

**Recreation One-Stop
Best Practices White Paper**

February 24, 2003

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I. **Executive Summary**

The Department of the Interior (DOI), leveraging its Recreation.gov website, volunteered to lead the cross-government, Recreation One-Stop initiative. This E-government initiative seeks "...to build a user-friendly, web-based, one-stop recreation resource for citizens, offering a single point of access to recreational opportunities nationwide." The goal is to offer better and improved citizen-centric services to visitors planning their vacations to government parks and recreation centers in the USA.

The initiative builds on the Recreation.gov website that currently provides information and access to Federal parks and facilities managed by 12 Federal agencies such as the National Park Service, the U.S. Forest Service and the US Army Corp of Engineers. The goal of Recreation One-Stop is to extend this successful model to tribal, state and local government parks and recreation facilities.

The Department of the Interior (DOI) requested that the Federal CIO Council Best Practices Committee conduct a best practices study of issues related to the development of the Recreation One-Stop initiative. Working in partnership with the Industry Advisory Council (IAC), the Best Practices Committee formed a Best Practices team comprised of the following volunteers from the IAC membership to support the study:

James Pauli, Project Manager, Electronic Data Systems
Bard Woltman, Co-Project Manager, BearingPoint
Brenda Beck, Executive Information Systems
Suresh Shenoy, Information Management Consultants, Inc.
Paul Smith, Software AG
Barbara Bleiweis, Oracle
John Dunavan, Little Planet

The Best Practice team:

- Conducted interviews with Federal, state, local, Tribal and private industry stakeholders;
- Researched best practices;
- Held numerous working sessions with DOI management to discuss issues.

In coordination with DOI leadership, the Best Practices team identified five issue areas:

- A. Vision
- B. Data Standards and Technology
- C. Governance

- D. User and Stakeholder Experience
- E. Business Case Justification

Vision

DOI and the leaders of Recreation One-Stop developed a broad vision for the initiative "...to build a user-friendly, web-based, one-stop recreation resource for citizens, offering a single point of access to recreational opportunities nationwide."

The team interviewed various stakeholders from Federal, state, local, and Tribal governments. What was clear from these interviews was that one of the major challenges to the Recreation One-Stop team is that different stakeholders have different visions of Recreation One-Stop. After reviewing these different views there appears to be consensus on two activities the Federal Government should perform and no consensus on one activity:

- **Consensus Area 1 – Collecting and Displaying Federal Information** – Based upon the interviews, the stakeholders felt that the Federal Government should collect and display detailed information on the Federal Parks and Recreation facilities (hereafter referred to as parks). This information should include general information on the parks, detailed information about activities allowed, and conditions of the parks. The belief was that State and private sector organizations would like to have access to this information to provide to the public via their web portals.
- **Consensus Area 2 – Federal Government Bringing the Community Together to Develop Data and Technical Standards** – It was agreed by the stakeholders that one of the most valuable roles the Federal government could and should play was bringing the government and private sector recreation community together to develop data and technical standards. By developing these standards the industry would have clearly defined terms and a way to share information. An example of a data standard would be the definition of a "trail". When the term trail is used does it mean hiking trail? Biking trail? Motorcycle trail? Horseback riding trail? Or all of the above? A technical standard, such as XML and Web Services, provides a common means to define and transfer data. In developing data and technical standards the team should coordinate with other cross-agency E-Government initiatives such as Geo-spatial One-Stop.
- **Non-consensus Area 1 – Development of One – Stop Portal for Federal, State, Tribal, and Local Governments Parks** – Many stakeholders raised issues about the one-stop portal concept. For example, State representatives noted that many States have

developed excellent tourism portals that provide information on government parks and recreation facilities, as well as private sector sites and services. These representatives believe the State sites should be supplemented with the Federal recreation information. Others believe the Weather.com model, a private portal that draws heavily on National Weather Service information, might be appropriate for park information.

The best practice review found that successful initiatives finalized their vision prior to embarking upon major changes. There appears to be widespread agreement on two components of the vision. The Recreation One-Stop team should initially focus on these components in which a consensus exists. In the third area, the Recreation One-Stop team should work with the stakeholders to develop a consensus. The Governance section provides best practices on the organizational mechanism that could help the community come to a consensus on the new vision.

B. Data Standards and Technology

To accomplish the goals of Recreation One-Stop, information and services must be shared among federal, state, tribal, and local governments as well as with the private sector. The technological challenge is to enable ubiquitous data sharing and interoperability among federal, state, tribal and local governments. Web Services - a technological approach, methodology, and standard - represent the best technical practice to achieve a “one-stop” service for the public, while allowing each governmental entity to retain its control over information and services it now provides.

This clearly has been recognized by DOI. The Government Without Boundaries program (GwoB), Federally sponsored by the General Services Administration, utilized a web service oriented approach to provide a website, where:

- Constituents can obtain information and services across all levels of government, and
- Governments can identify and deliver integrated information and services to their constituents.

For purposes of this discussion, web services consist of four components:

- **Universal Description, Discovery, and Integration (UDDI)** - UDDI is a “phone book” of the services being offered. Each government entity would publish its services to the “phone book”

- **Web Services Description Language (WSDL)** - WSDL provides a description of each of the services published in the UDDI registry
- **Simple Object Access Protocol (SOAP)** - SOAP provides a standardized protocol for applications to call a particular service across HTTP/S
- **Extensible Markup Language (XML)** - XML is the heart of web services and exchanging documents across the Internet

To participate in web services, a government entity must first create a service oriented architecture around its enterprise. This is done by “wrapping” enterprise functionality and service offerings with XML and SOAP interfaces. Then, descriptions are developed for the interfaces (how do I invoke this service – WSDL) and are published for the service to the UDDI(s).

The key technical challenges to implementing web services across Federal, state, tribal, and local governments will be data standards and performance.

Data Standards:

- What services will be offered? (UDDI)
- What will the description of those services look like? (WSDL)
- What will the schema of the exchanged data be?

The best ways to resolve this challenge are:

- Human business communication
- Vertical industry standardization (e.g., ACORD, OASIS, RosettaNet,)
- Schema repositories (XML.org)

Performance is always an issue when transacting business across the Internet. The “phone book(s)” for government park and recreation services could grow to be quite large. A native XML database with a HTTP/S interface represents the best possibility for a high-performance UDDI registry. This will be a necessity as the Recreation One-Stop initiative progresses.

There are challenges to providing a “one-stop” access for all park and recreation information and services across all government entities. However, the technology exists to accomplish this goal. The human issues that arise from this initiative far outweigh the technology issues that exist today.

C. Governance

As the Federal Government embarks upon an expanded vision of the services currently provided by Recreation.gov, it is important to design and implement a governance mechanism that involves stakeholders. Currently, the 12 or so Federal Agencies involved in the Recreation.gov initiative have established a governing council. This council provides a mechanism for the stakeholders to meet when necessary to develop strategies, plans, budgets, etc.

For the Recreation One-Stop initiative, there are three challenges to establishing governance mechanisms:

- **Challenge 1 – Different Visions of Recreation One-Stop** - Various stakeholders have different views on the Recreation One-Stop vision. Consequently, preliminary governance mechanisms should be established to help refine the vision
- **Challenge 2 – Governance Representing Many Diverse Stakeholders** - Governance mechanisms need to represent the large number of stakeholders.
- **Challenge 3 – Effective Large Group Governance Mechanisms** - Governance Mechanism should not be too large or unwieldy for effective decision-making.

Don Tapscott and his Digital 4 Sight organization have conducted leading research on best practices concerning strategy, governance, design, implementation and operation of leading digital economy organizations. Three best practices, identified by Don Tapscott's Digital 4Sight organization, provide the Recreation One-Stop initiative with alternative approaches for governance.

- **Best Practice – Different Visions of Recreation One-Stop** - Establish a representative visioning committee to review different views and establish a common direction.
- **Best Practice – Governance Representing Many Diverse Stakeholder**- Two alternative approaches to representing diverse stakeholders were identified. The first alternative establishes various committees to represent different constituencies. These committees develop and synthesize their issues and then negotiate with other constituency committees to reach resolution. A second alternative would be to establish a nonprofit corporation for the initiative. The corporation's members would be the various stakeholders. The

corporation's board would be responsible for establishing governance and management.

