1 UPDATED Active Views

Pages

- START HERE: How to Use This Wireframe
- Change Summary
- 11.1 UPDATED Active Views
- 11.1 UPDATED Inactive
- 11.1 UPDATED Retired Views
- Promo Card
- New Experience Slider

Active Views

- 11.1 Update Tags
- UX Tags
- Dynamic Callouts
- Dynamic Note Boxes
- Links Note Boxes
- Cards & Views - PERS
- Home Page Card
- PERS, Active
- JLRS, Active
- Health Only, Active
- Terminated
- Wireframe Information - PERS
- Wireframe Information - JLRS
- Wireframe Information - Health Only
- Wireframe Information - Terminated

PERS, Active

myCalPERS My Account Messages

Home Retirement Health Statements Education

Hi, <First Name>

Your <mailing/physical> address is undeliverable. Contact your employer to update your address.

Your email address is undeliverable. [Update your email.](#)

We Need Some Information from You [Send us a message](#) so we can determine your CalPERS retirement formula and normal retirement age.

We don't have a mailing address on your account. Contact your employer to add your address.

You have a submitted retirement application. You can track your application status on [Apply for Retirement.](#)

H2 - <Program Type> Account Summary

Last reported <mm/dd/yyyy>

<h3>H3 - Retirement</h3> <p>Estimated Earliest Retirement: 15.822 years</p> <p>Your Retirement Formula: 2% at 50</p>	<h3>H3 - Service Credit</h3> <p>Total Service Credit: 22.353 years</p> <p>Your Current Membership Status: Miscellaneous</p>	<h3>H3 - Balance</h3> <p>Total Balance: \$47,345.27</p> <p>Contributions: \$43,652.83</p> <p>Interest: \$3,692.44</p>
--	---	--

[Calculate a Retirement Estimate](#) [Apply for Retirement](#) [View Service Credit by Fiscal Year](#) [Make a Service Credit Purchase](#)

Your Health Benefits

H3 - <Health Plan Name>

Enrollment Effective: <mm/dd/yyyy>

[View Current Health Coverage Details](#)

[Enroll in a health plan to begin your health benefits coverage.](#) [Learn about Open Enrollment opportunities and updates.](#) [Search Health Plans or get information about Plans & Rates including online tools, health and wellness resources, and plan coverage.](#) [See Health Vesting for details on how much your employer may pay toward your retiree health premiums.](#)

More Information

[Your Account](#) [Education](#) [Power of Attorney](#)

- Links
- L1** Update your email. URL: Links to Change Your Email page (in Contact Information).
 - L2** Send us a Message URL: Link goes to MSS Send Us a Message page.
 - L3** Apply for Retirement URL: Links to Apply for Retirement landing page.
 - L4** Calculate a Retirement Estimate URL: Links to MSS Retirement Estimate Calculator.
 - L5** View Service Credit by Fiscal Year URL: Link to Service Credit by Fiscal Year
 - L6** Make a Service Credit Purchase URL: Goes to Service Credit Purchase module

Home Page Card

H3 - Retirement

Your Estimated Unmodified Allowance: **\$<X,XXX.XX>**

Estimated Earliest Retirement: **0.00** years

Your Retirement Formula: **2% at 50**

[Calculate a Retirement Estimate](#) [Apply for Retirement](#)

- Links
- L13** Health Vesting URL: Go to Health Vesting module
 - L14** Add or Change Your Beneficiaries URL: Links to Beneficiaries page.
 - L15** Update Your Contact Information URL: Links to Contact Information page.
 - L16** Find Your CalPERS ID URL: Links to Profile page.
 - L17** Find Your Membership Date URL: Links to Profile page.
 - L18** Request a Member Account Balance or Verification of

- Dynamic
- D1** Display if mailing address is missing.
 - D2** Display for users with an undeliverable email address. Triggered when email flagged as undeliverable by EMMA three times.
 - D3** Generic "Working After Retirement" content. Dynamically display if user does not have a retirement formula on file (very rare scenario, ex: 2-3 per year).
 - Pull age variable from SPS68, Normal Retirement Age
 - Pull formula variable from SPS68, Normal Retirement Age Formula (short)
 - Exclude Non-members from seeing the alert message.
 - D4** Display if the user submitted a retirement application, and New Annuity Closeout (NAC) hasn't run. Display for SR, DR, IDR for PERS.
 - D5** Do not display Estimated Earliest Retirement portlet if earliest retirement date CAN NOT be calculated.
 - D6** Display for Active
 - D7** Display for Active with 0 years remaining until their retirement when they log on, then display Estimated Unmodified Allowance in big numbers.
 - D8** If Unmodified Allowance cannot be calculated, DO NOT display. Revert back to the original design.
 - D9** "Time to Earliest Retirement" should account for minimum vesting (ex. 47 year old new hire must wait to 52). Count shows '0' after "Time to Earliest Retirement" has been reached.
 - D10** For minimum age or service eligibility requirements see SPS70.
 - D11** Display if service credit by fiscal year is available to user and not hidden.
 - D12** Default display.
 - D13** Display for Multiple Program Active users
 - D14** Display for active members eligible to enroll in CalPERS health benefits. Note: This link will NOT appear if a member is already enrolled in health benefits.
 - D15** Display if user is health subscriber.
 - D16** Open Enrollment link URL is dynamic based on if user is a health subscriber, or not. See content document for reference.



Design Prototype

Page

E5E5E5 100%

Local variables

Local styles

Export

Plugin

S Check for spelling mistakes.

Design documentation for MSS is unique. (1 of 2)



Member Self-Service is an application that requires extensive documentation compared to a straightforward website or mobile app.

We document:

- Dynamic behavior for if/then/else and Boolean logic
 - If user is enrolled in health, then display <this>, else <that>
 - If user applied for retirement benefits = true, display <this>
- Views for different audiences (active members vs. retirees, state vs. public agency)
- Links (label, URL, screen reader only [SRO] content)
- Accessibility rules (table captions, alt text for images, SRO content)
- Specifications (grid column widths, responsive behaviors, specific CSS styles)

Design documentation for MSS is unique. (2 of 2)



Member Self Service is an application that requires extensive documentation compared to a straightforward website or mobile app.

