APPENDIX I

Website Documentation

- **Website Alternatives and Recommendations Technical Memorandum**
- **Website Statement of Services - from AASP NTP2**

Website Alternatives and Recommendations Technical Memo

Document developed by:
Planning Technology, Inc./ Dowl Engineering
March 18, 2008

The purpose of this task was to identify and present options for internal (DOT&PF and FAA) and external (public) websites and associated applications to support and enhance the Alaska Aviation System Plan (AASP) efforts.

Background & Activities

The Project Team initially reviewed the existing DOT&PF website and databases, while evaluating the web server hardware, software and infrastructure. The Team also reviewed the State of Alaska Information Technology Standards (Version 62 Dated January 24, 2008) and other information provided by the DOT&PF.

The Project Team met with the stakeholder Technical Work Group as initially formed by the DOT&PF and presented examples that have been used on other websites in other states, aviation agencies and airports as well as specific ideas developed for Alaska. Members of the Team collected relevant data, held meetings with key individuals, and conducted follow-up contact with several key stakeholders.

Stakeholders Technical Work Group Meeting Notes and Summary

Although the members and makeup may change as the project progresses, the DOT&PF formed an initial stakeholders Technical Work Group. The Project Team met with this Technical Work Group on February 20, 2008. Introductions were made, an overview of the AASP program was presented, and then each of the group were asked to vocalize their "vision, needs, and problems in aviation technology in Alaska." The Team presented examples that have been used on other websites in other states as well as specific ideas developed for Alaska. A full summary of the meeting is included in Attachment B and the Agenda and Attendees are listed below:

Agenda
Introductions
AASP Overview by T. Middendorf
Round the Table – Your Vision, Needs, and Problems in Aviation Technology
PTI Example Presentation
Open Discussion

Attendees

Tom Middendorf	Mgr. Trans Planning, DOWL Engineering
Nicole McCullough	WH Pacific
Matt Kimmel	FAA Airports Division, IT Contractor (Digicon)
Bob Ori	Project Director, Planning Technology, Inc.
Pat Cotter	DOT – Northern Region (GIS Planner)
Rich Sewell	DOT-SWA
Judy Chapman	DOT - Northern Region
Chase Stockon	Technical Director, Planning Technology, Inc.
Jeannie Johnson	Sr Aviation Leasing Specialist, Alaska DOT&PF
Andy (Andrea) Morton	Chief Engineer, Anchorage International Airport

Kristen Fishburn	GIS Specialist, DOWL Engineering
Matt Freeman	FAA Airports Division

Recommendations – Internal / External Web Applications

It is the recommendation of the Team to develop the website in multiple sections to a) initially support the activities of the AASP while b) building the site for the long term conveyance of aviation information and data and to be used for application deployment. (*See Attachment A: AlaskaASP.com diagram.*) The development of this multi-section site requires the following steps:

Design Requirements and Development Plan

The purpose of the Design Requirements effort is to clearly identify all of the user needs and application specifications. The will enable the development team to verify that the application will fulfill the needs of the State and that all needs identified are complete and correct. This includes user, security, and data and applications requirements.

The purpose of the development plan is to convert all of the logical requirements gathered into physical specifications and a plan for the site development. The development plan will include all the information necessary to develop the working site. This includes the development of the brand and web page graphics as well as all the prototypes.

Development and Programming

Working closely with the other members of the Team, particularly the public involvement specialists resulted in an outline of the Public Involvement Section of the AASP public site. In order to properly convey the necessary information and messages for the AASP, the topics to be developed should, at a minimum, include:

Public Involvement Section
- What is AASP?
  - Background
  - Project Goals
  - Project Vision
  - Major Project Milestones
- Project Team / Point of Contact
- Project Schedule
- Meetings & Meeting Documents
- Survey (and restricted access survey management)
- Identification of Issues
- Planning documents

An important element in the issues collection and development of the AASP will be the use of an online survey. The survey will be used to elicit feedback and input from as many sources, aviation and otherwise, as possible. The survey will also require a secure administration module to manage, analyze, and report on the survey results.

It is recommended that additional aviation sections be added to the website in order to present interesting, dynamic aviation data to entice stakeholders to return to the site. While the specific utilities can be enhanced, possible first topics include:

Aviation Section
Aviation Calendar
Aviation Links
Basic Background and Aviation Feature Mapping
Other Aviation Activities / Information

Note: This may include possible kid's activities to assist in the implementation and data support particularly in the villages where the elders may or may not be involved or even computer and/or web access challenged. Involving the children in fun aviation activities is one of many approaches that may be utilized to increase adult participation in the AASP process.

GIS / mapping capability has always been desired by the State. Many of the capabilities and tools are complex in their use and analysis. Therefore, after meeting with the Stakeholders Technical Work Group, the Team divided the mapping capability into two sections – a Public Aviation Mapping Information System and a Restricted Advanced Aviation Mapping Information System.

The Public Aviation Mapping Information System will provide a graphical interface to the data collected during the initial phase of the AASP. The system should be a graphical user interface to an online geographical mapping system to provide both a visual map depiction and relevant textual information associated with the map features. The data for public consumption should be of a general simplistic nature and based on the evaluation and development of the data sources from the inventory tasks.

A Restricted Advanced Mapping Information System should be developed with the more complex data and application tools required by the more advanced aviation users. This should be a secure login implementation and include mapping, data, and application capabilities to assist team members in warehousing, reviewing, editing, analyzing, reporting, maintaining and archiving components from the AASP.

Hosted Environment / Infrastructure

It is recommended that the website both public and restricted sides be “externally” hosted by the Project Team, as a minimum, during the project development to allow for flexibility and rapid modifications with little disruption or delay. Once developed and the AASP project is completed, the site can be evaluated for inclusion in the state server environment. Although not originally hosted in the state server environment, the site should meet the state requirements to the best degree possible to minimize transition efforts. The public site should strive to meet all Federal Section 508 requirements as well as the State of Alaska IT Standards.

The recommendations herein should assist in the planning and production of NTP2 and the resulting website can greatly enhance and support the public involvement efforts of the aviation system plan while creating a portal to accurate, timely, secure and useful aviation data for the entire State of Alaska and the aviation industry. It is also understood by the Team that changes in technology, environment and staff members is inevitable and flexibility in all aspects can be accommodated.

Summary of NTP 2 Scope

A summary of NTP 2 of the AlaskaASP.com development effort will include the following work tasks and products.

