FLEX-able solution

For FEMA Risk Assessment, Sequencing, and Project Planning

2012 ESRI International User Conference
Today

- Stakeholders
- Solution
  - Data
- Development
- Demo
- Results
Stakeholders

• **Who?** FEMA: National & Regional Leadership

• **What?** Project Planning

• **When?** Yearly Process

• **Why?** Accountability to Congress

• **Where?** Nationwide
How?

- Multi Year Planning (MYP)
- Metrics
- Risk
- Need
- Impact
- Spreadsheets & Email
What is the Project Status (Planned, Funded, Completed)?

- Planned = Planned
- Funded = Pipeline
- Complete = Current

**Risk MAP NVUE Chart**

![Chart showing data for FY09 to FY20 with categories Planned, Pipeline, and Current]
Is Project Risk MAP Eligible (Tool Checkbox)?

Yes

TABLE: "tbl_PROJECT"
Field: [RM_Deployment] = Yes

Planned

What is the Project Status (Planned, Funded, Complete)?

Funded

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Planned
&
TABLE: "tbl_PROJECT"
Field: [PROJECT_PHASE] = Deployment

Completed

WHERE
FOORPRINT.PK_FOOTPRINT = PROJECT.PK_FOOTPRINT

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Funded

Initiated Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])

Completed Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])

Forecasted Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])

+ Initiated Population + Attained Population

Group by Fiscal Year "FY12" – "FY20"
Where TABLE: "tbl_PROJECT"
Field: [Fiscal_Year] = FY12, FY13, etc.

Hierarchy Structure
if (status = "Complete")
  add to; attained
else if (status = "Funded")
  add to initiated;
else if (status = "Planned" & Phase = "Deployment")
  add to specific fiscal year population

No

Delete Footprint.

No

Can user add additional Project Phase that meets Risk MAP Deployment criteria?

Yes

TABLE: "tbl_PROJECT"
Field: [RM_Deployment] = No

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Planned
&
TABLE: "tbl_PROJECT"
Field: [PROJECT_PHASE] = Deployment

&&
TABLE: "tbl_PROJECT"
Field: [FY] = FY09-FY20

Population of a footprint only to be counted once

Planned = Planned

Population of a footprint only to be counted once

Completed = Attained

Population of a footprint only to be counted once

Funded = Initiated

Forecasted Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])

Initiated Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])

Attained Population = SUM (FEATURE CLASS: "MYP_FOOTPRINTS"
Field: [POPULATION])
Risk MAP Deployment Chart - Percentage

Is Project Risk MAP Eligible (Tool Checkbox)?

Yes

TABLE: "tbl_PROJECT"
Field: [RM_Deployment] = Yes

Planned

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Planned

TABLE: "tbl_PROJECT"
Field: [PROJECT_PHASE] = Deployment

Funded

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Funded

Completed

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Completed

What is the Project Status (Planned, Funded, Complete)?

No

TABLE: "tbl_PROJECT"
Field: [RM_Deployment] = No

TABLE: "tbl_PROJECT"
Field: [PROJECT_STATUS] = Planned

TABLE: "tbl_PROJECT"
Field: [FY] = FY09-FY20

Planned Completed

TABLE: "tbl_PROJECT"
Field: [FY] = FY12 - FY15

Table: "tbl_PROJECT"
Field: [FY] = FY16 - FY20

WHERE FOORPRINT.PK_FOOTPRINT = PROJECT.PK_FOOTPRINT

End of FY12 Target

TABLE: "tbl_METRIC_SUMMARIES"
Field: [DEPLOYMENT_Target]
Solution!

- Browser based
- Real time
- Mapping
- Data Analysis & Visualization
  - Spatial patterns & Relationships
- Charting
- Simple Access to Data
Data

- Supporting Information
- Metrics
- Project / Planning
  - Project Footprints
  - Project Record Table (related to footprint geography.
- Data revisions:
  - Geometry changes
  - Attribute Changes
Data

- Complex Geometry = poor performing geometry / map services
Development

- Configurable Flex-viewer
- Custom Widget
  - Charting API
  - Feature Editing (secure service)
Demo

- Secure Log In
- Token based editing
  - Add Project Records
- Query and Filter data
- Charting
- Export to excel
Log On

Please enter your user name and password.

**Account Information**

User name

Password

☐ Remember me?

Log On
Welcome!

- Multi-Year Prioritization & Planning
- Change Password
2. Add Project

3. Complete deployment input

1. Select data development record
1. Select project footprint with the map selection tool.
2. Make selection on map.
3. Add New Project.
4. Complete project input info.
1. Select deployment record

2. Add Project

3. Complete data development input
1. Select project footprint with the map selection tool.
2. Make selection on map.
3. Add New Project.
4. Complete project input info.
1. Select project to be modified
2. Double click on the attribute
3. Save edits when done

Delete Project Record
<table>
<thead>
<tr>
<th>Priority</th>
<th>Region</th>
<th>Name</th>
<th>M. Fiscal Year</th>
<th>Phase</th>
<th>Status</th>
<th>Validated</th>
<th>Population</th>
<th>Description</th>
<th>Type</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>RM-FY11-IL-DuPage</td>
<td>TBD</td>
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<td>Funded</td>
<td>0</td>
<td>916924</td>
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<td>Unassigned</td>
<td>IL</td>
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<td>TBD</td>
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<td>677560</td>
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<td>IL</td>
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<td>Unassigned</td>
<td>IL</td>
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<td>RM-FY10-IN-Upper V</td>
<td>TBD</td>
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<td>Funded</td>
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<td>1694883</td>
<td>Y</td>
<td>Watershed</td>
<td>IN</td>
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<td>TBD</td>
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<td>Funded</td>
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<td>1006086</td>
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<td>Watershed</td>
<td>OH</td>
</tr>
</tbody>
</table>

### Export Project List

The table above displays a list of projects with their respective details such as priority, region, name, region, fiscal year, phase, status, validated, population, description, and type. The projects are sorted based on their priority with lower numbers indicating higher priority. The table also includes information about the region, state, and lead associated with each project.
Results / Impact

• Real time data
• Planning
• Coordination
• Simple
Questions?

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