

Optimizing the Web for Patient Care – A Work in Progress

HIMSS – May 17, 2007

Mayo Nursing's Intranet Journey

- **Background**
- **Getting started...**
 - **Survey - Opinio**
- **Project development**
 - **3 phases**
- **Methods**
- **Next steps**

History...

You've come a long way baby!

- 1997 Department of Nursing Intranet introduced

Mayoweb | Department of Nursing Home Page | CI Materials | Contact Us
Discharge Planning | Fact Sheets | Float Preference Model | Forms | Guidelines
Manuals | Mayo Nursing Council | Nursing Education | Nursing on the Internet
Nursing Research | Patient Care Unit Descriptors | Secretarial Resources
Specialty Nursing Practice | Transcultural Patient Care | Useful Links

Mayo Nursing

Practice Education Research Leadership Nursing Council Resources
Discharge Planning Committees Guidelines/Manuals CI Nursing Home Page

Nursing at Mayo

Nursing at Mayo

[Nursing Home Page](#)

[Practice](#)

[Education](#)

[Research](#)

[Documentation](#)

[Leadership](#)

[Nursing Council](#)

[Resources](#)

[Discharge Planning](#)

[Committees](#)

[Guidelines & Manuals](#)

[Continuous Improvement](#)

Search Nursing

Specialties

— Choose a Specialty —

Magnet Recognition Award

A [Magnet Nursing Services Recognition Award](#) recipient for demonstrating excellence in nursing services since 1997.



[ANCC Magnet Web site](#)

Nursing Announcements

[Changes to Nursing and Verbal Orders](#)
(posted May 9, 2006)

[Nurses Selected for Observational Experience in Japan](#)
(posted Apr. 26, 2006)

[Maintaining Patient Confidentiality: A Trust and a Responsibility](#)
(posted Apr. 14, 2006)

[Magnet Site Visit May 15-19](#) (posted Mar. 14, 2006)

[2005 JCAHD Post Survey Improvement Initiatives](#)
(posted Jan. 9, 2006)

[Guidelines Under Review](#)

[IV Administrative Guidelines](#)

[Pain Management Resources](#)

[Patient S.A.F.E. Program](#)

[Practice Initiative Education](#)

[Recent Guideline Changes](#)

Mayo News

[Continuous Accreditation Readiness Dispatch](#)

[Documentation Bulletin](#)

[Electronic Documentation \(E. DOC\) Nursing Newsletter \(Archived Issues\)](#)

[MES Newsletter](#)

[MICS News - Nursing](#)

[Nursing Fact Sheet](#)

[Nursing Fact Sheet \(Entire Issue\)](#)

[Nursing Newsletter \(Archived Issues\)](#)

[This Week at Mayo Clinic](#)

[Voting/Consulting Staff News](#)

Nursing Spotlight on Retention

Why I Stay —
Vonnie Aug, BSN,
RN Staff Nurse
"Taking care of patients and knowing that I can make a positive difference in their hospital stay is reason enough but I also enjoy the variety of nursing



Status Panel

Hospitals		
RMH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SMH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic Env.		
MICS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Nursing Share (L Drive):

<\\mfad.mfroot.org\rchdept\nursvc>

Submit Content to Nursing

Have a suggestion or need a change or addition to the Nursing web site? Here's how to [submit content](#)

Accreditation

[Accreditation Toolkit](#)

[Practitioner Privileges/Procedures Verification](#)

Core Measures

[Heart Failure](#)

[Pneumonia](#)

Emergency Preparedness

[Emergency Preparedness Manual](#)

[Code 90, Dept. of Nursing](#)

Nursing Leadership

[Clinical Nurse Specialists](#)

[Discharge Planners](#)

[Education and Professional Development \(EPD Members Only\)](#)

[Nurse Managers/Nursing Supervisors](#)

[Nursing Administrative Members](#)

Why a redesign? What are the issues?

- Too much information presented to everyone at once.
- Takes too long to find resources.
- Opportunity to incorporate new web tools and technologies.