* AASP Design Requirements and Development Plan
  The purpose of this task is to clearly identify all of the user needs and application specifications. This will enable the development Team to verify that the application will fulfill the needs of the State and that all needs identified are complete and correct.

* AASP Public Involvement Site Development, Programming and Implementation
  This task will involve the development of the portions of the AlaskaASP website pertaining to the public involvement and outreach of the Aviation System Plan. The task includes two sections: Alaska ASP Public Involvement Section and Resources and the Utilities Section.

* AASP Outreach Survey Application
  An important element in the issues collection and development portion of the Alaska Aviation System Plan is the use of an online survey. The survey will be used to elicit feedback and input from as many sources - aviation and otherwise - as possible. The Team will develop the online survey based on content and questions developed and approved by the State. The survey may allow anonymous users to complete the survey but will solicit full contact information for possible follow-up. In addition, the Team will furnish a secure Survey Management section for results review, data export, and possible survey management.

* AASP Public Aviation Database and Aviation Mapping Information System
  As part of the Public Information Site, there will be a Public Aviation Mapping Information System to provide a graphical interface to the data collected during the initial phase of the AASP. The system will be a graphical user interface to an online geographical mapping system to provide both a visual map depiction and associated textual information associated with the map features. It will be developed as a graphical web based system utilizing simple on-demand (no client installation) web browser map generation. Simplified selection of features to present related textual data will be utilized. The data for the public consumption will be of a general nature based on the evaluation and development of the data sources from the inventory tasks. Typical data sources

will likely be similar to the FAA 5010 NASR facility data, FAA Obstruction data, available Airport or statewide aerial imagery, and FAA Airspace (Sectional and Terminal Area Chart) raster images. Formats will vary but likely to include shape files, CAD drawing files and raster (TIF, ECW, JPG, SID). In addition, Ikonos imagery will be obtained for 30 airports along with the ALP vector drawings as an overlay to display the capabilities of the mapping system.

* AASP Internal Aviation Mapping System and Applications
  As part of NTP 2, a "shell" or "core" Restricted Advanced Mapping Information System will be developed and populated with limited data to demonstrate the potential for AASP team study use. This will be a secure login implementation and include mapping, data and application capabilities to assist team members in reviewing and analyzing components from the AASP. This would provide the foundation for expanded development of other mapping capabilities that would be incorporated in the next phase of the project.

The deliverables for NTP 2 will be the AlaskaASP.com web site that will be hosted, updated and managed by the Team.

Possible Future Applications to Consider

Statewide Interactive Master Planning and Airport Layout Plan (iALP) system

In the past, the complexity of maintaining and distributing Master Planning and Airport Layout Plan (ALP) data, required by States and the FAA, has proved to be challenging. With the advent of digital data and documents along with web based technologies, the effort of maintaining this planning data and associated required documents has been reduced tremendously. The hardcopy Master Plan and ALP has typically been difficult to access and make available to end users without a working knowledge of CAD software, knowing where to find the right files, or finding a way to print a legible version.

With the growing interest by airports, States, the FAA, and other industry user groups in the web based ALP's planning and operational uses, it would be beneficial to the State, and the FAA, to bring more Master Plans and iALPs on-line for airports at various activity levels, thereby making the collective information readily available to end user groups.

The following functions are available with these applications and systems.

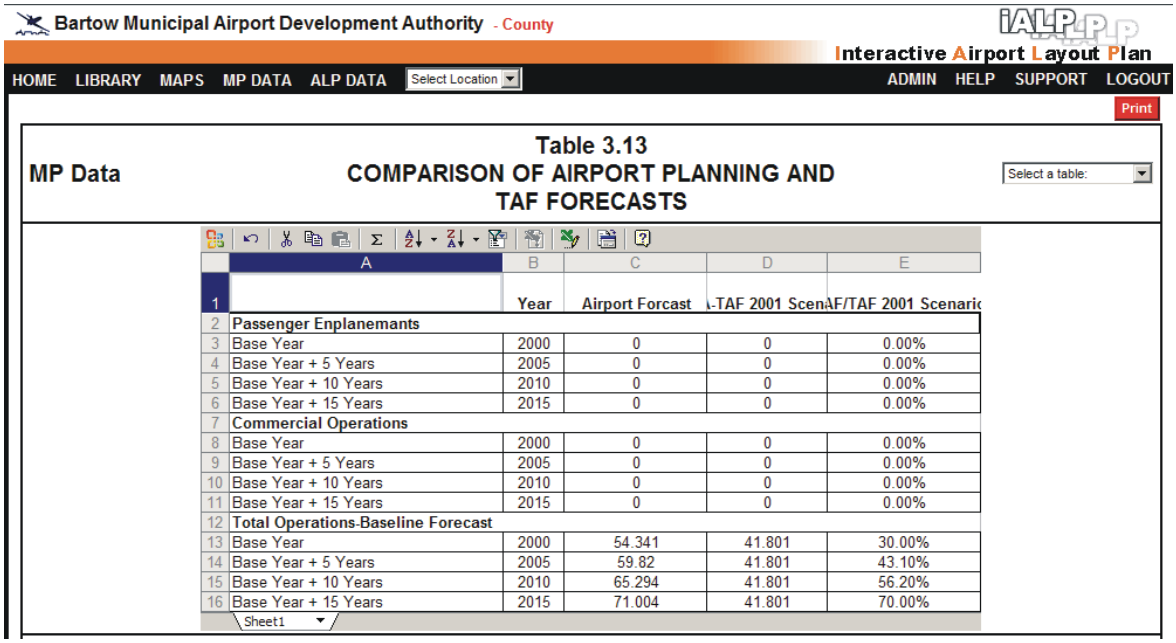
Master Planning

* Forecasting Module - Provide Airports and agencies web based forecasting validation tools. Also, comparison tools are also incorporated for analysis with other data sources.

  Demand/Capacity - The FAA Demand/Capacity programs have been developed into a web based tool for Airports and agencies to utilize for airfield analysis with the results stored in the overall database.

