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**What Senior Management Wants: Value
Added Approach to Systems Enhancement**

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Problem Statement – Setting the Stage

- ^ Actual Case Study - Annual 5 Yr. Planning Event
- ^ Methodology - Nothing Structured
- ^ Leadership – Decentralized Committee
- ^ Team - Executives and SME's w/ Varying Interests
- ^ Economy – Crisis, Budget Cutting
- ^ Questions
 - > What is the “Tipping Point” for GIS?
 - > Why should we spend more money?
 - > Competing for Budget Interests?
- ^ Not Consultants!

Guiding Principles and Approach

- ^ What Now?
- ^ Challenge as Opportunity - Create a Sense of Urgency
- ^ Named Project - GeoFusion Improvement Initiative
- ^ Defined Tipping Point - Scenarios of What System Could Be
- ^ Collaboration - Included Key Stakeholders
- ^ Scientific Approach - Metrics for Decision Making
- ^ Communication - Socialize Plan with SME's (get buy in)
- ^ Secure Leadership Approval - Wrench Time
- ^ Process Focused - Evaluated Software and Data against Business Processes

GII Systems Planning

Seven Step Lifecycle



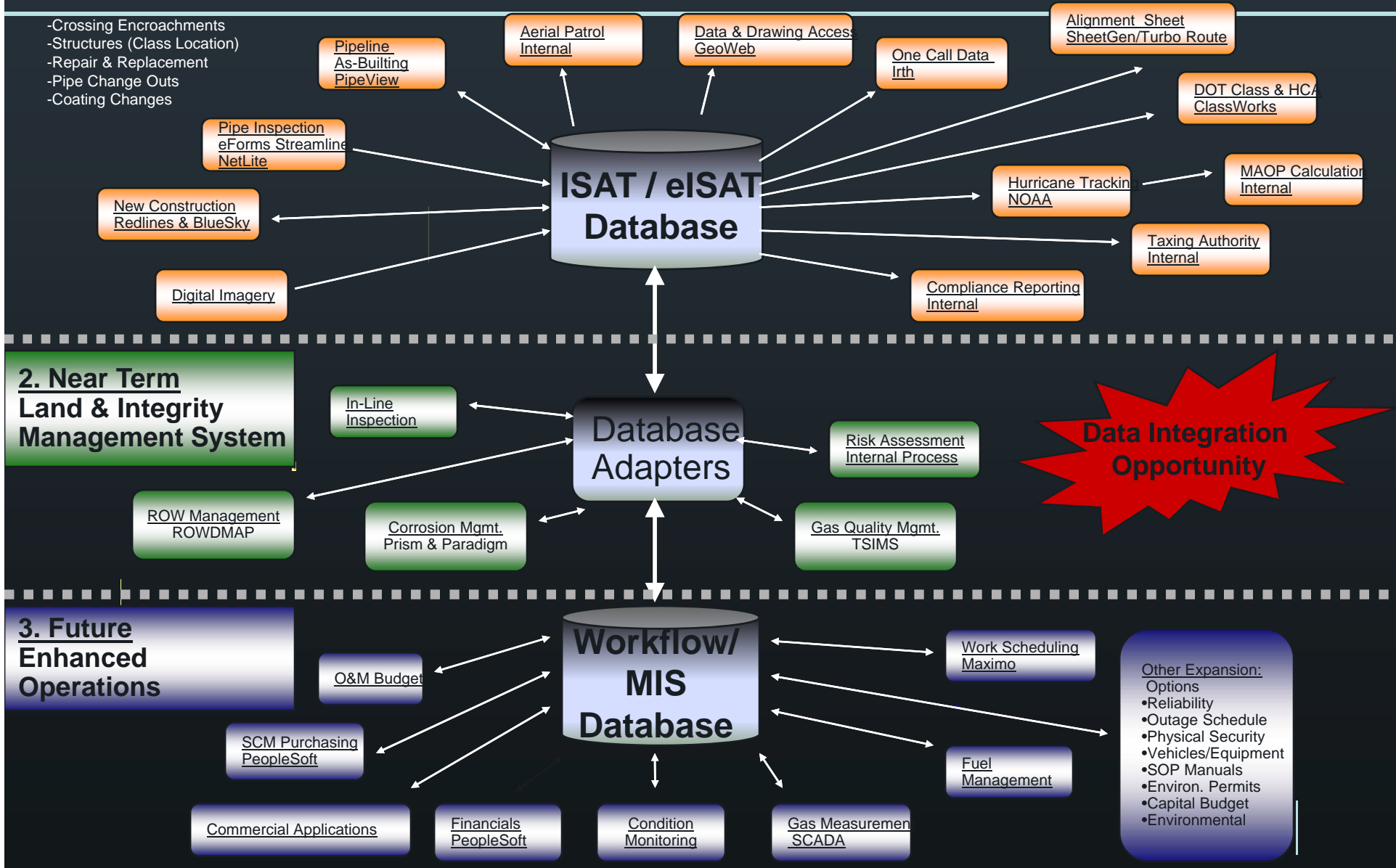
1. Today
Compliance & Engineering System