- **Best Practice – Effective Large Group Governance Mechanisms -**
In addition to the advisory committee/board mechanism suggested above, a leadership mechanism would be required. First, a leadership group would set direction and provide oversight to operations staff. The leadership group would take the input from the advisory groups and make the final determination of any strategy or policy. Additionally this leadership group would work with the operations staff to set the look and feel of any Recreation One-Stop website. Typically, the leadership council would have representatives from the different stakeholder groups.

D. User and Stakeholder Experience

The challenge of every website or portal is to develop a positive user experience. Research has found that the stakeholders – in this case recreation consumers, recreation planners, and government agencies – want a single location to identify comprehensive resource information. This central source of expert information has the ability to promote recreation to a diverse audience: citizens, businesses, tourists and other state and Federal government agencies, to increase revenue and volunteerism of our parks.

The second experience challenge is that the Recreation One-Stop portal should be organized with the “end user” in mind.

The standards for the “type of information delivery” must take into account the vast amount of information available, and the vast appetite for information present among the resource consumers.

The use of multiple sites within Recreation One-Stop that focus on core topics enables the scaling of the project, allows some degree of built-in redundancy, and permits the development of sub-sites that reflect the unique culture of the content and the consumers.

Successful implementation experience suggests easy to use websites featuring helpful navigation tools and containing relevant information, will increase participation in e-government initiatives and encourage customer loyalty.

Accessibility considerations in website design improve the quality of the user-experience for all consumers. The standards for the “style of information delivery” must take into account the greatest range of

potential users in terms of computer, and English (American) language literacy, and intellectual functioning.

The website also must take into consideration the needs of individuals with disabilities and should embrace Section 508 standards.

Business Case Justification

Once a vision is finalized for a Recreation One-Stop portal, a business case should be developed that identifies financial and operational models. The challenge for any website or portal is to determine the appropriate business and financial model that provides adequate on-going funding for development and operations.

Research indicates that four best practice portal models exist:

- **Systems Integration Portals**—Systems Integration Portals are funded from Agency budgets and generally recommended for Agencies that already have made a significant investment in an e-government infrastructure, or are willing to take on the significant cost of hardware and software needed to develop and host the site. The Agency is responsible for hosting and maintaining the portal.
- **Application Service Provider Portals (ASP)** — The ASP portal is a viable option for Government Agencies that do not have, or whose resources do not allow them to make an investment in, significant e-government infrastructure. The ASP portal relies on commercial or other government service providers to host the portal and provide the Agency with connectivity to users for a monthly hosting fee.
- **Transaction-Based Portals**—Transaction-Based Portals allow for the recovery of development and maintenance costs through the collection fees for each transaction completed through the portal. Transaction fees are generally transparent to the constituent. Transaction-Based Portals are generally initiatives outsourced to private industry who are then responsible for development, hosting, and maintenance costs. They are compensated for their investment on a transaction basis by the host agency and may share revenue with the host agency based on the particular business model.

Convenience-Based Portals— Convenience-Based Portals rely on fees paid by the constituent when they conduct a transaction for services through the portal. Convenience-Based portals are similar to

Transaction-Based portals in how they are structured, but additional fees associated with the on-line purchase are visible to constituents. Generally, Convenience-Based portals charge the basic fees for services that have traditionally been walk-up, mail, or telephones based services (e.g. Motor Vehicle or Business/Commercial License renewal) and add additional fees for the “convenience” of doing business on-line.

After the vision is finalized and a governance mechanism is developed, Recreation One-Stop management should develop a business model. The model should select the appropriate portal and financial funding approaches.

II. Background

The Department of the Interior (DOI), leveraging its Recreation.gov website, volunteered to lead the cross-government, Recreation One-stop initiative. This cross-agency E-government initiative seeks "...to build a user-friendly, web-based, one-stop recreation resource for citizens, offering a single point of access to recreational opportunities nationwide." The goal is to offer better and improved citizen-centric services to visitors planning their vacations to government parks and recreation centers in the USA.

The initiative builds on the Recreation.gov website that currently provides information and access to Federal parks and facilities managed by 12 Federal agencies such as the National Park Service, the U.S. Forest Service and the US Army Corp of Engineers. The Goal of Recreation One-Stop is to extend this successful model to tribal, state and local government parks and recreation facilities.

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- C. Governance
- D. User and Stakeholder Experience
- E. Business Case Justification

The remainder of this report is organized into sections describing each of these five issues.

III. Vision

The vision of Recreation One-Stop is not about what is possible today with current technologies, but what is possible in three to five years from now. It is about preparing the infrastructure, establishing the foundations and shaping the policies for a world driven by wireless connectivity, broadband access everywhere, full motion video and animation becoming the norm, free and easy access to every conceivable information needed to plan a vacation e.g., travel, accommodations, weather, access to service providers, application for fishing or hunting licenses, and even facilitation of the commercial aspects of making reservations .

Challenge 1 – Different Visions of Recreation One-Stop -Various stakeholders have different views on the Recreation One-Stop vision.

In our discussions with different functional experts involved in the Recreation One-Stop initiative, it became clear that they all had different views of what the initiative's vision should be.

Some of the views we heard included:

- Everyone –
 - Timely, detailed information on the services and conditions of Federal lands is very valuable.
 - Any network should be citizen centric. It should provide comprehensive information about travel destinations – Federal, state, local, tribal, and private sector.
- State Tourism Representatives –
 - Many States have developed excellent websites. The Federal parks and recreation content should support these websites.
 - Some States already have partnered with the private sector in building and sponsoring websites.
 - Economic development and travel dollars are very important to the States. The States want to promote local businesses on their sites.
- Local Government Representatives –
 - They do not have a lot of money. They would like to leverage any government website that would help promote their region.
 - Economic development and travel dollars are very important to the Local Government. They want to promote local businesses on their sites.
- Park Management Representatives –
 - Land management and client usage management issues are important. Visitors should be informed of current conditions, e.g. snow closures. Park managers would like to be able to redirect visitors from high traffic areas to low traffic areas.

- Museum and Cultural Representatives –
 - Cultural representatives would like to make sure their events receive wide promotion.
 - Museum representatives have established their own working committee - American Strategy.
 - There are issues around which museums and cultural sites should be featured. There are accredited and non-accredited museums. There are government museums, e.g. Smithsonian, non-profit museums, e.g., Mount Vernon, and private sites, e.g., Luray Caverns.
- Private Sector Facility and Service Providers –
 - Federal Government information is very valuable.
 - Most travelers either select a destination or an activity.
 - Travelers want comprehensive information about an area, and the ability to make reservations and travel plans to the location.
- Private Sector Travel and Tourism Providers –
 - Government information is very valuable.
 - Government should be careful not to unfairly compete with the private sector. There are a number of private sector providers of reservation and mapping services.

After reviewing these different views there appears to be consensus on two activities the Federal Government should perform and no consensus on one activity:

- **Consensus Area 1 – Collecting and Displaying Federal Information** – Based upon the interviews, the stakeholders felt that the Federal Government should collect and display detailed information on the Federal Parks and Recreation facilities (hereafter referred to as parks). This information should include general information on the parks, detailed information about activities allowed, and conditions of the parks. The belief was that State and private sector organizations would like to have access to this information to provide to the public via their web portals.
- **Consensus Area 2 – Federal Government Bringing the Community Together to Develop Data and Technical Standards** – It was agreed by the stakeholders that one of the most valuable roles the Federal government could and should play was bringing the government and private sector recreation community together to develop data and technical standards. By developing these standards the industry would have clearly defined terms and a way to share information. An example of a data standard would be the definition of a “trail”. When the term trail is used does it mean hiking trail? Biking trail? Motorcycle trail? Horseback riding trail? Or all of the above? A technical standard, such as XML and Web Services, provides a

common means to define and transfer data. In developing data and technical standards the team should coordinate with other Cross-agency E-government initiatives such as Geo-spatial One-Stop.

