MHEC Information Architecture Redesign

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University of Baltimore, 2018

The challenge

- How would a visitor discover this site?
- What is MHEC's **brand promise?**
- Does the site support the brand?

The challenge

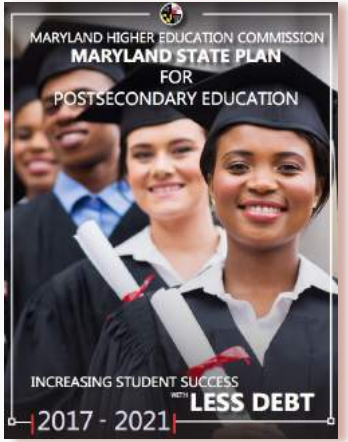
- What does the user want to do?
- What does MHEC want the user to do?
- What would constitute **a successful visit?**

The solution

Optimize the Maryland Higher Education Commission's website strategy and information architecture to establish them as Maryland's **premiere higher education access resource.**

The solution

The Maryland State Plan for postsecondary Education includes three goals for MHEC:



Access

Ensure equitable access to affordable and quality postsecondary education for all Maryland residents.

Success

Promote and implement practices and policies that will ensure student success.

Innovation

Foster innovation in all aspects of Maryland higher education to improve access and student success.

Our strategy

- Content inventory
- Personas & scenarios
- Market research
- User research
- Sitemap
- Wireframes

Content inventory

What works

- Information rich **content** is available throughout the website.
- Besides the home page, the page layouts across MHEC are consistent.
- Multiple paths lead to the same destination.
- The home page highlights frequently visited pages.

What doesn’t

- External link maintenance.
- Missed opportunities for brand cohesion.
- Difficulty of wayfinding.
- Level 3 **navigation** have long titles.
- Many **labels** are ambiguous.

Personas

Paul, 51

Paul is a retired USMC veteran seeking to embark on a second career. He resides in the Fallston area where he enjoys biking with his wife and jogging around his neighborhood.

Their 21-year-old and 24-year-old now out of the house, the empty-nesters use their newfound time to volunteer on the weekends. Paul wants to make sure that his next step will be the best ROI of his education and work experience. He consults about it with friends, who suggest real estate.

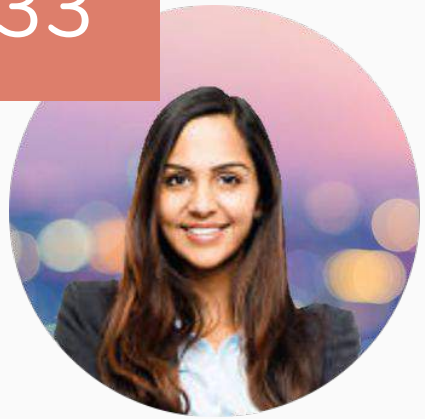
Technology aptitude ● ● ● ○ ○

“I like to ask around for recommendations first.”

“I'm ready for my next chapter.”

Personas

Marie, 33



Marie is an Assistant Provost at the University of Maryland. She lives in Catonsville with her fiancé and their Pit-Lab mix. Marie wants to always grow as an administrator, reading the latest research and attending conferences 3-5 times a year. She's currently overseeing the establishment of a new Education program at her university, but her faculty is divided on starting a new program versus refining the current Education major into something better.

Technology aptitude ● ● ● ● ○

"I'm not sure, but I can find out."

"We're teaching the next generation of educators."

Personas

Alex, 17

Alex is a student at Woodlawn High who lives with her parents and younger twin brothers. Dedicated and active in her school, she doesn't know how she'll balance her college search with student government, basketball, and hanging out with friends. The only decision she's made so far is that she'd like to either major in Business or Comp Sci. Her parents both went to school out of state, so they don't know what programs to recommend in Maryland.

Technology aptitude ● ● ● ● ●

"I'm excited for college but I don't even know where to start - it's so overwhelming."

Scenarios

real estate license maryland classes

All | Maps | Images | Videos | News | Shopping

10,600,000 Results Any time

Maryland Home Inspection Class | icaschool.com
https://icaschool.com/**maryland**
Ad Includes Radon & Mold Certification **Courses** + Lifetime Inspection Software.
Fully Updated for 2019 · ASHI affiliate · CREIA affiliate
Courses: Inspecting with Drones, Commercial Inspection, Radon, Mold, Energy Efficiency

State Licensing
Your Career as a Home Inspector Starts Here. Select Your State!

Free White Paper
Discover the Secrets of the Home Inspection Business. Download No

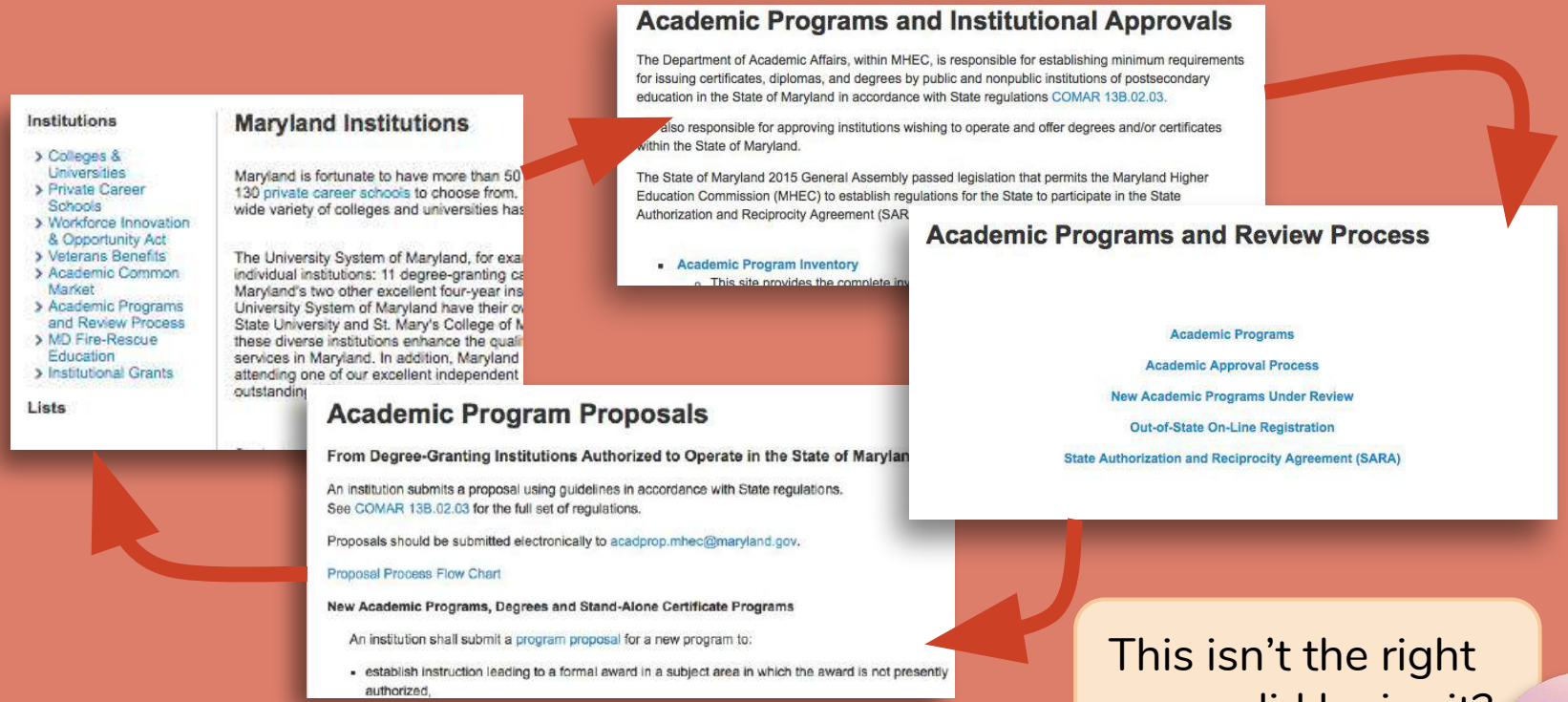
Start Your License Today | Maryland Real Estate Licensing
https://www.theceshop.com/**maryland**/pre-**licensing** 800+ followers on Twitter
Ad Free 5-Day Trial To Get Your **MD Real Estate License**. 91% Pass Rate - Start Today

Online Real Estate Classes | Education To Fit Your Needs
http://www.careerwebschool.com
Ad 40+ Years Experience. Simple, Easy & Painless. Find Your **Course** Today!

