



## ***Information Quality Research***

***Award #: PO N65236-08-P-6228***

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# Agenda

- Project Team
- Project Description
- Planned Demos/Deliverables/Transition Stages
- Criminal Justice Payoff
- Comments/Questions



## Project Team





## Background and Complementary Work

2006-2007: South Carolina Sex Offender Data Quality Study: Performed an analysis of the SC SO Registry. Highlights the effect of DQ on our decision tools and the frustrations that many LE officers feel regarding the data.

Study on the effect of DQ in analytic tools. Prove the quick degradation of these algorithms with poor quality data.

Ongoing Policy Formation through the Global Committee on Privacy and Information Quality. They are developing policy and IQ process tools in a complementary effort.



## Project Description

This project is committed to developing new tools for information quality assessment while also educating law enforcement on the importance of information quality in their decision making tools and everyday policing.

To this end, we are developing a web based tool for self-assessment, educational web pages for the NIJ/ILP site, web streamed scenarios/videos on the importance of IQ, and best practice slick sheets to inform LE of the various ways they can improve the quality of their information.



## Planned Demos/Deliverables/Transition Stages

April 2008: Draft Scenario Designs, List of Best Practice Agencies

May 2008: Draft SAT tool, Draft Web page design, Begin Best Practice Interviews and visits

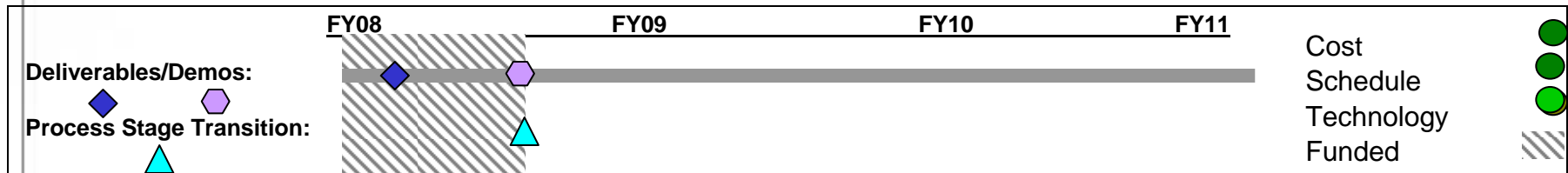
Summer 2008: Scenario development, Best practice gathering, Finalization of SAT

August 2008: SAT final design, final web pages, final scenario development, final best practice sheets

FY 2009: Pilot the incorporation of the self-assessments into GJXML

Find and develop more automatic assessment tools

Continue to education LE on the effects of poor IQ on policing





## Incorporating Assessments in GJXML/ NIEM

- Envision a process by which DQ assessments are embedded in data sent by agencies
- Aggregates of data sets will then be empowered to understand the quality of the data they are given and can incorporate these into their analytical tools
- Already several fields in the GJXDM suitable for IQ

### Existing Supertype Attributes in GJXDM

@probabilityNumeric	xsd:decimal
@reliabilityNumeric	xsd:decimal
@lastVerifiedDate	xsd:date
@lastVerifiedTime	xsd:time
@lastUpdatedDate	xsd:date
@lastUpdatedTime	xsd:time



## QuickAssess: Tool for Automatic DQ Assessment

- Justice Web Interface – Bob Rampy of Maricopa County
- Open Source tool querying multiple database and displaying results on SmartPhone
- Using this code as a launching point, we propose to develop a QuickAssessment tool that queries for missing fields, format errors, and believability errors
- Future generations of the tool will include accuracy predictors



## **Criminal Justice Payoff**

**Better understanding of effect of IQ on policing**

**A first tool for assessing their data**

**Best Practice Guide for improving data sets**

**Better IQ = better decisions**



### Information Quality Projects

FA:

RN :

Effort description: IQ SAT, Scenario Development/ Web Site development

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 Grantee Name: SPAWAR,  
 Charleston Southern University,  
 Northeastern University

### Project Description

- Educate LE about the importance of IQ
- New tools to assess and improve data
- Incorporate data assessments into GJXML/ data they are sharing

### Planned Demos/Deliverables/Transition Stage

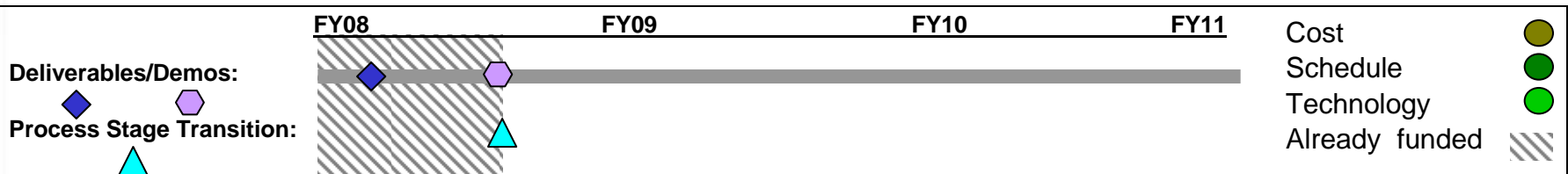
- NIJ/ILP Web pages on IQ
- Web streamed scenarios
- IQSAT – manual assessment tool developed by MIT/Northeastern
- CSU Best Practices
- FY 2009 Incorporate Assessments into GJXML

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### Criminal Justice Payoff

- Better understanding of effect of IQ on policing
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