

TECHNOLOGY TRANSFORMATION SERVICES

Using the ADAPT Model to Become Mobile Friendly

GSA MobileGov Community of Practice Feb. 25, 2020



Agenda



- What is mobile friendliness?
- Why is mobile friendliness Important?
- What does it take to become mobile friendly?
- What is the ADAPT Model?
- Questions



What is Mobile Friendliness?



Mobile Friendly Definition

PC Mag

"A website that is **easy-to-use** on a **mobile device**, especially the small screens of smartphones."

"In today's world it is essential that your site is optimized for mobile users. The site display must be able to shrink down to display on a mobile device while still being functional and user-friendly."

Direct Online
Marketing

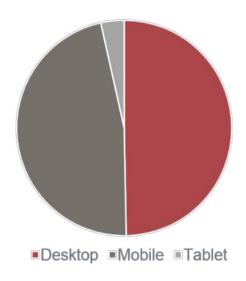


Why is Mobile Friendliness Important?



Percentage of Mobile Hits Across Federal Government Websites

(Reported by <u>analytics.usa.gov</u>)



There were **3.54 billion** visits over the past 90 days.

Devices			
Desktop	49.7%		
Mobile	46.8%		
Tablet	3.5%		
segmentation data, w less than 5% of all tra agencies comes from government networks	affic across all US federal		
Much more detailed of in downloadable CS			
This includes data on browser and OS usage	combined		

Browsers				
Chrome	49.5%			
Safari	30.8%			
Internet Explorer	6.2%			
11.0	5.6%			
7.0	0.5%			
Other	< 0.1%			
Edge	4.3%			
Firefox	4%			
Samsung Inter	2.5%			
Safari (in-app)	1%			
Other	1.8%			

Operating Systems			
Windows	38%		
10	29.2%		
7	6.8%		
8.1	1.5%		
Other	0.5%		
ios	28.2%		
Android	21.4%		
Macintosh	9.9%		
Chrome OS	1.4%		
Linux	1%		
Other	< 0.1%		

What Does it Take to be Mobile Friendly?



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Mobile friendliness can mean a multitude of things, depending on who you're talking to.

It can be helpful to think of it in terms of three goals for improving your site's user experience: **Presentation**, **Content**, and **Performance**.

- Mozilla.org

Attributes of Mobile Friendliness

- 1. Usability Users are on the go
- 2. Mobile Device Limitations Mobile devices are generally not as robust as PCs
- **3. Performance** Less powerful hardware and slower network connections

What is the ADAPT Model? (1 of 2)



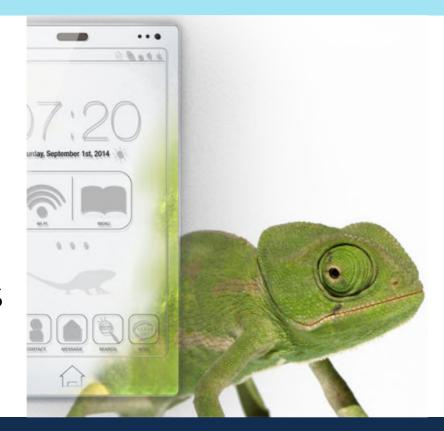
Assess Your Site

Determine Challenges

Align Solutions

Perform Enhancements

Test Again



Assess Your Needs Determine Align Perform Test and Site Solutions **Enhancements** Challenges Again Assess your needs Static testing Find solutions Enhance the Retest **Build in Mobile** Dynamic testing Prioritize code Compare results Further enhance Friendliness challenges Redeploy the the application Assess your site app 21st Century IDEA Static Test tool results Test tool results Repeat the Connected Government PageSpeed Insights process using reports reports Act Varvy SEO Tool Balance impact U.S. Web the same tools **DAP Analytics GTmetrix** with Design System Digital.gov articles mobiReady requirements 8 mobile friendly Dynamic principles Federal U.S. Web Design CrowdSource Mobile System Testing Program Google's mobile friendly test

Assess Your Needs & Site (1 of 3)



Assess Your Needs

Research regulatory requirements

- 21st Century IDEA Act
- Connected Government Act
- Other articles...



