
INP 210 Final Report

A2roadtrips.com

Alicia Green
Ellen Sabor
Ana Washington
Lena Williams
A2Inc.

April 23, 2002

Table of Contents

Executive Summary	4
Purpose	5
Goals and Objectives	5
User Profiles and Scenarios	6
Usability Requirements	8
Competitive Analysis	9
Competitive Analysis Summary	9
Competitor 1: Ann Arbor Area Convention and Visitor's Bureau	10
Content/Functionality	11
Strengths	12
Areas for Improvement	12
Competitor 2: State of Michigan – travel sub page	13
Content/Functionality	14
Strengths	16
Areas for Improvement	16
Functional Specification	17
Technical Specification	18
User Specifications:	18
Client-Side Specifications:	18
Server-Side Specifications:	19
Appendices	20
Appendix A: Site Outline	20
Appendix B: Structural and Functional Site Diagram	22
Global Navigation	22
Activities Section	23

Communities Section	24
Related Links Section.....	25
Message Boards Section.....	26
About Us Section.....	27
Appendix C: Wireframes	28
Home Page.....	28
Level 2 Sub Page	28
Level 3 Sub Page	29

Executive Summary

The web design firm of A2Inc. was hired to develop a website called A2roadtrips.com, a site to give Ann Arbor, Michigan area residents ideas for taking road trips within a few hours drive of the area.

The firm developed the purpose, goals and objectives with the client. User profiles were developed based on the client's ideal users of the new website. The Usability Requirements for A2roadtrips.com included a resolution-independent design and a 70% return rate for users per month.

Due to the uniqueness of the concept of A2roadtrips.com, there were no true competitors for a Competitive Analysis. Two websites that had some similar components were compared: the Ann Arbor Visitor's and Convention Bureau (<http://www.annarbor.org>) and the State of Michigan's sub-site for travel (<http://travel.michigan.org>).

The Competitive Analysis led the firm to include the following content in A2roadtrips.com:

- Attractions
- Recreation/Parks
- Arts
- Calendars of Events
- Shopping
- Searchable content
- Searchable categories based on region/county/city (scoped search)
- Keyword search
- Advertisers
- Coupons

During the Functional Analysis process, A2roadtrips.com included additional functionality:

- User submission of travel reviews
- A map linked to each destination
- Message Boards

Technical Specifications included a website designed for 800x600 optimal resolution and readable on browser versions 3.0 and higher (I.E., Netscape and AOL).

The website was designed for ease of navigation, and it has a shallow and broad structure by design. There are eight main categories, including a site map, and fifty-seven sub-categories. Diagrams are included in the back of the report under Appendices.

Purpose, Goals and Objectives for A2roadtrips.com

Purpose

To provide information and ideas to residents of the Ann Arbor/Ypsilanti area who wish to take a short, recreational trip out of town, no more than a two to three hour drive away. These may be day trips, or perhaps involve a one- or two-night stay.

Goals and Objectives

- Achieve 500 page impressions per day by end of first quarter up and running.
- Increase page impressions per day by 20% in each succeeding quarter during the first year.
- Obtain 10 advertisers in the first six months.
- Increase number of advertisers by 25% in next six months.
- Achieve a base of 5 other sites that will link to A2roadtrips.com in the first quarter.
- Double the number of linking sites by the end of the first year.

User Profiles and Scenarios

Group: Parents

Name: Jennifer Garcia

Occupation: Pediatric Physician at U of M Hospital

Personal Information: Divorced, age 54, 2 teenage sons.

Computer Skill: Moderate, uses PC, has no experience on a Macintosh, and has used the Internet for the past 5 months.

Computer Resources: PC at work (800 x 600), ISDN connection, Internet Explorer. Recently purchased a new PC for her home (800x 600), cable connection, Internet Explorer.

Disabilities: None

Description: Jennifer works very long and stressful hours. She recently purchased a new PC for home. Both of her sons use the computer for homework and for surfing the net. She and her sons would love to see a sporting event this Saturday. She needs to find directions to the venue and what time the game starts.

Group: Couples

Name: Matthew Harris

Occupation: Video Technician

Personal Information: newlywed, age 28, no kids

Computer Skill: Expert, uses PC and Mac at work and at home.

Computer Resources: At work uses both PC and Mac (1024 x 768) with T1 connection. At home he uses his Titanium Powerbook G4 laptop with AirPort Base Station to connect to the Internet. His work provides him with some of the best equipment! Internet Explorer is used both at work and at home.

Disabilities: Contact lenses, minor knee injury in senior year of high school.

Description: Matthew is a young newlywed looking to take his wife out on Friday night. His wife loves casinos and dining at nice restaurants. Lately Matthew has been taking an hour every other day to search for nice places to go. He has very fast connections to the Internet so he has no problem waiting for sites to download.

Group: Teachers

Name: Miles Jackson

Occupation: 4th grade school teacher at George Washington Elementary School

Personal Information: Married, age 43, 3 young children

Computer Skill: Moderate skills; confident running Microsoft Office and using the Internet; also uses some children's software for school purposes.

Computer Resources: Macintosh iMac at work and at home (both 800 x 600), ISDN connection at school, 56K modem at home, Internet Explorer 5.5 at home.

Disabilities: Wears glasses.

Description: Miles is always searching for ways to enhance his students' learning experiences with field trips a manageable distance from Ann Arbor. He often checks out a possible field trip with his own family first. This weekend, the kids would like to go a museum, while Miles and his wife are interested in seeing an iMax movie. They are unsure of the closest locations and how much this trip will cost. Miles uses his home computer with a 56K modem to get ideas for personal trips and school field trips as well.