- **Non-consensus Area 1 – Development of One – Stop Portal for Federal, State, Tribal, and Local Governments Parks** – Many stakeholders raised issues about the one-stop portal concept. For example, State representatives noted that many States have developed excellent tourism portals that provide information on government parks and recreation facilities, as well as private sector sites and services. These representatives believe the State sites should be supplemented with the Federal recreation information. Others believe the Weather.com model, a private portal that draws heavily on National Weather Service information, might be appropriate for park information.

A. Best Practices Found

The best practice review found that successful initiatives finalized their vision prior to embarking upon major changes. Large commercial enterprises will typically start the process through an enterprise strategic planning process and then a defined Information Systems Strategic Plan that serves as a 'road map' for future growth and management. Most of the challenges in this process are one of policy rather than technology. The ISSP serves as a basis for prioritizing the features, functions and technologies that must be adopted to arrive at the final envisioned goal.

B. Best Practice Findings

There appears to be widespread agreement on two components of the vision. The Recreation One-Stop team should initially focus on these components in which exists a consensus. In the third area the Recreation One-Stop team should work with the stakeholders to develop a consensus.

IV. Data Standards

DOI will face many challenges in meeting the business need and implementing the capability they desire. There will be challenge with regards to policy, processes, marketing, and technology. This discussion will address the technology issues, challenges, and critical success factors.

A. Best Practices Found

The capability DOI desires can be reached by:

- Storing meta-data of links for certain activities
- Storing data for certain activities
- Dynamically retrieving website data via web-scraping technologies
- Providing transactional services
- Web Services

Some combination of these approaches most likely will need to be used to accomplish such a daunting objective, as set forth in the Recreation One-Stop initiative. The use of web services, however, provides the most flexible and versatile means of providing and maintaining a service oriented architecture that expands across Federal, state, and local government domains.

Web services, based on new XML standards, can enable DOI to integrate and collaborate with external agencies, state, and local governments easier and faster.

This clearly has been recognized by DOI. The GwoB (Government Without Boundaries) program utilized a service oriented approach to provide a website, where:

- Constituents can obtain information and services across all levels of government, and
- Governments can identify and deliver integrated information and services to their constituents

The GwoB program delivered its own form of web services. Now that web services standards are being created and adopted by W3C, i.e., UDDI, WSDL, and SOAP, this standards approach can be achieved. Web services architecture does not come without challenges. However, the use of web services provides the maximum flexibility and versatility in a website that will span across federal, state, and local governments.

Many of the IAC companies supporting this study have customers in retail, media, education, finance, and government who have successfully implemented a service oriented architecture and extended those services via web services and the encapsulated standard technologies.

The rest of this section will provide an understanding of web services, why they are important, how to get started, and where the future of web services can take DOI. Additionally, the technology challenges recognized by DOI will be described.

B. Best Practice Findings

Challenge 1- Establishing XML-based data standards and Web services data sharing procedures with a very large number of potential partners?

This challenge represents the largest obstacle for DOI. Ultimately, DOI will set standards by implementation. What will the UDDI registry contain? What are the schemas for the XML data? These are questions on which DOI will need to lead the way. However, W3C and OASIS are excellent places to look for existing standards that could be reused. There are several non-Profit organizations that are setting standards for other industries, such as ACORD, who sets standards for the insurance community.

It is important to realize that these are more human issues brought about by technology. These issues would be there regardless of technology choice.

There really are two types of web services standards:

- Infrastructure
- Application

Infrastructure standards are available and stable today. There are literally hundreds of emerging and overlapping application standards.

- Infrastructure
 - XML 1.0
 - W3C DOM API
 - SAX API (de facto standard)
 - XML Namespaces
 - W3C XML Schema Definition Language
 - ISO/OASIS RELAX-NG XML Schema language
 - XPath / XSLT / XQuery
 - SOAP / WSDL / UDDI web services protocols
 - XML Signature
- Application
 - XHTML, SVG, MathML
 - RosettaNet - Electronics industry business docs
 - HL7 - Healthcare industry message formats)

- XBRL - Business reporting document format
- OTA - Travel industry message formats
- Open Applications Group – interoperable business documents
- Hundreds more!

Challenge 2:

Should Recreation One-Stop switch to an XML database, or is that investment premature or unnecessary to meet our user requirements?

Switching to an XML database is a close call, but this move appears to be the best future direction. With a large volume of partners the UDDI registry could grow quite large. Searching for a service is best served by a native XML database that accepts HTTP/S requests for performance reasons. UDDI, WSDL, and SOAP are XML. Converting to relational rows and columns is time consuming regardless of the XML interfaces that are provided. Additionally, one needs to think of the structure of XML that will be stored. The more complex the XML, the greater the need is to move to an XML native database.

Additionally, a native XML database will support W3C query standards, such as, Xquery. Relational databases will provide some sort of proprietary mapping interface to SQL. This would be extremely costly with regards to performance and maintenance. Best practice would suggest moving to a native XML database.

Challenge 3:

Can we eliminate the current content management system by using Web services to get data updates?

This is the exact vision of Web services. However, realistically, best practice suggests some kind of content management will most likely need to be maintained.

C. Critical Success Factors and Emerging Technology Opportunities

Critical Success Factors:

- Each participating government entity must implement a service oriented architecture and extend services via standard web services technology, i.e., SOAP
- Application standards must be set:
 - What services will be offered to citizen? The signature of these services must be agreed upon.
 - What do the services look like in a UDDI registry?
 - What format will XML documents take?

Web services are in their infancy, but organizations can achieve much by early implementation. Web services still lack:

- Scaling model
- Security model
- Transaction model
- Asynchronous model

These factors can be overcome, but may need to be re-addressed when the standard models emerge from W3C.

Emerging Technologies:

- Web Services
 - Native XML database
 - UDDI
 - SOAP
 - WSDL
 - XML

Web services represents a low cost means of achieving ubiquitous data sharing and interoperability amongst government entities at federal, state, and local levels.

D. Conclusions and Recommendations

Web services represent a current best practice approach for doing business over the Internet. Web services are flexible, versatile, re-usable web components. The dynamic interaction amongst agencies that web services enable is not surpassed by any existing technologies. While static capabilities like Web screen-scraping, and static links may be part of the overall solution, they do not provide the dynamic capabilities of Web Services. Government without boundaries will not be manageable without Web Services.

Best practice suggests use of Web services and XML technologies to provide a Recreation One-Stop to citizens.

E. Areas for Additional Study

Emerging XML and Web services standard initiated by W3C and other standards bodies represent a significant area for additional examination.

F. Best Practice Information Sources

www.w3c.org

www.uddi.org

www.w3c.org/TR/wsdl

www.w3c.org/TR/SOAP

www.w3c.org/XML

V. Governance

As the Federal Government embarks upon an expanded vision of the services provided by Recreation One-Stop , it is important to design and implement a governance mechanism that involves stakeholders. Currently, the 12 or so Federal Agencies involved in the Recreation.gov initiative have established a governing council that are able to meet when necessary to develop strategies, plans, budgets, etc.

As the initiative expands to incorporate state, local and tribal governments the number of parties involved in Recreation One-Stop could be in the thousands. As the number of parties increases, more formal organizational mechanisms will be required.

Additionally, it appears that the Recreation One-Stop effort is essentially two efforts. The first is the operation of a website for information on government recreation locations. The second is the bringing together of the recreation community to develop functional and technology standards. A good example of the work required for establishing a definition for a "bike path". Does "bike path" mean only a bicycle path, does it mean a bicycle and motorbike path. Does "bike path" mean bicycles only, no hiking and no horses? Getting agreement on these terms will greatly serve the consumers of recreation in understanding what services are available where.