Kaplan Real Estate Education | Get Your Real Estate Lic.
https://www.kapre.com/**real-estate/education**
Ad Now offered by Brightwood - online and home study **Licensing**, Exam Prep & CE.

Maryland Real Estate Commission (MREC) -
www.dllr.state.md.us/license/mrec
The Commission was created to protect the health, safety and welfare licensing, and regulatory activities, to uphold and apply the governing equally to all, to provide courteous, reasonable, and professional assi disciplinary actions.

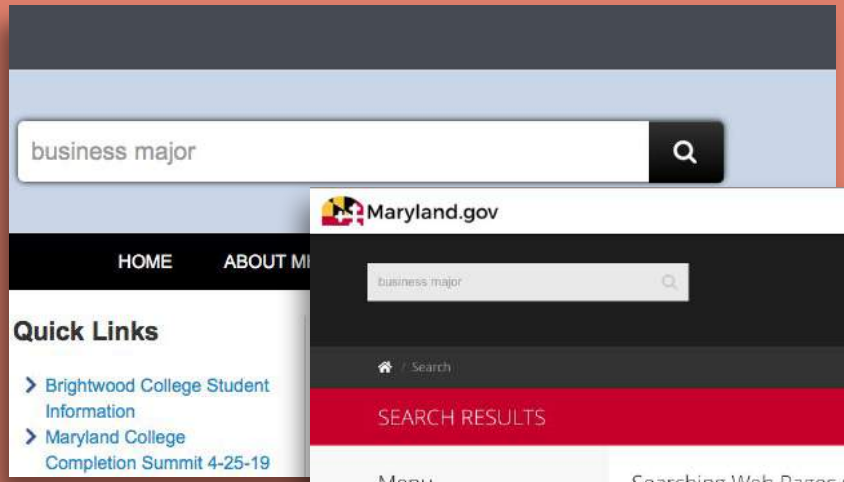
Scenarios



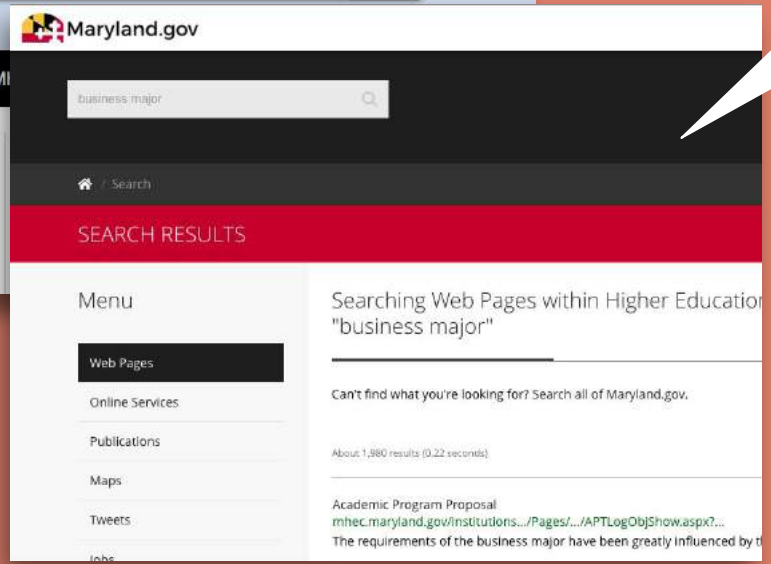
This isn't the right page...did I miss it?

Scenarios

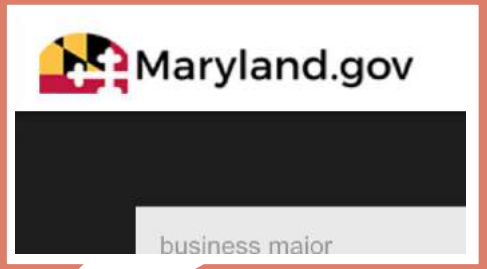
1.



2.

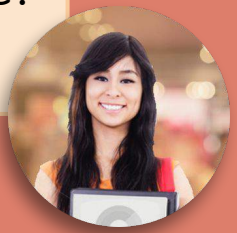


3.



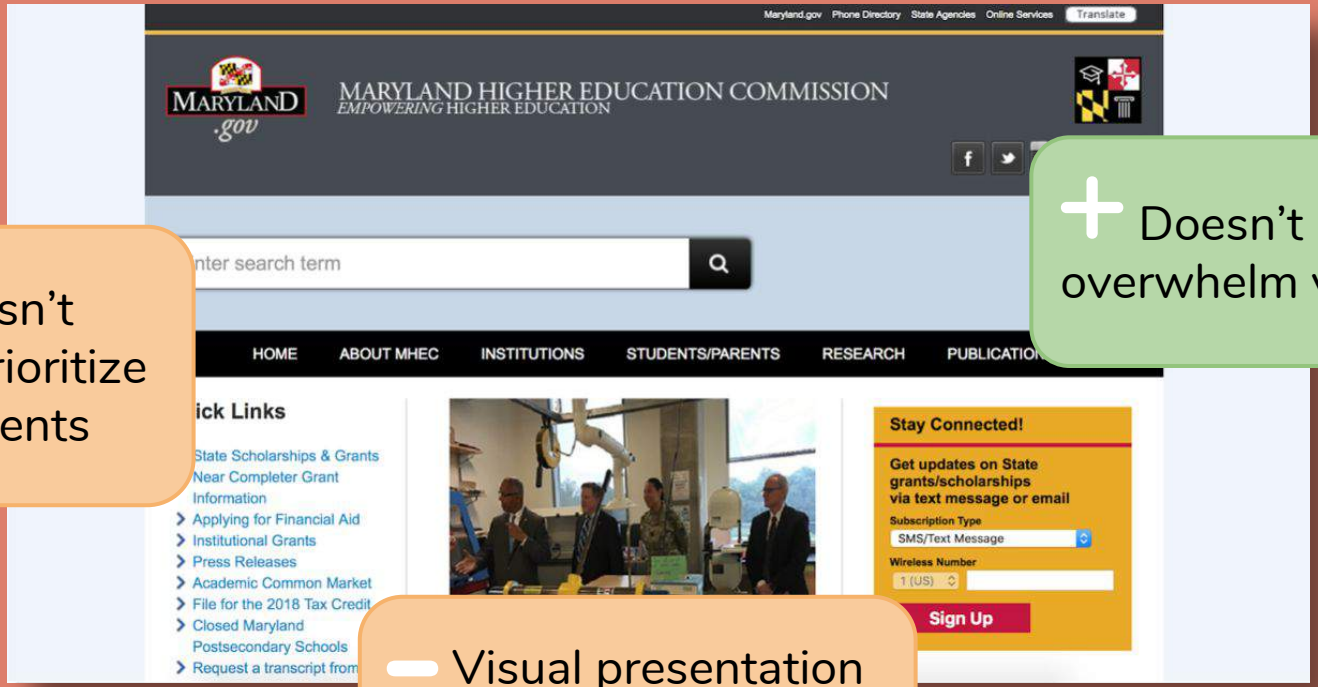
4.