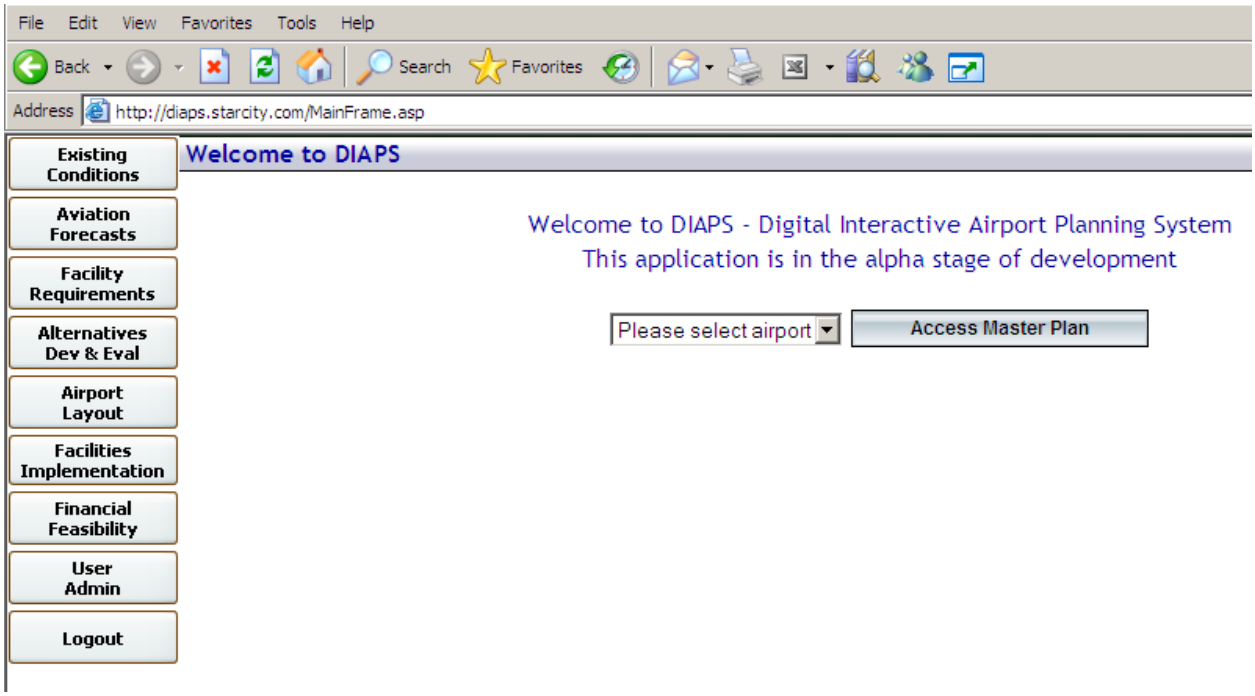
  Other Tools - Other web based tools developed and implemented include a pre-planning module for Master Planning scope development, alternatives development, costing and project financial development. Also developed are automated review modules for each phase of the Master Planning process.

Sample screen shots are shown below.



	A	B	C	D	E
1		Year	Airport Forcast	-TAF 2001 Scen	AF/TAF 2001 Scenari
2	**Passenger Enplanemants**				
3	Base Year	2000	0	0	0.00%
4	Base Year + 5 Years	2005	0	0	0.00%
5	Base Year + 10 Years	2010	0	0	0.00%
6	Base Year + 15 Years	2015	0	0	0.00%
7	**Commercial Operations**				
8	Base Year	2000	0	0	0.00%
9	Base Year + 5 Years	2005	0	0	0.00%
10	Base Year + 10 Years	2010	0	0	0.00%
11	Base Year + 15 Years	2015	0	0	0.00%
12	**Total Operations-Baseline Forecast**				
13	Base Year	2000	54.341	41.801	30.00%
14	Base Year + 5 Years	2005	59.82	41.801	43.10%
15	Base Year + 10 Years	2010	65.294	41.801	56.20%
16	Base Year + 15 Years	2015	71.004	41.801	70.00%

Sheet1



iALP

The Interactive Airport Layout Plan (iALP) system are web based tools that allow airport staff an easy way to manage the ALP planning process to include dissemination of accurate data, FAA analysis on proposed features and data maintenance management. Some capabilities include the following.

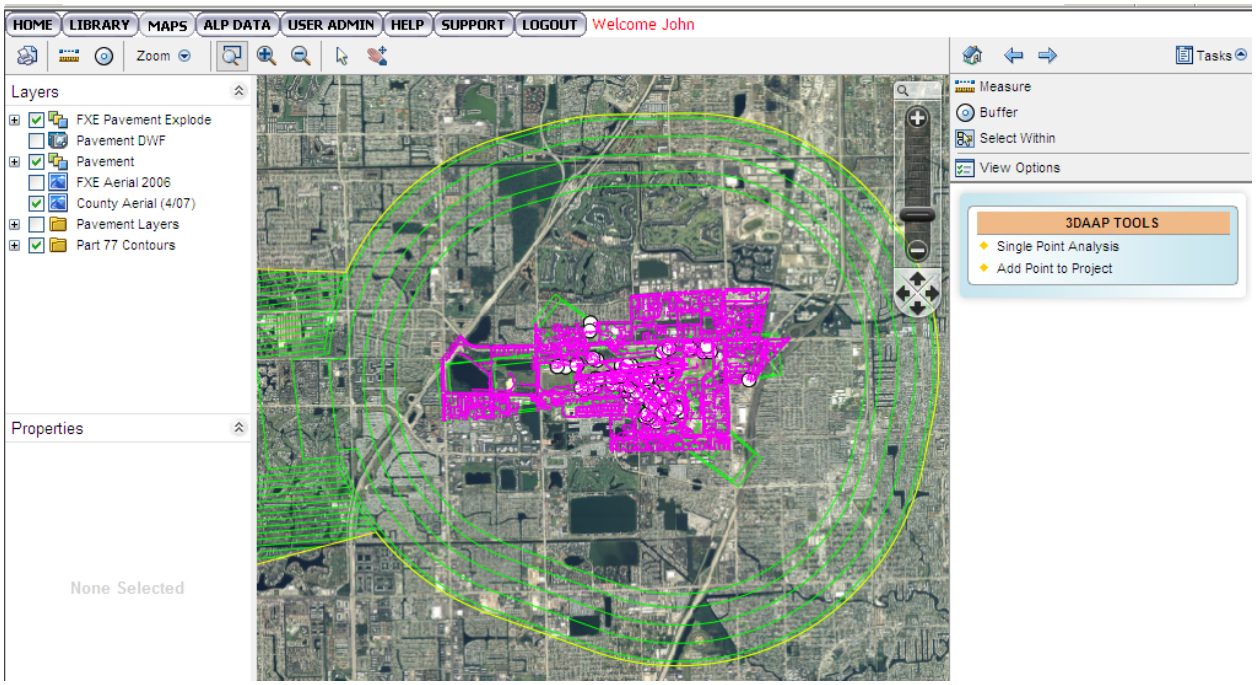
* Access to graphical data (CAD drawings and high resolution accurate aerial photos) for viewing, measuring and coordinate location purposes on any computer without any purchase of software.