Three challenges exist with establishing governance mechanisms:

- **Challenge 1 – Different Visions of Recreation One-Stop** -Various stakeholders have different views on the Recreation One-Stop vision. Consequently, preliminary governance mechanisms should be established to help refine the vision. The leadership of the Recreation One-Stop initiative has invited various stakeholders to a number of industry days to hear plans and express views on the initiative.
- **Challenge 2 – Governance Representing Many Diverse Stakeholders** - Governance mechanisms need to represent the large number of stakeholders. These stakeholders are members of various communities of interest. Stakeholders vary from large Federal Agencies to select interest groups, such as museum operators to small county governments. Also, as the Website is currently, envisioned, there are stakeholders with great interest in the Website, that are not content providers. These include users of the website and for-profit travel providers. Different stakeholders have different concerns and different representation needs.

- **Challenge 3 – Effective Large Group Governance Mechanisms -** Governance Mechanism should not be too large or unwieldy for effective decision-making.

In addition to meeting the challenges, there are Critical Success Factors (CSFs) that should be met. The CSFs determine whether the governance mechanism is ultimately successful. The CSFs for governance are:

- Provide client focused direction
- Represent the stakeholders
- Make timely and effective decisions

A. Best Practices Found

Don Tapscott and his Digital 4 Sight organization have conducted leading research on best practices concerning strategy, governance, design, implementation and operation of leading digital economy organizations. Using case studies and analysis from his research provides the government with a number of issues to consider and develop in refining its strategy and developing a governance approach.

Best Practice 1 - Public Counter 2000 (Netherlands)

“Public Counter 2000 uses a governance web to integrate local, regional and national government services in customer-centric clusters.... Public Counter 2000 is the product of a long internal and external consultation. Consensus building is fundamental to politics and decision-making in the Netherlands.... Communications is a priority for the project to build broad support from the public, media and governments.” (Note: Tapscott uses the Canadian definition of the term “governance” that would be more consistent with the US term “government”.)

“The Public Counter 2000 web is governed by a steering committee comprised of the key ministries involved as well as the National Union of Local Authorities representing local governments. The agency is deliberately set outside the formal bureaucratic organization to allow it to move more quickly through the corridors of government. As well the project’s director now reports directly to the minister of interior to create a direct channel to the cabinet.”

Best Practice 2 – Neighborhood Knowledge Los Angeles

“Neighborhood Knowledge Los Angeles (NKLA) is a university-community-government partnership aimed at improving and preserving neighborhoods. The cornerstone of the project is an online tool that

provides easy access to a vast collection of public (city, county, state, federal) and private (e.g., investment, toxic release notices) activities that can be tracked at the neighborhood Electronic Monitoring System (NEMS). NKLA's evolving information system uses a mapping interface to plot near "real-time" information on city maps posted on the web site." Although the project was initially constructed as a research project at the University of California, Los Angeles, long-term funding was required. The Fannie Mae Foundation and the U.S. Department of Commerce provided funding. "A condition of funding was that the UCLA team find a home for the NKLA in a non-profit organization so that the tool would be directly accountable to an active constituency. This encouraged NKLA researchers to develop effective community partnerships that placed this tool in the hands of community members...."

Best Practice 3 - Global Water Partnership –

"The Global Water Partnership (GWP) is an attempt to develop a comprehensive interdisciplinary approach to water management, drawing on expertise from many fields and professions from all regions of the world...This international network is open to all parties involved in water management, including governments, UN agencies, multilateral banks, professional associations, research organization(s), private corporations, and NGO's."

The GWP develops "priorities and implementation strategies that can be operationalized through regional or "river-basin" partnerships. In doing so, the GWP gives national governments the flexibility to evade three problems they typically face in dealing with complex issues that grow slowly and affect people across many jurisdictions:

- Gaps in knowledge and expertise...
- The political cycle...
- Territoriality...."

"The (GWP) partnership has four components. The highest policy-making body of the network is the Consultative Group (CG), with representation from all participants. The Technical Advisory Committee © consists of professionals and scientists in disciplines related to water use. The GWP network is divided into several regions of the world, each with its own Regional TAC. Regional units ...establish a shared view of appropriate strategies, mechanisms of implementation, and priorities for action and investment. A small Secretariat ... supports the international bodies, facilitates implementation of CG decisions and is responsible for monitoring the network's programs. Through this lean and largely informal structure, the GWP can decentralize decision-making and strategy implementation to regional and local bodies while still ensuring a high degree of knowledge exchange across the entire global network of participants. "

B. Best Practice Findings

The three best practices, identified by Don Tapscott's Digital 4Sight organization, provide the Recreation One-Stop initiative with alternative approaches to organization.

- **Challenge 1 – Different Visions of Recreation One-Stop**

One of the lessons of Public Counter 2000 is that developing a consensus builds broad-based support and success. It will likely result in the refinement of the vision and may result in a narrowing of the vision to meet a more specific need. The Department's early approach of have stakeholder consultation meetings seems very consistent with this best practice.

Drawing on the GWP best practice of developing Technical Advisory Committees, the Recreation One-Stop Leadership should consider establishing advisory committee to help refine the vision. The advisory committee should consist of Federal, state, local, Tribal, private sector and citizen representatives.

Establish a visioning committee to work through these issues.

- **Challenge 2 – Governance Representing Many Diverse Stakeholder**

The GWP project and the NKLA provide two alternative approaches to providing diverse stakeholders.

The GWP project's concept of establishing various committees of different constituencies applies to this challenge. The GWP used a set of regional Technical Advisory Committees to determine local needs. At the next consultation, the Department may want to develop advisory committees that represent the various communities of interest. These groups could:

- Help refine the Recreation One-Stop vision as stated in Challenge 1
- Help determine data standards for their community
- Determine on-going data maintenance approaches for their community
- Provide on-going advice to the Recreation One-Stop leadership.

An alternative approach is suggested by the NKLA best practice. NKLA transferred ownership to a non-profit corporation. The non-profit could have an advisory board for the various interest groups.

- **Challenge 3 – Effective Large Group Governance Mechanisms**

In addition to the advisory committee/board mechanism suggested above, two other mechanisms might be required. First, a leadership group would be required to set direction and provide leadership to operations staff. This group would take the input from the advisory groups. Additionally this leadership group with work with the operations staff to set the look and feel of the website. In the NKLA model, instead of a leadership council, a board of director would provide the direction. Typically, the leadership council or board of director would have representatives from the different stakeholders.

Critical Success Factors

The Critical Success Factors for the governance mechanism are:

- Provide client focused direction – This initiative is designed to provide citizens with information about government parks and recreation opportunities. Ultimately the success of the governance mechanism is whether that information gets to the citizens.
- Represent the stakeholders – Additionally, the vision is set, stakeholder involvement and representation will be key to ensuring the ongoing success of the initiative.
- Make timely and effective decisions – The governance process needs to provide a structure that ensures that timely and effective decisions are made.

C. Conclusions

The best practices provide three alternative governance models for the Recreation One-Stop initiative. They are:

- Specialized government organization
- Nonprofit organization
- A series of committees

The Department is currently using a committee approach for managing the Federal Recreation.Gov site.

D. Recommendations

The best governance approach will be determined by the final refined vision of the effort. If the final vision is an all encompassing website for Federal, state, local and Tribal efforts, then either a committee approach or a special government organization approach will probably work best. A special government organization will work best if the effort is funded fully by the Federal Government. A more participative approach will be required if funding is provided by all the participants.

VI. User and Stakeholder Experience

The intent of the website is to promote recreation to a diverse audience of citizens, businesses, tourists and other state and Federal government agencies, to increase revenue and volunteerism of our Federal parks as well as other Federal and state recreation facilities.

It is possible that merely presenting a web site with large amounts of recreation information provided by the National Park Service (NPS), Department of Agriculture, Army Corp of Engineers, Tennessee Valley Authority, and other Federal agencies, and some select States may promote visits to national parks as a recreation option, thus increasing revenues. However, without leveraging best practices toward promoting efficient citizen access there are no guarantees this effort will be successful. The following best practices in presentation, design, style and marketing of this website will lead to increased acceptance and participation in Recreation One-Stop and will strengthen stakeholders' ties to government.