Find out who is or will be using your site

- <u>Digital.gov guide</u> to using the Digital Analytics Program (DAP)
- DAP dashboard and insights

Digital Analytics Program

analytics.usa.gov

Find out about mobile friendliness (8 Mobile Friendly Principles)

- JavaScript is really cool, when used with care
- The viewport is the window to your site
- Remember That We Navigate Mobile Sites
 Using Our Fingers
- Installing additional software to properly view your site should not be necessary
- Conserve resources, recycle when possible
- The smaller the better, when it comes to page resources!
- Properly configure the server
- Don't forget accessibility!

Assess Your Needs & Site (2 of 3)

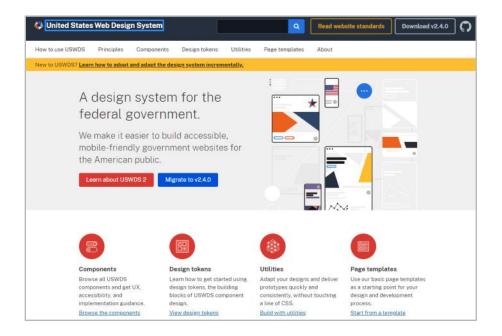


Build in Mobile Friendliness

U.S. Web Design System

https://designsystem.digital.gov/

- Components
- Design Tokens
- Utilities
- Page Templates



Assess Your Needs & Site (3 of 3)

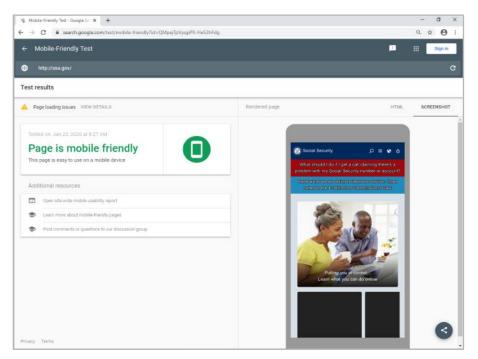


Assess Your Site

Google's Mobile-Friendly Test

https://search.google.com/test/mobile-friendly

- Generic Pass/Fail
- Software Uncommon on Mobile Devices (e.g. Flash)
- Text Size
- Content Sized To Screen
- Link Spacing



Determine Challenges (1 of 2)



Static Testing

PageSpeed Insights	W3C MobileOK Checker	mobiReady		Varvy SEO Tool	Gtmetrix
 Speed User Experience 	 Markup Validation Structure of the Page CSS Style Sheets Images/ Objects User Input HTTP Level Character Encoding 	 JavaScript CSS Caching HTML Minimize Image Size Charset Viewport Meta Cookie Size DOM Too Large 	 Duplicate Resources DNS Lookups Tables Pop-ups Frames Image Map and Resizing External Resources 	 Googlebot Access Page displaying on Mobile Device Page secure with HTTPS Accessibility Page load speed Robots.txt 	Key Performance indicators

Determine Challenges (2 of 2)



Dynamic Testing

Federal CrowdSource Mobile Testing Program

https://digital.gov/services/mobile-applicationtesting-program/

- Developed to Help Agencies Meet the Digital Government Strategy (DGS) Goals
- For Federal Agencies by Federal Employees
- Facilitate Test-Cycles
- Two Pronged Approach
 - Automated Mobile Friendliness Testing Tools
 - Hands On Testing "In the Wild"



For more information about the testing program, email us at... **DigitalGov@qsa.qov**

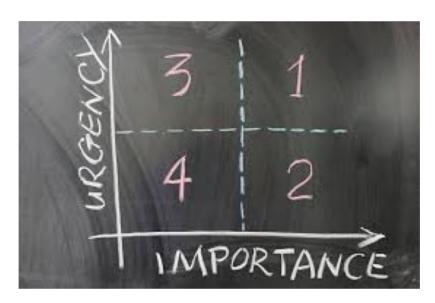
Align Solutions



- Find Solutions
 - Use test tool reports



- Prioritize Challenges
 - Balance the impact of the change with the design requirements



Perform Enhancements



- Enhance the Code
 - Test tool results reports
 - U.S. Web Design System
- Redeploy the app



Test Again



- Retest
 - Dynamic Testing
 - Static Testing
- Compare test tool results reports
- Further enhance the application

