Scope of Request for Environment Science Access Database Conversion

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# [Project] — Scope of Request1

## Statement of Scope

The project scope is defined below. The statement of scope consists of the following subsections:

* Problem/Opportunity Statement — Defines the problems and/or opportunities that have created a need for this project.
* Objectives — Defines a list of goals associated with this project. Completion of the project should fulfill these goals.
* Functionality — Defines a list of high-level functionality that the project should be able to offer at its completion.
* Exclusions — Defines a list of functionality, objectives, or actions that will be expressly excluded from the project.
* Assumptions — Defines a list of assumptions that you are making about the project in order to communicate them and get widespread agreement at the beginning of the project.
* Constraints — Defines a list of the constraints that may hinder progress in order to communicate them and get widespread agreement at the beginning of the project.
* Benefits — Defines a list of the tangible and intangible benefits the project offers to the customer. Benefits are quantified whenever possible.
* Risks — Defines a list of business and general technical risks related to the project.
* Additional References — Defines what other documentation and/or other relevant reference materials

## Problem/Opportunity Statement

Currently the staff is using a Microsoft Access database to log and track Environmental Health activities that pertain to the prevention, preparedness, monitoring, education, surveillance and sampling of facilities and conditions that may contribute to the occurrence or transmission of disease. MS Access applications are simply not designed to support more than a handful of end users. In a multi-user environment, both MS Access will quickly turn from an asset into a liability. Costs and issues associated with performance, versions, and data integrity will steadily increase. MS Access is limited in the number of concurrent users it can support at any one time (255 concurrent users, before a performance governor kicks in), and the amount of data it can store (~1 GB).  While Microsoft advertises that MS Access can handle up to a 2 GB datastore, in reality you will notice appreciable degradation in performance and stability over 1 GB.

The current Environmental Health MS Access provide little to no means to enforce proper integrity of business data — the assurance that your business data is both accurate, complete and follows a consistent format.  With a true relational database, data integrity rules and constraints are built into the database, and are enforced at ‘data entry time’ in the application to insure that all data in the application is complete, and all fields conform to a consistent, valid format. Absent proper data integrity, calculations or references to other data within the application will not function properly, and reports that are used to make business decisions are suspect or even useless. Complex business processes and associated workflows is the primary reason to develop a custom Environmental Health application. SQL Server, in combination with a .NET Smart Client front-end application, provides a number of efficient and easy-to-use ways to model complex business processes and workflows. Lastly in some cases the MS Access Database original developer is unavailable or under-experienced individuals who are responsible for “holding the system together,” solving constant end users’ problems, and producing custom reports for management can sometimes cause employee downtime, and important business data is often unreliable or missing altogether.

## Business Objectives

This section lists a set of business goals and objectives that the proposed project facilitates. It also describes how the proposed project can accomplish these goals:

* Create an MS SQL Database and migrate the current MS Access Data into it.
* Create a centralized Internet Web Site to be used by the staff of the Department of Environmental Health.
* Create a centralized Intranet Web Site to be used by non-Department of Environmental Health users.

## Functionality

It is important for all parties to agree on the functionality that the proposed project will deliver at completion. The purpose of this section is to define the intended scope to all parties in the earliest stages.  
  
This proposal supports the following functionality:

* Data entry and modification of Environmental Health related data by Environmental Health staff.
* Data entry and modification of Environmental Health related data by non-Environmental Health staff.
* Automation of email notifications.
* TDB

## Exclusions

Exclusions must be defined at the beginning of a project so that all parties can agree on the functionality, objectives, or actions that will be expressly excluded from the proposed project. This section helps to reduce misunderstandings from occurring later in the process when it is too late to correct them.  
  
 The exclusions for this project are listed in the bulleted list below.

* TBD

## Assumptions

These assumptions are listed to ensure that all parties understand what assumptions the team has made in order to create the proposal:…

* MS Access will no longer be use.

## Constraints

Constraints are conditions that can potentially have a negative effect on the project. The constraints listed here provide all parties with information about constraints and can work to alleviate the conditions if possible. If these conditions cannot be alleviated, this section will provide warning of their existence.

* Environmental Health Department access to Microsoft Product license needed to develop the new system.

## Benefits

Each project offers a set of benefits. The following list outlines the benefits this project offers:

* Client versus server

A server-side database, such as SQL Server, evaluates requests on the server side (sent in the form of a SQL statement) and then returns data to the client. Jet, on the other hand, lets the client do all the work. Jet is the database engine behind Access. Even if the database (.mdb) is on a network server, the client still does all the work. The server simply responds to client file requests.

* No client installation

A Web-based front end minimizes installation issues. Users need only a browser. The database doesn't care whether the user is sending requests via a Windows PC, a Mac.

* Easy use of NT authentication

Using Visual Basic or C# you can determine the NT name of users logged into the database and thereby restrict which users can do what. However, this method isn't foolproof, and it doesn't truly authenticate users. Your Web interface (on an IIS Web server) can use Integrated Windows Security to authenticate user credentials to individual web pages.

* No version problems

A Web interface eliminates version incompatibility issues.

* Live, behind-the-scenes interface updates

To update an Access front end, you must copy or modify an .mdb file. Access won't let you make changes while people are using it. (Beginning with Access 2000, you can make some changes, but a few still require exclusive access to the database.) In contrast, you can change the Web interface files (.asp, .aspx, and so on) whenever you like. The changes are almost immediate.

* More users

By their very nature, Web interfaces are unbound. In other words, once a page is loaded, the interface is no longer connected to the database.

## Risks

What are the risks to this project?

* Not getting proper requirements documented and agreed upon by sponsor.
* Not having the needed licenses to technologies needed to build the system once requirements have been gathered and documented.