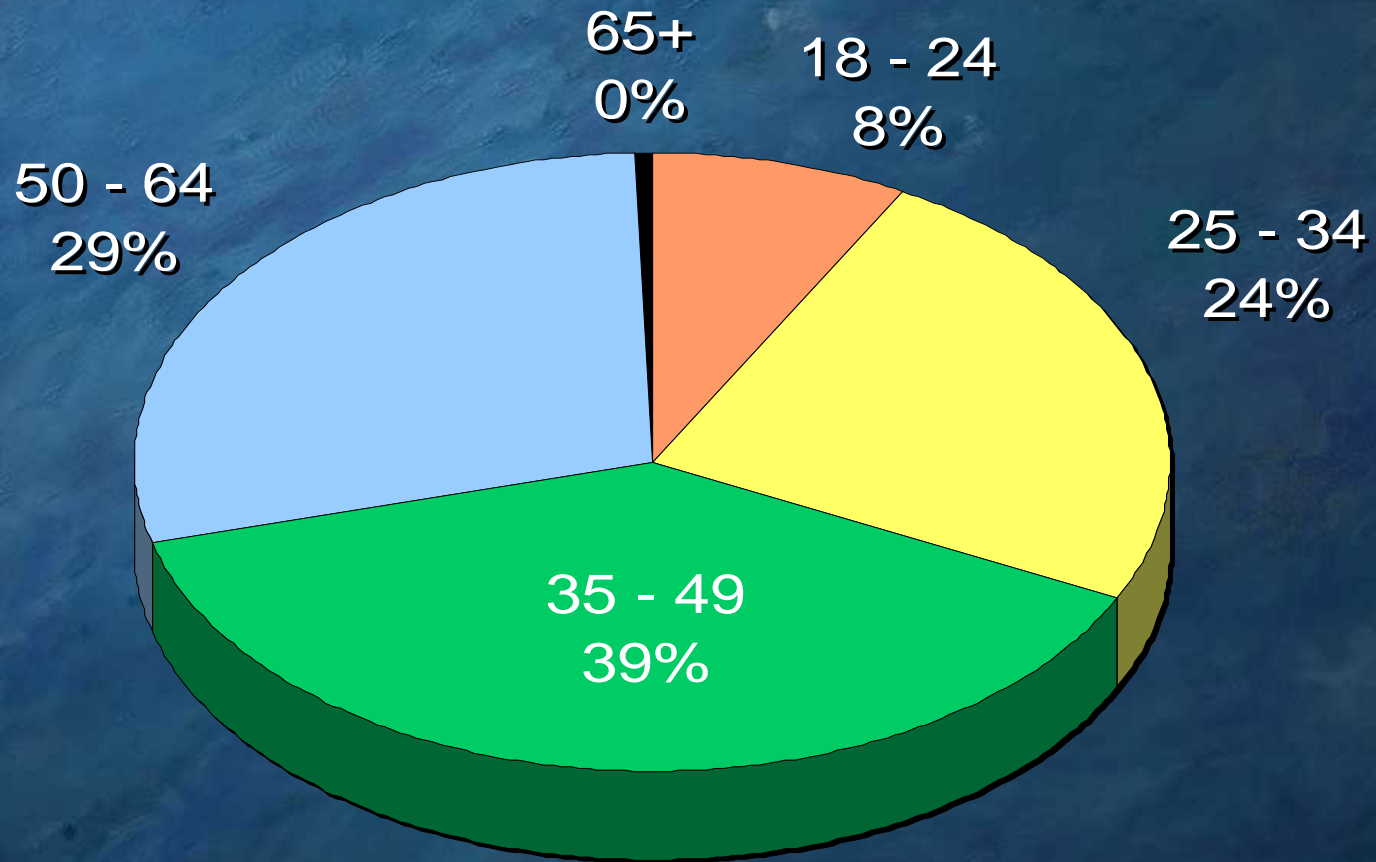


Feeling overwhelmed?