We use real content instead of FPO (For Placement Only) text, or lorem ipsum.

- Other IT team members, business areas, and stakeholders, have an easier time interpreting our designs with real content.
- We have existing publications from our business areas and the Office of Public Affairs that we leverage for content.
- It gives us the opportunity to implement plain language practices and improve the scannability and readability of content for the web.

Figma Demo



Layers Assets 11.1 UPDATED Active Views

Pages

START HERE: How to Use This Wireframe

Change Summary

11.1 UPDATED Active Views

11.1 UPDATED Inactive

11.1 UPDATED Retired Views

Promo Card

New Experience Slider

Active Views

11.1 Update Tags

UX Tags

Dynamic Callouts

Dynamic Note Boxes

Links Note Boxes

Cards & Views - PERS

Home Page Card

PERS: Active

JLRS: Active

Health Only: Active

Terminated

Wireframe Information - PERS

Wireframe Information - JLRS

Wireframe Information - Health Only

Wireframe Information - Terminated

myCalPERS members (i.e., Retirees) are eligible for other CalPERS programs.

- 1.1 Update your email. URL: Link to Change Your Email page (in Contact Information).
- 1.2 Send us a Message. URL: Link goes to MSF Send Us a Message page.
- 1.3 Apply for Retirement. URL: Link to Apply for Retirement Locking page.
- 1.4 Calculate a Retirement Estimate. URL: Link to MSF Retirement Estimate Calculator.
- 1.5 View Service Credit by Fiscal Year. URL: Link to Service Credit by Fiscal Year page.
- 1.6 Make a Service Credit Purchase.

- 1.11 Health Vesting. URL: Go to health vesting module.
- 1.12 Add or Change Your Beneficiaries. URL: Link to Beneficiaries page.
- 1.13 Update Your Contact Information. URL: Link to Contact Information page.
- 1.14 Find Your CalPERS ID. URL: Link to Profile page.
- 1.15 Find Your Membership Date. URL: Link to Profile page.
- 1.16 Request a Member Account Balance or Verification of

- 1.17 Health Vesting. URL: Go to health vesting module.
- 1.18 Add or Change Your Beneficiaries. URL: Link to Beneficiaries page.
- 1.19 Update Your Contact Information. URL: Link to Contact Information page.
- 1.20 Find Your CalPERS ID. URL: Link to Profile page.
- 1.21 Find Your Membership Date. URL: Link to Profile page.
- 1.22 Request a Member Account Balance or Verification of

myCalPERS My Account Messages

Home Retirement Health Statements Education

Hi, <First Name>

Your <mailing/physical> address is undeliverable. Contact your employer to update your address.

Your email address is undeliverable. Update your email.

We Need Some Information from You. Send us a message so we can determine your CalPERS retirement formula and normal retirement age.

We don't have a mailing address on your account. Contact your employer to add your address.

You have a submitted retirement application.

2 - <Program Type> account summary

Retirement

Estimated Unqualified Allowance: \$<X,XXX.XX>

Estimated CalPERS Retirement: 0.00 years

Your Retirement Formula: 2% at 50

Calculate a Retirement Estimate Apply for Retirement

H3 - Retirement

Estimated Unqualified Allowance: 15.822 years

Your Retirement Formula: 2% at 50

Calculate a Retirement Estimate Apply for Retirement

H3 - Service Credit

Total Service Credit: 22.353 years

Your Current Membership Status Miscellaneous

View Service Credit by Fiscal Year Make a Service Credit Purchase

H3 - Balance

Total Balance: \$47,345.27

Contributory: \$43,852.89

Interest: \$3,692.44

Your Health Benefits

H3 - <Health Plan Name>

Enrollment Effective: <mm/dd/yyyy>

View Current Health Coverage Details

H3 - Health Benefits Information

- 1.17 Enroll in a health plan to begin your health benefits coverage.
- 1.18 Learn about Open Enrollment opportunities and updates.
- 1.19 Search Health Plans or get information about Plans & Rates including online tools, health and wellness resources, and plan coverage.
- 1.20 See Health Vesting for details on how much your employer may pay toward your retiree health premiums.

More Information

H3 - Your Account

H3 - Education

H3 - Power of Attorney

- Dynamic
- 01 Display if mailing address is missing.
- 02 Display for users with an undeliverable email address. Triggered when email flagged as undeliverable by EMMA three times.
- 03 Generic "Working After Retirement" content. Dynamically display if user does not have a retirement formula on file (very rare scenario, ex: 2.5 per year).
- 04 Pull age variable from SP566, Normal Retirement Age.
- 05 Pull formula variable from SP566, Normal Retirement Age Formula (chart).
- 06 Exclude Non-members from seeing the alert message.
- 07 Display if the user submitted a retirement application, and New Annuitant Closeout (NAC) hasn't run.
- 08 Display for SR, DR, DRH for PERS.
- 09 Do not display Estimated Earliest Retirement portlet if earliest retirement date CAN NOT be calculated.
- 10 Display for Active.
- 11 Display for Active with 0 years remaining until their retirement when they log on, then displaying the "big number" (years remaining).
- 12 Unmodified Allowance (if not calculated, display revert back to original sign).
- 13 Time to reach "big number" should account for minimum vesting (ex. 47 year old new hire must wait to 52). Count down "Y" after "Time to Earliest Retirement" has been reached.
- 14 For minimum age or service eligibility requirements see SP570.
- 15 Display if service credit by fiscal year is available to user and not hidden.
- 16 Default display.
- 17 Display for Multiple Program Active users.
- 18 Display for active members eligible to enroll in CalPERS health benefits. Note: This link will NOT appear if a member is already enrolled in health benefits.
- 19 Display if user is health subscriber.
- 20 Open Enrollment link URL is dynamic based on if user is a health subscriber, or not. See content document for reference.

Design Prototype

Page

ESE5E5 100%

Local variables

Local styles

Export

Plugin


Check for spelling mistakes.