* Easy to use interface for users that allows the capabilities of a CAD package without the intense learning curve associated with a CAD package.

* All FAA analysis criteria are programmed in the tools so that users can easily view the impacts of the proposed development without having to rely on the FAA and/or interpretation of FAA criteria documentation.

* Graphical data is standardized so that all users will be utilizing the same format for any efforts undertaken which minimizes the data maintenance efforts.

A sample screen shot is shown below.



Automated CIP

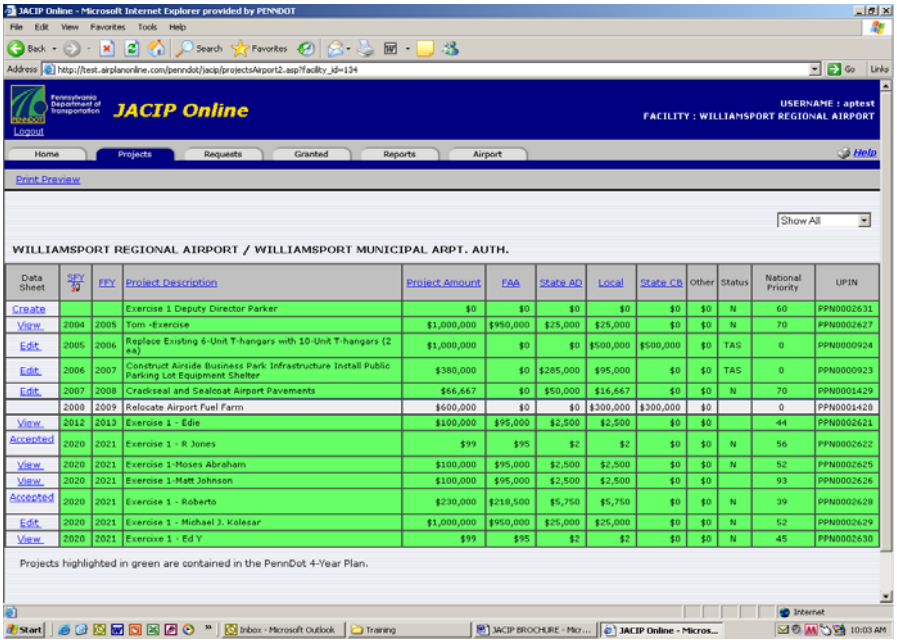
The Joint Airport Capital Improvement Program (JACIP) was developed to electronically manage aviation programming efforts including future programs, Airport Capital Improvement Program and any specified long term programs. It is a web-based tool designed to assist each stakeholder - airport, state and FAA with their unique but interrelated airport planning and programming responsibilities. Some of the capabilities include the following.

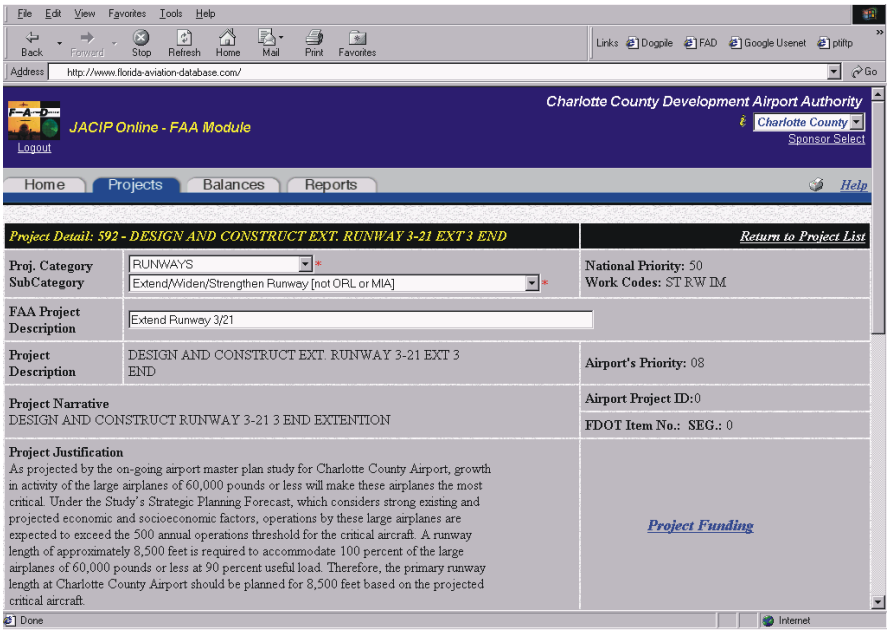
* An aviation project programming tool
* A simplified, user-friendly data entry port
* An internet database application that will automate the submission of future plans
* An efficient mechanism to share real-time information on airport development needs and proposed projects included in the future plans
* A flexible report generator
* Automated project coding and national prioritizing
* A major reduction in duplicative paperwork for all stakeholders

The JACIP program is made up of three independent modules:

1) JACIP - Airports is for use by airport managers, owners, commissioners, and municipalities;
2) JACIP - FAA is designed for use by aviation planners at the FAA
3) JACIP - State is for state aviation planners.

The modules operate well individually, but are maximized by working in conjunction with one another to provide a coordinated capital improvement program system. Sample screen shots are shown below.