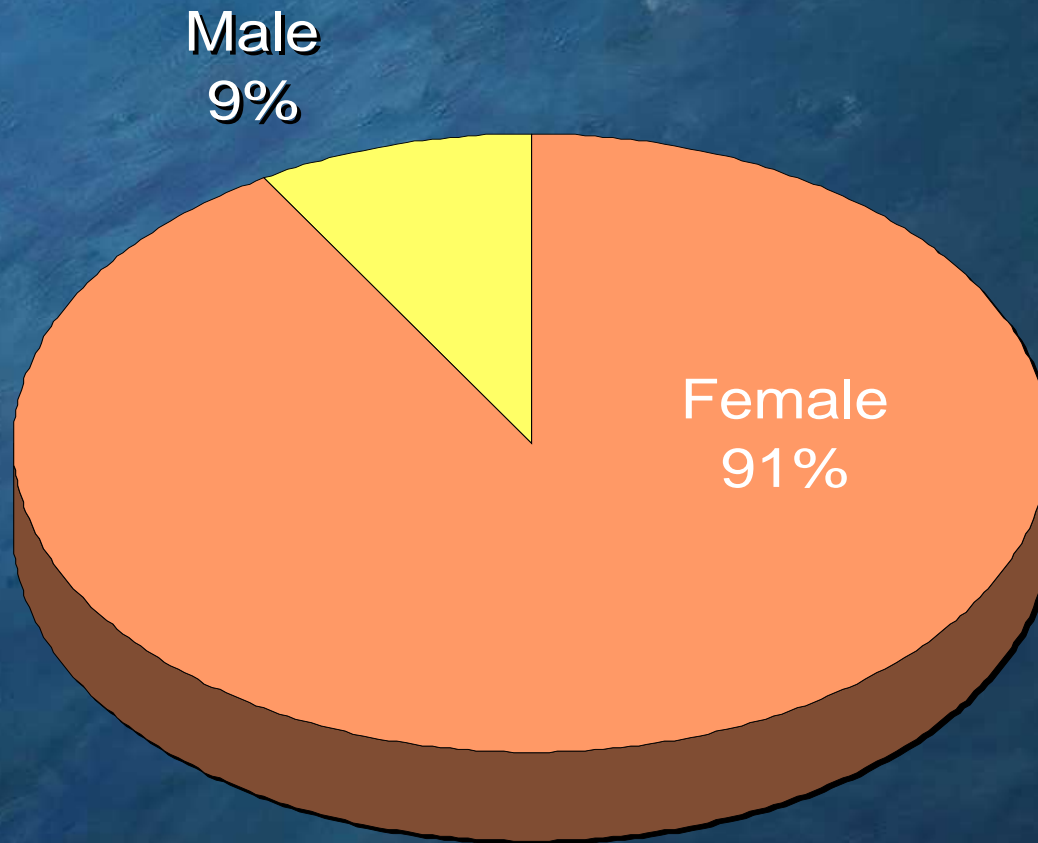
Survey Results

- Survey to everyone:
6,000+ DON staff
- Used Opinio software
- Developed questionnaire with
Nursing research; obtained IRB
approval
- Staff were reminded once; assured
responses would be confidential.
- 1519 responded (25%)