Successes and Challenges with Figma



Successes with Figma

- Combines three design documents into one source
 - Wireframes, user interface flows, and content documents (from Voltron )
- Encourages collaboration with commenting feature
 - Business areas, stakeholders, other IT teammates are big fans
- Able to maintain a reusable, updatable component library
 - Can easily publish and push library updates
 - Design files can accept or decline library updates
- Version history shows snapshots of design documentation in previous iterations

Challenges with Figma

- Moderate to difficult learning curve
- Expectations around commenting need to be managed
 - At present, there is no way to turn off commenting without revoking access to files
- Software lives in the cloud – outages occasionally happen
- Components, variants, and text layer names need to be carefully managed
- Some features or tools rely on plugins
 - Previously free plugins can change to fee-based plugins without notice.
- It's occasionally buggy
 - Library styles have temporarily disappeared, text fades to gray, text inexplicably bolds itself, etc.
 - Not a hard stop, Figma is typically aware of bugs and provides updates on statuses

Questions?

The image shows a wireframe design tool interface for a user account page titled 'myCalPERS'. The page layout includes a header with navigation links (Home, Retirement, Health, Statements, Education), a personalized greeting 'Hi, <First Name>', and a list of error messages:

- 01 Your <mailing/physical> address is undeliverable. Contact your employer to update your address.
- 02 Your email address is undeliverable. Update your email.
- 03 We Need Some Information from You. Send us a message so we can determine your CalPERS retirement formula and normal retirement age.
- 04 We don't have a mailing address on your account. Contact your employer to add your address.
- 05 You have a submitted retirement application. You can track your application status.

Below the errors are three summary cards:

- H3 - Retirement:** Estimated Unqualified Allowance: \$<X,XXX.XX>. Estimated Unqualified Allowance: 0.00 years. Your Retirement Formula: 2% at 50.
- H3 - Service Credit:** Total Service Credit: 22.353 years. Your Current Membership Status Miscellaneous.
- H3 - Balance:** Total Balance: \$47,345.27. Contributions: \$43,852.89. Interest: \$3,692.44.

The bottom section is titled 'Your Health Benefits' and includes 'H3 - Health Benefits Information' with links for enrolling in health plans, learning about open enrollment, searching for health plans, and seeing health vesting details.

The right sidebar contains a 'Dynamic' panel with various conditional display rules (e.g., 'Display if mailing address is missing', 'Display for users with an undeliverable email address') and a 'Page' panel with a 'Check for spelling mistakes' option.

Thank you!

Kelly.Diaz@calpers.ca.gov

Director of UX

Theresa.Rapozo@calpers.ca.gov



**DIGITAL
WEB
SERVICES
NETWORK**

Using Big Data to Help Taxpayers

Joe Ledoux/Shawn Brouwer

Digital Services Section

Franchise Tax Board

Insight Driven

Being insight driven isn't always all about data ... it includes:

- Process Demand and Prioritization
- Process Re-engineering
- Agility and Scalability
- Governance
- Benefits Realization
- Technology Solution
- Architecture
- Regulation and Compliance
- Ethics and Sharing
- Privacy & Security
- And much, much more



Data Driven Benefits

Overall

- Success matters because your mission is important!
- If you don't measure and use data, you are not achieving the full potential of your mission.

Benefits to Management & Staff

- Focus limited time and energies on key activities that are real issues and have impact on our mission/vision
- Set goals for staff and hold them accountable
- Cannot manage what you do not measure
- High-performing organizations use data analytics roughly three times as extensively as the lower performers in their field - Forrester

Current Data Sources

- Webtrends
- Google
- Bing
- Page level feedback
- Webmaster email
- Forms request tool
- Akamai
- Social media
- ArcGen 5
- SharePoint
- Teamsite
- Tripwire
- Audioeye
- iTunes
- AppDynamics
- Survey Monkey
- Other areas



Decision Making - Now

Data driven decision making is parallel to what we learned in middle school science class:

1. Identify issue – based on data
2. State hypothesis: “I believe...”
3. Perceived mechanism/ cause
4. Design experiment - Usability
5. Examine data
6. Confirm or reject hypothesis



Sharing

Fear: Sharing data will undermine management's authority

Reality: Sharing data engenders trust

- Diffuse concerns through transparency

Even if current metrics are not as high as you would like, the value is in the roadmap and metrics for future success.



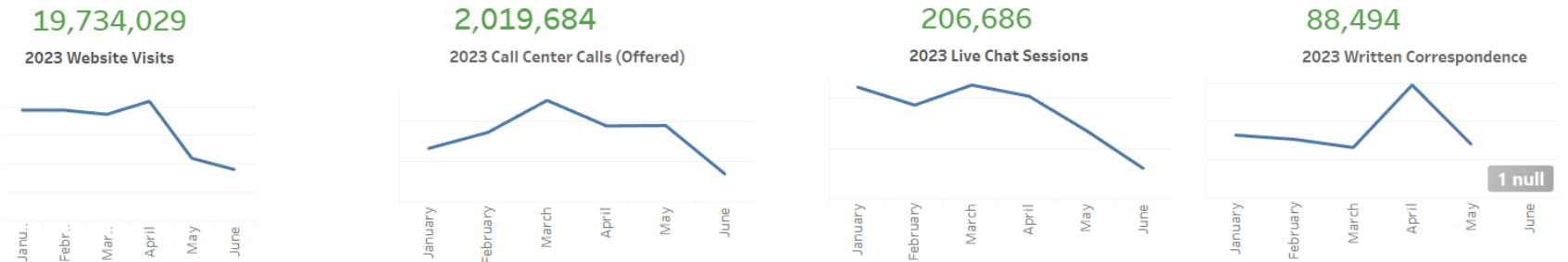
Sharing Data: FTB's Customer Contact Channel Dashboard