How did I get here?
I'll just Google it...



Competitive analysis

Competitive analysis Client

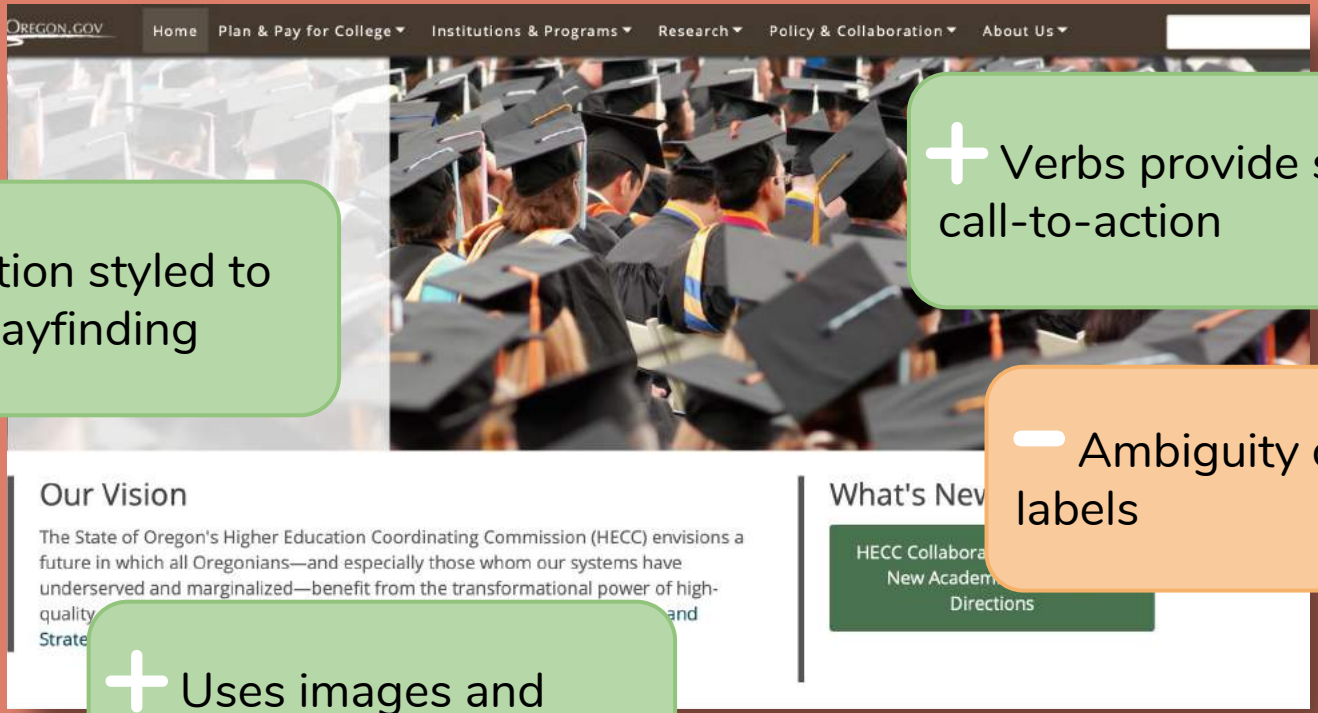


\+ Doesn't overwhelm visitors

\- Doesn't clearly prioritize key elements

\- Visual presentation could be more impactful

Competitive analysis Competitor



+ Navigation styled to support wayfinding

+ Verbs provide strong call-to-action

− Ambiguity of some labels

+ Uses images and color to advance brand

Competitive analysis

- Use salient categorization to make content **findable.**
- Use navigation labels to reach the right people and **advance** brand messaging.
- Use images where possible to make a visual **impact.**

Competitive analysis SWOT

- Core mission is to help Maryland residents attend and finish college
- MHEC maintains rich data sets about higher education enrollment
- Solid grants for institutions that focus on higher education access
- Unique programs that can help undergraduates finance education

Strengths

- Content is not always positioned to reach its intended audience
- Few interactive and dynamic communication tools
- Visibility through adjacent organizations and institutions could improve
- Easy to get lost in the website and not know the current location or state

Weaknesses

Competitive analysis SWOT

- Profile MHEC being a premiere education access resource in Maryland
- Setup link referrals with institutional partners - Maryland Universities, career schools, and other state agencies
- Advance communication about research, podcasts, and legislation
- Promote MHEC with targeted advertising via national education channels (Princeton Review)
- Focusing more on trade schools and other re-skilling opportunities

Opportunities

- Students leaving Maryland to attend colleges out of state
- College search aggregates
- Cuts in state funding resources
- Student loan debt burden is high, and students with existing loan balances might not consider re-skilling or going back to school
- Cuts in state funding resources

Threats

Search engine optimization

Search engine optimization

How to make a website findable?

- Use critical **keywords** in the page text.
- Put descriptive **metadata** in the source code.
- Connect with sites you want to be **linked** to.

SEO Keywords

- Frequent keywords emerged during the content inventory.
- We used Google for external search.
- **Maryland Universities** and **Maryland Schools** are general keywords that apply to many contexts for external search.
- What about keywords that do not include **Maryland** for internal searches?

Keyword	**Date**	**First Page Results**
Maryland Higher Education	9/15/2018	First listing
Maryland Universities	9/15/2018	No results
Maryland Colleges & Universities	9/15/2018	Seventh listing
Maryland Schools	9/15/2018	No results
Maryland Financial Aid	9/15/2018	Second listing

SEO Keywords

Research and Methods

- Google Analytics via the client from October 3, 2017 to October 3, 2018.
- Additional research utilized SEOMoz and keywordtool.io. Internal search included manual keyword research of 25 terms.
- External first page SERP analysis happened in Google, Bing, and DuckDuckGo with geographic specific terms and general terms.
- Internal searches rely less on a geographical indicator.

Keywords Considered

Affording college in Maryland

MHEC Grants

Maryland Schools closed

veterans scholarships

Affording college

Real estate schools

Get certified in CDL

Academic common market

Schools closed

SEO Keywords

Findings

- External search findings did not always predict the success of an internal search.

	MARYLAND SCHOOLS	SCHOOLS	MARYLAND HIGHER EDUCATION	HIGHER EDUCATION
Internal Search	7,010 Results	6,550 Results	3,410 Results	10,100 Results
External Search	0 on the first page	0 on the first page	First result in Google	0 Results on the First Page

	Maryland Financial Aid Calculator	Financial Aid Calculator	Get certified in CDL in Maryland	Get certified in CDL	Maryland schools closed	Schools closed
Internal Search	129 results	133 results	8 results	4 results	781 Results	5,040 Results
External Search	0 on the first page	0 on the first page	0 on the first page	0 on the first page	0 on the first page	0 on the first page

- External search for geographically rich keywords like **maryland financial aid calculator, get certified cdl in Maryland,** and **Maryland schools closed** yielded no external search results, and minimal success with internal search.

