MAKING RIGHT OF WAY DATA ACCESSIBLE

Agency of Transportation
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MAKING RIGHT OF WAY DATA ACCESSIBLE

OVERVIEW

- Statewide Picture - Need for Change
- Project Design + Implementation
- Real World Use
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LEGACY "SYSTEMS"

1927 Floods‡

fl 2011 Tropical Storm Irene
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THE PAPER AGE
MAKING RIGHT OF WAY DATA ACCESSIBLE IN THE DIGITAL AGE

- 22,000+ projects
- 2,100+ CADD
- 7000+ scanned
- 2,056 scanned half-sized
- 2TB of scanned drawings
- Route Logs
- Thousands of acquisition documents
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USE CASES

Who

Time

ROI

Why

How
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WHO

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WHY

Emergency Readiness

Alternative Energy

Asset Management

Project Delivery

Green Stormwater Infrastructure
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TIME FOR CHANGE

VT needed a better way to make ROW data easy to find.

Keep CADD as platform for roadway design.

Utilize GIS as a platform for managing the data.
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PROJECT GOALS

1. Create a combined data model
   - Repeatable method of CADD-GIS conversion
   - Process to review and digitize scans

2. Publish data as a web service
   - Direct user access

3. Advance web based viewer
   - Link data to other internal systems
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DESIGN

CADD+Scan Plans

ROW VIEWER

CADD to GIS Conversion

ROW Geospatial Data

Vermont Base Map Data

For Selected Project:

PPMS & Artemis Attributes

Project #, Project Description, Project History, CADD DGN filename & location, Etc.

ACQ. Sell-off

Muni Parcel Data

Ortho Imagery

Linear Referencing

Road Centerlines

Utility

Town Boundaries

Project Management Systems
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CADD TO GIS WORKFLOW

Input CADD File

FME

Input Scan File

Process Geometry
Convert Objects to Features

Georeference Images
Create Features from Image

Features

ROW Geospatial Data

Output Georeferenced Scan File

Output Geospatial Data
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DEMO

http://host.appgeo.com/vtrans/
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ORTHOMAGAERY
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ROADWAY
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PARCELS
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CADD OBJECTS
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SCANS
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REAL WORLD USE

- Rail
- Route Logs
- Operations
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ROUTE LOGS
MAKING RIGHT OF WAY DATA ACCESSIBLE OPERATIONS
QUESTIONS?

THANK YOU

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