Key

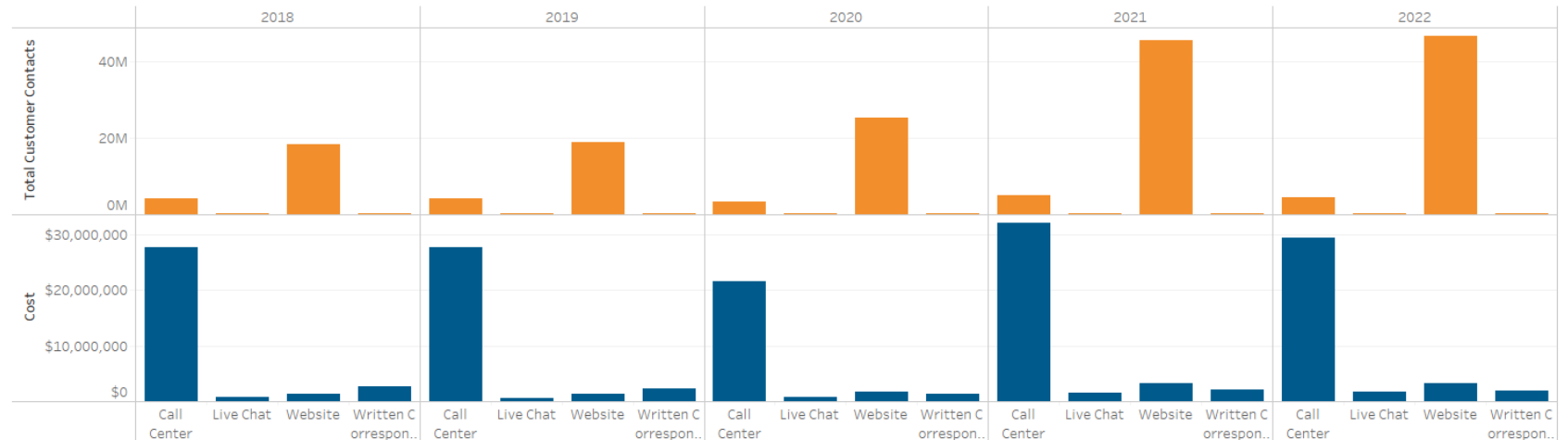
objectives:

- Track yearly and monthly customer channel interactions.
- Help digital services team collaborate with business partners across the enterprise to make informed decisions.
- Give high-level overview to Executive team and business-area managers on key metrics.

FTB Customer Contact Executive Dashboard

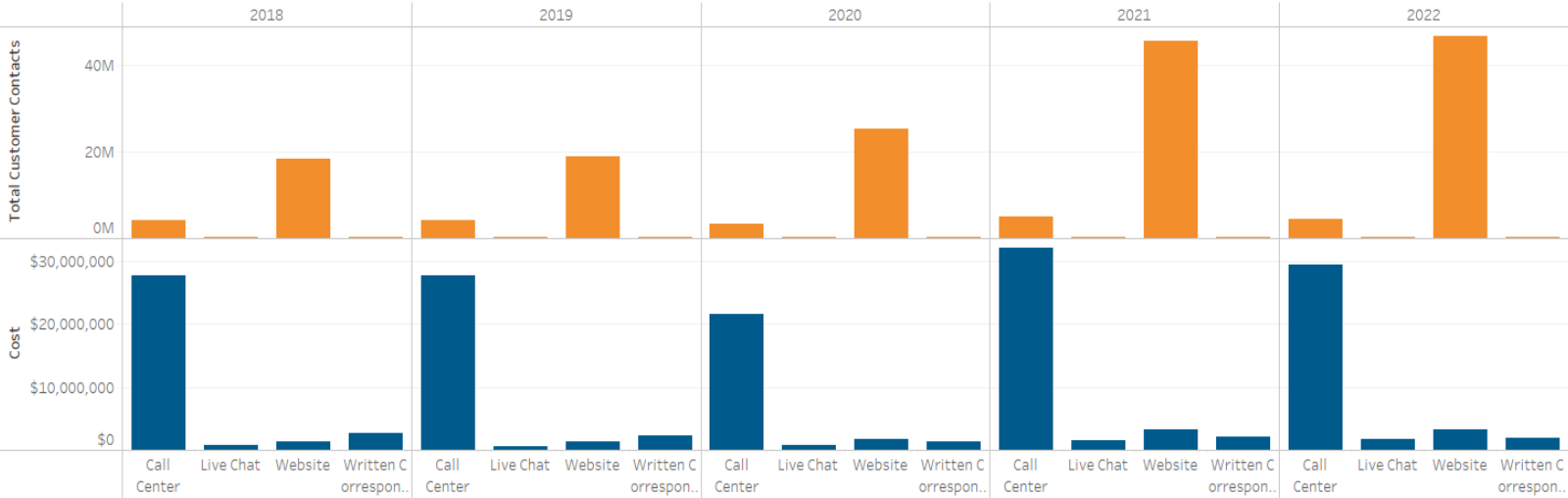


Yearly Totals by Channel



Customer Insights

Yearly Totals by Channel



Top 5 Taxpayer Feedback (Web)

1. Help - Unable to speak with a person
2. MyFTB - Don't see 'Accept' button
3. Pay - Live chat not working
4. MCTR - Live chat didn't work
5. Forms -- out of date forms, can't find form

Top 5 Searched Terms (Web)

1. mandatory e-pay
2. vehicle registration collections
3. 3567
4. installment agreement
5. web pay

Top 5 Chat Session Categories

1. PIT Account Resolution
2. PIT Prefiling Assistance
3. PIT Refund
4. Middle Class Tax Refund
5. BE Pre-filing Assistance

