

The Design and Deployment of an Enterprise Asset Data Collection Solution



Presenters

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 - CartoPac Field Solutions

Outline

- Project History
- Project Goals
- Mobile Solution Requirements
- Phase I Implementation
- Phase I Results
- Future Considerations
- Questions and Answers

Project History

- The Data Problem...
 - Multiple fragmented sources
 - No standard format
 - No storage solution
 - Data recall impossible
 - Unknown data quality
 - Data collection standards
- Midstream Data Needs
 - Enterprise wide usage
 - Maintain/Archive records
 - Data Standardization



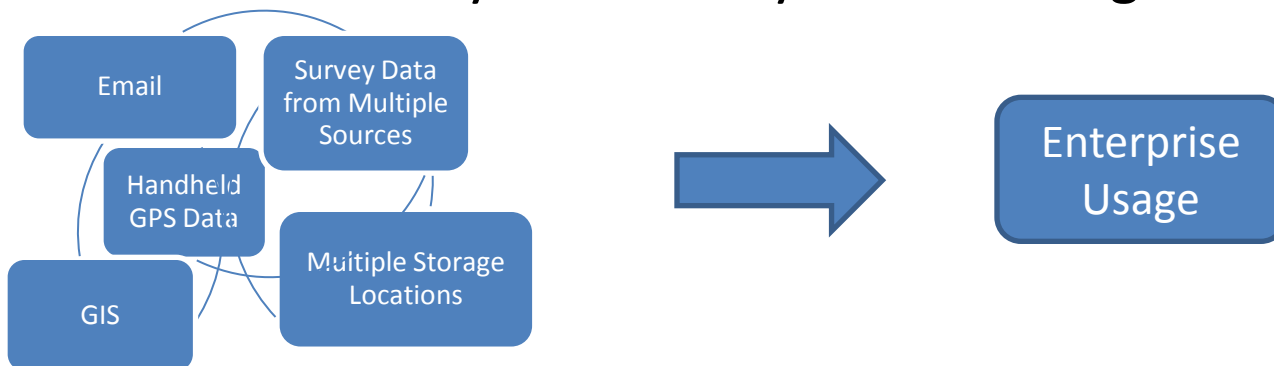
Project Goals

- Survey Data Standardization
 - Utilize same standard for all data collection methods, i.e. mapping grade, survey grade
 - Utilize a standard Feature Code Library
- Combine Internal/External Data into Single Storage
 - Esri ArcSDE layer
- Streamline Processes
 - Data Collection
 - Data Upload
- Rapid Mobilization
 - Minimal Training
 - Utilize Existing Personnel



Mobile Solution Requirements

- Forms Based GPS Data Collection
 - Utilize standard feature code structure
- Minimize Training Required
 - No user software required
- Automate Post Processing
 - Data Quality Control
- Streamline Data Transfer to and from ArcSDE
- Maximize Efficiency & Accuracy with Existing Resources



Phase I Implementation

- CartoPac Solution
 - CartoPac Mobile
 - CartoPac Field Server
 - CartoPac Studio
- Internal Resources Utilized to Configure Solution
 - CartoPac Studio





