How To Create a Database

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From a Program Manager’s Perspective

- Assess needs
- Procurement process
- Role/Responsibilities
Assess Your Needs: Question

- What isn’t working now?
- How can this work better?
- What will you need in the future that you don’t have now?
Assess Your Needs: Things to Consider

- Track Data
  - For how long?
  - What historical data needs to be kept?
  - Multiple applications/records for each customer
Assess Your Needs: Things to Consider

- Contact Management
  - Do you have multiple entities sharing information and communicating?
  - Do you need to track events?
  - Do you want to know time lapses between events?
Assess Your Needs: Things to Consider

- Reporting
  - What kind?
  - How many?
  - How often?
  - Standard vs. ad-hoc
Yes! I want a new Database: now what?

Time to choose a database or hire a programmer!
Off the Shelf or Custom Made?

- Things to Consider...
  - In house expertise for building and/or maintenance
  - Customized fields, reports necessary?
  - Long term feasibility
  - Ability to share across organization or multiple organizations?
  - Amount of data now and in the future
Procurement Considerations

- Cost
- Scope of project
- Ability to serve future needs
- Ability to combine old and new data
- Timeline
- Accessibility of staff (yours & contracted)
- Security & confidentiality of data
Procurement Process

- Develop a scope of need
- Request proposals from multiple organizations
- Develop score sheet - pay attention to weighting
- Hear oral presentations and read proposals - ask questions
- Interview referrals and other clients
- Rank organizations based on feedback
- Negotiate a contract
- Now the WORK begins!
Your Role: It really has JUST begun!

- Remember this!
  - No one knows your data better than you
  - No one knows your needs better than you
  - But - you can’t think of everything
    - Ask everyone for feedback
      - Users/agencies/contractors
      - Funders (that need reports)
      - Your boss
      - Your entire team
Your Role: Specific Tasks

- Complete a detailed flow chart of every process
Examples: Work flow
Your Role: Specific Tasks

- Complete a detailed flow chart of every process
- Provide data formats and mapping for any historic data to be transferred and/or housed
- Provide formatting rules, field value qualifiers,
## Examples: Data Elements (fields)

<table>
<thead>
<tr>
<th>Data Field</th>
<th>Current Location</th>
<th>Data Source</th>
<th>Future Data Source</th>
<th>Field Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCID &amp; Seq</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text or Number?</td>
</tr>
<tr>
<td>PSID</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text or Number?</td>
</tr>
<tr>
<td>Address</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text</td>
</tr>
<tr>
<td>City</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text</td>
</tr>
<tr>
<td>State</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text</td>
</tr>
<tr>
<td>Zip</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text</td>
</tr>
<tr>
<td>CAP status</td>
<td>New</td>
<td>DIS</td>
<td>DIS</td>
<td>Y/N</td>
</tr>
<tr>
<td>Phone</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Phone</td>
</tr>
<tr>
<td>Best time to call</td>
<td>New</td>
<td>new</td>
<td>Data Entry</td>
<td></td>
</tr>
<tr>
<td>Second Phone</td>
<td>New</td>
<td>new</td>
<td>Data Entry</td>
<td>Phone</td>
</tr>
<tr>
<td>e-mail address</td>
<td>New</td>
<td>new</td>
<td>DIS/Data Entry</td>
<td>Text</td>
</tr>
<tr>
<td>Approval to use E-mail as primary</td>
<td>New</td>
<td>new</td>
<td>Data Entry</td>
<td>Y/N</td>
</tr>
<tr>
<td>County</td>
<td>Demographics 1</td>
<td>DIS</td>
<td>DIS</td>
<td>Text</td>
</tr>
<tr>
<td>Birthdate</td>
<td>Demographics 2</td>
<td>USS</td>
<td>DIS/Data Entry</td>
<td>Date</td>
</tr>
<tr>
<td>Occupants &gt;62</td>
<td>Demographics 2</td>
<td>USS</td>
<td>Data Entry</td>
<td>2 digit field</td>
</tr>
</tbody>
</table>
Your Role: Specific Tasks