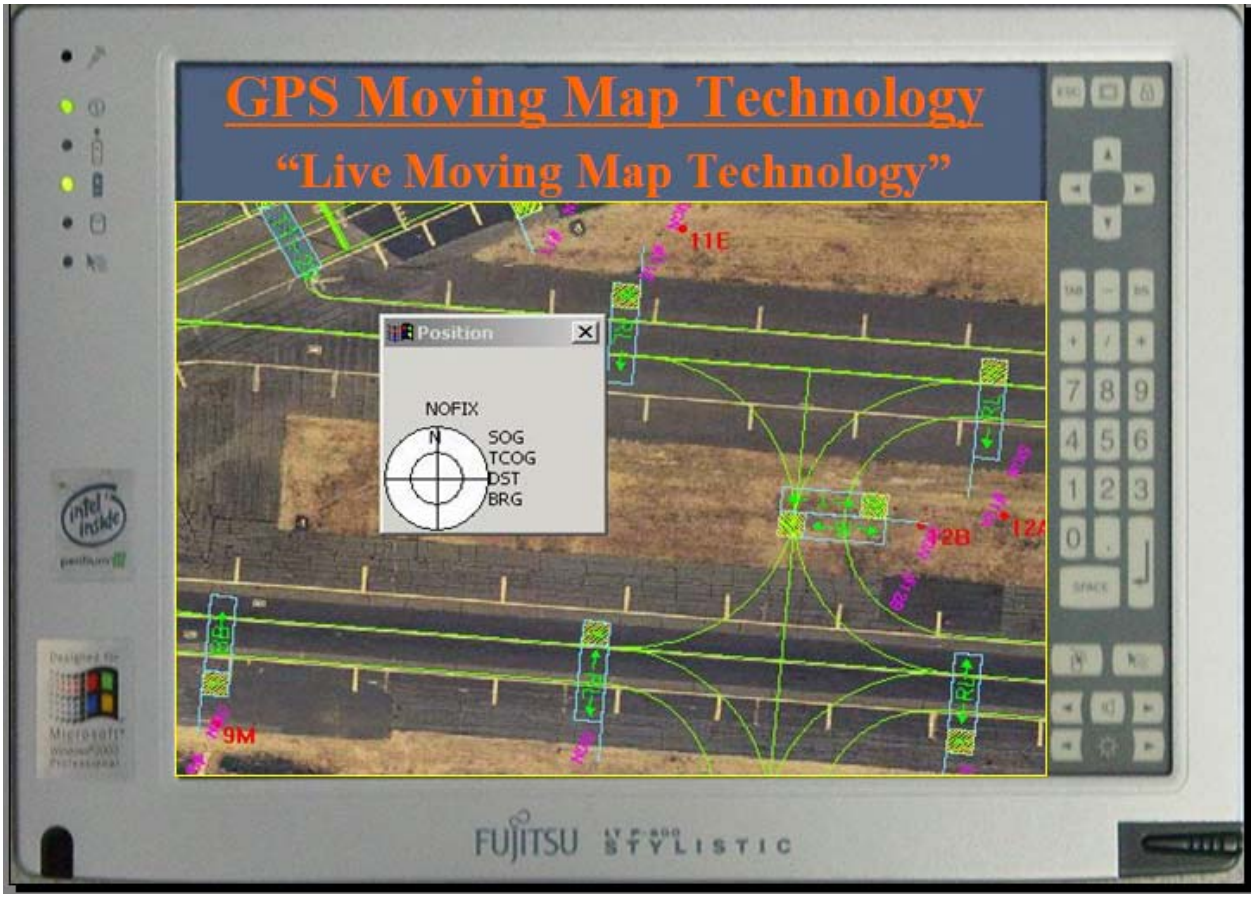


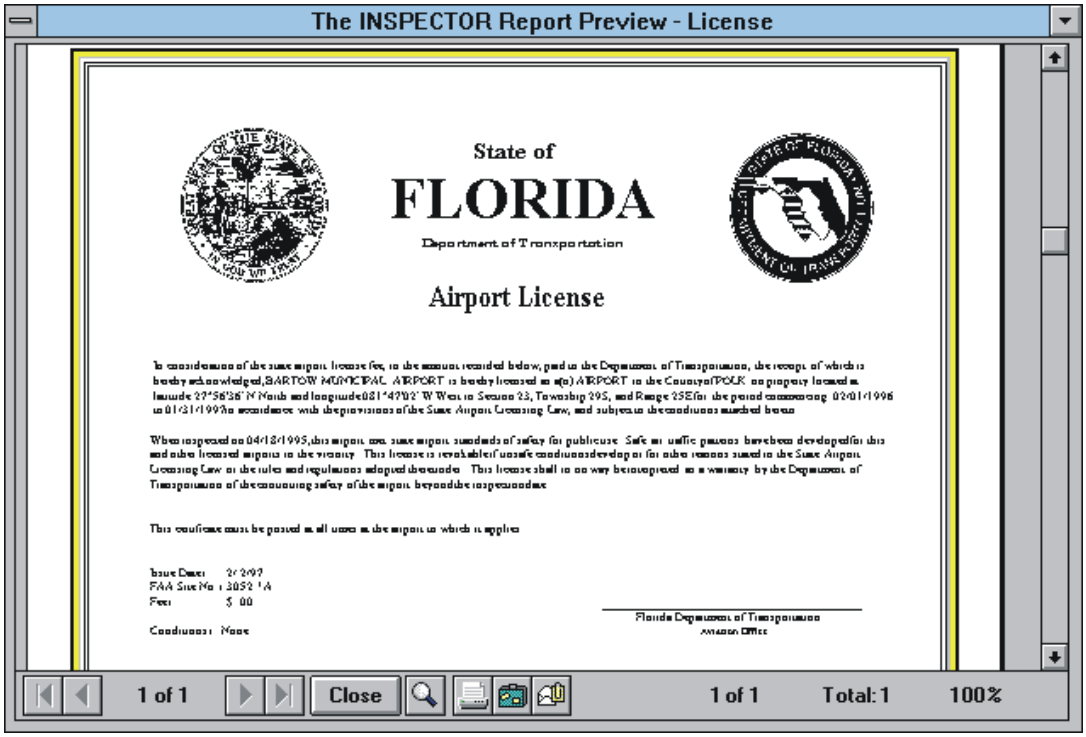
Mobile Airport Inspection Tool

This application involves the use of field mobile devices and software that allow users to inspect airports for FAA FAR Part 139 requirements, State inspection requirements and other specific detailed aspects of an airport. The following capabilities are included in this application.

* Use of existing accurate CAD, GIS and aerial ortho imagery
* Integration of GPS moving map technology
* Data transfer to State's information and mapping systems
* Field photo capture capabilities
* Licensing generation

This application functions on mobile devices and can be utilized locally or via the web. Examples of the system are shown below.