GeoFusion Tipping Points

Collect Data →

Manage & View Data →

Analyze & Report Data



Step 2: Select Team, Develop Tool and Interview Stakeholders

- ^ Developed Template Agenda
- ^ Assigned Facilitators
- ^ Performed Interviews
- ^ Over a 4 month effort
- ^ Included 50 Stakeholder Participants
- ^ Performed 30 Interviews
- ^ Across multiple companies and departments
- ^ Business Process Focused

AGENDA		
(MOCK INTERVIEW) GII Interview		
Month, Day, Year/Time		
Interviewed Business Process: For example, DOT Gas and HCA Process		
Attendees: Attendee List		
☰		
9:00 a.m. – 9:15 a.m.	Introductions Participants introduce themselves	Team Lead
9:15 a.m. – 9:30 a.m.	GII Interview Goals 1) Validate existing system 2) Identify opportunities for enhancement	Team Lead
9:30 a.m. – 9:45 a.m.	Process-based Feedback Discuss the methodology by which the interview will be conducted (how are the data and software supporting the process)	Team Lead
9:45 a.m. – 10:15 p.m.	GeoFusion Dataset Evaluation 1) Evaluate GeoFusion datasets that support the business process. 2) Discuss possible opportunities for dataset enhancement (including structure of data)	Stakeholders Participants
10:15 a.m. – 10:45 p.m.	GeoFusion Software Evaluation 1) Evaluate GeoFusion applications that support the business process. 2) Discuss possible opportunities for application enhancement.	Stakeholders Participants
10:45 a.m. – 11:00 p.m.	Conclusion 1) Wrap-up discussions and answer questions. 2) Be available for "parking lot" discussions.	Team Lead
☰		
Additional Instructions:		
Meeting provided hardcopies:		
1) GeoFusion Improvement Initiative slideshow		
2) GII Interview Form		
3) GII SharePoint Location Address		

Step 3: Translate Stakeholder Feedback Into a Draft Project List

- No misrepresentation of feedback
- Interview forms were populate via SharePoint templates
- Electronically mapped team comments to create list
- **Received approximately 350+ comments from interviews**
- Created a draft project list of over 80 meaningful projects

Project ID	Comment ID	Typing Point	Process Name	Validation Status	Comment Type	Comment Focus	Comment Description
1	86	1) Engineering and Compliance	DOT Class and HCA	Enhancement Opportunity	Data Project	Centerline	Correct the lateral position by the pipe by data collected i.e. AGM, pig runs. Automated notification of control point changes.
1	128	1) Engineering and Compliance	Pipe Inspection	Enhancement Opportunity	Data Project	Centerline	Improve accuracy.
1	26	1) Engineering and Compliance	Data and Drawing Access (Web)	Enhancement Opportunity	Data Project	Other Dataset	Add AGM as a feature layer. Layer for edit/print of ROW track.
1	71	1) Engineering and Compliance	Pipe Editing & As-Building	Enhancement Opportunity	Data Project	Other Dataset	AGM need to capture data.
1	72	1) Engineering and Compliance	Pipe Editing & As-Building	Enhancement Opportunity	Data Project	Other Dataset	Utilize other survey datasets to line-up our centerline.
1	100	1) Engineering and Compliance	DOT Class and HCA	Enhancement Opportunity	Software Project	GeoWeb	Improve performance. Improve GIS analysis. Improve print and publishing capabilities. Be able to see the controlling structures for Class and HCA. View piggable segments and color by (L) year. Load AGM.
2	87	1) Engineering and Compliance	DOT Class and HCA	Enhancement Opportunity	Data Project	Aerial Photography	Enhancement Opportunity (Does not impede business needs): Gaps-Black areas in GeoWeb. Process for vendor mesh old photography with new photography. Update specs.
2	197	1) Engineering and Compliance	Alignment Sheet Generation	Enhancement Opportunity	Data Project	Aerial Photography	On certain scales the photography is not clear. Quality assurance on the photography—too dark, too light, etcetera. Centerline data is more accurate than the photography when centerline is sub-meter accuracy. Martin Melchor is checking with Sandborn on 1



Step 4: Develop a Weighted Matrix to Prioritize Project List

- **Criteria:** Why would El Paso Leadership spend money on a GeoFusion Project?
- **Weights:** What is the weight distribution between the criteria?
- **Collaboration:** Weighted matrix was built with consensus from multiple departments.