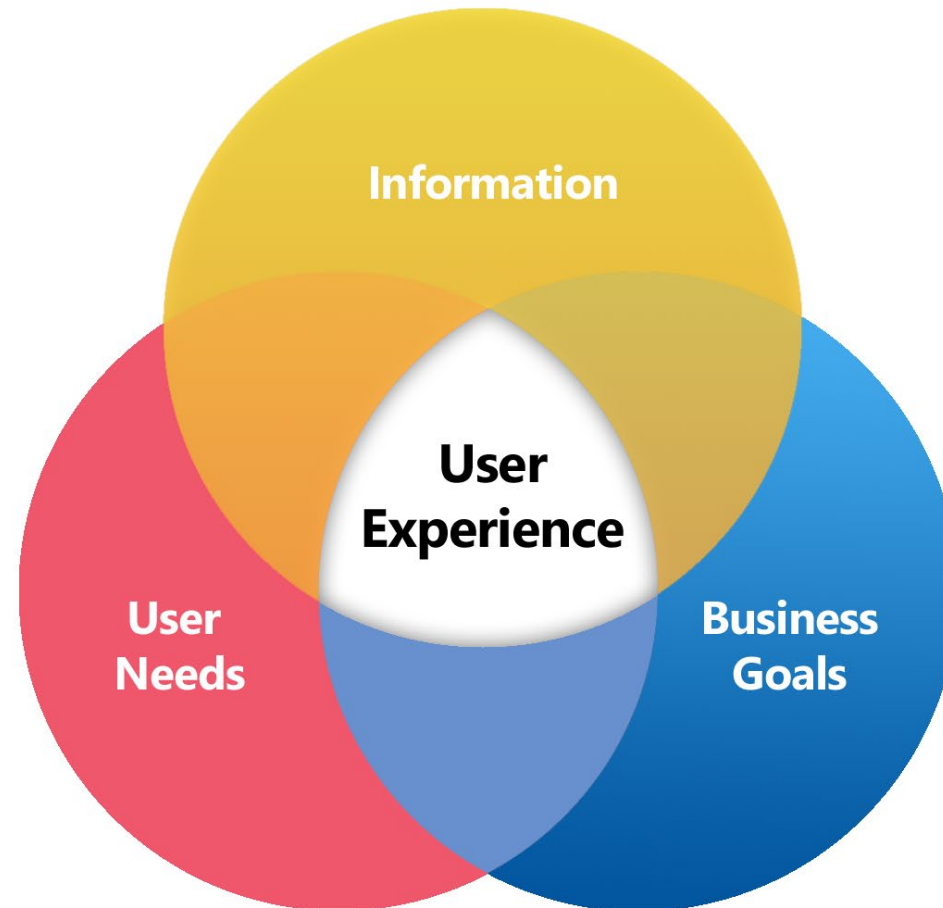
Top 5 Call Categories

1. PIT General
2. PIT Levy
3. BE General
4. AART General
5. ARRT Levy

Dashboard is updated monthly with the most common web user feedback, top search terms, top chat session categories, and top call center categories.

Use Data (Information) to Refine User Experience

- Lower # of calls by adding information users need to the web
- Feature most searched content on homepage
- Use live chat to address common written correspondence issues



Questions

*Inspiration drives us.
Digital intelligence guides us.
Innovation remains our goal.*





DIGITAL WEB SERVICES NETWORK

Analytics Update

Linda Tracy

Analytics and Insight Specialist
California Department of Technology

Universal Analytics (UA) Sunset

- Standard (free) UA properties have stopped collecting data as of July 1, 2023.
 - Users can access and export historical data until December 31, 2023.
- Optimized (paid) UA 360 Properties have a one-time extension and will continue to collect data until July 1, 2024.
 - Users can access and export historical data until July 1, 2024.

Export UA Reports

- Export reports before your cutoff date.
 - Standard property: December 31, 2023
 - Optimized 360 property: July 1, 2024
- Visit Google's Export and share reports help page for more information:
<https://support.google.com/analytics/answer/1038573?hl=en>

Google Analytics 4 (GA4) Analytics Accounts

- We've created GA4 accounts for all agencies whose UA properties we manage.
- We will no longer create new UA properties. We will only create GA4 accounts/properties.

Avoid Data Gap/Loss

- If we've created a GA4 account/property for your agency, make sure you:
 - Add your agency GA4 measurement ID to your website.
 - Add our statewide GA4 measurement ID to your website. We require all state agencies add our statewide analytics code to their websites.
- Both GA4 measurement IDs will ensure data collects for your website.
- Monitor your analytics account to ensure data is collecting for your site.

GA4 Analytics Contract

- If you're managing your own analytics contract, you will need a new contract due to a new pricing formula with GA4.
- We are available to manage your account to avoid needing a new contract.
 - Existing accounts/properties can be transferred under our analytics organization.

Contact Us

- To request a GA4 account/property that is managed by our team, reach out to us at analytics@state.ca.gov.
- For more information, visit <https://webstandards.ca.gov/analytics/>.



**DIGITAL
WEB
SERVICES
NETWORK**

State Web Template V6.2

Artem Khomishen

Carter Medlin

Christina Florente

Web Design and Development
California Department of Technology

Template Update overview

- Version 6.2 update (10 minutes)
 - De-coupling of state template website
 - New development repo
 - New guidance content (download and setup)
- HTML starter website (5 minutes)
- Feedback and Q&A (5 mins)



Template problems and solutions Part 1/2



Utility problems

- Template was bundled with template website
- Difficult for community to isolate template changes
- Difficult for community to make suggestions
- Website content only updated with template release

Solutions

- Decouple template from template website
- New Development repository for contributors
- HTML starter site built from Development repository
- NPM Package option
- Template website is...just a website

Template problems and solutions Part 2/2



Performance / accessibility problems

- JavaScript library had to be at the end for it all to work
- Required image downloads, created content shift
- Extra code, code quality, unreviewed script

Solutions

- JavaScript library can be bundled anywhere; DOM friendly
- Audited source linting for quality
- No more template image files; all in CSS
- No more globals!
- Reduced JavaScript; half the size of 6.0.5
- Updated to Bootstrap 5.3 from NPM (latest)



What changed

Before

State template website as repo

 Learn: how to use template

 Develop: The source code

 Start: Starter site



After

 Learn: State template website

 Develop: State template Dev repo

 Start: State template HTML repo

Template repositories



HTML

- Latest web template releases
- Static files needed to start a new web project
- Starter sample site

Web Template Website

Template usage guidance content website

Eleventy

Static site generator framework

ASP.NET Core MVC

Server side web application framework

React

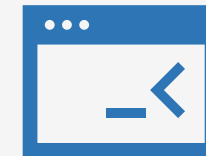
Front end user interface framework

Development repo

Template development source code



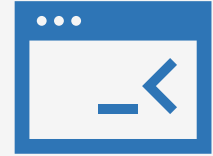
New development source repo



- Brand new development repo
- Separate from the template website
- Used to build HTML starter site, CDN, NPM
- For contributors
- For those who want to see the source
- Not for you? No problem