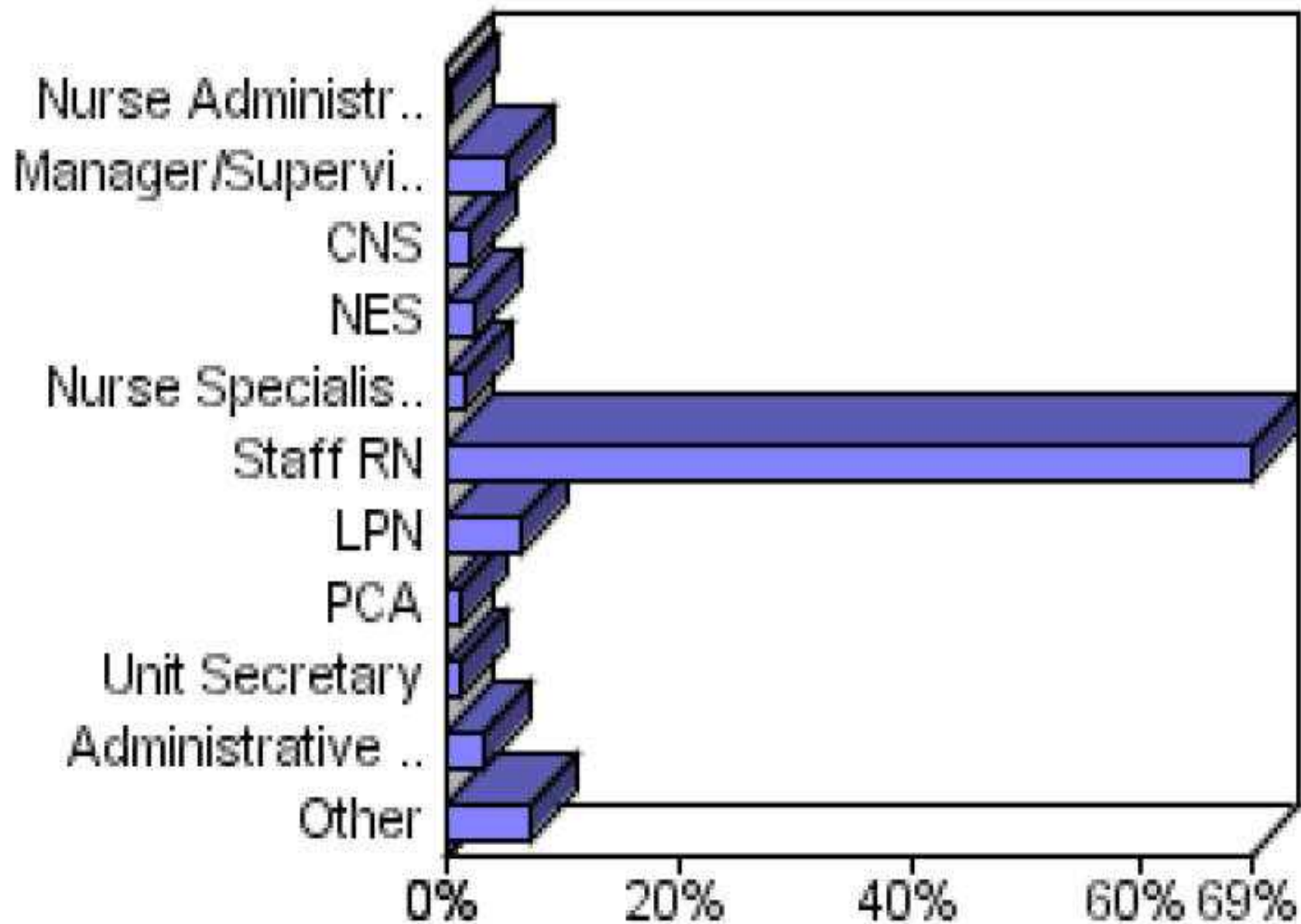
Response by age



Response by gender



What is your primary role in the Department of Nursing



Questions Posed

Please rate the Nursing website on each of the following characteristics:

1

2

3

4

5

6

1

2 Ease of navigating the site

3 Ability to find what I need quickly

4 Useful to my work activities

5 Overall design/look

6 Navigation speed

7 Quality of content


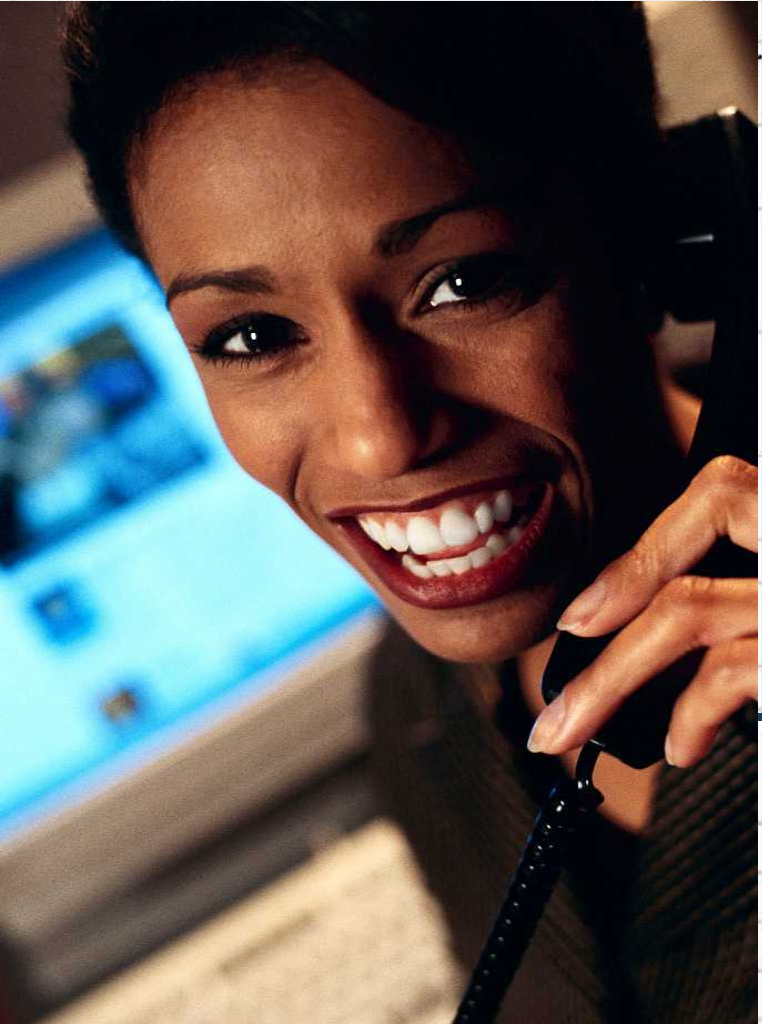
8 Number of clicks to get information



Questions Posed

7. Please answer the following questions about your intranet use at work (inside Mayo's firewall). One response for Frequency and Usefulness is required for each question:

	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												



What did they say...