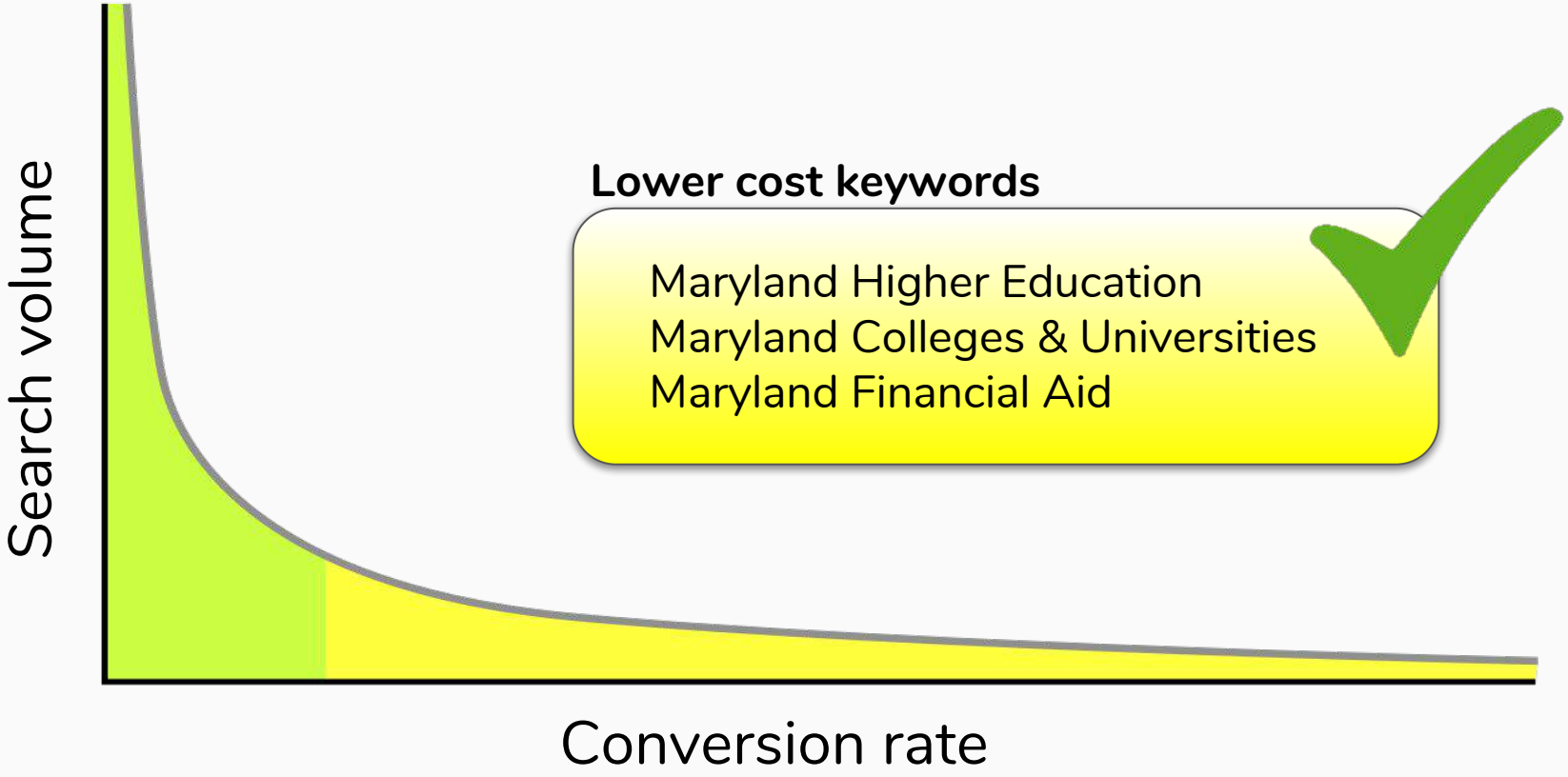
SEO Long tail

Search evolves past 1-2 keywords

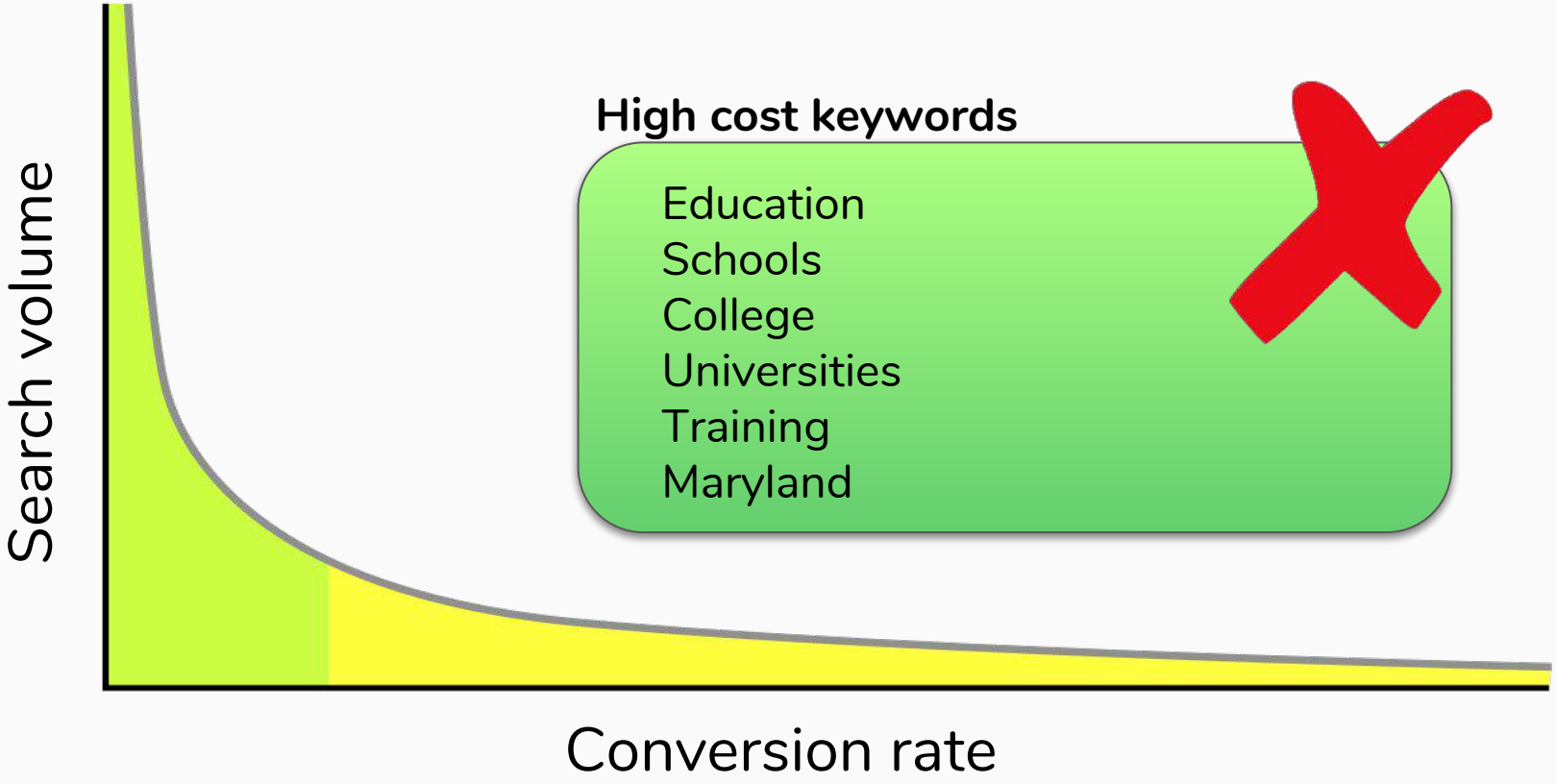
- 80% of keywords most people use for MHEC are likely to be similar.
- Long tail SEO is the 20% of keywords that have less search volume, but gives clues to optimize content.
- As mobile and voice grows, natural language keywords with 4+ search terms require consideration.