Group: Hosts to Visitors

Name: Susanna Reed

Occupation: Office Manager for a dental office

Personal Information: Single, age 33, no children

Computer Skill: Expert, years of software experience. Comfortable using the Internet.

Computer Resources: Consumer PC at work and home (both 800 x 600); T1 connection at work and 56K dial-up at home. Internet Explorer at work and Netscape Navigator at home.

Disabilities: Uses wheelchair.

Description: For the past 11 years, Susanna has worked for Dr. Bright Smile D.D.S., a dentist in Ann Arbor, MI. She uses business software at work and feels very comfortable using it. She surfs the Internet while she is on her breaks and when she is at home. Using Internet Explorer, she often visits www.dentalsupplies.com to order supplies for the office. Susanna often uses the Internet for home shopping since she is in a wheelchair. Susanna's brother will be visiting from Texas and she is looking for fun side trips to make with him that are also accessible for her.

Usability Requirements

- Learning time/task time
Users will be able to use this site the first time without any training. First-time users will be able to find their topic of interest within two minutes of visiting the site; expert users (5 or more visits) will be able to find a topic within 30 seconds.
- Number of errors
95% of users will experience no fatal errors in completing a task.
- Subjective impressions
The average user satisfaction with the website will be 7 or higher (on a scale from 1-10; higher numbers indicate greater satisfaction).
- Revisits
At least 70 percent of users will return to the site at least once per month.
- Response times
Response time to get pages to users will be no more than 10 seconds. Sizes will be given for files that take more than 10 seconds to download at prevalent bandwidth available to most users.
- Resolution-independent design
Users will be able to see full web pages (without scrolling) regardless of what monitor size they have. Resolution-independent pages will adapt to whatever size screen they are displayed on.

Competitive Analysis

Competitive Analysis Summary

A competitive analysis was performed to assist in the development of A2roadtrips.com. In many ways, the A2roadtrips.com idea is unique to the recreation and travel industry. There are sub pages in competitors' sites that offer recreational and travel ideas throughout an entire state or region, but none that offer trips commencing from a particular area. Therefore, there are no true competitors for this new website.

Instead of providing a complete analysis of competitors' websites, there was an analysis done on sections of websites that offer a portion of what A2roadtrips.com plans to offer. These sites include those with destinations throughout the state of Michigan and those designed for a specific county. The competitors employ different labeling and organizational schemes for viewing their information. Further examination of these schemes should prove helpful in determining the optional organization of content for A2roadtrips.com.

Certain content and functionality appear to be standard in this industry and should be included in the A2roadtrips.com website:

- Attractions
- Recreation/Parks
- Arts
- Calendars of Events
- Shopping
- Searchable content

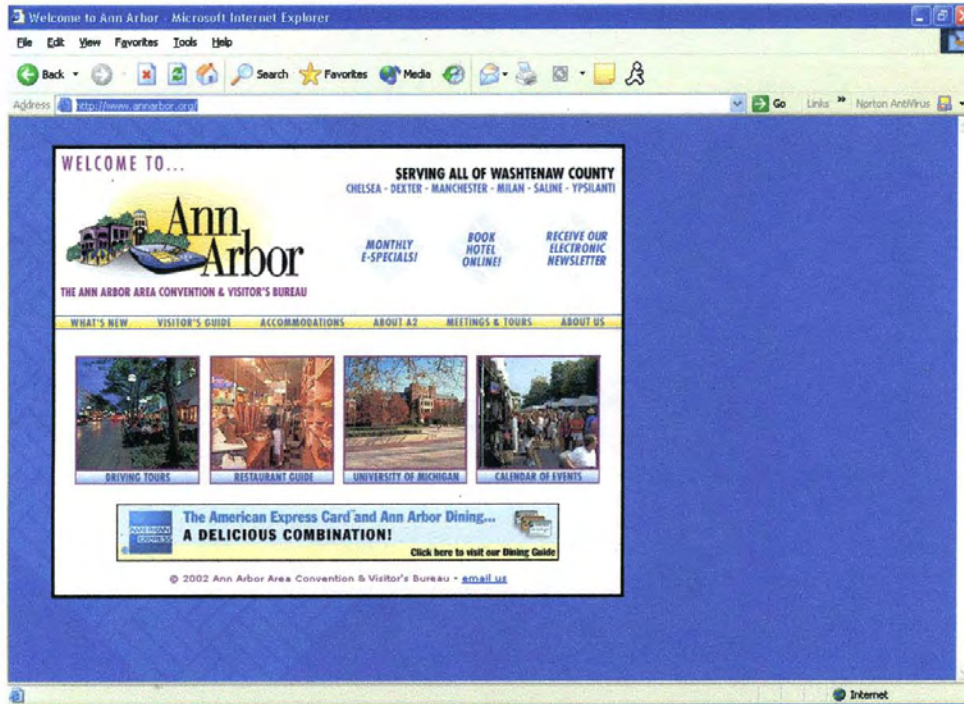
Additional content and functionality that are specific to one of the competitors and may be used by A2roadtrips.com include:

- Searchable categories based on region/county/city (scoped search)
- Keyword search
- Advertisers
- Coupons