- “The information I need is not easy to find, and what I do find takes so long to read through it is less than useful in a busy floor practice...”
- “It takes too many clicks to find important information items such as nursing guidelines.”
- “It is very hard to get to the procedures and that is what I use it for.”
- “I put very unuseful because the information is so difficult to access.”
- “I find it very frustrating every time the nursing home page gets a new look. I have to learn all over again where things are.”

What else...

- “I would like education on how to navigate the site.”
- “Literature searches too difficult.”
- “Just when you get a grasp, it changes. Leave things alone.”
- “If there were less options on the intranet, people would work more.”
- “Mayo Policies and Proc guidelines VERY frustrating to navigate.”
- “For documentation in the patient setting seems to be too many clicks and spots to go to.”
- “I don’t know how to make it more interesting, I just know it is pretty boring and difficult to navigate.”

So what do we do?

- **Development of DON web proposal**
 - **Nursing Web Team**
Charge: *Advise Development Team*
 - **Angela Braaten, Office Manager**
 - **Katie Brady Schluttner, RN, Informatics Nurse Specialist**
 - **Kathy Dickson, MA, Director for Operational Analytics**
 - **Deb Lafferty, DON Web Site Architect**
 - **Diane Twedell, RN, DNP, Nursing Education Administrator**

Teamwork

- **Development Team:**

Charge: *Propose and implement methods for DON intranet planning, design, development, and evaluation.*

- **Deb Lafferty** **Project Manager/Web Site Architect**
Leads the planning and development of all project deliverables.
- **Brett Pauley** **Web Art Director**
Specializes in user interface design and assists with analysis.
- **Cindy Strauss** **Systems Analyst**
Provides historical and practical input during analysis and design.
- **Tom Suther** **Human Factors Engineer**
Contextual design expert providing support during all phases of project.
- **Ad hoc members (to be invited during analysis, development & evaluation)**
 - *Web coder*
 - *Nursing employees: Staff nurses (In & Outpatient RN, LPN), Educators, Managers, Unit & Specialty representatives, Unit & Admin. Assistants, Research reps, Administration reps, MHS reps*

Project deliverables:

- 1.** Address admin and user interface issues with policies/procedures/guidelines.
- 2.** Redesign site to include new technologies to create better searching and site management.
- 3.** Research web-based tools for more efficient work flows.

Deliverable #1 – Policies/ Procedures/Guidelines

- Two goals:
 - Improve search results
 - Automate administrative work
- Institution working with Stellent
- Developed templates with Institution
- Conversion of current policies from html to Word documents
- Work group updating and identifying workflow



Deliverable #2 – Intranet Redesign

- **Goal**
 - **Fast access to information**
- **Method**
 - **Direct observation**
 - **Affinity Sorting**
 - **Intense review and analysis**
 - **Drafting**
 - **Usability**
- **Current site functional until entire site is ready to launch (exception is connection to Stellant when ready for policies/procedures/guidelines)**

Deliverable #3 – Create new efficiencies

- **Addressed after Deliverables #1 & 2 have been completed.**
- **Possible projects gleaned from observation and interviews:**
 - **Integrated calendar for department**
 - **Web-based scheduling tool**
 - **Absence monitor/request tool**
 - **Enhanced searching**

Method - Observation

- 17 Units/areas observed
 - 3 ICUs
 - 3 inpatient progressive care units
 - 4 general care
 - 5 outpatient areas
 - 2 procedural areas
- Administration (3 areas), Education (2 areas), Research (1 area)
- Over 2 months, 24-hour observation

Method - Data collection

- Used Opinio to collect interview and scenario data
- Collected artifacts & took photos
 - computer monitor post-its
 - bathrooms
- Suggestions for improvement
- Team used Sharepoint to house data & collaboration (discussion board)

Affinity Sorting

1. Team gleaned topics from survey and observation
2. Divided into four sorting groups
3. Grouped like topics
4. Created category (subject) cards
5. Compared all four groups' sorting
6. Many categories same
7. Content fell into multiple categories



Intense Review & Analysis

- Blocked half days for two weeks
 - “Browser bunker”
 - Team Discussions
 - Categories
 - Interface
 - Infrastructure



Looking forward...

- **Discovery, Analysis, Development through 2007**
 - Intense Observation – completed
 - Collaborative analysis – completed
 - Content inventory – completed
 - Meta data gathering – completed
 - Web-based analysis – *up to our eyes*
 - Mapping - *pending*
 - Create development site – *pending*
 - Usability - *pending*

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Questions?



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