The INSPECTOR Report Preview - License
State of
FLORIDA
Department of Transportation
Airport License
1 of 1
Close
1 of 1
Total: 1
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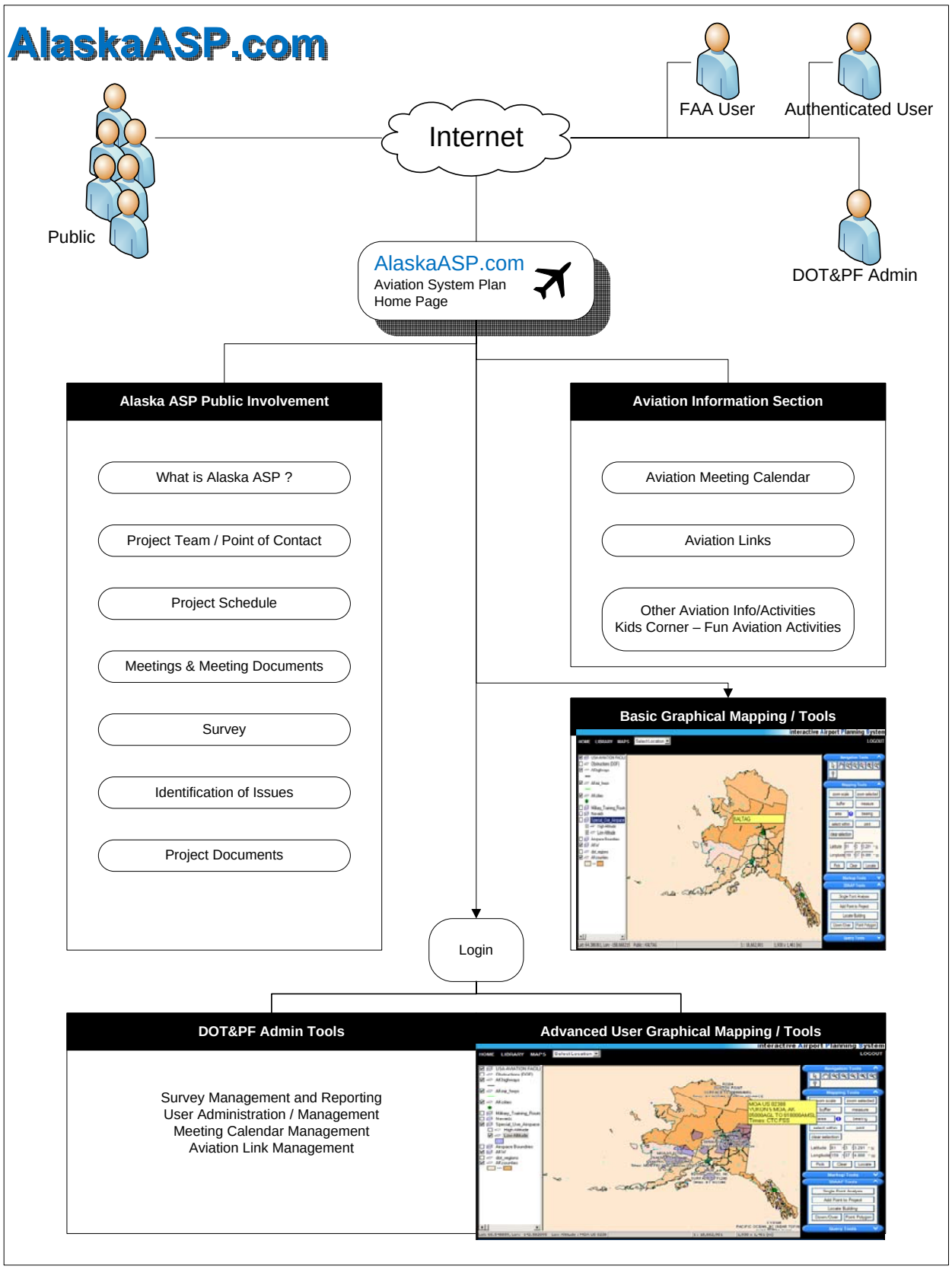
ATTACHMENT A



Alaska ASP Planning Meeting
Website/GIS Technical Work Group
February 20, 2008
DOWL Engineering Offices

Agenda

Introductions
AASP Overview by T. Middendorf
Round the Table – Your Vision, Needs, and Problems in Aviation Technology
PTI Example Presentation
Open Discussion

Attendees:

Tom Middendorf	Mgr. Trans Planning, DOWL Engineering
Nicole McCullough	WH Pacific
Matt Kimmel	FAA Airports Division, IT Contractor (Digicon)
Bob Ori	Project Director, Planning Technology, Inc.
Pat Cotter	DOT – Northern Region (GIS Planner)
Rich Sewell	DOT-SWA
Judy Chapman	DOT - Northern Region
Chase Stockon	Technical Director, Planning Technology, Inc.
Jeannie Johnson	Sr Aviation Leasing Specialist, Alaska DOT&PF
Andy (Andrea) Morton	Chief Engineer, Anchorage International Airport
Kristen Fishburn	GIS Specialist, DOWL Engineering
Matt Freeman	FAA Airports Division

Round the Table

Matt Freeman: We are partners with the state on funding projects. So the questions we always have are: Are we doing projects too soon, too late? Are our funding priorities correct? Are our investments appropriate? Are they justified? Who is using our facilities? Regarding the inventory: Who is using each airport and who is using what routes … where are the people going? Possible mapping opportunity for geo-analysis. When a carrier leaves Fairbanks …where is it going?

Supportive of a better database of airport information. Pavement management database is currently pretty good. There is limited staff expertise to get and update data, so that should be considered.

The APEB process scores projects and the process is a little political but the process works pretty well. [Rich Sewell clarification: – The Aviation Project Evaluation Board (APEB) is made up of 6 Directors and the planning commissioner – projects are scored by 16 criteria on best professional practices. The process is much more objective now

than it used to be.] Are these criteria still appropriate? These criteria include: Aviation hazards, health and quality of life, on the road, etc.

Kristen Follow-up Question – For GIS, what kind of airport inventory tools do you have now. Matt –We have a pavement mgmt tool (statewide) with some basic data. We can produce very basic maps.
Judy – I would really like to see that route structure you discussed and a fleet mix. If the system could show you that, it would help us evaluate runway extensions etc. It allows us to plan and evaluate.
Bob – VLJs require 3500 and an LPV. Do you have a plan to allow that? Matt – we have too many gravel runways.
Rich – I was at Eclipse, they have a 2400 ft capability and a gravel kit. So it is a very real possibility. I know someone with Global Native Community Coop and they are looking at VLJs to service the state.