NPM Package



Benefits

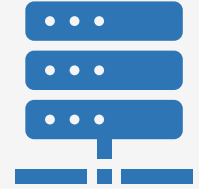
- No more template source in your source
- Faster deployments
- Easier updates
- React friendly

Usage

- `npm i @cagovweb/state-template`
- `import '@cagovweb/state-template'`
- Or copy the 'dist' folder (css / js / fonts)



Updated static HTML repo



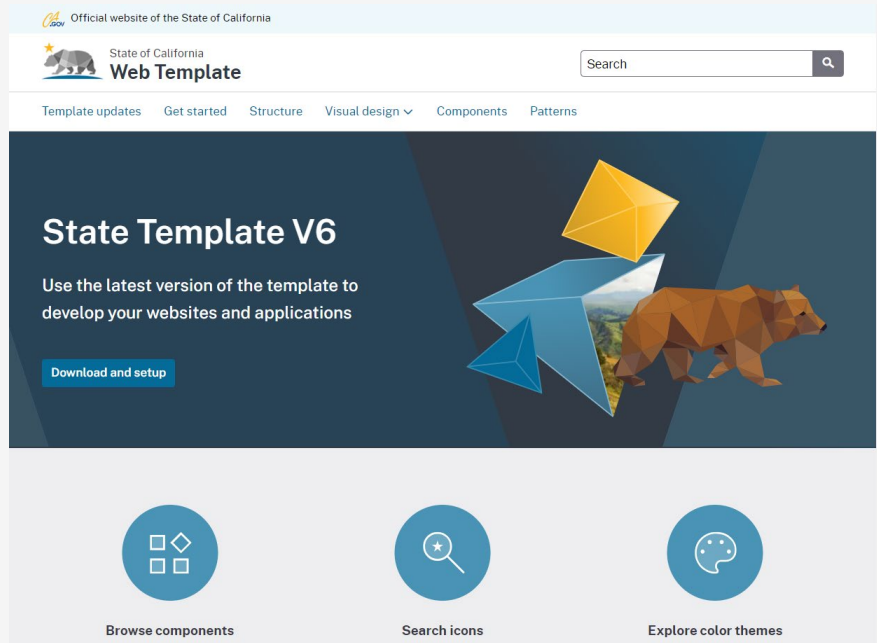
- Dynamically rebuilt by the Development repository
- Upgraded to include a variety of samples
- Used to test functionality
- Fully static, runs in a folder on your desktop
- HTML comments identify common elements
- Always has a live demo
- This is your starter site



Static HTML starter website Part 1/2

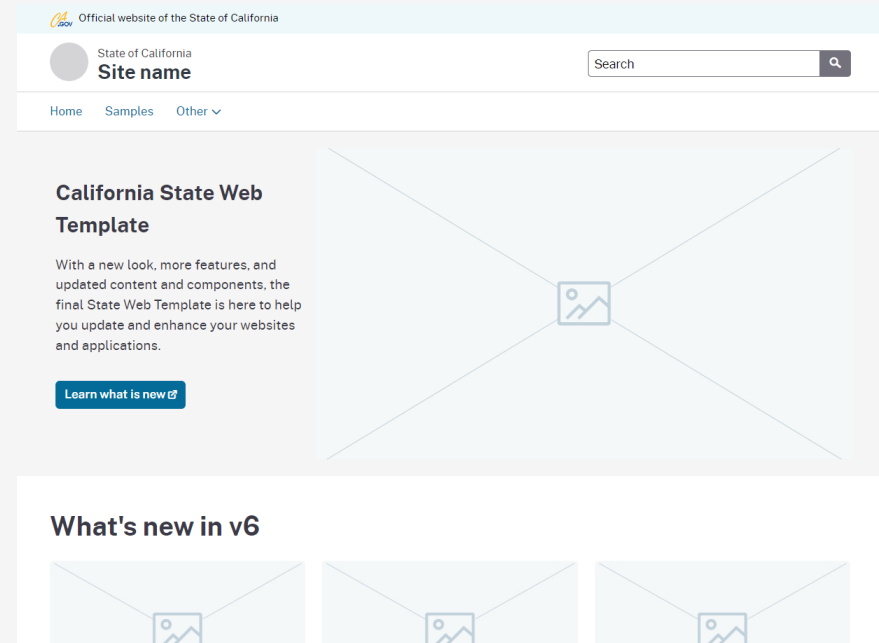
OLD

State template website



NEW

Starter site & placeholder content



Static HTML starter website Part 2/2

To access the starter site + demo

1. [State template site](#)
2. Get started
3. Download and set up
4. [HTML \(GitHub\)](#)
 - Download files (code dropdown)
 - [Live sample link](#) in read me.

The screenshot displays the GitHub repository for the California State Web Template (HTML Version). The repository is public and has 1 branch and 5 tags. The file list includes:

- ca_state_template (updating to 6.2)
- images (6.1.2 (from dev))
- samples (updating to 6.2)
- gitempty (6.1.2 (from dev))
- LICENSE (Initial commit)
- README.md (added sample)
- about.html (updating to 6.2)
- blank.html (updating to 6.2.0, last week)
- contact.html (updating to 6.2.0, last week)
- favicon.ico (6.1.2 (from development site), last month)
- index.html (updating to 6.2.0, last week)
- robots.txt (Version 6.0.8, 9 months ago)
- serp.html (updating to 6.2.0, last week)

The README.md file contains the following text:

California State Web Template (HTML Version)

This repository is a simple "Hello world!" HTML site containing a few standalone HTML pages with included local references to the State Web Template CSS and JavaScript files.

Live sample

You can view a running version of this sample site here.

- [Live Sample Demo](#).

State Web Template

The California State Web Template is an HTML template and website standard offered by the California Department of Technology to state agencies and departments within the State of California and beyond.