This working group was tasked with determining Recreation One-Stop's design considerations centered on the needs of the user for the type and style of the information available. We define "type of information" as the volume and variety of information specific to federal, state and local recreational opportunities as relevant to its users. The "style" of information is defined as the manner in which the information is presented to the user. Style of delivery encompasses the graphic features, text elements, and navigation tools.

Relevant information sources used in support of our findings are *The National Park Services Comprehensive Survey of the American Public*, June 2001, *Pew Internet & American Life Project*, and *Benchmarking the e-Government Revolution*, *Momentum Research*. Also, we reviewed industry analyst's reports from Gartner, Forrester and Meta, as well as interviewing advertising and Internet marketing firms, and federal and state stakeholders.

A. Challenges and Issues

The central premise behind the initiative is the perceived value in locating all publicly subsidized recreational opportunity information at one Federal website.

Research supports the potential utility of a comprehensive recreation website. Research from the Pew Internet & American Life Project supports the suggestion that Internet users among the population actively seek information related to recreational opportunities through government websites. The Pew research determined that 77% of government website visitors report they are looking for "tourism and recreation information". The NPS survey information indicates that

17 percent of visitors visited the NPS web site before taking their trip to a National Park. Sixteen percent consulted other web sites as well. Momentum research supports that there are three critical metrics to measure the effectiveness of E-government. These metrics are “application and service relevance”, “citizen and business satisfaction” and “the preservation of the public trust”.

As with every E-government initiative, the Department of the Interior faces multiple issues and challenges. Citizens and Congress will have very high expectations for e-gov initiatives to show relevance and value as well as return on investment (ROI).

We have identified seven issues that relate to scale, scope, delivery, breadth and value of the information provided within Recreation One-Stop.

1. Scope and Scale of Project

The leading challenge toward this objective is the scale of the effort. In the absence of a prior effort of this magnitude many policy, procedure, and coordination challenges exist. The compiling and configuration of the enormous amounts of data the project entails have implications for scores of Federal employees currently tasked with gathering and reporting resource information.

2. User Definition

“There is no average user”. Dr. Machlin, Professor of Sociology at the University of Idaho, a lead investigator and sociologist for the National Park Service, reports that the result of decades of research and hundreds of user surveys indicate that there is no average consumer of recreational opportunities. Further, each consumer is transient in recreational interests based on season, co-participants, and occasion. For example, a family of four may have separate involvement in hunting, fishing, water sports, and crafts as individuals, and collective interest in a local picnic area. If there is no average user identified it is difficult to determine what information should be included on the website to meet, much less exceed, user expectations.

3. Too Much Information

Because of the vast amounts of information available within the Department of the Interior and other affiliated agencies toward this effort, the task of consolidating information from an entire spectrum of resources, including museums, music venues, parks, landmarks, scenic trails and highways, is challenging. The volume of information involves the physical coordination of vast amounts of information. Dr. Machlin, and Dee Lopez, State of Florida, MyFlorida.com project manager, indicates that the public thirst for information, while unquenchable, is specific. The fire-hydrant approach to disseminating

information will overwhelm the support resources such as help-desks and toll-free numbers unless the information is organized in a usable manner.

4. Relationships with Stakeholders

The success of the effort is contingent upon the establishment, and maintenance of relationships with key stakeholders. Information gathering activities from across a range of federal agencies, state, and local governments, and private interest groups and organizations are necessary. Information must be current and accurate, routinely modified and updated based on current environmental and infrastructure conditions specific to each location.

5. Fear of Competition

Consolidation of Federal websites into a single coordinated information outlet will have serious programmatic and political implications specifically as it relates to competition. Competition among other federal, state, and local websites by Recreation One-Stop is a significant issue. Minimizing the opinion that Recreation One-Stop is competing with state and commercial recreation sites is critical to the success of this project. Strong emphasis on teaming efforts with all stakeholders individually, must be started as soon as possible. Arkansas's tourism director, Joe David Rice is uneasy about the Federal government's long-term goals for Recreation One-Stop. He stated that Arkansas and other state and local governments have invested tremendous resources in their tourism programs that include recreation information available through their websites. He commented that the logical place for recreation searches should be on a state/local web site. Mr. Rice suggested that the states have the capabilities to engage with commercial enterprises to encompass all recreation alternatives, such as bed and breakfast information. In Mr. Rice's opinion, states have the incentive to make their websites user-friendly and customer intimate as possible because they are competing for overall tourism dollars. Mr. Rice suggested that the Federal government does not have this incentive, in part due to the prohibition of commercial product endorsement. Overall, Mr. Rice was concerned that the Recreation One-Stop effort may have the effect of diluting state tourism efforts. Similar concerns were voiced by operators of private recreation-focused websites at the Recreation One-Stop stakeholders' conference in Washington, DC, March of 2002.

6. Lack of Marketing Plan

A significant challenge is the marketing of the Recreation One-Stop website. Marketing any product or service, particularly one with this potential market, takes tremendous effort and expense. State and local government make extensive investments in their marketing efforts. Arkansas alone spends \$12 million among traditional advertising firms, web design and web-based advertising firms. In addition, they make investments in meta-tags for search

engines such as AOL and Travelocity. Ongoing market research efforts, including professionally facilitated focus groups, are used to continuously enhance the marketing message. Arkansas also reports engaging the academic community for website analysis and evaluation.

7. Value Proposition

Development of a mega-site focused on the listing of resources, including contact information, static facts, links to “true” content sites, without any discernable user or content specific culture is not a viable business model.

B. Best Practices

1. Programmatic Goal

The creation of a “one-stop” source for information surrounding specific constituent interests is not without precedent. The Federal government has long supported the development and maintenance of collaborative efforts to gather and research topical information. Often these resources are a consortium of public and private concerns dedicated to collecting and disseminating specific information, with collection points known as Centers of Excellence (COE). The COE model is recognized and used throughout federal, state, and local governments, and among professional communities. The COE also is recognized to be apolitical, and a source of impartial expert opinion. Embracing the COE model would provide a clear vision for the website, and elevate its mission. Stakeholders and consumers would then recognize the value of collection points for objective, non-commercialized, expert information about our recreational resources.

The COE model for Recreation One-Stop recognizes the unique expertise resident among the professionals that provide stewardship of public lands. The breadth and depth of this expertise is entirely unique to Federal and state government. For the constituent, Recreation One-Stop represents a visit with the source of expert resource data – not opinion. Subjective conceptualization of the data then becomes the domain of the commercial sites.

2. Branding and Image

The Department of the Interior should investigate commercial practices, such as branding, identity, user-experience design and integrated marketing and e-business strategy. For example, Siegelgale (http://www.siegelgale.com/index_flash.html)

3. Internet performance Indicators and ROI

The internet is now among the most used source of information for making travel plans, second only to personal experience. The commitment of time and resources is high to develop and maintain an online presence, so incorporating ROI or “accountability” into traditional image and branding marketing campaign, is viewed as a best practice. The ability to go beyond traditional “hit” and “click” Internet indicators to track key performance indicators is needed. Without performance measurements and means to track bottom line impacts, the pressure of public scrutiny can erode a credible E-government program.

4. Citizen / Customer Focus

Recreation One-Stop must be organized with the “end user” in mind. Because of the variety of stakeholders for this web site it may be beneficial to construct individual “portlets” based on constituent demographic “types”. If Recreation One-Stop sub-sites were to be created, a couple of examples of demographic types to be considered would be age, activity, organization affiliation, state and local etc. For example, the Meta Group sites Western Australia’s www.dotu.wa.gov.au youth site is a best practice. The site provides insight into how public and private entities can partner together to attract and educate the constituency. Western Australia identified its target market, identified its partners in offering youth-related news, events, links and valuable information, and presented information within a stylistically “cool” website for kids.

Arkansas’ Joe David Rice suggested that the Recreation One-Stop could provide relevant information to states to augment or enhance their existing state recreation information. For example, seasonal outdoor information such as foliage reports, new trail openings, watchable wildlife sightings, and water table information would be available. Other categories could include cultural or heritage information, including guest appearances. This additional information that only the Federal Government can provide would be viewed as valuable to the state and local stakeholders.