Common search terms:
MHEC MDCAPS Login, MHEC Grants, MHEC

SEO Long tail

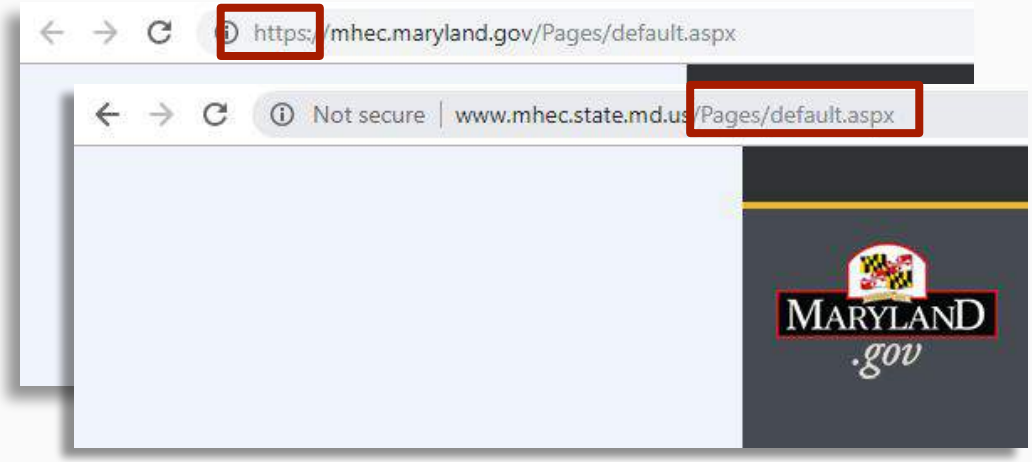


SEO Long tail



SEO Metadata

- URL titles play a significant role in the traffic that MHEC's site will receive.
- These two URLS both lead to what seems to be the MHEC home page, however one is not encrypted with https.
- There are also vague page names that can hinder external search



Site Performance

Site performance

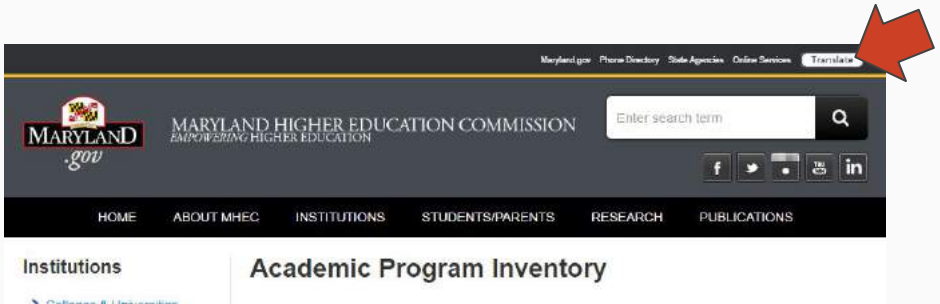
Site speed is critical to users navigating to different pages on the MHEC site. Many users leave web pages that do not load quickly.

After testing MHEC's home page, we discovered the following:

- Average load speed in the Washington D.C area is 1.23 seconds on a desktop.
- Average load speed from Vancouver, Canada can reach up to 5.2 seconds on a desktop.
- Average load speed with a 3g or 4g connection is 8.9 seconds on a mobile device.

Accessibility

- Add descriptions of images in the <meta> tags for screen readers.
- Increase contrast with URLs on web pages so people with low eyesight can interact better.
- Request an increase to the size of the “Translate” button so that it is more prominent for non english speakers.



User Research

User testing

Site map

Wireframes

User Testing | Card Sort

Phase 1

Phase 2

Card sorts help understand how users perceive grouping labels under navigation.

We completed two phases of card sorts.

Phase one

- **Closed Card Sort**
- 12 participants
- Refined global navigation
- 30 card categories and five groups.

Current Navigation

Card sort | Phase 1

Initial Site Map | Card Sort Groups and Categories

Site map Levels 1 and 2

Findings

	About MHEC	Pay For School	Publications	Resources for Schools	Students
# of Cards	25%	25%	16%	17%	16%
Appearances	20	14	13	17	16

	One	Two	Three	Four	Five
Cards per Group	5	8	10	5	2

Next steps?

- Create new global navigation based on this feedback
- Introduce more cards to sort
- Continue to think about inclusivity with navigation based on personas.

Card sort

Phase 1

Phase 2

Phase two

- **Hybrid Card Sort**
- 8 valid participants
- 60 cards
- Focused on global and local navigation
- Included education administrators, parents of future students, and higher education students.

Card sort

Updated Global Navigation

Considering Local Navigation

Card sort findings

Global Navigation Suggestions

Groups generated by users

Card Sort 2 Navigation	Suggested Groups by Users
About MHEC	Who We Are ⬅
Our Schools	Choosing a College Schools and Programs ⬅ Preparing for College
Pay for School	Financing College ⬅
College Access	Advocacy and Outreach ⬅ Educator Services ⬅ College Access Services ⬅ Grant and Program Funding
Publications	Publications and Media (2) ⬅ Publications and Reports ⬅ Forms

Other Groups	Accreditation and Policy ⬅ Student Resources Accreditation ⬅

⬅ = **New global navigation label suggestion**

Final Site Map

Updated Site Map

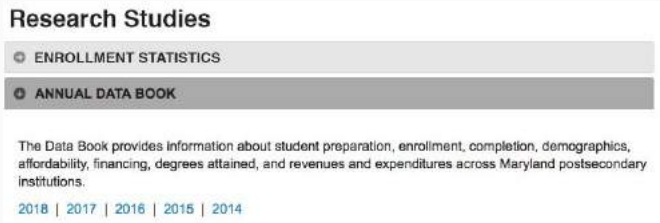
Local Navigation

Final Site Map

Updated Site Map

Local Navigation

- Nest additional navigation on pages
- Use color and other text styling to signify user location