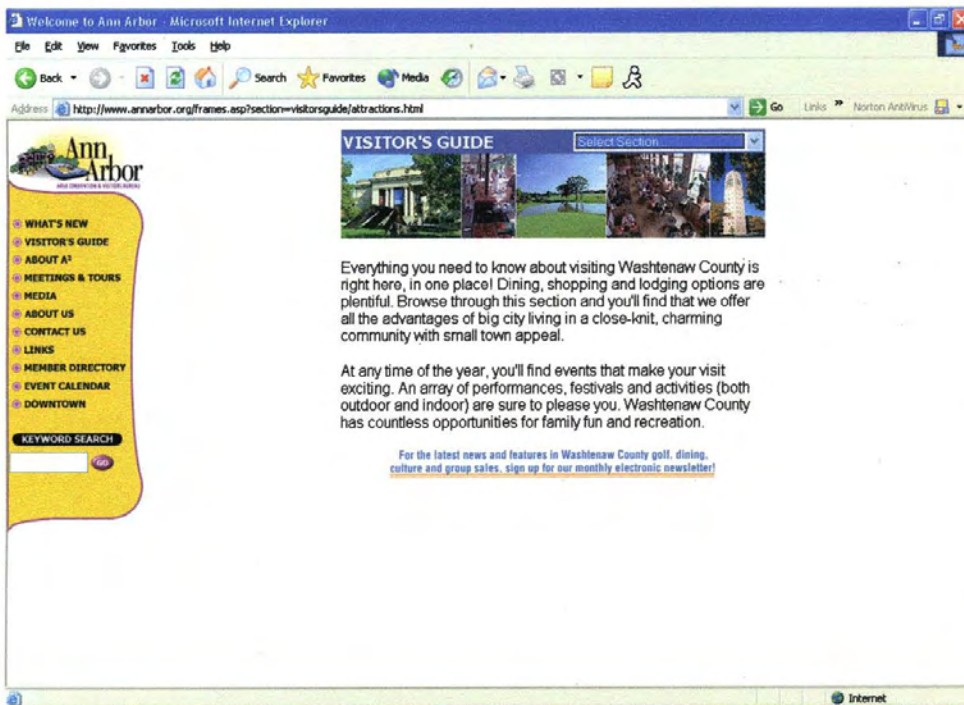
Content not offered in the competitors' pages that would be helpful to A2roadtrips.com include:

- "Mileage" or "Travel Time" counter from home to destination
- Pricing structure for Events, Recreation, Museums, etc.

Competitor 1: Ann Arbor Area Convention and Visitor's Bureau (<http://www.annarbor.org>)



- annarbor.org Home Page (home page extends for 1 screen at 1024 x 768)



- annarbor.org Sub Page (sub page *varied* for 1 screen at 1024 x 768)

Content/Functionality

Ann Arbor.org offers information for visitors and residents to Washtenaw County, and it touts the cultural and recreational opportunities of the Ann Arbor area.

Note: this website was going through a re-design process at the time that it was critiqued. The Home page content categories were changed, and this critique reflects that information. Level two pages of the structure had not yet been re-designed, and therefore, the navigation is not the same from Home to sub pages.

Specific content/functionality includes the following categories:

Categories Offered:

- What's New
 - Events Calendar, Press Releases, News
- Visitor's Guide
 - Accommodations, Attractions, FAQ, Arts, Dining, Festivals/Events, Golf, Nightlife, Shopping, Parks/Recreation
- Accommodations
 - Hotels, Innkeeper's Corner, Camping
- About A2
 - History, Downtown, Our Neighbors, Getting Around, U of M, City Directory, A2 Live Cam, A2 Links, Weather
- Meetings & Tours
 - Meeting Planning, Convention Space, Group Tours, Driving Tours, Wedding Planning, City Directory
- About Us
 - Contact Us, Member Directory, Press Releases, FAQ, Order Slides, Story Ideas, Mailing List
- Monthly E-specials
- Book Hotel Online
- Receive our Electronic Newsletter

Technology Used:

- Database-driven website
- Search options
- Form submission

Search Functionality:

- Keyword search within categories
- Calendar event search
- Member search

Supporting Content:

- Email to employees
- Membership form submission
- Meeting request for proposal submission
- Bureau address and phone number

Strengths

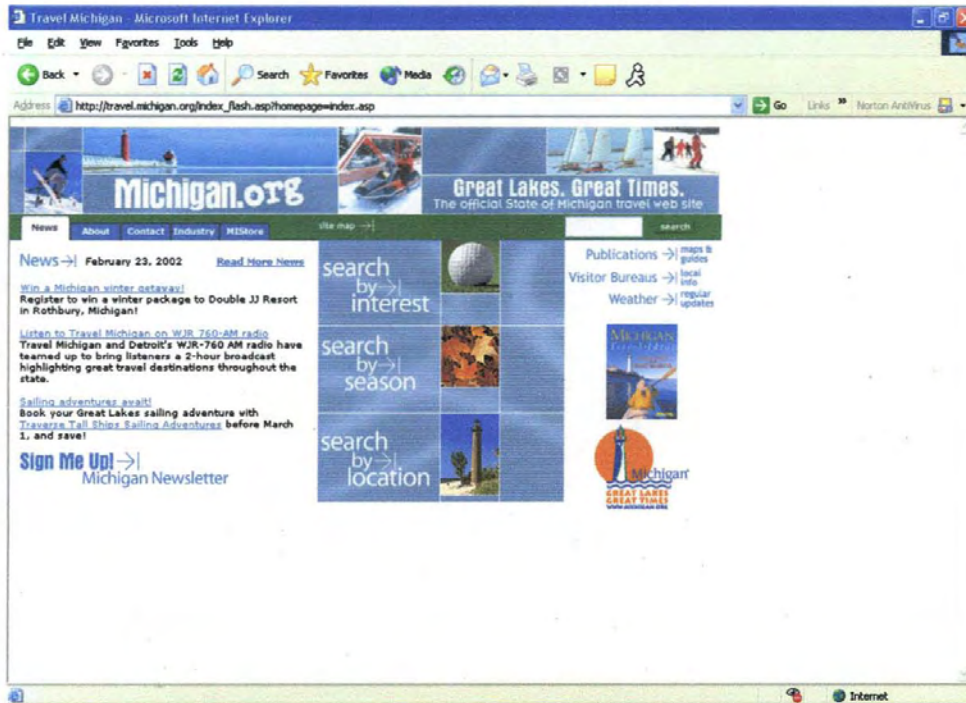
Simplicity and consistency are the greatest strength of this site.