Both Ms. Lopez and Dr. Machlin suggested the development of a number of sites focusing on core sets of information or activities. The use of multiple sites that are interrelated permits the scaling of the project, some degree of built-in redundancy, and the development of sites that reflect the culture of the content and the consumer.

5. Usability and navigation tools

Easy to use web sites, featuring helpful navigation tools with relevant information, will increase participation in E-government initiatives and encourage customer loyalty.

The standards for the “style of information delivery” must take into account the greatest range of potential users in terms of computer, and (American) English language literacy, and intellectual functioning. The recommended best practice standards for text are 4th Grade English language proficiency. The recommended standards for language comprehension are 8th grade. The website must also take into consideration the needs of individuals with disabilities and should embrace Section 508 standards. Accessibility considerations improve the quality of the user-experience for all users. For example, - graphical navigation tools that consistently reflect icons and themes throughout the site that take into account the language, computer, or visually impaired would also make navigation simpler for all users.

The standards for the “type of information delivery” must take into account the vast amount of information available, and the vast appetite for information present among the resource consumers (taxpayers).

Incorporating some of the following tools into the Recreation One-Stop website would increase usage, foster partnerships with state/local and private sector, enable new revenue streams, and provide greater return on investments.

- About the site-link to information about the site
- Frequently asked questions
- Search functions such as, “Ask Ranger Rick”
- Site maps-visual representation of sections of the website
- Ability to personalize- by user type, state, region, or activity
- Push technology- Newsletters by activity or interest
- Knowledge Sharing or Communities of interest- e.g., area for “bikers” to rate certain bike trails
- Calendars of events-scheduled events by activity
- Hot topics
- In the News
- Just for kids
- Online public notices- e.g., fires, floods, hurricanes
- Special initiatives- e.g., volunteerism in a certain location or interest
- What’s new- e.g., new trails, wildlife sightings
- Most visited- review of one NPS per month in detail

C. Areas for Additional Study

The Recreation One-Stop initiative will stimulate numerous policy development requirements. Among these are the use of advertising or public/private partnership to “underwrite” the citizen’s right to free access to public information.

The COE revenue model also poses some considerations. Should the site make money for its own support, and if so, how is the income derived, spent, and managed.

Policy considerations surround the functions of data gathering and maintenance requirements. Are these functions to become job requirements for Federal personnel? If so, what are the implications of Federal employees contributing to the value of a separate commercial venture?

D. Best Practice Information Sources

Dee Lopez, Project Manager, State of Florida, Technology Office –
MyFlorida.com, and Visit-FLA.com – 850.922.7573
Dr. Gary Machlin, NPS Sociologist, University of Idaho – 202.208.5391
Edwin Gardner, Project Manager, Little Planet Learning – 888.974.2248
John Clark, Program Director, Office of Intergovernmental Solutions, GSA 202
501-4362'
Duncan Pollack, President of Siegelgale, 212 707-3928
Joe David Rice, Arkansas Tourism Director, 501 682-1088–
NPS.gov, Nation Park Service Comprehensive Survey of the American Public
Pew Internet & American Life Project government Web site survey
Meta Group, Architecting Enterprise Portals and Best Practices in Citizen Access
Gartner, A Vertical Look at Portals and Changing of the Guard in the
Government Portal Market
The State of Federal Websites: The Pursuit of Excellence
Forrester, Best Practices in Usability Testing
Longwoods International, web site
www.portalscommunity.com/library/fundamentals
Momentum Research Group, Benchmarking the E-Government Revolution

VII. Business Case Justification

This section of the paper outlines the information necessary to form the business decision on the implementation the Recreation One-stop portal. It will address the involvement of key stakeholders, types of portals being used in the government arena today, and examples of portal implementations that could influence the development of Recreation One-Stop.

A. Issues

1. What are the needs of the stakeholders? How can DOI accurately measure the expectations meet the experience and business expectations of the stakeholders?
2. Which type of Enterprise Portal most applies to the financial and technological capabilities of DOI?
3. Should DOI outsource or fund Recreation One-Stop through appropriated dollars?
4. Can Recreation One-Stop learn from another portal implementations?

B. Customer and Partner Surveys

1. Conducting Customer Surveys

In justifying the Business Plan for any foray into an expansion of the Recreation One-Stop portal, relevant information must be collected on the customers who use the facilities. Specifically, best practice experience suggests the following customer-centric information be collected prior to the expansion of the Portal:

1. Frequency of visits to recreational facilities per customer – including diversity of sites visited;
2. How the customer came to make the decision to visit the particular recreation facility – e.g., word of mouth, Television Ad, Internet site recommendation, "drive-by" sighting, or just sheer luck;
3. Method used to obtain tickets or passes to facilities – Internet, walk up, telephone, other;
4. Willingness of customers to obtain passes via the Internet if they have not already done so;
5. The site they used to purchase the tickets – there are multiple sites offering this service;
6. Experience the customer had if they purchased tickets over the Internet
7. What the highlights and lowlights were of their Internet experience;
8. Are they aware of Recreation One-Stop?

The purpose of this kind of survey would be to ascertain the willingness of recreation site customers to migrate their future ticket purchases to the Internet; the percentage of recreation site customers already using the Internet for their purchases; the good and bad experiences of Internet users so that they may be incorporated or removed from the portal redesign; and the awareness among recreation site customers of the existing portal.

A better business case could be justified for appropriated funding, outsourcing, or a combination of the two with information from a representative population sample of customers. The Department of the Interior keeps University of Idaho Professor, Gary Machlis on staff to coordinate surveys throughout the Department. His input into the creation of the survey, estimating the proper population sample size, and coordinating the deployment of the survey would be very useful. A sample customer survey is attached to this report as Appendix B.

2. Conducting Partner Surveys

As the Department of the Interior wishes to expand the offerings of the Recreation One-Stop portal to include resources offered at the State and Local level, the needs of these organizations must be ascertained prior to deployment. The state and local recreational facilities may be incorporated as a future secondary offering and would be independent of the recreation facilities offered by the Department of the Interior and the rest of the Federal Government.

For the purposes of this survey, we will define Partner to include the following:

1. 50 State Governments
2. Several thousand Local Municipalities
3. Independent Travel and Recreational Boards – Both For- and Non-Profit

Specifically, best practice experience suggests the following partner-centric information be collected prior to the expansion of the Portal:

1. Would the Partner prefer having a graphical presence in a federally controlled Internet portal, prefer to be hyperlinked to their own site, or neither?
2. Would the Partner be willing to share revenue for ticket sales generated from the Recreation One-Stop portal based on a profitable business case? If so, as a flat fee or a percentage of sales?
3. Would the Partner be willing to share information in an open platform based on XML technologies, or a derivative of XML?
4. Would the Partner be willing to share in the cost burden of advertising and other promotional costs associated with the Recreation One-Stop portal based on a profitable business case?

The purpose of this survey would be to ascertain the willingness of recreation partners to participate in the Recreation One-Stop portal and to determine how they wish to participate. A better business case could be justified for appropriated funding, outsourcing, or a combination of the two, with information from a representative population sample of Partners.

C. Other Stakeholders

The team also has identified several other stakeholders in the redesign of the Recreation One-Stop portal. Among the most prevalent include:

1. Both publicly and privately owned lodging facilities
2. The Department of the Interior – National Business Center
3. Concessionaire Vendors with existing and future contracts at recreation sites
4. Existing Federal Government Recreational Portals – More specifically the National Park Service Online Reservation System, and the Department of Agriculture – US Forest Service Online Reservation System

DOI should have dialogue with these stakeholders to determine the impact on each of them for the Recreation One-Stop portal redesign. While the portal redesign will affect each of these stakeholders in a different way and magnitude, each of these stakeholders input to the portal's redesign will add significant value.

D. Best Practice

Conduct comprehensive surveys from a representative stakeholder population sample as outlined above.

1. Four Main Portal Types

Systems Integration Portals—Systems Integration Portals are funded from Agency budgets and generally recommended for Agencies that have already made a significant investment in an e-government infrastructure, or are willing to take on the significant cost of hardware and software needed to develop and host the site. The Agency is responsible for hosting and maintaining the portal.