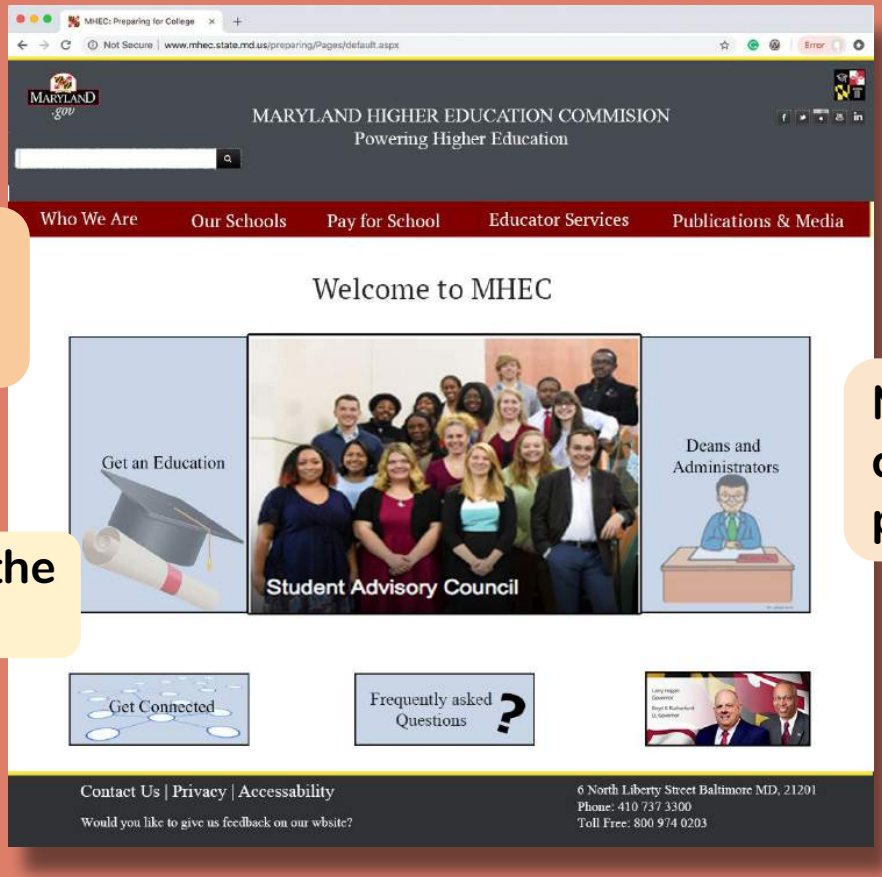


- The current publications page organizes Level 4 content with accordian menus
- Apply this as a design standard for interior page navigation

Wireframes

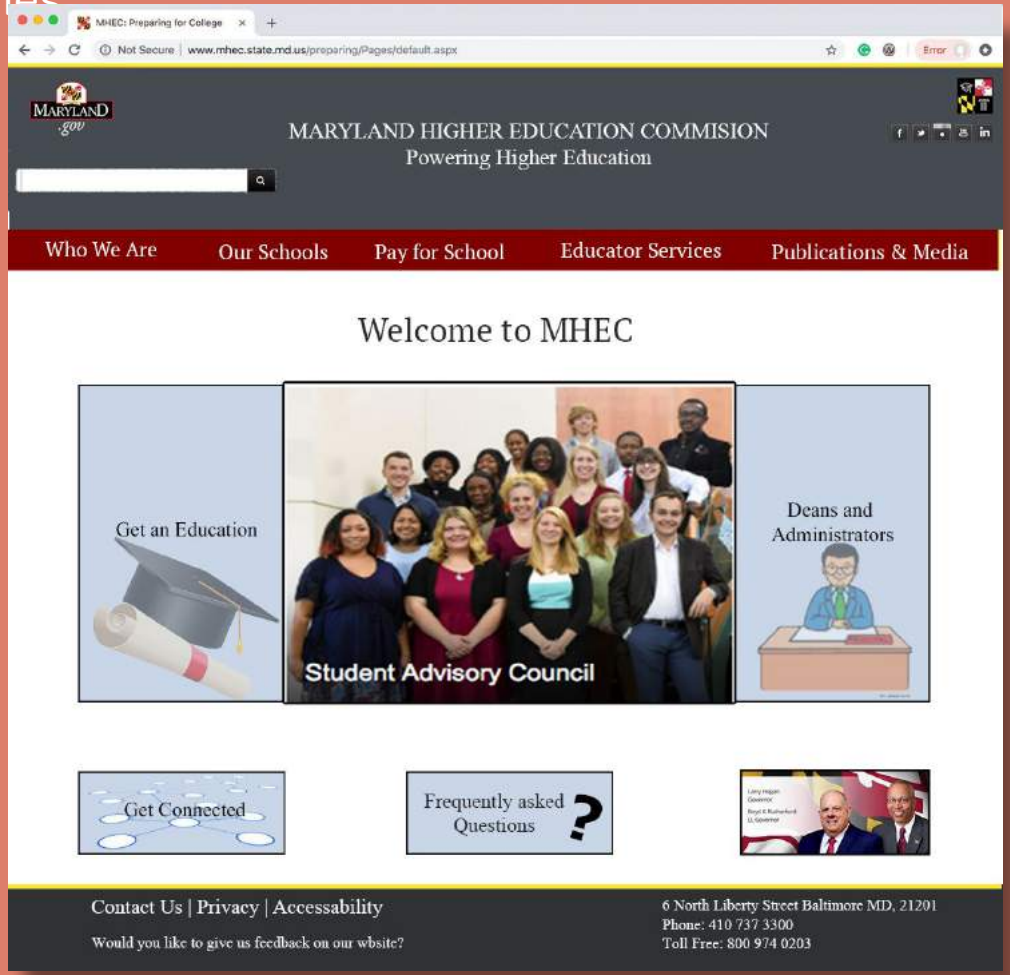
More contrast in the navigation

Less clutter on the screen



More screen space devoted to prioritized services

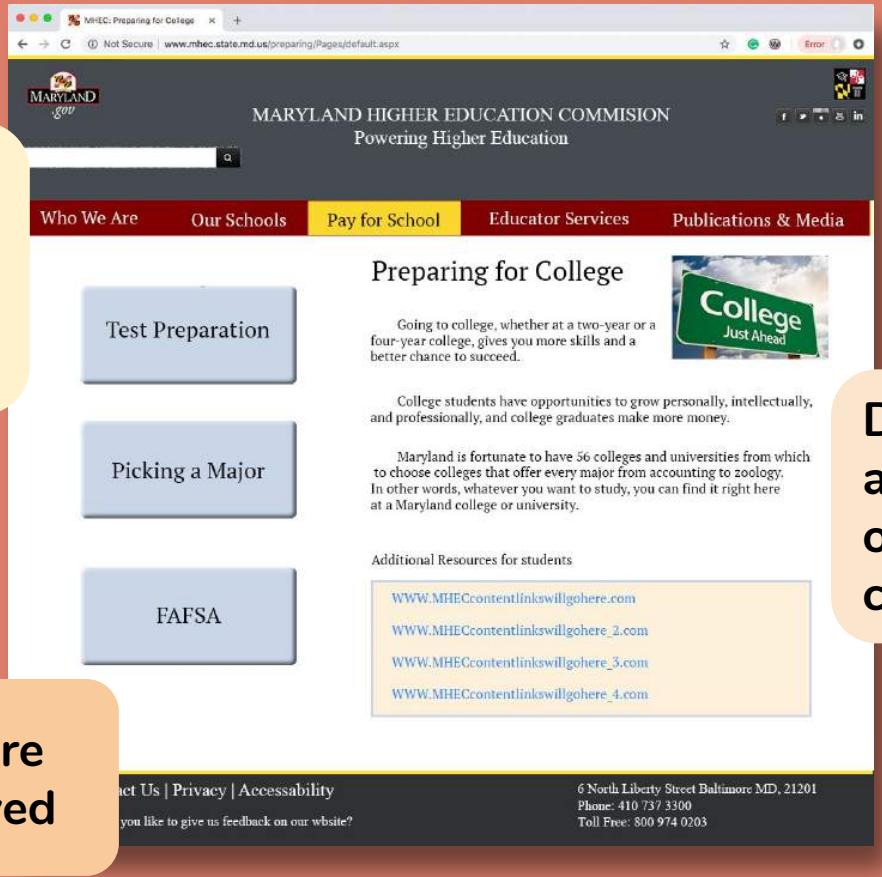
Wireframes



"The large images on screen took me straight to the page I needed!"

