

Attachment F Data Conversion Approach and Plan Response



Narrative/Requirement

The Department requires the successful conversion and migration of data from the current Environmental Health Database.

Environmental Health applications employ multiple databases, hundreds of tables, and millions of records. A percentage of these records may be considered “archival” and could be accessed through special reports. However, millions of records must be immediately available in any new system.

Databases are currently distributed across several servers, each server running SQL Server 2016. Databases were designed on an N-Tiered client/server architecture, with a relational database core.

Data records fall into the following categories as described below:

Category	Description	Conversion Requirements
Active data	Records used daily, active entities and the actions taken on the entities.	All active data shall be converted for immediate use.
Historical data	Data related to non-active or closed entities with any changes to entities or inspections at least two (2) years in the past.	Historical, older data must still be available to system users.
Support data	Tables maintaining data to generate on-screen forms and printable reports. The tables include, but are not limited to, code tables, restricted lists, baseline information, and statewide and county-specific details.	Many records have an “end-of-life” date marking the record obsolete. Current software cannot use these records for new entries; obsolete data must be available for reports and screens replicated based on specific detail(s) to retain historical data.
Audit Trails	Tables logging every change made to a record. Financial audit tables are required by State directive and exist in a separate database.	Tracing or tracking such information is required. Records created during a specified period must be made accessible to Central Office staff. Data generated before the specified period may be retrieved through reports.
Report data	Flattened and expanded data used to generate reports quickly and allow for user-built reports.	Vendor shall determine best method to provide report data to minimize generation time and meet requirements for throughput in a user-accessible format.

In addition to SQL tables, there are more than 2 million data files generated by the system or attached to entities. Such relationship(s) must be maintained. Files may include, but are not limited to, Word documents, photographs, blueprints, and PDFs. Such data files may not require “conversion”, but the records must be retrievable.

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Record retention requirements for digital files vary between program, but on average, are seven (7) years from date of receipt or creation. It should be noted the current data has never been archived from these databases. There are several programs which require staff to review historical entity data. Conversion plans must include these factors to propose a flexible plan to convert the most vital records, while still allowing access to archived records as needed.

The chart below contains counts taken as a snapshot of the data as of September 1, 2017, and rounded to the nearest thousand. The counts were taken from primary data files and do not include the support tables that supply the building blocks of the forms or the relationship tables that link records to each other. In the chart, and “Entity” is a facility or individual for which processing is performed.

Program	Record Count in Thousands					
	Entities	History	Billing	Inspections	Notes	TOTALS
Biomedical Waste	173	3,485	1,414	2,705	87	7,864
Body Piercing	4	80	22	49	2	157
Food Hygiene	86	4,646	562	2,502	54	7,850
Group Care	122	1,643	264	2,665	79	4,773
Limited-Use Water	284	1,605	817	2,774	52	5,532
Migrant Labor Camp	6	158	36	530	5	735
Miscellaneous	80	1,390	459	525	54	2,508
Mobile Home Parks	22	705	199	1,475	10	2,411
OSTDS - Construction	2,409	4,575	6,100	8,419	612	22,115
OSTDS - Service & Operating	113	2,737	809	5,815	27	9,501
Rabies	130	416			72	618
Swimming Pools	130	5,103	1,496	21,034	81	27,844
Tanning	11	176	53	214	6	460
Tattoos	35	856	167	74	13	1,145
Nuisance Complaints	769					769
TOTALS	4,374	27,575	12,398	48,781	1,154	94,282

Vendor Response

Respond with an outline for how you plan to approach data conversion, and how you will ensure a successful fallback should the conversion process not be successful. Include processes and tests that will be established to verify and validate successful conversion.