Application Service Provider Portals (ASP) — The ASP portal is a viable option for Government Agencies that do not have, or whose resources do not allow them to make an investment in, significant E-government infrastructure. The ASP portal relies on commercial or other government service providers to host the portal and provide the Agency with connectivity to users for a monthly hosting fee.

Transaction-Based Portals—Transaction-Based Portals allow for the recovery of development and maintenance costs through the collection fees for each transaction completed through the portal. Transaction fees are generally transparent to the constituent. Transaction-Based Portals are generally initiatives outsourced to private industry who are then responsible for development, hosting, and maintenance costs. They are compensated for their investment on a transaction basis by the host agency and may share revenue with the host agency based on the particular business model.

Convenience-Based Portals— Convenience Based Portals rely on fees paid for by the constituent when they conduct a transaction for services through the portal. Convenience-Based portals are similar to Transaction-Based portals in how they are structured, but additional fees associated with the on-line purchase are visible to constituents. Generally, Convenience-Based portals charge the basic fees for services that have traditionally been walk-up, mail, or telephone based services (e.g. Motor Vehicle or Business/Commercial License renewal) and add additional fees for the “convenience” of doing business on-line. These portals have not been well received due to constituents being forced to pay more than they have paid in the past for the same services. (A similar complaint can be found in commercial banking customers upset at paying ATM or web-service fees to use electronic banking when the perceived cost to the bank is lower than using a traditional bank teller.)

2. Appropriated Funding

While there is an existing architectural framework in place for the Recreation One-Stop portal, as part of any appropriated funding request a complete business plan with an updated technical direction of the Portal should be created. The new business plan may define the portal with one of the following purposes:

1. A true portal with dynamically linked data controlled by the Department of the Interior, with online reservation and billing (e-commerce) capability and with the intention of migrating State and Local capability;
2. A true portal with dynamically linked data controlled by the Department of the Interior, with online reservation and billing (e-commerce) capability – and with no intention of migrating State and Local capability;
3. A search engine with hyperlinks to other recreational sites with no e-commerce capability and with an open architecture to allow other sites to pull data from the portal as needed with little or no assistance from the Department of the Interior.

At this time there is not enough information to offer best practice for experience for a reasonable funding request for the redesign of the new Recreation One-

Stop portal. Once a direction for the portal has been established, an independent study should be conducted to determine cost.

3. Complete Outsourcing

A viable option for organizations seeking to establish large e-business or e-government applications is to look to an outside organization that has made the investment in the technological, human resource, and business infrastructure to handle a transaction based e-commerce system implementation. The entity outsourcing the requirement can control quality and content while not incurring the up-front costs of development including hardware, software, and human capital.

A business case to justify the outsourcing requirement needs to be established so that reasonable bids from vendors to host and maintain the Portal are submitted. The following, at a minimum, would need to be established and provided to vendors:

1. Anticipated minimum number of reservations made through Recreation One-Stop including a breakdown between on-line and telephone (if required) reservations for a minimum of 3-5 years out and any guarantees for purchases if anticipated minimums are not met
2. The history (if any) of purchases made through Recreation One-Stop or related site
3. How, and from where, the vendor would collect fees related to purchases made through Recreation One-Stop
4. Expected marketing and advertising activities of the vendor and/or the Department of the Interior
5. Expected performance requirements of the vendor
6. Expected physical design of Web Pages
7. Expected technical requirements
8. Business requirements of Recreation One-Stop

E. Best Practice

Implement one of the four outlined Government Portal types based on the needs of this E-government initiative.

Appendix A - Portal Case Study

Portal 1 – A major U.S. State

Type of Portal: Convenience Based

1.1.1 Challenge

As consumer demand for and use of Internet-based services increased, numerous agencies throughout the state began preparing plans to create the technical infrastructure required to establish an eGovernment portal. Each agency would allocate money from their own budgets to acquire the technology resources needed for their eGovernment initiatives. Recognizing an opportunity to leverage economies of scale and provide an easier user experience for citizens (voters and tax payers), many of the state's legislators hoped to develop statewide standards or programs that would provide consistency and reduce the overall cost to the state of delivering services online. These congressmen reasoned that pooling resources might enable state agencies to establish a more robust eGovernment program for less money. The State legislature charged the Department of Information Resources, a state department focused on promoting cost effective and time saving use of technology resources, to establish a task force to study and demonstrate the feasibility of conducting state business over the Internet.

Early in 2000, the state issued an RFP to numerous consulting firms – asking each to propose a strategy for studying the viability of statewide Web-based services. In response, one firm offered to construct and pilot an eGovernment framework that provides state agencies and local governments with the managed services required to provide their eGovernment programs. These services include e-Payment functions, security management, application development services and web site hosting. Per the requirements of the state, the consulting firm created a unique self-funded business model that requires no general appropriation by the state.

The consulting firm provides technical infrastructure and Internet security skills as well as resources to support the state's efforts to market the site and attract users. They were selected based on their approach that provided a complete service, including development, hosting, business management, marketing, and sales support.

1.1.2 Objectives

To make it easier for citizens to access state and local governments, the state's Division of Information Resources engaged the consulting firm to:

- Build an e-Government framework including e-payment and security capabilities.
- Pilot the framework by helping six state agencies begin delivering eCommerce service.
- Host the framework on an ongoing basis.
- Help market the framework to additional agencies and to citizens – provided the pilot is successful and warrants statewide rollout.

Additionally, the state initiated the framework effort in order to establish a single consistent, web-based service structure for the whole state and to provide rural areas, which would not otherwise have access to web-based service for financial reasons, with the same opportunities as more metropolitan areas. The state fully outsourced the entire eGovernment framework effort to the consulting firm, which in turn can contract with additional vendors to provide some of the services.

1.1.3 Solution

The consulting firm's team developed the state's eGovernment framework and established eCommerce operations for six pilot agencies in just six months. The team designed the infrastructure, integrated the web interface with traditional systems environments in each of the pilot agencies, provided web and custom application development services, and built the data center for hosting and managing the infrastructure.

The infrastructure was designed with the following features in mind:

- Strong security, including 128-bit security and virtual private networks
- Scalable architecture that allows for rapid expansion and changes to applications
- Availability 365 days a year, 24-hours a day
- Ability to trace transactions throughout the system
- Easy navigation
- Acceptance of credit cards, electronic funds transfer payment, and electronic checks
- Bilingual applications
- ADA compliant
- Web application development services
- Call center services (Help desk)
- Assistance to state agencies and local governments in marketing to their constituents
- Shared revenue from convenience or premium service fees.

The pilot agencies were:

- Office of the Comptroller of Public Accounts (CPA), which uses the framework to certify that a business is in good standing for the state franchise tax, a previously manual and time consuming task. The CPA also created ability for taxpayers to file short form tax returns online.
- State Railroad Commission (RRC), which allows oil and gas operators to apply for and pay for drilling permits via the portal.
- State Real Estate Commission (REC), which uses the framework to enable web based agent and broker license renewal.
- State Department of Licensing and Regulation (DLR), which allows air conditioning and refrigeration contractors to renew licenses on a credit card using the framework's technology.
- State Department of Insurance (DI), which uses the framework to electronically review licensed insurance agent information. DI also uses the framework to allow insurance agents and companies to subscribe to DI newsletters online.

Having realized several key benefits for the State through the pilot, the consulting firm's team has been providing the state with ongoing support to onboard additional agencies and provides additional services.