Safety/Pipeline Integrity	35%	} Required Projects
How will pipeline safety or integrity be impacted?		
Pipeline Compliance	30%	} Required Projects
How will pipeline compliance be impacted?		
Cost Benefit	20%	} Enhanced Systems Projects
What is the cost versus benefit ratio?		
Process Required/ Increased Utilization	15%	} Enhanced Systems Projects
Is there process efficiency or increased utilization?		

Step 5: Refine Project List (apply matrix)

- ^ Apply Weighted Matrix – Numeric Value
- ^ Apply Common Sense Evaluation – Numeric Value
 - > Does this make sense?
 - > Are we missing anything?



Safety/Pipeline Integrity How will pipeline safety or integrity be impacted?	35%
Pipeline Compliance How will pipeline compliance be impacted?	30%
Cost Benefit What is the cost versus benefit ratio?	20%
Process Required/ Increased Utilization Is there process efficiency or increased utilization?	15%



**Common
Sense
Evaluation**

**Weighted
Matrix**

Step 5: Refine Project List (apply matrix)

- Moving Closer to the 5 Year Plan
- Established Numeric Value or 20 to act as the “Cut Line”
- **Approximately 1/3 Fell Above Cut Line and 1/3 Fell Below and 1/3 Deleted**
- Approximately 24 Data and 30 Software Projects

GII Projects List				Safety/Pipeline Integrity	Pipeline Compliance	Cost Benefits	Process Required and Increased Utilization			
No.	Ref ID*	Project Type*	Project Name	35%	30%	20%	15%	Weighted Ranking	Common Sense Ranking	Project Assumptions/ Detailed Comments*
PROJECTS TO CONSIDER IN THE 5 YEAR PLAN										
1	2	Data Project	Status Reconciliation (Data)	Integrate pipeline safety risk if project is not executed	Project is required to maintain pipeline compliance.	Project is high cost and high benefit	Process is operating in a "work around" situation or increase in utilization.	34.75	34.75	09Jun09: Defining list domain option definitions and applying correctly to the associated records.
2	44	Data Project	Reconcile Unknown Pipe and Filing Data (Data)	Regulatory mandated pipeline safety processes are impeded.	Project is required to maintain pipeline compliance.	Project is high cost and high benefit.	Significant impact to process efficiency or utilization.	31.75	31.75	
3	1	Data Project	AGM Data Integration (Data)	Regulatory mandated pipeline safety processes are impeded.	Compliance processes are impeded.	Project is low cost and high benefit.	Significant impact to process efficiency or utilization.	30.25	30.25	09Jun09: Project includes integration, displaying and subsequent centerline corrections.
4	New	Software Project	Pipe Move Notification 100ft (Software / Process)	Regulatory mandated pipeline safety processes are impeded.	Compliance processes are impeded.	Project is low cost and high benefit.	Significant impact to process efficiency or utilization.	30.25	32	22Jun09: Project added by Tim Keller (conversations with Jeff Farrells)
5	20	Data Project	Enhance As-built Process - Reduce Timing of Completion (Process)					N/A	32	23 Jun 09 - Add construction centerline when the first pipe is in the ground. Address this with the other damage prevention projects.
6	41	Data Project	Add Comp. Station MAOP (Data)	Regulatory mandated pipeline safety processes are impeded.	Project is required to maintain pipeline compliance.	Project is high cost and high benefit.	Process is operating in a "work around" situation or increase in utilization.	29.5	29.5	
7	46	Data Project	Pressure Test Record Reconciliation (Data)	Regulatory mandated pipeline safety processes are impeded.	Project is required to maintain pipeline compliance.	Project is high cost and high benefit.	Process is operating in a "work around" situation or increase in utilization.	29.5	29.5	23 Jun 09 Need to confirm the statement of errors in pressure test data. See comments in other tab.



Step 6: Develop Draft 5 Year Plan (Add Cost, Schedule, etc.)

Team Recommendation:
Denotes the team's final decision concerning the project status.

Aggregate/Prerequisite Projects:
Denotes project sequence in coordination with other similar project.

Cost and Schedule Projections:
Denotes estimated project cost and schedule.