- Page template and navigational items are easy to navigate (re-design process was not complete and items were not consistent)
- Site logo and Home links both return customers to the home page
- Minimal graphics assist in faster page loading
- Navigational bar expands within sub-categories to show user location

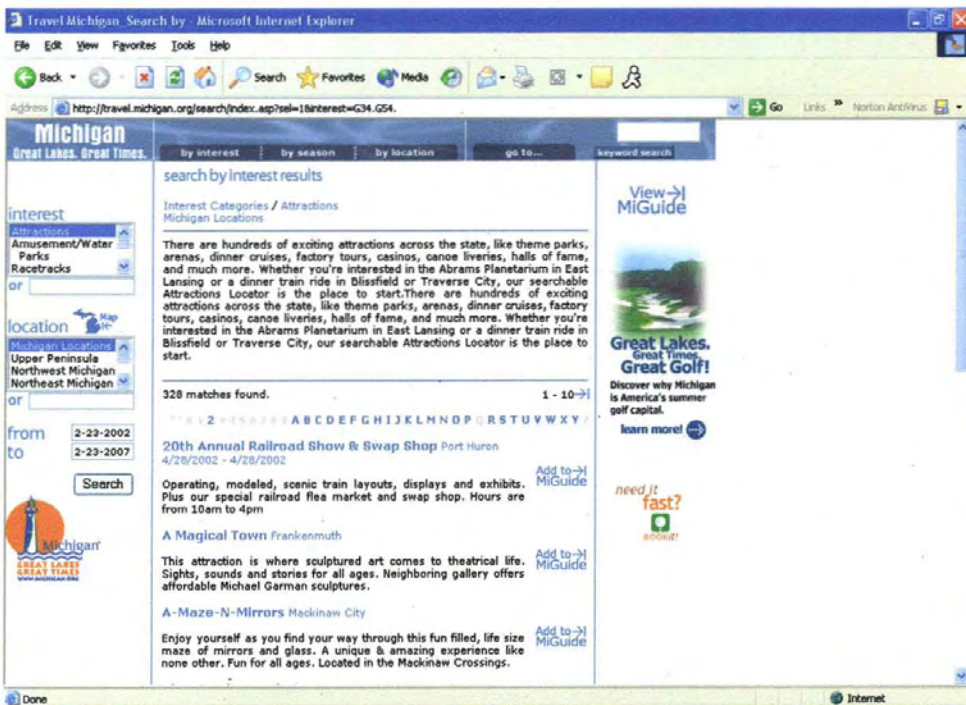
Areas for Improvement

- No home page link – user cannot return to the home page without using the back button
- Downtown Ann Arbor category could show a member directory specifically for the mapped area

Competitor 2: State of Michigan – travel sub page
 (http://travel.michigan.org)



- travel.michigan.org Home Page (home page extends for 1 screen at 1024 x 768)



- travel.michigan.org Sub Page (sub page extends for 2.4 screens (varied) at 1024 x 768)

Content/Functionality

The State of Michigan website offers travel and recreational opportunities throughout the State. The sub page of travel.michigan.org was selected for this analysis because it appeared to have the largest database of opportunities and the greatest breadth of searchable options.

Specific content/functionality includes the following categories (list below is not structured like the actual website):

Categories Offered:

- Accommodations
 - Bed & Breakfast, Cabin or Cottage, Historic Inn, Home/Condo/Apartment Rental, Resort, Specialty
- Agricultural Tourism
 - Agricultural Tourism Tour, Agricultural Museum Tour, Animal Farm/Park, Cider Mill, Farm Market/U-Pick Orchard, Herb Farm, Heritage/Historic, Horse Farm/Stables, Product Processing, Tree Farm, Wineries, Other Agricultural
- Attractions
 - Amusement/Water Parks, Racetracks, Casinos, Children's Attraction, Convention Center/Arena, Tours, Hall of Fame, Bridge/Locks, Miniature Golf Course, Nuclear Power Station, Planetariums, Professional Sports Facility, Rentals (ATV, etc), Sports Attraction, Transportation Facility
- Golf
 - Public/Semi-Private Golf
- Camping
 - Group, Modern, Rustic, RV
- Events
 - Agricultural/Food/Harvest, Arts/Crafts/Antique, Exhibits/Fine Arts, Fairs/Festivals, Holiday, Sporting, Other Event Type, Shows, Music/Theater, Snowmobiling, Skiing
- Restaurants
 - Bar/Lounge, Coffee Shop, Delicatessen, Diner/Grills, Ethnic Dining, Family Dining, Fine Dining, Gourmet Dining, Grill, Pizzeria, Sandwich Shop, Sports Bar, Sushi Bar, Other Bar, Brewery, Dinner Cruise/Train
- Packages
 - Attraction, Business/Corporate Traveler, Charter Fishing, Cultural, Event, Family, Festival, Golf, Honeymoon, Romantic Getaway, Restaurant, Shopping, Skiing, Snowmobiling, Other