We want your input

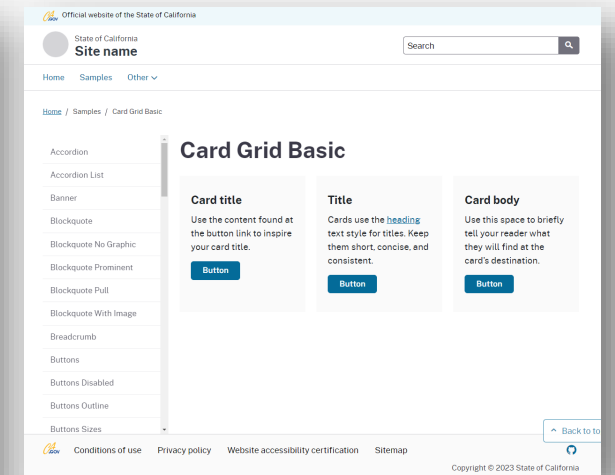
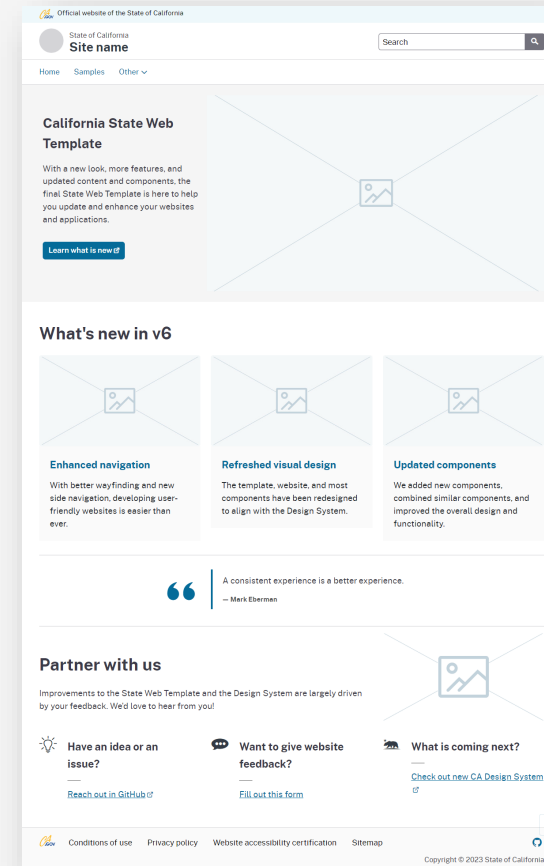
Answer a poll in Teams

Static HTML starter website (now live!)

Includes:

- Template files
- Homepage
- Header, footer, navigation
- Samples of all components and patterns in a list

No state template website content!



Static HTML starter website (in progress)

Created a **human-centered** starter site.

Uses state template components/patterns.

Has the minimum needed for a new site.

Tailored to department pages and files

- Template files (css, js)
- Header, footer, navigation
- Homepage, sample pages
- Required pages (footer links)
- New page patterns (use what you need)

Page patterns

- Homepage
- Landing page (+ variations)
- About us landing page
- Careers
- Contact us
- Newsroom
- List of articles
- Link directory (topic + links)
- Legal pages
- Sitemap
- 404 page

Static HTML starter website Part 1/2

Official website of the State of California Application log in

State of California Site name Search

Home Components and patterns Samples Top task 1 Top task 2

Homepage title

Compelling sentence or two that ties the website to the department missions or goals

Vestibulum laoreet faucibus ultrices, vestibulum condimentum lectus in arcu.

Button

Top user tasks

Components directory Top task 1 content 1 Top task 2 content 1

State Template Website Link Link

Marketing 1

Use marketing spaces to promote items related to business goals. Limit to 2 or 3 and rotate as needed. This allows the homepage to remain simple and focused.

Marketing 2

Enter a concise description for this topic. You could include imagery with the marketing cards to make it more visually appealing.

News

Press release 1

Month 00, 0000 | Press release

Press release 2

Month 00, 0000 | Press release

News article 1

Month 00, 0000 | News article

[View all](#)

Heading

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a. Vestibulum laoreet faucibus ultrices, Vestibulum condimentum lectus in arcu ultrices condimentum.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a. Vestibulum laoreet faucibus ultrices, Vestibulum condimentum lectus in arcu ultrices condimentum.

Official Title
Name
Government agency
[Bio or contact info](#)

Official Title
Name
Government agency
[Bio or contact info](#)

Official Title
Name
Government agency
[Bio or contact info](#)

Heading

Link 1
Link 2
Link 3

Heading

Link 1
Link 2
Link 3

Heading

Link 1
Link 2
Link 3

Conditions of use Privacy policy Accessibility Sitemap

Copyright © 2023 State of California

Official website of the State of California Application log in

State of California Site name Search

Home Components and patterns Samples Top task 1 Top task 2

Top task 1

Top task

Content page 1
Content page 2
Content page 3
Content page 4
Content page 5

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a.

Task 1

Promote the most accessed task. Use analytics to validate that it's popular. Use an action for the button, like apply, register, etc.

Button

Task 2

Promote the most accessed task. Use analytics to validate that it's popular. Use an action for the button, like apply, register, etc.

Button

Subtitle

Content page Content page Content page

Content page Content page Content page

Subtitle

- [Content 1](#)
- [Content 2](#)
- [Content 3](#)

About

About us
News
Careers
Contact us

Heading

Link 1
Link 2
Link 3

Heading

Link 1
Link 2
Link 3

Conditions of use Privacy policy Accessibility Sitemap

Copyright © 2023 State of California

Official website of the State of California Application log in

State of California Site name Search

Home Components and patterns Samples Top task 1 Top task 2

Home / Top task 1 / Content page 1

Top task

Content page 1
Content page 2
Content page 3
Content page 4
Content page 5

Content page 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a.

Heading 2

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a. Vestibulum laoreet faucibus ultrices, Vestibulum condimentum lectus in arcu ultrices condimentum. Lorem ipsum dolor sit amet, consectetur adipiscing elit.

- Vestibulum pretium dapibus diam, a finibus metus congue a.
- Vestibulum laoreet faucibus ultrices.
- Vestibulum condimentum lectus in arcu ultrices condimentum.

Heading

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum pretium dapibus diam, a finibus metus congue a.