Phase I

Field Testing

Training

CartoPac Mobile

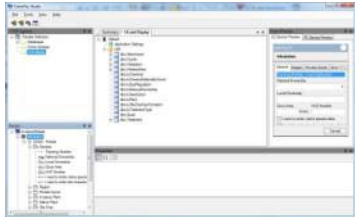
Hardware Selection

SDE Data Connection

CartoPac Studio

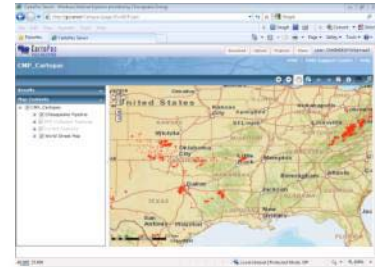
CartoPac Field Server

Integrated with ArcGIS Server



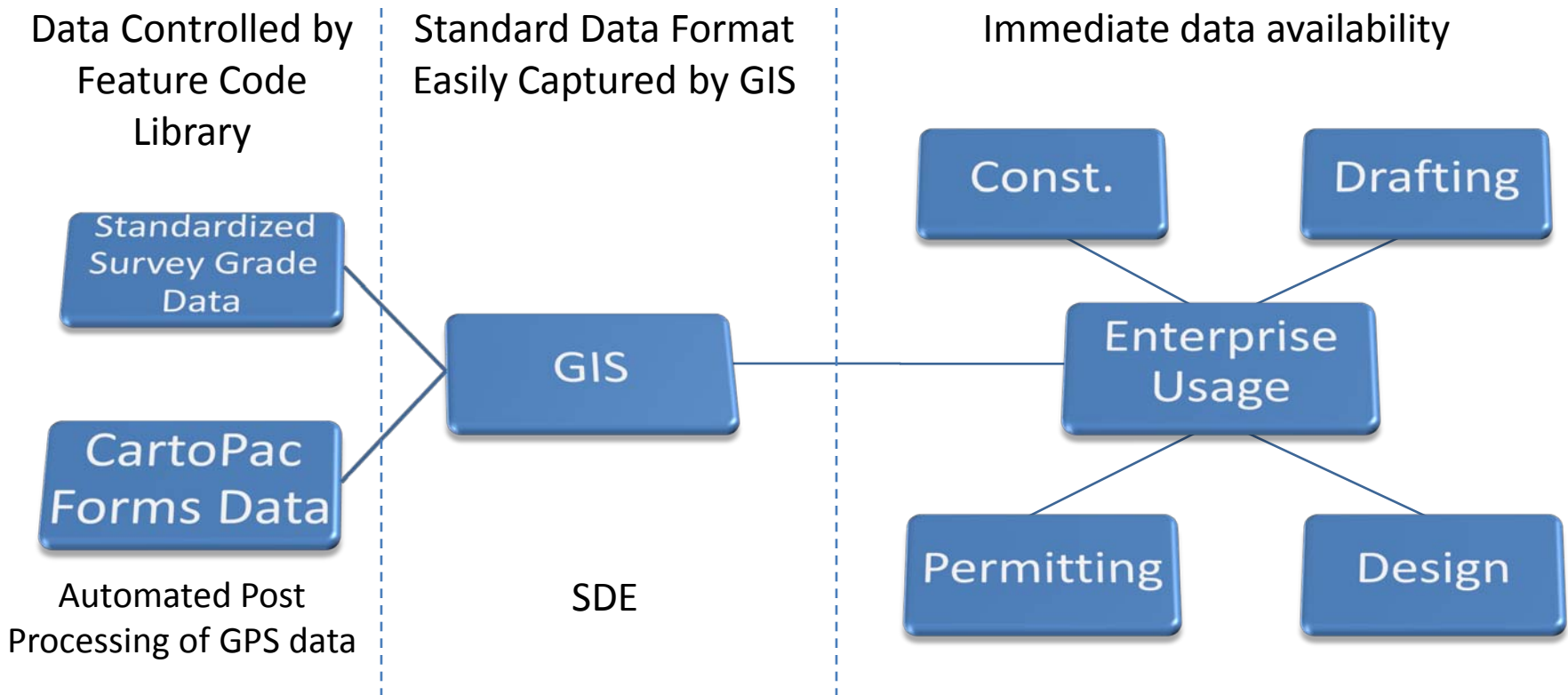
Forms

User Interface for Download/Upload



Phase I Results

- Enhancements and optimizations are easily implemented with little to no follow up training required



Additional Tools

- Third Party Drafting Software Integration
 - AutoCAD Civil 3d
 - BlueSky
- Esri Silverlight API – Web based map viewer and editor



New Solutions/Projects

- Usage reports
 - Metrics on usage for management reporting
 - Use by area, data quality, etc.
- CSV Export from web map
 - Non GIS platforms
- O&M Forms

Thank You

- Questions?
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