Wireframes

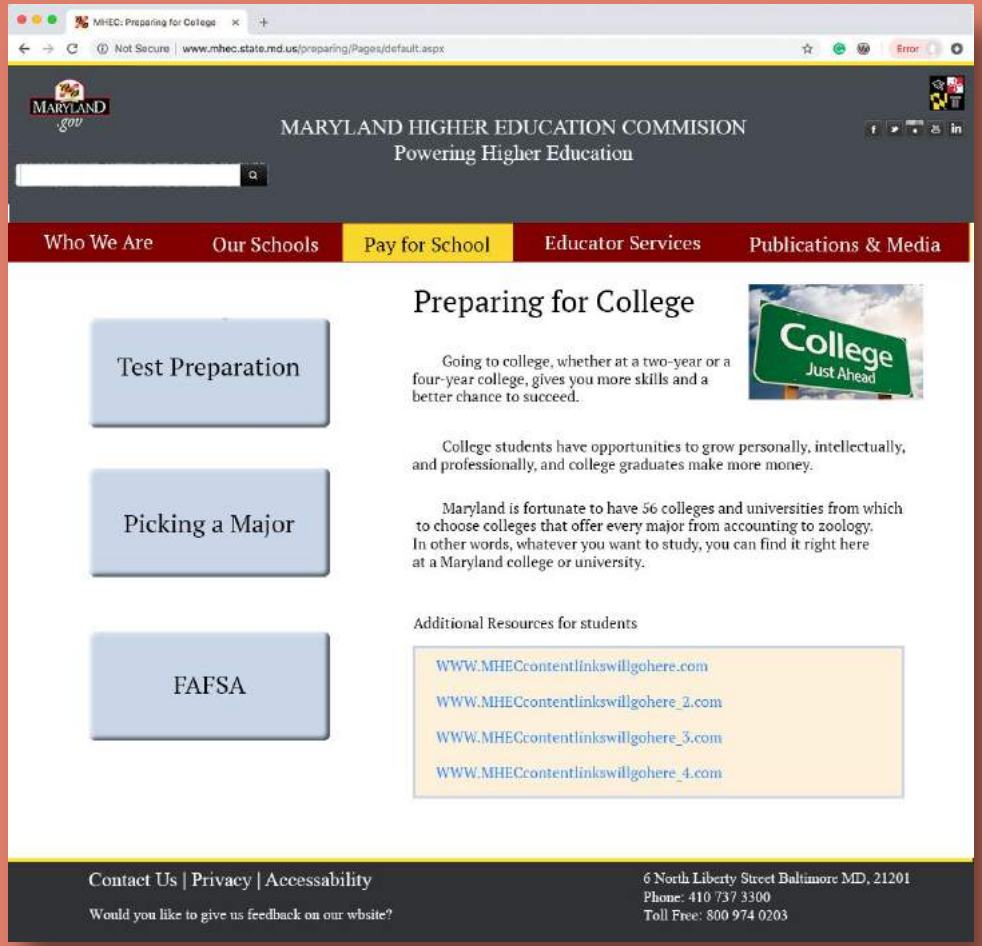
Nav has breadcrumbs to help users gain their bearings



Downloadable files are stored and organized in a consistent location

Level 3 links are clearly displayed

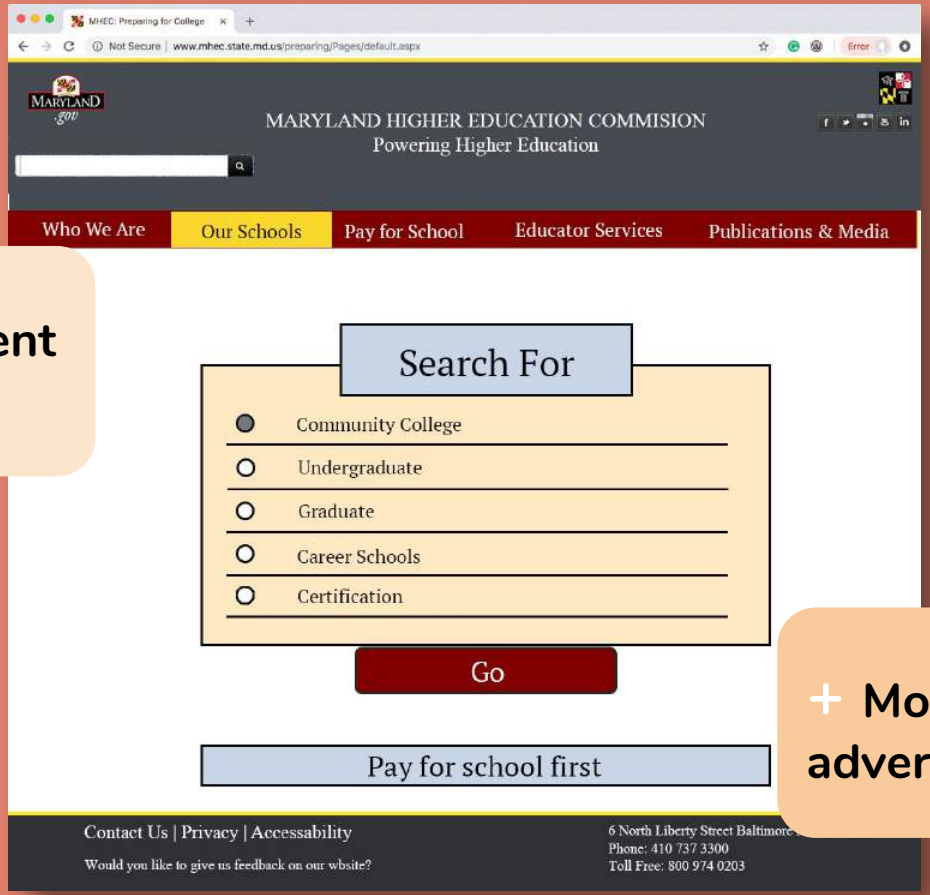
Wireframes



"I could find all the forms I needed almost instantly!"