- Shopping
 - Antique Stores or Malls, Arts and Crafts Shop, Farm Markets, Downtown Shopping District, Malls/Shopping Center, Flea Market, Outlet Mall, Specialty Shop(s)
- Tourism Org. & General Info
 - Associations, Convention and Visitors Bureaus, Destination Areas, Transportation
- Skiing
 - Cross-country, Downhill
- Boating/Paddle Sports
 - By-the-hour Chart, Cruises, Driving Charters (sic), Duck Hunting Charters, Fishing Charters, Full Day Charters, Half-day Charters, Multi-Day Charters, Other Charter Boats, Marinas, Rentals
- Cultural
 - Aquarium, Archeological Sites, Architectural Sites, Art Museum/Art Gallery, Automotive Museum, Historical Museum, Historic Ship, Historic Sites, Lighthouses, Maritime Museum, Native American Tribal Centers, Religious Shrine/Site/Chapel, Science Museum, Statuary/Sculpture, Symphony, Theater, Zoo, Other Cultural Attractions
- Nature Tourism
 - Biking, Botanical Gardens, Ecological Center, Fishing, Hiking/Backpacking, National/State Forests/Woods, National/State Wildlife Refuge, Nature/Bird/Wildlife Sanctuary, Nature Center, Nature/Plant/Wildlife Preserves, Nature Museum, Parks, Underwater Preserves, Waterfalls/Fountains, Other Nature
- Snowmobiling
 - Snowmobile Rental, Snowmobile Trails

Technology Used:

- Database-driven website
- Search options
- Form submission
- Dynamic menus

Search Functionality:

- Search by interest from home page
- Search by sub-category within category pages
- Region specific search from home page
- County specific search from home page

- City specific search from home page
- Search by season

Supporting Content:

- Send comments, questions
- Request for information
- Toll Free customer support
- Addresses for mail requests and in-person visits
- FAQ
- E-newsletter

Strengths

The large amount of content – in both categories offered and in support information is the greatest strength of this site.

- Title and logo links both return customers to the home page
- Navigational menu at top is consistent throughout
- Use of breadcrumbs to show user's position within sub-pages
- Search parameters for categories or locations of interest
- E-Newsletter to interested customers
- Mail offerings

Areas for Improvement

- Category listing order changes from home page dynamic menus to search menus in sub-pages
- Search options are so inclusive that content is frequently overlapped: i.e., "National/State Wildlife Refuge", "Nature/Bird/Wildlife Sanctuary" and "Nature/Plant/Wildlife Preserves" are all in the same search menu
- Visitors could benefit from a pricing structure for these different category searches: i.e., "Free" options within Museums, Parks, Skiing, etc.

Functional Specification

- Users can keyword search a database of 500 destinations.
- Searching can be scoped by city or distance, type of activity (culture, recreation, spectator sports, shopping, gambling, etc.), or audience (families with children, adults only, seniors).
- Search results may be sorted by distance or city, or type of activity.
- Special Events can be browsed by month.
- Every destination will be described, with information on hours of operation, admission fees, and other factual data. More subjective information will be given as well, such as highlights, what to avoid, appropriateness for different age groups/audiences, etc.
- Every destination will have a link to a map showing its location.
- A disclaimer will be visible on every page: "Actual days and hours of operation, admission fees, and other information may vary from what is posted here; please check with your destination before you go."
- Every page will have a link to the home page.
- Message boards will allow users to share opinions and ask each other questions about places visited, new destinations.
- Users will be able to write and submit travel reviews of places they have visited.

Technical Specification

User Specifications:

CPU Requirements:	Pentium 100 or faster	Operating Systems:	Windows 95/98 or higher, Mac OS 9.2 or higher
Memory:	32 MB or higher	Screen Resolution:	800 x 600
Color Depth:	256, 8-bit to 32-bit	Sound:	
Modem Speed:	56K Modem		
Browser Compatibility:	NS 3.0+, IE 3.0+, AOL 3.0+		
Identify Require Plug-ins:			

Client-Side Specifications:

Automatic Email Generation: No
Wire Feeds: No
SubMenus: Yes
Rollovers: Yes
Help Function: No
DHTML: N
Frames: N
JavaScript: Yes
Java Applet: No
Shockwave: No
Flash: No Version:
Streaming Audio: No
IF Streaming Audio, Technology?
Secure Area? No
Cookies: Yes
Active Server Pages: No
Estimated Number of Pages: 8 main categories / approx. 60 sub categories

Server-Side Specifications:

EXISTING		PLANNED	
Hardware:	Power Mac G4, 933 Dual Processor, 1GB,		
Operating System:	Mac OS X/Unix		
Server Software:	Apache		
Database Software:	Oracle 8		
Database Interface:	SQL		
Chat Software:	No		
Media Streaming:	No		
E-Commerce:	No		
E-mail Robot Software:	No		
Identify all Java, JavaScript, Perl, CGI scripts and their function:			
1.Java	Rollovers, HTML Links		
Security/ Encryption	No		
Protected Area:	No		

Appendices

Appendix A: Site Outline

1.0 Home

1.1 Activities

- 1.1.1 Art Museums
- 1.1.2 Historic Sites
- 1.1.3 History Museums
- 1.1.4 Natural History Museums
- 1.1.5 Science Museums & Planetariums
- 1.1.6 Music
- 1.1.7 Theater
- 1.1.8 Biking
- 1.1.9 Boating
- 1.1.10 Camping
- 1.1.11 Canoeing
- 1.1.12 Fishing
- 1.1.13 Golf/Miniature Golf
- 1.1.14 Horseback Riding
- 1.1.15 Ice Skating
- 1.1.16 Roller and In-line Skating
- 1.1.17 Skiing
- 1.1.18 Swimming
- 1.1.19 Cider Mills
- 1.1.20 Gardens/Nature Centers
- 1.1.21 Parks
- 1.1.22 Sports Centers
- 1.1.23 Zoos and Aquariums
- 1.1.24 Professional -- Spectator Sports
- 1.1.25 College -- Spectator Sports
- 1.1.26 Outlet Malls
- 1.1.27 Farmers' Markets
- 1.1.28 Flea Markets
- 1.1.29 Antique Malls
- 1.1.30 Casinos
- 1.1.31 Racetracks