Since the initial pilot, the consulting firm's team has extended the framework's capabilities to support many other capabilities such as:

- Driver license and ID card renewal
- Vehicle registration renewal
- Electronic filing for the judicial system
- Property tax payment
- Voter registration
- Additional occupational and professional license renewal
- State Tomorrow Fund enrollment (pre-paid college education plan)
- Workers compensation verification
- Parking and traffic ticket payment
- Utility bill presentment and payment

1.1.4 Results

The consulting firm has provided the state with a stable environment from which it can provide eCommerce services

throughout the state. Within two years of its launch the framework has been leveraged to provide services for 30 state agencies and local governments. The framework is also positioned to continue adding functionality and capability to realize value for the state, its constituents, agencies and local governments. Specific benefits to the state and its legislators include the following:

- Increased end user (constituent) satisfaction through 24x7 access to government services and information.
- Faster recovery of service fees and decreased fee processing time through automation of fee collection. Financial transaction data is sent to both the agency's systems and the state controller's systems eliminating duplicate entry required through other means of payment (phone, over the counter, mail).

State agencies can benefit from participating in an online site for the following reasons:

- The State Online infrastructure is sufficiently robust to handle a large number of applications – building redundant infrastructures with the features described above would be costly;
- By aggregating volume, state agencies, local governments, and universities can leverage lower rates for credit card fees, lower fees for digital signatures, etc.;
- High levels of security have been built into the infrastructure to insure the integrity of the transactions and users' privacy – a less secure environment built for similar transactions could more easily be breached and compromise the public's confidence in the e-government services;
- The State's online's ePay service provides a secure online payment system. ePay performs credit card processing for MasterCard, VISA, AMEX, and Discover credit cards. In addition, ePay also accepts payments via Automated Clearing House (electronic checking) and debit cards. The secure online payment system reduces deployment, scalability, and implementation requirements.
- State agencies benefit from having automated integration with the State Treasury for electronic payments.
- A common look and feel to transactions simplifies navigation for site visitors and expedites application development through reusable code modules;
- State agencies can take advantage of marketing their services with the state's online service. Such joint

- marketing will increase the exposure of their individual online service and also limit their marketing expenses;
- By providing government services through a state's online service, the citizen has the convenience of one-stop-shopping for government services. Online services make it possible for the citizen to no longer have to know what government agency to go to for a particular service, just what service they need.

1.1.5 Benefits of electronic payment

Online payment is one of a state's online service's most valuable capabilities. ePay's added value comes from its ability to handle custom accounting data that the processors and clearinghouses will not handle and the ability to process credit cards, debit cards, and electronic checks through the same interface. ePay provides detailed transactional information to the State accounting system daily and eliminates the need for State employees to key in fee receipts. In addition, ePay stores constituent's credit card data in secured, encrypted databases where the government organizations do not have access to citizen's private information.

Innovative use of ePayment capabilities allows for the government to automatically manage funds and reconciliation. Key data in the ePayment file tie the transaction to the business function and to the accounting transaction. In government, payments are often distributed to multiple cost centers using combinations of accounting codes. The transactions specifications allows for an unlimited number of detail lines of accounting data. This allows funds to be automatically disbursed to multiple accounts.

It's difficult to put a dollar amount on the savings each agency may realize. It is dependent upon the size and volume of the transactions for each agency. One example of savings however is outlined below:

Each year, the Comptroller of Public Accounts processes about 2.6 million sales tax returns filed by more than 615,000 businesses. More than 100,000 businesses now use electronic tax filing or "WebFile" which is available through the state's online services. Approximately 80% of these businesses choose the ePayment option in WebFile now.

The Comptroller of Public Accounts saves \$1.25 for each paper return that they do not have to handle and there are 110,000 filers. The Comptroller of Public Accounts also saves 50 cents for each check they do not have to process, which are about 10,000 now.

1.1.6 Value

The state gained several key benefits beyond the capabilities and accomplishments of online services because they relied on the consulting firm to lead the eGovernment framework initiative. These benefits include the ability to have a self-funded site with the consulting firm taking on all significant risk, consultants with 20 years of experience working with state and local government technology issues, and strong relationships with the state that have been leveraged to promote the framework and increase its success.

State online services are built to be the internet user interface to an agency's customer set, not to replace the existing means of delivering the service. The process for financial transactions has been streamlined because the data is sent to both the agency to update their backend application and to the Comptroller of Public Accounts to update the State's financial system. This often requires two separate entries for the existing processes, as well as additional handling for collection that come in through the mail and over the counter.

1.1.7 Development Time

The framework for the portal was developed in 90 days. By combining the strengths of the consulting team and their partners, the firm was able to execute an aggressive time schedule by running multiple tasks in parallel. Key personnel were empowered to make decisions when needed thus eliminating management bottlenecks. The entire system was designed for change and significant flexibility, which allowed the team to accelerate the process while minimizing risk.

Appendix B - Customer Satisfaction Questionnaire

RECREATION CUSTOMER SATISFACTION SURVEY

Respondent:

Age: _____

Size of Group: _____

Length of stay: _____ Days

If one-day visit: _____ Hours

Time and Place

Dates of current visit:

Interview area:

Residence (Optional):

Street Address

City State Zip Code

=====

1. Please list the main recreation activities that you came to enjoy, in order of importance to you.

2. a. Is this your first visit to this National Park Site? ___Yes ___No
b. If no, how many previous visits have you made to this National Park Site in the last 12 months? _____Visits

3. a. Do you visit other National Park Sites? ___Yes ___No
b. If yes, please name the National Park Sites that you visit most often.

4. a. Did you use the Internet to find information about this National Park Site? ___Yes ___No

b. If yes, which website(s) did you use to find information about this National Park Site?

c. If yes, how would you rate the following?

	Strongly Agree	Agree	Somewhat agree	Disagree	Strongly Disagree	Don't Know
	A	B	C	D	E	F
The information I wanted on the Park was easy to find.						

The information was organized and understandable.	A	B	C	D	E	F
Pictures and graphics helped me make a decision.	A	B	C	D	E	F
I would use the Internet again to look for more information on other National Park Sites.	A	B	C	D	E	F

5. Did you purchase your tickets on the Internet for this National Park?

Yes No

6. How does this National Park Site compare to those National Park Sites?

7. What changes would you like to see at this National Park Site?

8. What changes have you seen since your first National Park Site (if applicable)?

9. Please rate use on the following customer service issues: (Circle one letter for each issue)

	Excellent	Above Average	Average	Below Average	Poor
Cleanliness/sanitation (Garbage/litter removal, general appearance and maintenance)	A	B	C	D	E
Resource/protection/condition of natural resources	A	B	C	D	E

(Water quality, erosion, etc.)

Safety/security

(Availability of help, protection from physical hazards, crime/vandalism, etc.)

General Management

(Prompt attention to problems, friendly, courteous, helpful, etc.)

A B C D E

A B C D E

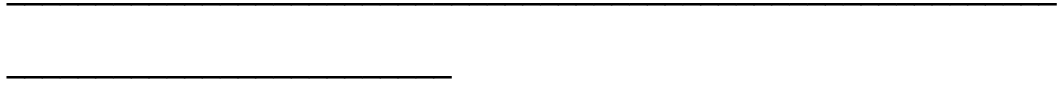
10. Please tell us how important each of the following items are in contributing to the types of outdoor recreation experience you expect at National Park like this. (Circle one number for each item)

	Extremely Important	Very Important	Important	Somewhat Important	Not Important	N/A
	1	2	3	4	5	6
Availability of basic information about the area (Operating hours, maps, facilities)						
Availability of interpretive information about the area (Brochures and posters on plants, animals, fish, etc.)	1	2	3	4	5	6
Availability of places to enjoy my chosen activities away from other incompatible activities	1	2	3	4	5	6
Suitability of facilities for my main activities	1	2	3	4	5	6

11. Please tell us how satisfied you are with the following items:

	Extremely Satisfied	Very Satisfied	Satisfied	Somewhat Satisfied	Dissatisfied	N/A
	1	2	3	4	5	6
Availability of basic information about the area (Operating hours, maps, facilities)						
Availability of interpretive information about the area (Brochures and posters on plants, animals, fish, etc)	1	2	3	4	5	6
Availability of places to enjoy my chosen activities away from other incompatible activities	1	2	3	4	5	6
Suitability of facilities for my main activities	1	2	3	4	5	6

12. Please take the opportunity to comment on other issues regarding the lake, which may not have been discussed above.



THANK YOU FOR YOUR COOPERATION!