Nicole: We have collected 34 databases so far, some are incomplete. We have been collecting airport master plans and aviation system plans. Bureau of Indian Affairs database is a good one, but not really aviation related.

Pat: Whatever we do, we should be compatible with DOT&PF HQ standards [GeoDatabase], (Highway data only for now, mile posts, centerlines, etc).

Judy: eDocs – State system, we have tried to work with it. We all have ArcGIS, but we all go to Pat for question answers. It would be nice if we had a web based tool that we could run simple queries. Simple like Muni's GIS rather than complex like ArcGIS. Would like "clickable maps" with basic airport information, ALP's, and ability to do queries. Should be simple and intuitive to use.

Matt – There has been a lot of geospatial data collected over the last couple years in Northern Region. Pat has been coordinating this. It is catching on and we have a users group that discusses new datasets.

Rich: We have a highway base. If you could have an aviation component, that would be great. Bob: And airports require 3D for airspace, etc. I have written computer code and I am savvy, but many users are not –so it has to be simple to use. I would like to see project evaluations (each region prepares it different). Some regions use Access. We need a standardized APEB package. Only used once or twice per year. Judy can't see the projects. This is a huge opportunity to improve the process. Must be easy to use. Like Google, pick a community, upload all relevant documents. ALPs.

Judy: I'd like to have everything you presented; it would make my job easier. I want to see the ALP layers, I want to see complex leasing information (it would also help our leasing officers manage leases).
Attach photos to airports. We take pictures of airports and projects, we attach
Deferred maintenance projects are funded by the State. We have all CIP projects in M and O. Would be nice to show CIP projects completed and planned.

Pie in the sky – everyone has the standard data (5010 inventory) … weather cam data would be nice. All the grants at each airport, ops data, Master Plans, geotech studies, etc.

Rich – 5010 three year public airport inspections. We take pictures. It would be nice to include those pictures. Pictures might be used by APEB later. Any system would need to factor in DOT&PF limited staff to maintain the system.

Jeannie – We spend a lot of time running around trying to integrate the information. This person is working a project and that person is working on the same project? I would like to see a streamlined process. System must be linked to make it valuable. It can't be standalone. Another piece is creating an entirely new website for DOT and Aviation. I work with eLeasing that people access through the DOT site.

Andy – Don't use GIS to do what you don't do anyway. If you don't track it now, don't start. GIS only what you do now. Anchorage can link up to the City now.

Judy: Statewide aviation needs a contact person identified as the Specialist. If someone is not already designated.

Break

PTI Demo (Presented by Bob Ori)

JACIP / PRPA Grant / PRPA iALP lease system / POS iALP

Jeannie is very interested in lease system and would like to be able to demo at a staff meeting to get people excited. They are currently using an in-house developed DOS system called RAZ. It maintains the data and does the billing. (We don't have the billing system in the PRPA portion.) Jeannie would like to plan for the replacement of RAZ. She is now the head of leasing at Central Region.

Andy: Do we really have Part 77 surfaces for all the airports? Bob demonstrated Part 77 generation for the entire state.

Google Pro is in use in the northern region (at least one license to test it). Bob: Skyline Globe Pro is better. There is also ArcExplorer which is ESRI's version.

Discussion

Bob: I think the CIP is certainly an important piece. Another area may be Airspace for notification at least.

Matt: I would like to see a comprehensive Inventory Platform (eALP like). I don't really care about the CIP side, but I understand that someone may need that. Andy: I'm

thinking CIP should come later, but I want to be able to select inventory data. For example, show me all the airport with runways with length greater than X with aircraft type of Y and pavement condition index of <Z. I don't see the CIP as something that has a wide user base. Judy: Yeah, Roger and nobody else really uses the CIP system. Rich: We have to create a list of CIP projects by legislative district, so I have a real need for a portion of the CIP system. Judy, yes and if we could then tie them to the GIS, that would be useful. Andy: well I see that, so maybe the CIP is a higher priority.

Jeannie: Of course, I see leasehold management as an important part (interfacing with eLeasing? There is a lot of FAA leases at the state facilities.

Do you want to show military and private airports on this system? We could use the 5010 database for the private airports. Everyone agrees that there is enough data in the 5010. Alaska Division of Forestry actually setup at some airports for fire prevention. A lot of these are "SuperCub" strips. 5010 is still enough.

5010 inspections in Alaska are $1200 per inspection.

We need to view all the issues as system-wide and focus on those.

Our task is to identify the aviation technology issues that exist, rank them and propose solutions or at least a scope to solutions.

Wrap-up | Areas of focus

Possible Additional Committee Suggestions

Northern Region DOT&PF Aviation Design Manager, Ryan Anderson orScott Mayberry who works for them

Design, Butch (ALP development)
- He referred Angela
- Phil Neuchterlein

DOT&PF Planning Central Region
- Allan Kemplen

Alaska Aviation System Plan
Website Statement of Services
4/9/2008
From AASP NTP2: Phase 1, Stage 2

Task 1. AlaskaASP.com Design Requirements and Development Plan

Design Requirements

The purpose of the Design Requirements effort is to clearly identify the user needs and application specifications. This will enable the development Team to verify that the application will fulfill the needs of the Contracting Agency and that needs identified are complete and correct.

User Requirements: The users' needs shall be determined and/or re-evaluated. It is at this stage that information needs and functions shall be finalized. Additional interviews may be used to assist in identifying any additional users' requirements. This effort shall include the identification of the functional requirements, input requirements, output requirements and procedures that define how the information must flow through the functions of the developed site and application.

Security/Data Requirements: Although a large portion of the AlaskaASP.com site will be completely open to the public, data sensitivity, applicability, and availability for both the public and restricted areas shall be evaluated. Based upon the user and data, the security requirements shall be identified and discussed with the Contracting Agency. A user access schema shall be developed identifying the access rights and privilege levels of various user levels. Security risks to data integrity shall also be evaluated.

Development Plan

The purpose of the development plan is to convert all of the logical requirements gathered into physical specifications and a plan for the site development. The development plan shall include the information necessary to develop a working site. If data exists in electronic format which will need to be converted for use by the application, then data conversion shall be included in the plan.

Brand Development / Prototypes: The Alaska Aviation System Plan and the related AlaskaASP.com website will need to present a consistent look and feel to the users, participants, and stakeholders. This will be most apparent in the appearance of the AlaskaASP.com site where many will go to view and access data. The Team shall develop a logo and a look for the site. Once approved, the look and style sheet shall be used throughout the site to ensure visible brand consistency and awareness.