1.2 Events Calendar

1.3 Communities

- 1.3.1 Battle Creek
- 1.3.2 Brighton
- 1.3.3 Detroit
- 1.3.4 Flint
- 1.3.5 Grand Rapids
- 1.3.6 Jackson
- 1.3.7 Kalamazoo
- 1.3.8 Lansing
- 1.3.9 Midland
- 1.3.10 Mount Pleasant
- 1.3.11 Port Huron
- 1.3.12 Saginaw
- 1.3.13 Toledo
- 1.3.14 Windsor

1.4 Related Links

- 1.4.1 Convention and Visitors' Bureaus
- 1.4.2 State Tourism Sites
- 1.4.3 Chambers of Commerce
- 1.4.4 Local and Regional Media Sites
- 1.4.5 Our Favorite Sites

1.5 Newsletter Sign-Up

1.6 Message Boards

- 1.6.1 Destinations
- 1.6.2 Trip Reviews
- 1.6.3 Romantic Getaways
- 1.6.4 Camping
- 1.6.5 Family Trips

1.7 About Us

- 1.7.1 Mission statement and background
- 1.7.2 Contact Form

1.8 Site Map

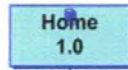
Note: Global Navigation in bold

Appendix B: Structural and Functional Site Diagram

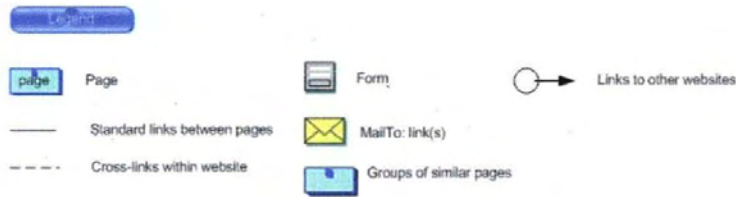
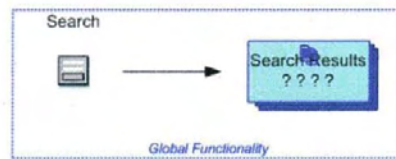
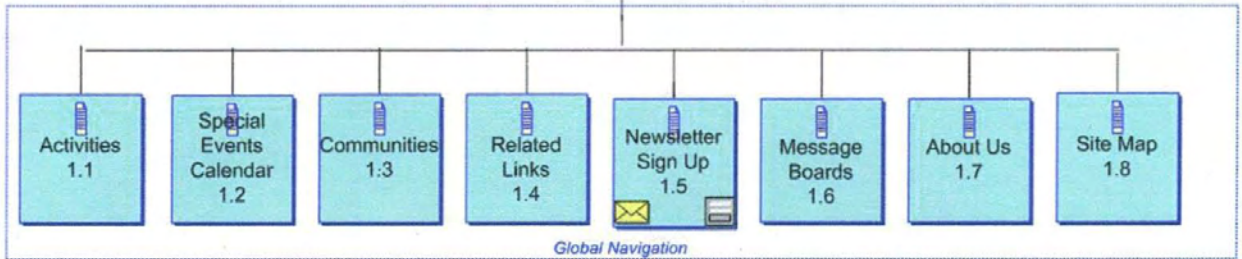
Global Navigation

Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02

Level 1



Level 2

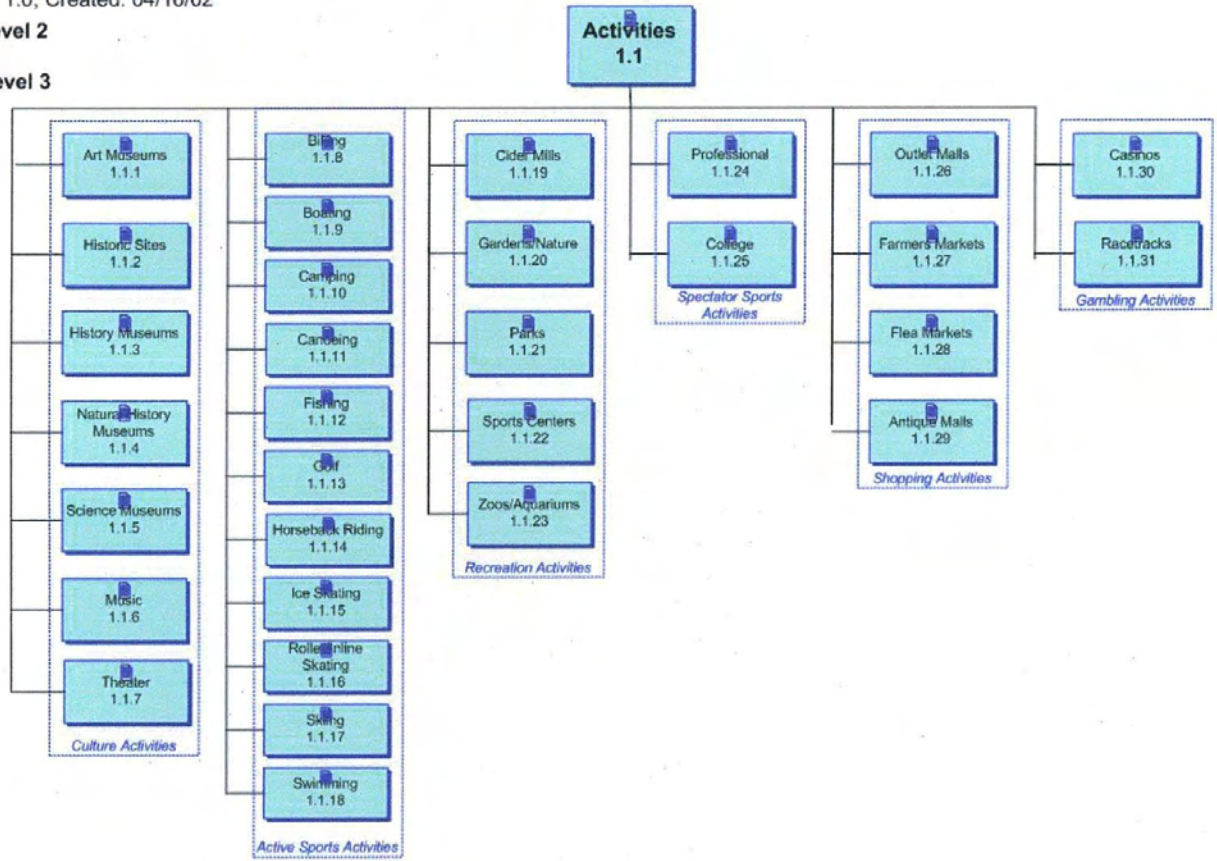


Activities Section

Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02

Level 2

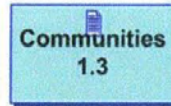
Level 3



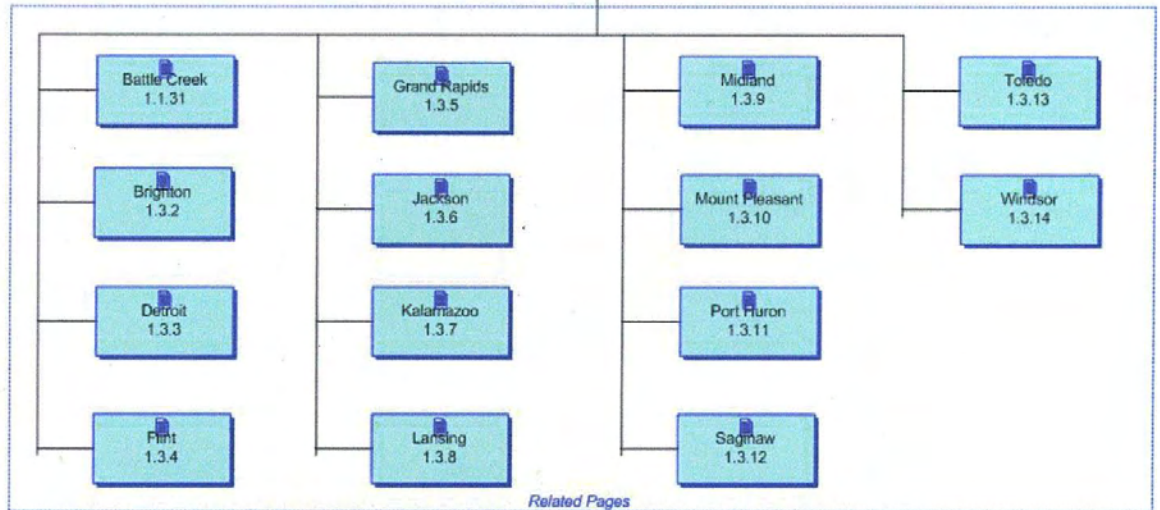
Communities Section

Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02

Level 2

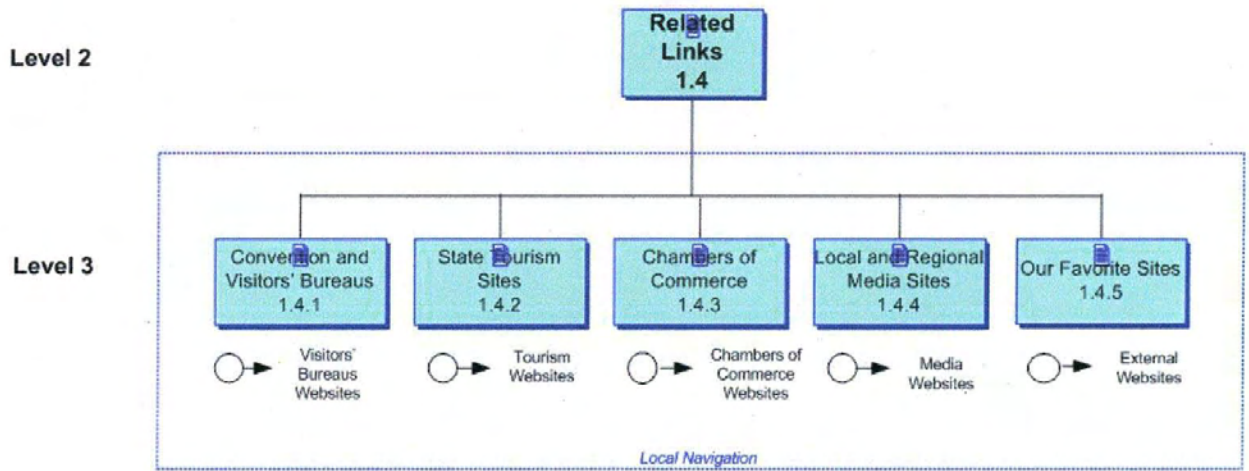


Level 3



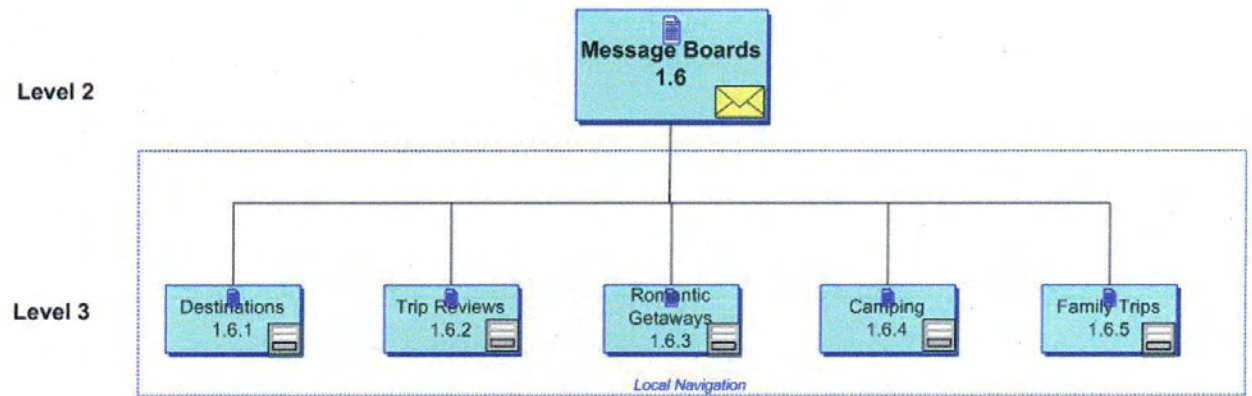
Related Links Section

Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02



Message Boards Section

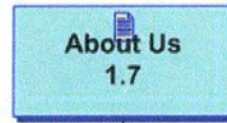
Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02



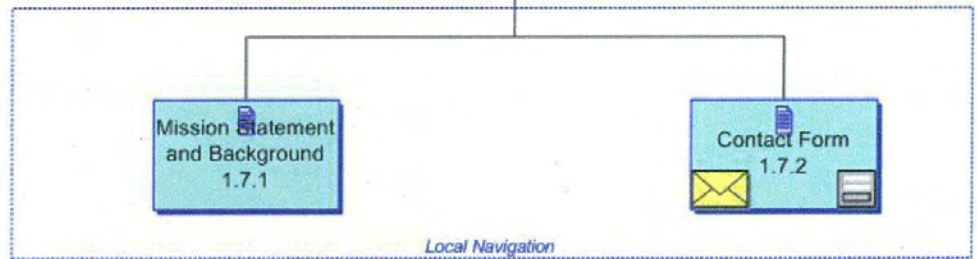
About Us Section

Structural/Functional Site Diagram: A2Roadtrips.com
www.a2roadtrips.com
v. 1.0, Created: 04/16/02

Level 2



Level 3



Appendix C: Wireframes

Home Page

Logo	A2roadtrips.com	Home Site Map About Us
Activities Special Events Calendar Communities Related Links Newsletter Sign Up Message Boards	<p>Welcome Message sample text sample text sample text sample text sample text sample text</p> <p style="text-align: center;">Image</p>	<p>Searches</p> <p>Keyword: <input type="text"/></p> <p>Type of Activity: <input type="text"/></p> <p>Location: <input type="text"/></p> <p>Miles Away from A2: <input type="text"/></p> <p>Audience: <input type="text"/> G O</p>
Advertisement		Advertisement

Level 2 Sub Page

Logo	A2roadtrips.com	Home Site Map About Us