- Provide data formats and mapping for any historic data to be transferred and/or housed
- Complete a detailed flow chart of every process
- Provide formatting rules, field value qualifiers,
- Provide drop down menus for all fields
### Example: Drop down values

<table>
<thead>
<tr>
<th>House Type</th>
<th>Code</th>
<th>Name</th>
<th>Code</th>
<th>Name</th>
<th>Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2, 2 or more story single family</td>
<td>1</td>
<td>Fuel Oil/Kerosene</td>
<td>0</td>
<td>None</td>
<td>1</td>
<td>Ranch, single level</td>
</tr>
<tr>
<td>Ranch, single level</td>
<td>2</td>
<td>Utility Gas</td>
<td>1</td>
<td>Fuel Oil/Kerosene</td>
<td>2</td>
<td>Bi-level or split level</td>
</tr>
<tr>
<td>Bi-level or split level</td>
<td>3</td>
<td>Bottled Gas/Propane</td>
<td>2</td>
<td>Utility Gas</td>
<td>3</td>
<td>Mobile home (half or more of heated)</td>
</tr>
<tr>
<td>Mobile home (half or more of heated)</td>
<td>4</td>
<td>Electricity</td>
<td>3</td>
<td>Bottled Gas/Propane</td>
<td>4</td>
<td>Row house, inside of row</td>
</tr>
<tr>
<td>Row house, inside of row</td>
<td>5</td>
<td>Coal</td>
<td>4</td>
<td>Electricity</td>
<td>5</td>
<td>Row house, end of row</td>
</tr>
<tr>
<td>Row house, end of row</td>
<td>6</td>
<td>City Steam</td>
<td>5</td>
<td>Coal</td>
<td>6</td>
<td>Duplex or condominium with two units</td>
</tr>
<tr>
<td>Duplex or condominium with two units</td>
<td>7</td>
<td>Wood</td>
<td>6</td>
<td>City Steam</td>
<td>7</td>
<td>Multi-family, including condo, with th</td>
</tr>
<tr>
<td>Multi-family, including condo, with th</td>
<td>8</td>
<td>Solar</td>
<td>7</td>
<td>Wood</td>
<td>8</td>
<td>Other</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>Water</td>
<td>8</td>
<td>Solar</td>
<td>9</td>
<td>Manufactured/Modular Housing</td>
</tr>
<tr>
<td>Manufactured/Modular Housing</td>
<td>M</td>
<td>Missing</td>
<td>9</td>
<td>Water</td>
<td>M</td>
<td>Missing</td>
</tr>
</tbody>
</table>

*Primary source of supplemental Fuel(Pre) Titled: SUPHEATB*  
*Primary source of supplemental Fuel(Post) Titled: SUPHEATF*
Your Role: Specific Tasks

- Complete a detailed flow chart of every process
- Provide data formats and mapping for any historic data to be transferred and/or housed
- Provide formatting rules, field value qualifiers,
- Provide drop down menus for all fields
- List of all your reporting needs
- Present each process orally and allow for questions
- Be available during programming
- Meet on a regular basis & document all activities
- Designate a Project Manager
My Top Ten List

10 - DO understand the difference between the sales pitch and the reality. Be prepared to be flexible but know what is non-negotiable for you.

9 - DO wish BIG! Let them tell you what they can’t do. Until then - Expect the Moon!

8 - DO consider future needs as well as current needs. You’ll thank yourself later.
Top Ten List

7 - DO make this your (or someone’s) primary job for the duration of the project

6 - DO act as if your life depended on it. Or at least the next 10 years of your work life!

5 - DO be specific always. Never assume.. Always verify
Top Ten List

- 4 - DO write down every conversation, every deliverable, every deadline, every change of scope, every.. every...

- 3 - DO include others in planning. Everyone

- 2 - DO reward for deliverables, not time
Top Ten List

1 - DO your best Happy Dance! This is exciting! If you do it right, It will ROCK your (future)world!
Questions?

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