Interface Prototypes: Graphical user interface prototypes shall be prepared which meet the design and functional requirements identified. These prototypes shall be presented to the Contracting Agency for review and approval. The prototypes shall illustrate the design and proposed functionality. Examples of interface prototypes include screens, forms, dialogs, and input mechanisms.

Output Prototypes: Output prototypes shall be prepared which meet the design and functional requirements identified. These prototypes shall be presented to the Contracting Agency for review and approval. The output prototypes may include reports, graphs, maps, queries, file structures or web pages as examples.

Deliverables:

Alaska ASP Design and Site Design Boards
Prototypes and Navigation Layouts
Technical Memo outlining User and System Requirements

Task 2. Alaska ASP Public Involvement Site Development / Programming

The Team shall develop and program the portions of the AlaskaASP.com website pertaining to the Public Involvement and Outreach of the Aviation System Plan. The task includes two sections: Alaska ASP Public Involvement Section and Resources / Utilities Section. These sections shall be programmed to include:

<u>Alaska ASP Public Involvement Section</u>

What is the Alaska ASP?
Project Team / Point of Contact
Project Schedule
Meetings & Meeting Documents
Issue Identification
Project Documents

<u>Resources / Utilities Section</u>

Aviation Meeting Calendar
Aviation Links
Aviation Fun / Kid Activities

Alpha Development: The actual coding and application development shall occur. During the development, close coordination with the Contracting Agency shall be maintained. The application shall be reviewed on a regular basis to ensure that the product meets the Contracting Agency's expectations. Modifications to the application shall take place during this phase to modify and correct any problems identified. The application shall be reviewed and tested by the Team to eliminate programming errors.

Beta Design: Coding modifications required by the alpha level testing shall be made. In order to accurately ascertain how the application will perform in production, the beta application shall resemble the actions of production as close as possible. Each process shall be evaluated with the expected and unexpected data entered. The application shall be tested for efficiency, functionality, security and integration across the designated operating systems and platforms.

Final Release: Upon final approval from the Contracting Agency, the site shall be finalized and uploaded to the Production Environment.

Deliverables:

Beta Public Involvement Website
Final Public Involvement Website

Task 3. ASP Outreach Survey Section

An important element in the issues collection and development portion of the Alaska Aviation System Plan is the use of an online survey. The survey shall be used to elicit feedback and input from as many sources - aviation and otherwise - as possible. The Team shall develop the online survey based on content and questions developed / approved by the Contracting Agency. The survey may allow anonymous users to complete the survey but shall solicit full contact information for possible follow-up. In addition, the Team shall furnish a secure Survey Management section for results review, data export, and possible survey management.

Deliverables:

Online Survey
Survey Results and Management Interface

Task 4. Public Alaska Aviation Database / Public Aviation Mapping Information System

As part of the Public Information Site, there shall be a Public Aviation Mapping Information System to provide a graphical interface to the data collected during the initial phase of the Alaska ASP. The system shall be a graphical user interface to an online geographical mapping system to provide both a visual map depiction and associated textual information associated with the map features. It shall be developed as a graphical web based system utilizing simple on-demand (no client installation) web browser map generation. Simplified selection of features to present related textual data shall be utilized. The data for the public consumption shall be of a general nature based on the evaluation and development of the data sources from the inventory tasks. Typical data sources will likely be similar to the FAA 5010 NASR facility data, FAA Obstruction data, available Airport or statewide aerial imagery, and FAA Airspace (Sectional and Terminal Area Chart) raster images. Formats will vary but likely to include shape files, CAD drawing files and raster (TIF, ECW, JPG, SID). The Contracting Agency will

provide the most recent ALP CADD files and imagery for its airports. In addition, where recent DOT&PF and DCED imagery is lacking, Ikonos imagery shall be obtained for 30 airports along with the ALP vector drawings as an overlay to display the capabilities of the mapping system.

Alpha Development: The actual coding and application development shall occur. During the development, close coordination with the Contracting Agency shall be maintained. The application shall be reviewed on a regular basis to ensure that the product meets the Contracting Agency's expectations. Modifications to the application shall take place during this phase to modify and correct any problems identified. The application shall be reviewed and tested by the Team to eliminate all programming errors possible.

Beta Design: Coding modifications required by the alpha level testing shall be made. In order to accurately ascertain how the application will perform in production, the beta application shall resemble the actions of production as close as possible. Each process shall be evaluated with the expected and unexpected data entered. The application shall be tested for efficiency, functionality, security and integration across the designated operating systems and platforms.

Final Release: Upon final approval from the Contracting Agency, the site shall be finalized and uploaded to the Production Environment.

Deliverables:

Beta Public Mapping Information System Website
Final Public Mapping Information System Website

Task 5. Restricted Alaska Aviation Mapping Information System - PHASE I

As part of this first phase, a "shell" or "core" Restricted Advanced Mapping Information System shall be developed and populated with limited data to demonstrate the potential for ASP team study use. This shall be a secure login implementation and include mapping, data and application capabilities to assist team members in reviewing and analyzing components from the ASP. This shall provide the foundation for expanded development of other mapping capabilities that would be incorporated in the next phase of the project.

Alpha Development: The actual coding and application development shall occur. During the development, close coordination with Contracting Agency shall be maintained. The application shall be reviewed on a regular basis to ensure that the product meets the Contracting Agency's expectations. Modifications to the application shall take place during this phase to modify and correct any problems identified. The application shall be reviewed and tested by the Team to eliminate programming errors.

Beta Design: Coding modifications required by the alpha level testing shall be made. In order to accurately ascertain how the application will perform in production, the beta application shall resemble the actions of production as close as possible. Each process shall be evaluated with the expected and unexpected data entered. The application shall be tested for efficiency, functionality, security and integration across the designated operating systems and platforms.

Final Release: Upon final approval from Contracting Agency, the site shall be finalized and uploaded to the Production Environment.

Deliverables:

Beta Restricted Alaska Mapping Information System - Phase I (Core)
Final Restricted Alaska Mapping Information System - Phase I (Core)

Task 6. Site Management / Update

The prior tasks will create the Alaska ASP.com web site. In this task, the Contractor shall host, update and manage the AlaskaASP.com site for 18 months following the release of the web site for public use. In addition, the Contractor shall respond to requests for custom queries and report development during that 18 month period.

Deliverables:

Regular Site Management Status Reports