Activities Special Events Calendar Communities Related Links Newsletter Sign Up Message Boards	<p>Home>Activities</p> <p>Culture Art Museums Historic Sites History Museums Natural History Museums Science Museums Music Theater</p> <p>Sportster Sports Professional College</p> <p>Shopping Outlet Malls Farmers Markets Flea Markets Antique Malls</p> <p>Gambling Casinos Racetracks</p> <p>Active Sports Biking Boating Camping Canoeing Fishing Golf/Miniature Golf Horseback Riding Ice Skating Roller/Skate Skating Skiing Swimming</p> <p>Recreation Amusement Parks Cider Mills Gardens/Nature Parks Sports Centers Zoos/Aquariums</p>	<p>Searches</p> <p>Keyword: <input type="text"/></p> <p>Type of Activity: <input type="text"/></p> <p>Location: <input type="text"/></p> <p>Miles Away from A2: <input type="text"/></p> <p>Audience: <input type="text"/> G O</p>
Advertisement		Advertisement

Level 3 Sub Page

Logo	A2roadtrips.com	Home Site Map About Us
<p>Activities</p> <p>Special Events Calendar</p> <p>Communities</p> <p>Related Links</p> <p>Newsletter Sign Up</p> <p>Message Boards</p>	<p>Home>Activities>Professional Sports</p> <p>Sample text External link</p> <p>Sample text External link</p> <p>Sample text External link</p> <p>Sample text External link</p>	<p>Searches</p> <p>Keyword: <input type="text"/></p> <p>Type of Activity: <input type="text"/></p> <p>Location: <input type="text"/></p> <p>Miles Away from A2: <input type="text"/></p> <p>Audience: <input type="text"/> <input type="button" value="GO"/></p>
<p>Advertisement</p>		<p>Advertisement</p>