GII Projects List					Y= Yes or Do, N= No or Shelf, P= Postpone, M= Moved to IT		A= Under \$100K, B= \$100K-\$500K, C= Over \$500K, D= Unknown, Requires further Scoping.	
No.	Ref ID	Project Name	Weighted Ranking	Common Sense Ranking	Final Decision	Prerequisite	Cost Category & Projected Year	General Comments
PROJECTS TO CONSIDER IN THE 5 YEAR PLAN								
1	2	Data Reconciliation (Data)	34.75	34.75	N	None	A, 2010	Should not be difficult.
2	45	Reconcile Unknown Pipe and Filing Data (Data)	31.75	31.75	Y	Ref ID's 44, 46,32	D, 2010/11	Extensive research project. May require field research, SCM involvement. Could extend into 2011. Coordinate with other reconciliation projects to minimize research.
3	1	AGM Data Integration (Data)	30.25	30.25	Y	Ref ID's 1, 15	D, 2010	Need to validate scope of project (e.g., all new projects or include historical data & how far back do we go?). Should we consider Integrity Web requirements as a prerequisite?
4	New	Pipe Move Notification 100ft (Software / Process)	30.25	32	Y	None	A, 2010	This functionality may be a portion software (or toolbar) & a portion manual process or built in to the as-built process. Are notifications yearly or or ad-hoc?
5	20	Enhance As-built Process - Reduce Timing of Completion (Process)	N/A	32	Y	Ref ID's 44, 70, 9, 27	A, 2010	Tom Broughton Request. This process enhancement will be contingent on our ability to "speed up" the business of construction redlines & files.
6	41	Add Comp. Station MAOP (Data)	29.5	29.5	P	None	D, 2012	Need to validate scope of project (e.g., all new projects or include historical data & how far back do we go?)
7	46	Pressure Test Record Reconciliation (Data)	29.5	29.5	Y	Ref ID's 44, 46,32	D, 2011	Requires further scoping. Evaluate source data. Coordinate with other reconciliation projects to minimize research.

Step 7: Present Findings to Leadership (Dashboard)

Acceptable/Stable: The data or software is meeting the business process need.

Enhancement Opportunity:

The data or software is meeting the business process need, yet there is potential for positive ROI.

Needs Improvement: The data or software is not meeting the business process need.

Future Evaluation: The supporting data or software is not available to evaluate.

Core Business Process	Existing System Status	
	Data	Software
Tippling Point 1 (Engineering and Compliance System)		
Cake Baking	Acceptable/Stable	Enhancement Opportunity
Car Washing	Needs Improvement	Enhancement Opportunity
Dish Cleaning	Acceptable/Stable	Acceptable/Stable
Wallpapering	Enhancement Opportunity	Enhancement Opportunity
Oil Changing	Needs Improvement	Acceptable/Stable
Dog Walking	Enhancement Opportunity	Needs Improvement
Babysitting	Enhancement Opportunity	Acceptable/Stable
Workout Routine	Enhancement Opportunity	Enhancement Opportunity
Floor Mopping	Future Evaluation	Future Evaluation
Vacuuuming	Enhancement Opportunity	Acceptable/Stable
Window Washing	Needs Improvement	Acceptable/Stable
Garage Cleaning	Acceptable/Stable	Acceptable/Stable
Lawn Mowing	Enhancement Opportunity	Acceptable/Stable
Tippling Point 2 (Integrity Management and Land System)		
Tree Trimming	Future Evaluation	Future Evaluation
Flowerbed Weeding	Future Evaluation	Future Evaluation
Clothes Washing	Enhancement Opportunity	Acceptable/Stable
Dinner Preparation	Acceptable/Stable	Acceptable/Stable
Tire Changing	Enhancement Opportunity	Acceptable/Stable
Tree Watering	Enhancement Opportunity	Enhancement Opportunity
Tippling Point 3 (Enhanced Operation and Corporate System)		
Dish Drying	Future Evaluation	Future Evaluation
Floor Sweeping	Future Evaluation	Future Evaluation
Furniture Dusting	Future Evaluation	Future Evaluation
House Painting	Acceptable/Stable	Acceptable/Stable



Template Tool Demonstration

GII Systems Planning

Seven Step Lifecycle



Step 7: Present Findings to Leadership (Dashboard)

Step 6: Develop Draft 5 Year Plan (Add Cost, Schedule, etc.)

Step 5: Refine Project List (apply matrix)

Step 1: Define Tipping Points

Step 2: Select Team, Develop Tools and Interview Stakeholders

Step 3: Translate Stakeholder Feedback into a Draft Project List

Step 4: Develop a Weighted Matrix to Prioritize Project List

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