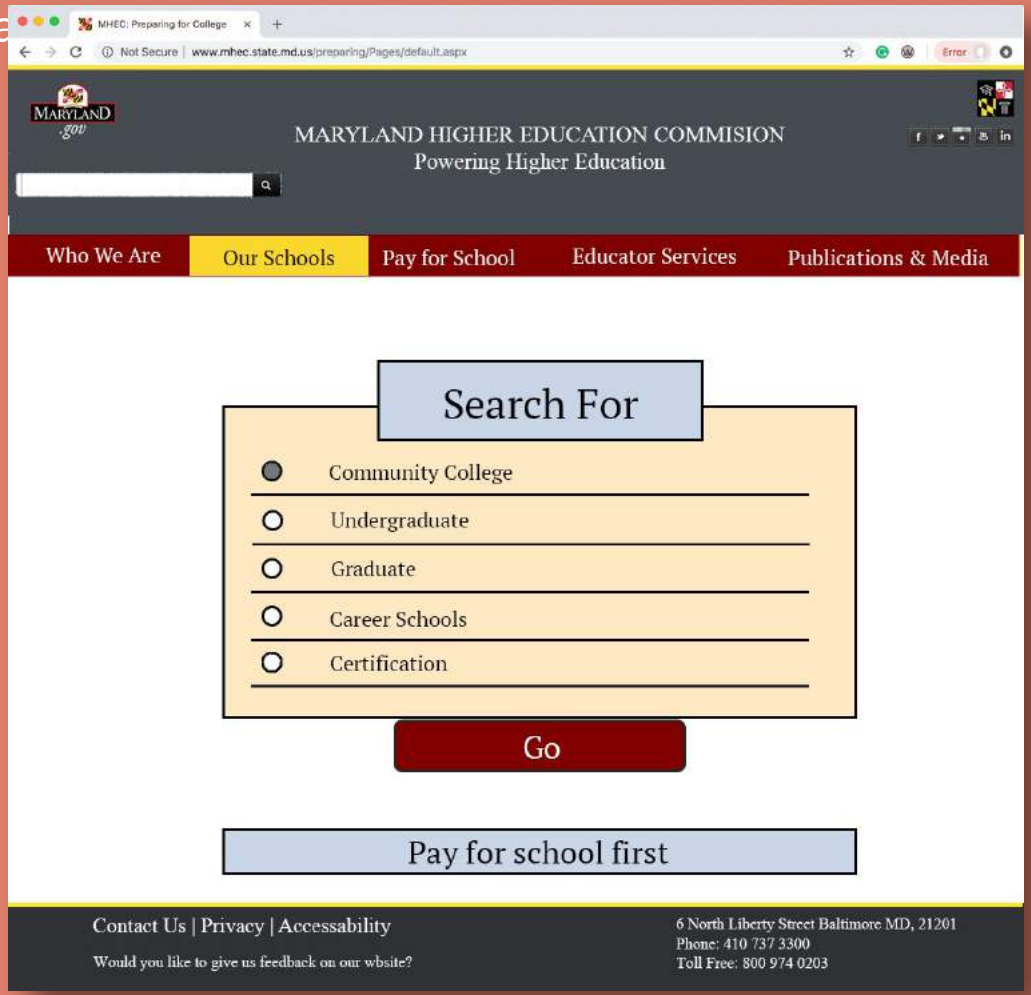
Wireframes

+ All degree content is searchable here



+ More content is advertised and linked

Wirefra



"The search feature was easy to understand and I knew what results were going to appear!"

Best Bets

Success

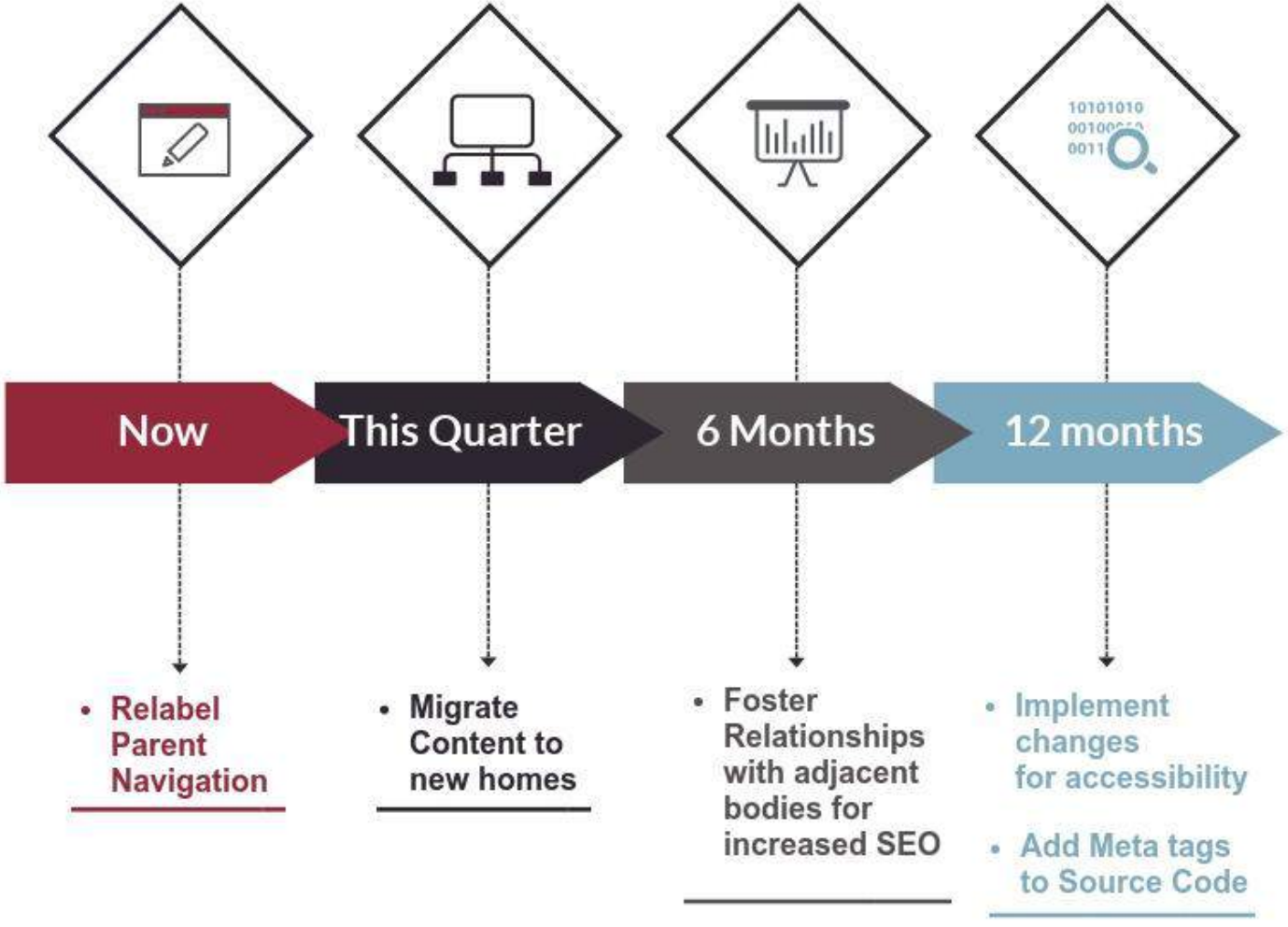
Highlight program success through strong visuals and content organization.

Access

Use clear labeling and wayfinding to help all MHEC audiences access their potential.

Innovation

Use SEO and UX heuristics to guide Marylanders down the path to higher education.


Now
This Quarter
6 Months
12 months
• Relabel Parent Navigation
• Migrate Content to new homes
• Foster Relationships with adjacent bodies for increased SEO
• Implement changes for accessibility
• Add Meta tags to Source Code

Thank you!

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Appendix

Phase 2 Testing Card Sort: https://www.gloomaps.com/4XmqnZHnrn
Phase 3 Testing Card Sort: https://www.gloomaps.com/ow3oCoEwNk
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SmallSeoTools - Keyword Density Checker. Retrieved October 19, 2018 from https://smallseotools.com/keyword-density-checker/
Go to https://docs.google.com/spreadsheets/d/18ojns4Dsb_S-qL0m2Zo7fpk3oGXJNXUdp1azaXX5AIE/edit?usp=sharing to see SEO keyword research
Images from Pexels.com, free for personal and commercial use, no attribution required.
SEO Data: https://docs.google.com/spreadsheets/d/1MFYP1Qn1_0LurBPfdiYKYUMGxTDScx27_TWviRSfI4A/edit?usp=sharing
Card sort tools include Optimal Sort (Phase 1) and Proven by Users (Phase 2)

Full card sort data available upon request

Competitive Analysis Considerations:
Minnesota Office of Higher Education | NJ Office of the Secretary of Higher Education | PA State System of Higher Education | Oregon Higher Education Coordinating Commission | NJ Higher Education Student Assistance Authority | Higher Learning Commission