What’s in it For Me?  Making a Web Map Accessible to the Sight Impaired

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What’s In it For Me?

- “What’s in it For Me?” – *what is it?*
- Challenge: make it accessible to the sight impaired
- Process we took
- Resources
What’s In it For Me? – what is it?

HTML5

PC/Laptop

Smartphone
What’s In it For Me? – what is it?

What it Does

- Click on the map or enter a Cobb County address
- Get a listing of Transportation and Parks projects within a 5 mile buffer
Enter an address OR select Map Click from I want to...menu
Number of Projects

Click on a project to get more info

Buffer generated Map zooms to buffer
Some projects have fact sheets
Data pulled from program management database
What’s In it For Me? – what is it?

Why we built it

- Many CIP projects in Cobb: SPLOSTs, CIDs, General Fund, GDOT and 2016 SPLOST projects
- Let residents know what projects are proposed, planned, underway, or completed near their area of interest: work, home, school, play
- What’s in it for Me: Personalizes it

~ 600 projects
What’s In it For Me? – *the challenge*

Make the What’s in it For Me? web map accessible to the sight impaired.
What’s In it For Me? – the process

Research

Develop

Test

Complete
What’s In it For Me? – *the process*

**Research**

- Put the word out – asked if anyone knew of anyone who has done this
- Online research
What’s In it For Me? – the process

W3C Web Accessibility initiative – Research and Development Working Group (RDWG)
http://www.w3.org/WAI/RD/wiki/Accessible_Maps
“…no standards does exist, which describes how to make a visual map accessible to people with visual disabilities”

the W3C (World Wide Web Consortium) standard that is most relevant is WCAG 2.0 AA. Essentially, it’s a matter of evaluating if something is Perceivable, Operable, Understandable & Robust.

Was not initially aware of others that had undertaken this.

We were on our own
What’s In it For Me? – the process

Cherie Newton
- Lost her vision in 1994
- MARTA agent
- Cobb Transit Advisory Board (TAB) Member
- Cobb County resident

Had to adjust our typical workflow
- Would meet with her before TAB meeting
- Correspond via email
What’s In it For Me? – *the process*

- The software translates text, icons, and buttons on computer screens and dictates them to users
- Popular software
- DOT owns an older version
What’s In it For Me? – the process

Screen Readers

READ ‘EVERYTHING’

Can’t Read

• Images: maps, photos, scanned documents
• Untagged controls: buttons, text boxes
What’s In it For Me? – the process

Develop/Test

Screen Reader can see “link” so she can click on it and she could read the PDF that popped up

Screen Reader Could Read this Text

This may have been read by her screen reader as an “unlabeled” button

The screen reader can see this but it wasn’t clearly identified as a search box
Adjustments to the What’s in it for Me? web map

- Unnecessary text/search boxes were removed
- Redesigned to remove ‘pop up’ boxes
- Redesigned to make the address search box prominent on the page
- From the enter address option - created an option to create a PDF report of the project list which is easily read by the screen reader.
8,002 people in Cobb with vision difficulty (2012 ACS)
April 28th met with Cherie at TAB meeting
May 19th 1st round of modifications completed
May 28th received feedback
May 29th 2nd round of modifications completed worked!

MDJ reporter met with us at the June 23 TAB
June 26th MDJ article

What’s In it For Me? – the process

You can't control the wind, but you can adjust your sails
What’s In it For Me? – *the process continues*

October 7th Georgia URISA
March upgraded to Geocortex Essentials 4.2.1
July 23rd ESRI User Conference
Essentials 4.3 TBD

*iOS assistive technology - iPad*
• In the beginning we were stumped
• One web map for both sighted and sight impaired users
• Screen reader READS EVERYTHING keep it simple

Please consider it in your design

• Transit web map – next step
Resources

Cobb What’s in it for Me? web map
http://www.cobbqgis.org:81/CobbDOTViewer/

AMAC Accessibility Solutions / Georgia Institute of Technology | College of Architecture
http://www.amacusg.org

Automation Properties for Accessibility Support in UI (Silverlight)

JAWS Screen Reader
http://www.freedomscientific.com/Products/Blindness/Jaws

W3C Web Accessibility initiative
http://www.w3.org/WAI/gettingstarted/Overview.html

W3C Markup Validation Service
http://validator.w3.org/

Center for the Visually Impaired – Atlanta
http://www.cviga.org/

ArcNews
Making Maps Accessable to the Blind and Partially Sighted (ArcGIS API for JavaScript)
What’s In it For Me? – questions

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Cobb Transit Advisory Board
Cherie Newton