#	First Name	Last Name	Username
1	Alpha	One	@alphaoe
2	Beta	Two	@betatwo
3	Charlie	Three	@charliethree

Vestibulum laoreet faucibus ultrices, Vestibulum condimentum lectus in arcu ultrices condimentum. Lorem ipsum dolor sit amet, consectetur adipiscing elit.

About

About us
News
Careers
Contact us

Heading

Link 1
Link 2
Link 3

Heading

Link 1
Link 2
Link 3

Conditions of use Privacy policy Accessibility Sitemap

Copyright © 2023 State of California

Static HTML starter website Part 2/2

Your voice matters

1. Do these page patterns help? (1 not at all, 5 helps a lot)
2. What are the top 3 page-patterns you're interested in? Add in your own in the chat if it's missing.

Page patterns

- Homepage
- Landing page (+ variations)
- About us landing page
- Careers
- Contact us
- Newsroom
- List of articles
- Link directory (topic + links)
- Legal pages
- Sitemap
- 404 page

Questions?



Accessibility Updates



**DIGITAL
WEB
SERVICES
NETWORK**

Greg Duncan

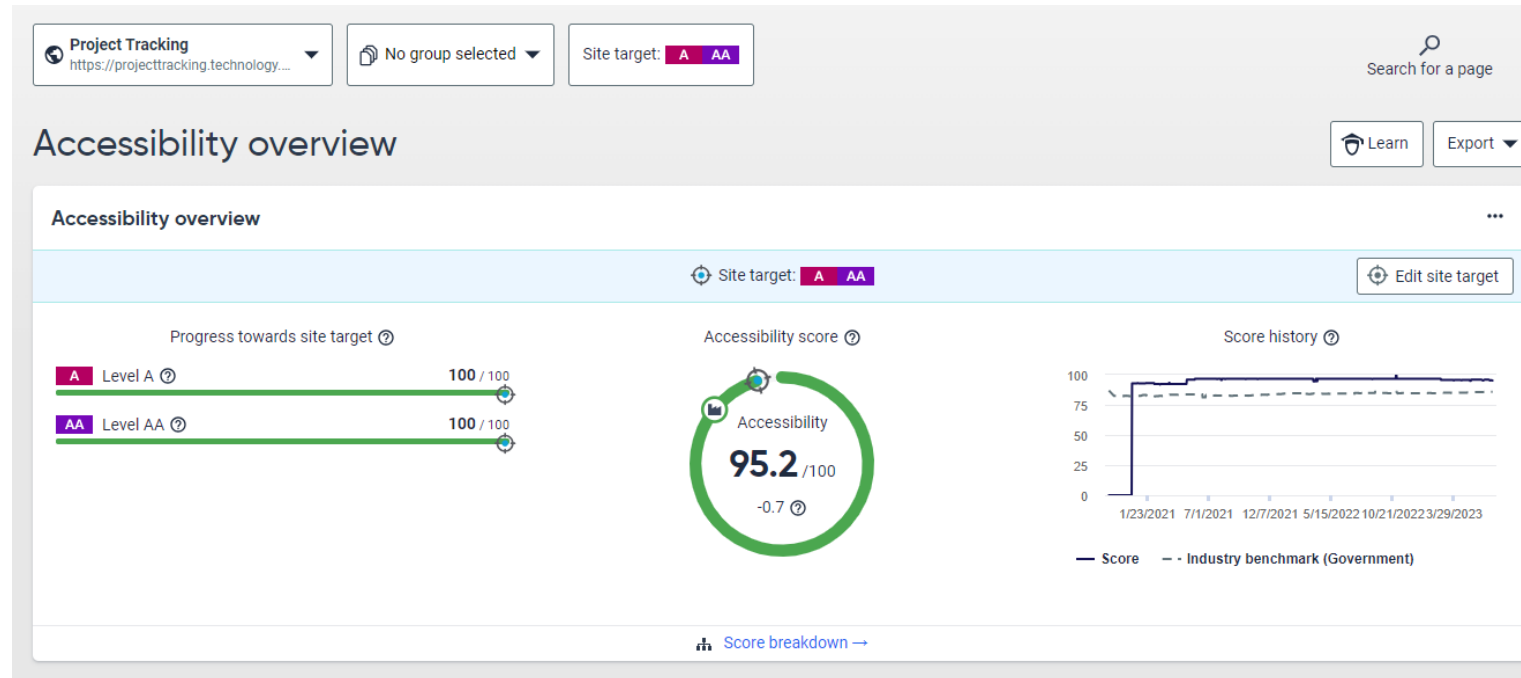
Digital Accessibility Specialist

California Department of Technology

Accessibility Update

- Yay! 2023 Certification is Done!!!
 - Please make sure certifications have been posted to your website
- WCAG 2.2 Publish Date is Set for August 2023
 - Soon as it is finalized and public we will let everyone know
- Siteimprove Breakdown

Siteimprove Breakdown



If the Site Target is set to A and AA, that means you can only see a maximum score of what those issues equal up to. For example, let's say all the A and AA issues equal a score of 90/100. That means you can only get a score of 90/100 by clearing out all A and AA issues. A score of 100/100 is only possible if all the flagged issues are cleared out. This includes A, AA, AAA, Best practices, etc.

Automatic Speech-to-Text in Citizen-facing Apps



**DIGITAL
WEB
SERVICES
NETWORK**

Selvarani Janarthanan
Application Engineering Manager
Vikram Verma
Software Developer
California Department of Technology

What is speech recognition?

- AI and Machine Learning
- Device compatibility
- Language support

Speech Recognition in the Web Environment

- Webkit Speech Recognition
- API
- Event Handlers

Code Overview

- HTML
- JavaScript



**DIGITAL
WEB
SERVICES
NETWORK**

Suggested Future Topics
Closing Remarks

Koji Kumpulainen

State Web Services Manager
California Department of Technology

Thank you

Post conference materials will be published on the [DWSN Website](#).

For questions, please write to: DigitalWebServicesNetwork@state.ca.gov



Bringing together digital product managers, designers, and engineers.



DIGITAL WEB SERVICES NETWORK

Bringing together digital product managers, designers, and engineers.

Next DWSN Quarterly Forum Thursday, October 19, 2023